

**Dissertation for the degree of Doctor of Philosophy
in Architecture
at the University of York.**

**REVIVING WAR-DAMAGED
SETTLEMENTS
TOWARDS AN INTERNATIONAL CHARTER FOR
RECONSTRUCTION AFTER WAR**

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ABSTRACT

This study is concerned with the issue of reviving settlements after war. It focuses on the formulation of reconstruction policies and programmes. The aim is not to propose ready made solutions but rather to identify a set of 'practical' and 'effective' reconstruction recommendations, that could in the future constitute a morally based international reconstruction philosophy. The problem we are addressing is that:

Often, the task of rebuilding war-devastated settlements is seen entirely as a 'series of short-term quick fix projects'; carried out by central governments; and often imposed from above to serve 'hidden political agendas', with the ultimate result of the disaster of war being followed by the 'disaster of reconstruction'.

The hub of this research is based on field investigations and literature studies and, is presented to support the following hypothesis:

Settlement reconstruction should be an integral part of the nation-wide post-war development strategy, and within that reconstruction policies should foster the incremental learning process by the affected local communities.

This dissertation sets out to understand the nature of armed conflicts and the complexity of reconstruction after war. It attempts to catalogue and discuss the different tasks involved in the process of reconstruction by establishing, from the available (cross-cultural) literature, a conceptual framework of some of the main planning and implementation issues and dilemmas. It then examines in detail the three cases of Iraq, Yemen and Belfast.

Finally, it focuses on the concept of community participation in reconstruction which has widely been claimed to be the answer to many reconstruction problems. And concludes by: (1) drawing up a set of 'policy and practice' recommendations, that would enable 'careful' decision-makers, professionals and community leaders to ensure that the 'disaster of war' will not be followed by a 'catastrophe of reconstruction', and (2) laying the basis for an internationally respectable 'Charter for Reconstruction after War', that would help to involve governments and international bodies in the development and application of sound reconstruction policies, with the ultimate result of them being responsive to the needs of people. Both are translations of the insights gained from this research into practical solutions.

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DECLARATION & ACKNOWLEDGEMENT

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THE PREAMBLE

REVIVING WAR DAMAGED SETTLEMENTS

P.1. DEFINING THE PROBLEM.

This study is concerned with the issue of rebuilding settlements after war. The particular focus is on the formulation of reconstruction policies and programmes and on issues of organisation and management in their execution. The aim is not to propose ready made solutions but rather to suggest new ways of approaching the alleviation of suffering in the immediate post-war period. The proposition that is addressed can be summarised as:

How is it possible to speed the recovery of the 'survivors' and to 'rebuild' settlements in a post-war context, where the local organisational, social and cultural structures are disrupted, and where many resources are in short supply? At the same time, where the national demand is high and urgency is acute, to answer these questions the State has to meet its immediate political needs from reconstruction, without inflicting a negative socio-cultural impact on society.

Despite the fact that since the end of WW2 more than 300 wars have taken place all over the world claiming millions of lives, and devastating entire landscapes, towns and cities, the issue of reconstruction following war has been largely ignored by international agencies and academic institutions. War continues to be disregarded as a disaster and is still looked on as an abnormal (one off) event, though for the last few decades "...there has been no single day free of war and few islands of tranquillity". (Lewis, 1988a). Morally, we have to believe that avoiding wars must be every government's responsibility, but the reality is that power has a magnetic attraction and in its pursuit wars of all kinds are fought; against neighbours within nations, between states and across continents.

During and after war, citizens, local and central governments, as well as some international non-governmental organisations will undoubtedly embark on the necessary task of reconstruction and the costly return to normal life. There appears

to be little or no systematic understanding of this task and its requirements.

The initial examination of the subject, in the light of recent reconstruction programmes within the Middle East (both post-earthquake and war disasters), revealed the extent to which the task of rebuilding human settlements is seen entirely as a 'series of short-term quick fix projects'; carried out by central governments; often imposed from above and aided from outside and reinforcing narrow political objectives. Such 'hidden agendas' do not often correspond to the people's physical or spiritual needs. Consequently, official preoccupation with the technical aspects of rebuilding seem to overwhelm the genuine needs and concerns of the citizens, resulting in the disaster of war being followed by the 'disaster of reconstruction'.

In short, it seems that if the rebuilding of human settlements after war is to be, in any way, responsive to the real needs of the people, immediate attention is needed to counter: (a) the complete lack of specialised knowledge on post-war rehabilitation; (b) irresponsibility of State institutions towards rebuilding settlements; and (c) the total absence of international interest and commitment to the issues of post-war reconstruction.

There is then an urgent need for a considered *philosophy of reconstruction*. Such philosophy would establish and widely disseminate a general framework of recommendations for approaching reconstruction (in a multi-cultural context) with the intention of (a) meeting foreseeable needs of war-torn communities; and (b) drawing to the attention of the world community the costs of reconstruction and their responsibilities to act accordingly. Hopefully, the knowledge acquired in this research would sow the seeds for such philosophy.

P.2. THE SCOPE OF THE STUDY AND HYPOTHESIS.

The dissertation sets out to catalogue and discuss the different tasks that are faced during the rebuilding of war-torn settlements by examining in detail the three cases of Iraq, Yemen and Belfast. And concludes by drawing up a set of 'policy and practice' recommendations, that would enable 'careful' decision-makers, professionals (architects, planners, engineers, etc.) and community leaders to ensure that the 'disaster of war' will not be followed by a 'catastrophe of reconstruction'. The hub of this argument is based on field investigations and literature studies and, is presented to support the following hypothesis:

Settlement reconstruction should be an integral part of the nation-wide post-war development strategy, and within that reconstruction policies should foster the incremental learning

process by the affected local communities, who would learn to 'grow it' and grow 'with it', preferably in partnership with the State. Against this approach, on the other hand, reconstruction that takes the form of an arbitrary series of centralised, top-down projects (infrastructure, housing, public buildings etc.), conducted by 'outsiders' is unlikely to be physically effective, culturally appropriate, or environmentally sustainable.

This study recognises that people and authorities, faced with the great task of rebuilding from the ashes of conflict, do not need yet other 'outsiders' to suggest ready solutions, on what, how and when to rebuild. They could rather more greatly benefit from evidence on others' past successes and failures in reconstruction. The role of this study therefore is to draw attention to a number of aspects and issues that ought to be taken into account by people, planners, professionals, and national and international NGO's, when considering the task of rebuilding future settlements. Thus, through out this work attempts have been made to extract such issues from cross-cultural experience and catalogue them under recognisable headings.

It is important to present the outcome of the debate on those issues in a way that would interest the concerned people, and achieve a balance between peoples' needs and governments' interests. The main message to those people should be that:

Settlement reconstruction should not be approached from the 'drawing boards of central government', but from the physical and spiritual needs and expectations of millions of inhabitants of those damaged settlements.

The dilemma of government reconstruction versus peoples' involvement, leads us to address issues, such as the degree of local participation and the promotion of local cultural traditions and building skills. Why and how should these be achieved? When local communities are excluded from the process of rebuilding their own settlements, in very much the same way as they have been excluded from the decision to wage war in the first place, their participation is usually replaced by 'utopian' schemes, decided upon many miles away by central government, often only partially realised, and without consideration of the local climate, culture or conditions in the affected areas.

Thus the social, cultural and psychological dimensions of the reconstruction process are easily forgotten, to the extent that the act of rebuilding becomes a largely physical propaganda, or even a simple profit-making exercise. Although this dissertation is primarily concerned with policy formulation and management

Reviving war damaged settlements.

organisation of the built environment, it does so in the context of economic, social and psychological recovery. It is our belief that professional planners must be made more aware that their decisions can only have validity, if they are set in an environment made by sensitive social and economic development policies. The primary aim of reconstruction in practice must be to revive and enhance devastated communities.

We realise that this 'people first' approach to general economic development theory goes counter to the conventional wisdom of the last 40 years, our analysis is that those theories have failed. Centrally directed economies that ignore or suppress the basic demands of their people for growing self expression, do in the end fall apart; often with disastrous consequences akin to those following war.

P.3. AIM AND OBJECTIVES.

The main *aim* of this study is to identify a set of 'practical' and 'effective' reconstruction recommendations, that could in the future constitute a morally based international reconstruction philosophy. It recognises the importance of introducing an international perspective into the subject by exploring it in a number of *different* contexts and over a number of years, using the author's objectivity as an 'outsider' in all cases, hopefully without falling into the trap of 'universally applicable solutions'. The wider aspiration is to lay the basis for an internationally respectable 'Charter for Reconstruction after War', that would help to involve governments and international bodies in the development and application of sound reconstruction policies, with the ultimate result of them being responsive to the needs of people.

Having this in mind the following objectives are set up to provide a framework to guide the investigation and development of this work.

1. To develop a theoretical understanding of the nature of armed conflicts. This involves examining:
 - The relationship between war and development; types of conflicts; similarities and differences between war and natural disasters.
 - The theoretical background on the study of war.
 - Vulnerability and social preparedness.
 - The immediate, indirect and side effects of war (both negative and possible positive effects).
 - The impact of defence on city planning and architecture.

2. To establish from the available (cross-cultural) literature a conceptual framework of some of the different issues and dilemmas which could possibly be involved in:
 - The context of formulating a national strategy for reconstruction.
 - Settlement planning at local and regional levels.
 - The implementation of reconstruction programmes.

3. To examine, in detail, a number of reconstruction case studies both after war and natural disaster, highlighting the conceptual issues identified in the theoretical part of this study:
 - The first was of Basrah and Fao in Iraq following the Iran-Iraq war (1980-1988) focusing on aspects of decision-making and implementation of reconstruction at a national policy level.
 - The second was of the contractor-built reconstruction projects in Dhamar after the 1982 earthquake. Beside reconstruction policies the field work focused on the detailed process of settlement planning and implementation using an evaluation of the reconstruction based on feedback from the local inhabitants.
 - The third was of Belfast in Northern Ireland, the focus was to investigate how long-term civil unrest can become a 'war-culture' and affect the urban environment in a number of ways.
 - The fourth was of the Dhamar Aided Self-help project, where the particular focus was on the formulation and application of reconstruction programmes that involve the participation of the people.

4. To focus on the concept of community participation in reconstruction which has widely been claimed to be the answer to many reconstruction problems.

P.4. RESEARCH METHODOLOGY.

In order to overcome some of the difficulties associated with the study of reconstruction after war, such as 1) lack of documents on the subject (Davis, 1988; Zargar, 1989a, El-Masri, 1992); 2) the fact that most of the available literature deals with the aftermath of Second World War in Europe. Consequently, "...the significant differences between the contexts of damaged European countries with the present devastated nations such as Iran, Iraq or Lebanon, drawing conclusions from them for the present situation, is not without difficulty". (Zargar, 1989b:427); 3) the absence of a satisfactory conceptual framework for the study of reconstruction after war. (Zargar, 1989a; Amirahmadi, 1991; El-Masri, 1992), this research used a

combination of empirical evidence and theoretical perceptions.

Three main research methods have been employed in the preparation and development of this dissertation: (1) literature review; (2) a number of workshops, conferences and short courses, that were used as *learning tools* over the period of this study (1989-1992) and; (3) field-work case studies. Although a full discussion of these methods and constraints is presented in Chapter 3 (for literature review) and Chapter 5, it may be helpful to point out the following:

1. The comprehensive *literature search* that was conducted over the last 3 years, had two main aims in mind: (1) to develop the author's knowledge on issues of post-war reconstruction, which included an understanding of the previous work and research carried out in regard to the topic, and (2) in doing so, there has been a conscious attempt to avoid 'rediscovering the wheel', thus this literature review was meant to march in formation with those who have already left useful research signposts.
2. Participating in, as well as organising a number of national and international events (workshops, visits, conferences and short courses) have played a significant role in the development of this study, particularly as the amount of published information on reconstruction after war was very limited.
3. In order to conduct the different field visits appropriate data collection techniques were used, to satisfy the different explorative and descriptive needs of each place. In all cases field work was approached without being constrained by rigid pre-determined categories of response, which contributed to the openness, flexibility and the depth of qualitative inquiries and allowed the employed techniques to be dependent on (a) being socially acceptable (b) being innovative (c) using locally available resources; (d) making and taking opportunities; (e) using locally acceptable practices.

Finally, it should be observed that the highly political context of any post-war situation imposes some limitations on research into the issue of reconstruction in general, and severe constraints on fieldwork in particular.

P.5. STRUCTURE OF THE STUDY.

In order to support the above mentioned hypothesis, this study will start by exploring *the state of the art of reconstruction after war* (Chapter 1); it explores war as a phenomenon, concentrating on the dilemma of war, peace and development. Accepting the similarities that have been identified between natural and war disasters, this Chapter argues that too much dependence on natural disaster literature, could be misleading. Thus, it attempts to understand war by formulating a general framework, based on identifying a number of measures in which war is different from natural disasters and that can be used to measure war.

A 'clear' understanding of armed conflicts and their different dimensions is essential to explore the effects of war and the stages of recovery (Chapter 2). Citing that no two wars are alike in terms of their effects and that the effects of the same war could differ from one battle or attack to another, this Chapter attempts to separate the effects of war into three categories in terms of impact and time, while keeping in mind the fact that these categories overlap: Immediate impact, Indirect effects and side effects. This Chapter, also reviews the different stages of recovery after war through considering the sub-culture of war and concludes by highlighting the reconstruction phase, which is the main concern of this dissertation.

Chapters 3 & 4 set out to provide a picture of some of the different dilemmas which could possibly be involved in the *context of thinking on the planning and management of post-war reconstruction*. They do so by reviewing the available literature on the post-war reconstruction experience of more than 30 countries. They conclude by raising the main problem of people's needs versus government's interests.

A description of the *research methods* adopted by the author through out his studies is to follow in Chapter 5. It will discuss, besides the literature survey, research methods used during field work in four countries: Iraq, Iran, Yemen and Northern Ireland, as well as a number of workshops, conferences and short courses that have acted as 'learning tools' for the author. This Chapter concludes by listing a number of methodological considerations that ought to be taken into account in post-war reconstruction research.

Chapters 6, 7 and 8 will present the field work carried out in Iraq, Yemen and Belfast, respectively. Each casestudy, with its own objectives, supports one part or more of the main hypothesis of this dissertation.

Chapter 9 suggests a model for looking at reconstruction as a partnership between the state and the local communities of that State. Finally, Chapter 10 introduces a set of recommendations for the planning and management of reconstruction programmes along with suggestions for future topics of research.

P.6. DEFINITIONS.

While this dissertation does not call for a formal glossary of terms, some comments on the use of definitions are in order.

Armed conflicts: In this study the terms 'war' and 'armed conflict' are used interchangeably to denote conflicts in which direct confrontation takes place

between two or more parties, nations, states, or even within a nation, that has a defined time span, during which a society undergoes severe danger and incurs human, physical, economic, social, psychological and environmental losses, that eventually would affect the four bounds of any stable society (community, environment, state and market).

Vulnerability, is a general term that implies the level of loss that would be caused to an element at risk, if a certain level of hazard was to occur.

Shelter, is "...the superstructures of different shape, size, type and materials erected by mankind for security, privacy and protection from the elements and for his singularity within a community". (UN, 1976b:37).

Infrastructure, is "...the complex networks designed to deliver to or remove from the shelter people, goods, energy or information". (UN, 1976b:37).

Services, cover those required by a community for the fulfilment of its functions as a social body, such as education, health, culture, welfare, recreation and nutrition.

Physical reconstruction, is the process of repairing and rebuilding the physical elements in a settlement: shelter and infrastructure.

Post-war reconstruction, is the first step that has to be taken in the development process following a war. Reconstruction could be distinguished from any other form of normal building activity or development project, by the level of complexity involved in this process (emotional energy; righting wrongs; rebuilding lives; solving differences to achieve national goals, etc.), and the magnitude of the task that has to be undertaken in the most pressing and demanding economic, political, social and cultural circumstances.

Post-war revitalization: From reviewing the different effects of war it has become evident that physical rebuilding is just one segment of a wider process of reconstruction following war, which involves economic, social and psychological readjustment. Housing is a significant part of this segment. Thus it might be more appropriate to use the term revitalization or rehabilitation instead of reconstruction.

Reconstruction strategy, is that body of knowledge, which helps determine the most important tasks that have to be implemented at each stage of reconstruction, the type and amount of resources needed, and the location of reconstruction projects. A strategy involves defining goals and objectives, setting priorities and targets, making plans or facilitating market mechanisms, and formulating policies for implementation.

Reconstruction planning, is a process to achieve the goals and objectives of national reconstruction strategy through the rational and efficient use of available resources.

Sultan Barakat
YORK, May 1993

CHAPTER ONE

RECONSTRUCTION AFTER WAR: THE STATE OF THE ART.

1.1. INTRODUCTION.

In order to better plan reconstruction, it is important to understand the different characters of war that cause destruction. This is the aim of the following two chapters. This Chapter explores war as a phenomenon, concentrating on the dilemma of war, peace and development. The argument is later expanded to discuss why the issue of war as a disaster has been largely disregarded by international research and aid institutions over the last few decades, a fact that has recently led researchers to pursue the studies of natural disasters in order to develop their understanding of reconstruction after war.

Accepting the similarities that have been identified between natural and war disasters¹, this Chapter argues that too much dependency on natural disasters literature, could be misleading, because of the considerable differences in the nature of post-war reconstruction and that of disaster. An obvious example is the highly political context within which reconstruction after war has to be undertaken. These differences are the consequence of the basic contrast between war and other natural phenomena. In the absence of hard data, the following text can best be described as *working hypotheses* that needs to be tested under various conditions. It attempts to understand war, by formulating a general framework based on identifying a number of dimensions, in which war is different from natural disasters and that can be used to measure war and its aftermath: its scope, speed of attack, duration, methods of destruction and vulnerability.

This Chapter is not intended to present an in-depth study of war, but rather to help those concerned about reconstruction to better consider the causes of

¹ See the work of Davis (1986; 1988a; 1988b; 1989); Lewis (1988a); Zargar (1988b; 1989a); Meyers (1991) and El-Masri (1992).

destruction. Moreover, it was written while having the Middle East, as a geographical region, in mind and more precisely, while having the 1980s as a parameter within which we would limit the scope of this research. Nevertheless, every now and then, our examination expands to include other wars when needed. This limitation has been considered in order not to fall into the trap of excessive generalisations.

1.2. THE LEGEND OF WAR.

Creation and demolition, construction and destruction have always been an integral part of human life and activity. Almost every nation, culture and civilisation through out history, has acted both as a 'founder' and 'destroyer' of human settlements. Through out history, many societies all over the world have experienced devastation and dispersal. Some have disappeared altogether, others have rebuilt, in one form or another, their new place from the rubble of the past. The world has seen many massive wars; some were long before recorded history and only became known to us through archaeological evidence. Others were recorded in literature, legends and holy books. One just needs to review the different kinds of major wars of the distant and then the more recent past, in order to see that wars are seemingly integrated into the fabric of the human condition. One of the hopes of modern times was that this need to kill and destroy, as a means of settling differences, would become less and less attractive or necessary. But the contrary seems to be the case. In fact, as the means have developed, so have the opportunities arisen and the scale of tyranny multiplied exponentially.

To mankind, ultimate security has always been provided by the construction of his habitat and shelter. However, 'national security' for some societies has at times meant destruction for others. This tragic and ironic consequence of so much 'security' in recent times, has too often resulted in the destruction of defenceless settlements. It seems that the bombardment of human settlements has become one of mankind's principal activities, often lavishly supported by 'public funds'. Moreover, it also seems that the 'horrific' events associated with destruction, are given more credence and prominence than the rebuilding of communities and the population of new settlements. Sadly there seems to be today, a preoccupation with destruction, where the technology, in the hands of a few, can cause death and misery to the many.

We would all agree that 'nature' has been harsh on mankind, through what we would call natural disasters. Still, "...the greatest death and destruction, loss and grief,

dislocation and relocation are associated with the man-made disasters that have occurred through warfare. The slaying of human by human in either direct combat or through sophisticated weaponry brings cruel mutilating injuries and sudden, untimely and violent death... And of course, warfare destroys the homes and habitations, the livelihoods, and even lives of many non-combatants..., mankind's capacity to create psychic trauma through war, to create horrifying forms of warfare, has increased exponentially" (Raphael, 1986:18). It has been claimed that between 1955 and 1976 the toll of death caused by natural disasters did not exceed 1.2 million.² Within the same period for instance, the Vietnam War (1960-75) killed 1.8 million; the Biafran War (1967-1970) 1.1 million and the Bangladesh war (1971) 1.5 million. (see Davis 1978:116-117). These figures are quoted to support the argument that, now, it is true that man's capacity to kill and destroy has overwhelmed anything that nature can deploy. Being aware that it is hard to demonstrate this fact in a historical perspective, this Chapter suggests that it is self-evident that war is a continuing major source of human suffering and destruction.

1.3. THE DILEMMA OF WAR, PEACE AND DEVELOPMENT.

In today's world, despite the super powers' belief that, based on nuclear deterrent, they have maintained the peace for more than forty-five years, more than 300 armed conflicts have taken place all over the world since the Second World War. Some still continue and new ones are starting every month, and now even Europe can not be excluded. (Kirdon & Smith, 1983). Under the threatening 'cloud of the nuclear mushroom', of the 159 members of the United Nations at least 50 have been involved, either in a national, regional or international war, as well as civil strife or revolution³. The First York Workshop on Settlement Reconstruction, held in May 1988, noted 33 countries that have been directly affected by war since the Algerian War of Independence (1954-62)⁴ (Lewis, 1988a). However, since 1988 many

² This figure includes the 1976 Tangshan earthquake in China in which 650,000 people were killed and the 1970 Chittagong flood in Bangladesh that killed 300,000 people.

³ Note that the number of the UN members keeps on growing. Recently, Namibia, Estonia, Latvia, etc. have joint.

⁴ Afghanistan; Algeria; Angola; Bangladesh; Kampuchea; Chad; Cyprus; Egypt; El-Salvador; Eritrea; India; Indonesia; Iran; Iraq; Israel; Jordan; Lebanon; Libya; Malaysia; Falklands (Malvinas); Morocco; Mozambique; Namibia; Nicaragua; Northern Ireland; Pakistan; Philippines; Somalia; Sri Lanka; Thailand; Uganda; Vietnam; Zaire.

conflicts have taken place, thus we can add to that list, Panama, Colombia, Rumania, Lithuania, Armenia, Azerbaijan, Kuwait, Iraq, Liberia, Saudi Arabia, Qatar, United Arab Emerits, South Africa and now Yugoslavia. However, one should not ignore the indirect, as well as the direct involvement of the five Security Council permanent members: United States, United Kingdom, France, Russia and China in most of these conflicts far from their own land. In fact the West has been involved in 35 conflicts, while the old Eastern Block has been involved in at least 20 of these. The greatest number of these conflicts have taken place in the Third World, and were fed by the tensions of the Cold War, the Western Capitalist powers sought to exert their authority over the region against the intrusion of the Communist forces. (Marxism Today, August 1991). Other sources such as Trainer (1989:144) claimed that in terms of direct involvement, "Of the 120 wars that broke out between 1945 and 1976, socialist or communist countries have been involved in only six, but the rich Western countries have been involved in no fewer than 64".

War between nations, with its misery and ruin, is the most demanding and painful test of a people's commitment to their nation. The more prolonged and bitter the conflict, the greater the test of the true mettle of a nation's spirit and the solidarity of its people. War within a nation, so called civil war is often more damaging and invasive into the lives of more families, in every community, making, as they set friends, colleagues and relations against each other, reconstruction more difficult and psychological repair almost impossible. However, the author believes that if the people's interests could be truly represented by their Government then peaceful, stable and prosperous development, in partnership with Government, is surely what they would choose.

In a number of philosophical and sociological studies war has been attributed to mankind's nature. (Holmes, 1986; Miedzian, 1992). It is claimed that over the years, war has been used to secure and maintain man's needs and resources through power and domination. Moreover, war has also been used to satisfy man's so called immoral needs such as pride, aggression, envy and prejudice; while in international terms, war is seen as a direct result of political, ideological and economic pressures. Whether it is mankind's nature or the economic and political pressures, "... we find that almost every government in the world, lavishly protesting that it is peace-loving, ... [and] wants ... to *defend* itself ..., spends incredible amounts of money and commits enormous human, scientific, technical and other resources to producing weapons for its own use and for sale to others". (Harper, 1985:26). It has been

estimated that more than a trillion US dollars (one million millions) is spent annually on arms. (D+C, 2/1992:6).

This Chapter takes the position that war is directly related to development in both, developed and developing countries. The two Developed Blocks are producing weapons, 65% of which are bought by the developing countries (conventional weapons). The rest are used to reinforce their own armies. During 1990 the USA being the biggest arms supplier to the Third World, sold arms worth 18.5 billion dollars. Developing countries continue to spend an estimated 200 billion dollars a year on their armed forces. (D+C, 2/1992:6). Thus, in the developed countries the production of arms is supporting a considerable section of their economies, while the consumption of this weaponry in the South, suggests that too many of these 'small' conflicts are due to the failure of fair economic and social development policies, at both national and international levels. Some of these ideological wars, fought by proxy on behalf of external forces, speak of the 'success' of the international arms lobby over the 'failure' of the humanitarian development lobby. We are forced to ask if wars really are the best way to promote a suitable substitute for sustainable economic development?

Looking into the future, and as we are approaching the end of the millennium, it seems that war as a means of solving political differences is more comprehensively used than ever before. With the end of the 'Cold War', the threat today is no longer of an old style West-East conflict, but this has 'left room' for the development of conflicts on a North-South basis. As long as building 'peace' is dependent on armaments and preparation for war, rather than on the enhancement of societies and education (science, culture and environment), hopes for a stable and therefore a sustainable future for all of us are unlikely. Of course the human tragedy does not have to extend to active war, it can be created by the 'excuse' of a possible war, thus depriving the population of resources and stability in which to grow and develop.

Some sources, such as *Economist* (Dec. 1988) and United Nations (1988), hope to see a brighter future in which war will be avoided. They have built their hopes on the dramatic political changes that took place during 1988 and 1989. Where it has been said that "... of the 26 wars in progress 12 have stopped, or stand a good chance of stopping" (Zargar, 1989b:380). Still, three years later there does not seem to be many indicators for optimism. Although it is true that since then a number of wars have been brought to an end, a number of wars have been initiated, and the lives of many thousands have suffered terrible and tragic consequences.

Still, following the liberation of Kuwait, most of the high-technology weapons used by the coalition forces were displayed at the Singapore 'Defence' Exhibition, in March 1991, with the slogan 'combat tested'. Special emphasis at the exhibition was given to the new-generation of weapons; computer-controlled missiles and laser-guided bombs. (see Guardian, 27 March 1991). It is unfortunate that we can not talk about war as part of history, it is a part of our present reality, as it has been all this century in the Middle East.

Nevertheless, the end of the Cold War and the renewed confrontation between the developed and the developing countries during the Gulf War 1990-91 have introduced a new dimension to the dilemma of war, peace and development. Today there is a strong attempt between the major international donors like Britain, France, the United States, Germany and the Scandinavian countries to condition aid to political and economic reform in the developing world and in Eastern Europe⁵. If these conditions are genuine, then there is a growing hope that aid will no longer follow political alliances but rather the promotion of global human rights. To give an example, Brauer (1992) claimed that the German Ministry for Economic Cooperation has published five criteria for granting aid to developing countries including: 1) respect for human rights; 2) popular participation in the political process; 3) guarantees for certainty in law; 4) a market-friendly approach to economic development; 5) reduction of 'excessive' military spending. (see also, D+C 1/1992:4-5).

The immediate question that comes to mind is how do political conditions work in practice? And what about aid that is being given in armament form. Although it is too early for an assessment, there are some recent examples of actions where aid has been suspended or curtailed, usually on the grounds of abuse of human rights. For instance the British government has cut off aid to Sudan, Somalia and Burma for such reasons. (Brauer, 1992:3). The problem, from our view point is that, countries in great need for post-war reconstruction are more likely to lose out on these conditions. eg. Sudan, Iraq, Somalia, Vietnam, etc. In a more cynical view, one could claim that donors (knowing that it is very difficult to implement political and economic reform in those countries) are using these conditions as excuses to cut or reorient their aid programmes to favour Eastern Europe.

⁵ For more details see *Aid and Political Reform*, Overseas Development Institute (ODI), Briefing Paper, January 1992.

Finally, it is important to note that having the capability, wars could also be started for the satisfaction of military commanders, more so when these very commanders are the government and the defence industries. For instance, on the 14 May 1982, the Israeli news paper 'Yediot Aharnot' quoted General Eitan to have said, [when asked why the Israeli forces should attack Lebanon]; "Since I have built an excellent apparatus by the investment of billions of dollars, I must make use of it". This was reported three weeks before the Israeli invasion of Lebanon. (see Jansen, 1982). Again, emphasising the psychological importance of getting involved in a conflict, Sharon [the Israeli defence minister during the invasion of Lebanon] was quoted in Jansen (1982:7) saying that one of the reasons for the attack on Lebanon was that, "...nine years after the 1973 war, there was a whole generation of Israeli soldiers who had no experience of battle and who needed to be given it".

In conclusion, whatever the cause of war is, it is the character of warfare in various respects that mostly affects reconstruction and needs to be analyzed and understood if there is to be effective reconstruction.

1.4. THEORETICAL BACKGROUND ON THE STUDY OF WAR.

There is undoubtedly a considerable popular thirst for military history and the stories of war, as represented by the hundreds of titles of books found when searching the literature. John Connell was quoted in Holmes (1986:5) to have said:

"War has had us in its thrall. It has horrified us and fascinated us.. The stench of war has seeped into our souls. We have talked endlessly about peace; but in the recesses of our imagination we have brooded, often feverishly, on war, and we have written about it more copiously, I suppose, than any previous generation: memoirs, novels, poetry, histories official and unofficial, and (increasingly) theoretical studies of greater prolixity than profundity".

However, most of the literature is descriptive, as if in some way war is taken for granted. Most of the detailed studies that have considered war as a phenomenon have been conducted in the fields of military and political sciences. The logistic and strategic studies of war are well developed⁶. On the other hand, few studies have looked at the effects of war on society, these were conducted in the field of social geography (eg. Curson, 1989; Dahlan, 1975; Faour, 1988); sociology and

⁶ A considerable number of strategic and defence study centres exist in North America, Europe and what was know as the Eastern Block.

psychology (eg. Iklé, 1958; Raphael, 1986); and most of all refugee studies (eg. UNHCR's publications; Hamermesh, 1979; Simmonds et al, 1983).

During the last few years, in an attempt to understand the characteristics of war in order to better plan the reconstruction, scholars sought modern research on natural disasters as a source of knowledge. Thus, in the field of disaster management it was in the writings of Cuny (1983; 1986; 1992) and Davis (1978; 1986) that war was counted as a disaster. Still the issue of reconstruction after war was only paid lip service. In the field of post-war reconstruction, Davis (1986) was the first to suggest the existence of many similarities between war and natural disasters in terms of their impact and their disruption of peoples' normal life. Later on and based on these established similarities, scholars attempted to explore the issue of post-war reconstruction by studying cases of emergency response and reconstruction after natural disasters. (eg. Lewis, 1988b; Cockburn & Zargar, 1989; Zargar, 1988b; 1989a; 1989b; El-Masri, 1992; Meyers, 1991). This approach was pursued also because:

- 1) Despite the great number of wars and their continuity the issue was not recognised as a 'disaster' - particularly by international development and aid agencies- and consequently was not considered as one, neither in terms of emergency nor in reconstruction. (UNDRO 1988 ignored war when it counted the impact of disasters)⁷.
- 2) The fact that modern disaster research has largely neglected the investigation of war and its impact on the social and cultural identity of the civil population (Amirahmadi, 1991; Meyers, 1991).
- 3) Lack of specialised literature and recorded experiences on rebuilding after war, in particular literature dealing with the developing countries where the majority of wars have taken place since 1945. (Davis, 1988b).
- 4) Although the European experience of reconstruction after the Second World War could be a relevant base for comparison, it can not easily be used as basis for today's policy formulation. (Azimi-Bolourian, 1986; Lewis, 1988a; Zargar, 1989b).

However, it is ironic that, for instance, the start of modern disaster research in the United States in early 1950s was largely developed and initially funded by the U.S. Military. The creation of a number of disaster study centres grew from military

⁷ In this context, E. L. Quarantelli (1987b:7) wrote: "Few of us would have trouble characterizing some aspects of the recent Mexico City earthquake or the Amaro, Columbia, volcanic mud slide as a disaster. Yet many of us would hesitate to characterize in the same way the clashes between the Soviet Union military and the native guerrillas in Afghanistan, the American air strike on Libya or the current war between Iran and Iraq".

agencies. "These agencies were concerned with protecting the U.S. population from biological, chemical, and, particularly nuclear attack. In the absence of actual attacks on the U.S. they contracted for the study of peacetime, 'natural' disasters in order to obtain pertinent information that could be generalized to the war situation". (Meyers, 1991:4). In fact, most of the big active International and non-governmental agencies in disaster relief and aid were established as a result of war (eg. Red Cross, Oxfam, etc.) and consequently their model of intervention and provision of relief following natural disasters -for a long time, until the late 1970s- followed models of post-war intervention. On a number of occasions, these agencies were criticised by natural disaster management experts, for failing to distinguish between natural disasters and conflict, which led, in numerous cases, to approaches designed for shelter after war being used to provide shelter in the aftermath of disasters. (Cuny, 1983; 1992:27). Earlier on, we stated that the lack of specialised literature on recovery and reconstruction after war had led scholars to explore in more detail the issue of natural disasters, in an attempt to obtain information that could be generalised to war situations, thus reversing the roles.

To start with, it is important to make a number of speculations on why the issue of war as a disaster has been, and largely still is, neglected by disaster research, particularly in the area of reconstruction. The following reasons can be suggested:

- 1) Methodological imperatives on the side of psychological and sociological researchers (Barkun, 1977:221; Meyers, 1991), whose desire to grasp the dynamics of catastrophic change has led them to search for and concentrate on, cases that are most readily studied, i.e. small communities affected by natural disasters.
- 2) For the last 45 years (the duration of the existence of disaster studies as a science) wars have been limited to the Third World. The fact that the involvement of the developed countries - where most of the research and publications take place - has been generally limited to the development of destructive methods in connection with the Cold War. On the other hand, countries involved in war were more concerned with the job of reconstruction rather than researching it. (This fact can be found even today. For example see the Iraqi reconstruction case-study).
- 3) The reluctance on the part of the international development agencies to intervene and support research in what they see as highly political situations, where they are bound to take sides.
- 4) Some social scientists were "...reluctant to expanding the disaster area to include 'war' phenomena" (Quarantelli, 1987a:299) because they were concerned that "...war-inspired disaster studies might be put to negative uses". (Meyers, 1991:5).

From the above assumptions, one can conclude that it is for the very reasons that are given for not studying reconstruction after war that too much dependence on the study of reconstruction after natural disasters could be misleading. Furthermore, it could be a fatal mistake to argue that "Reconstruction is much the same process whether it be after war, earthquake, explosion or any other source of destructive forces". (Lewis, 1988b:24). For instance, the fact that disaster research has mostly been concerned with cases that are most readily studied, i.e. small communities affected by natural disasters, suggests that caution should be exercised when generalising information to be used in a post-war context, where reconstruction mostly starts at a national level. Furthermore, the nature and the tone of disaster literature, which is mostly addressed to NGO's, international development agencies and UN bodies, is very different from what is appropriate to address local and central governments in the highly political contexts of war. The following quote from the writings of Cuny (1983) symbolises the attitude of many natural disaster researchers:

"To a large extent, this book explores disaster response without considering the political context. In reality, just as disasters and development cannot be separated, neither can disaster response be divorced from politics. Unfortunately, few governments in the Third World are democratic and many regimes perpetuate underdevelopment because it supports the needs of an oligarchy or other privileged class. Thus many of the ideas presented here are anathema to these groups. For them, control of disaster relief goods from foreigners is the preferred method of aid, for it is in keeping with the dictatorial system". (Cuny, 1983:7).

However, in recent years some attempts have been made to investigate and understand the magnitude of post-war reconstruction by a number of governments: Lebanon, Iran and Iraq. It is interesting to note that in the cases of Lebanon and Iraq, where natural disasters are rare, attention was immediately directed towards other countries that have experienced war and reconstruction, eg. Korea, Japan and Vietnam. While in the case of Iran an attempt has been made to learn from natural disasters. (for more details on these attempts see Chapter 3 & Chapter 4).

1.5. THE AGENT OF MISFORTUNE: THE MAIN CONTRAST BETWEEN DISASTERS AND WAR.

Defining the phenomena associated with disasters is an issue that has been addressed by a number of researchers during the last few decades, since the establishment of modern disasters studies. However, no clear consensus has been

reached. (Quarantelli, 1987a; 1987b). It is important to start by noting that the early definitions have emphasised the physical quality of the disaster agent's or the agent impact. (Quarantelli, 1982). Thus, generally disasters came to be classified according to the cause of hazard, that could be either natural such as earthquake, cyclone, flood, volcano and drought/famine, or man-made, such as urban fire, industrial disasters, transportation disasters, collapse of man-made structures and war. (Cuny, 1983; Raphael, 1986). This kind of classification emphasises the physical quality of the disaster agent. Such emphasis, somehow, relates to the way disasters have often been described in quantitative terms: the number of dead and injured, the extent of damage to buildings and other physical resources, the number of homeless and the ultimate economic losses. It is interesting to observe how, under this classification war has always been counted as a disaster, but not really considered as one. (Zargar, 1988b, Meyers, 1991). Such classification and definition of disasters "...tends to be used by geographers and others with an interest in natural hazards and mitigation measures". (Quarantelli, 1987b:19).

On the other hand, more recent definitions, particularly in the field of social studies of disasters, put the focus on the human consequences rather than the particular disaster agent. Such focus made the classification of disasters more of a reflection of the real needs of the affected population. Quarantelli (1987b:19) quoted the definition reached by Fritz's (1961:655) as one of the well known definitions of disaster, when he wrote, disaster is any event:

"... concentrated in time and space, in which a society or a relatively self-sufficient subdivision of a society undergoes severe danger and incurs such losses to its members and physical appurtenances that the social structure is disrupted and the fulfilment of all or some of essential functions of the society is prevented".

Moreover, such a definition made it possible for a number of researchers to construct general principles of social effects under which a phenomenon can be consider a disaster. Thus, war was counted as a disaster under this classification too. This definition also led to the widening of the scope of what is a disaster.

Although this Chapter takes the position that war clearly fits the various definitions of disasters, it argues that, it is important not to mix and consequently confuse disasters with war because: (1) war is distinguished from virtually all other disasters (natural and man-made) by the deliberate and conscious attempt by the warring parties to inflict harm, suffering and damage to individuals and settlements

as we are seeing in Bosnia today; (2) war in general and civil strife in particular are characterised by social and political conflicts, a phenomenon that is not readily found in disaster situations.⁹

To support the first given reason we would argue that all disasters (natural and man-made) by definition are associated with a certain element of misfortune. In its popular definition the Oxford English Dictionary, writes, disaster is anything ruinous or distressing that befalls; a sudden or great misfortune or mishap; a calamity. Furthermore, Raphael (1986) cites that "...the word is derived from the Latin 'astrum', or 'star', and thus means literally ill-starred, connoting the elements of luck and magic and the powerful disturbances attributed to heavenly bodies". Such an element of luck and misfortune is totally ruled out in the case of war. It is the only phenomenon on which huge sums of money and human resources are spent and devoted for its development and initiation.

Relating disasters to misfortune in this context does not undermine the findings of a number of disasters' researchers in relation to the magnitude of man-made involvement in all kinds of disaster. A fact that is now being stressed by a number of authors and is dominating the natural-disaster mitigation literature. One of these authors is Cuny (1986) who wrote "...even though disasters are referred to by the event that cause them, a disaster is not the event itself. For example an earthquake is a natural phenomenon; if it does not strike a populated area with weak buildings, it is not likely to be a disaster" (Cuny, 1986). In this definition we can identify two dimensions that have to come together in order to constitute a disaster: a natural hazard which triggers the disaster and a vulnerable environment (context), which allows the natural hazards to develop into a disaster. No matter how significant the role played by man in natural disasters it is limited to the vulnerability dimension and never to the source of hazard, while in the case of war man's role in the latter is greater than his role in the former.

Furthermore, even the so-called man-made disasters are mainly triggered by accidents. "Technological disasters are usually a result of accidents or incidents occurring in the manufacture, transport, or distribution of hazardous substances such as fuel, chemicals, explosives, or nuclear materials" (Cuny, 1986:26). During the last few decades rapid development and industrialisation have resulted in a number of

⁹ In fact, our view coincides with that of Quarantelli (1987a) who went as far as excluding civil disturbances and riots from his definition of disasters.

technological disasters, which by their nature have been more severe when occurring in developing nations because of their lack of preparedness. The catastrophic gas leak at the pesticide plant in Bhopal, India, in 1984 is an example. "The accidents themselves are not much different from the kind of accidents that occur in industrialised countries, but the likelihood of their occurring and the potential damage is much greater. The death tolls from the resulting accidents could be magnified because Third World industries often are encircled by shantytowns and slums filled with migrants from the surrounding countryside" (Cuny, 1986:26).

1.6. MORE DIFFERENCES BETWEEN THE DIMENSIONS OF DISASTER AND THE CHARACTERISTICS OF WAR.

It is beyond the scope of this study to comprehensively research the issue of 'war' in general, as war could take the form of an armed conflict (this is the easiest to study in terms of effects), an economic war, an ideological war (of which the 1945-90 'Cold War' is part), a 'dirty war' (where no official war is declared, while the persecution of political opponents is going on, e.g. the disappeared in Argentina and against the Intefahda in Israel). In the literature it is common to find confusion in the way authors employ the term war to describe one sort of conflict or another. Thus the distinction is made mostly on the basis of the parties involved or on the type of weapon used. (eg. civil war, national, international, war, chemical war, etc). On the other hand, despite the obvious similarities between different wars in terms of their effects, a careful look reveals that the effects of war depend on a mixture of characteristics, such as the announced and the hidden agenda; aims behind the war; type of weapons used; war strategies and where and for how long the war lasts; the degree to which civilians are involved, etc. Hence, generalisations about war become more difficult. Nevertheless, it is felt that, in order to be able to better consider reconstruction on an international scale, there is a need to introduce a typology based on general dimensions and characteristics that not only cut across different kinds of war, but also within the same war. Considering the fact that post-war reconstruction as a science is still at its beginnings, there is a need to research in a wider sense. Of course, detailed studies in particular aspects of war are needed, but we have a different responsibility of piloting the issue and thus we need to make some assumptions and hypothesis, which can serve as a basis for the questioning and development by forthcoming researchers.

This Chapter attempts to reach a definition of the term *war* that encompasses

what we believe are the different dimensions or characteristics of war. Thus in this study the terms 'war' and 'armed conflict' are used interchangeably to denote *conflicts in which direct confrontation takes place between two or more parties, nations, states, or even within a nation, that has a defined time span, during which a society undergoes severe danger and incurs human, physical, economic, social, psychological and environmental losses, that eventually would affect the four bounds of any stable society (community, environment, state and market).*

The following Sections will identify some of the fundamental dimensions of war, that would inevitably dictate the end effects of war (war effects are discussed in Chapter 2), and thus influence our thinking on reconstruction. As far as possible, an attempt is also made to, further distinguish between the phenomenon of war and disasters.

- The scope of war:
 - a. Declared or undeclared war (threat of war, cold war).
 - b. Parties involved (civil disturbance, civil war, regional, international, etc.).
 - c. Geographical zone of war and population involved (urban, rural, borders, etc.).
- The speed of attack: or onset.
 - a. Unpredictable sudden attack.
 - b. Gradual built up.
 - c. Terrorist bombing.
- The duration of war:
 - a. Short period / intermittent.
 - b. Long term / recurrent.
- Methods of Destruction: Broadly, weapons of destruction are classified in three groups: conventional weapons, chemical and biological weapons and finally, nuclear weapons.
- Vulnerability and social preparedness:

1.6.1. The scope of war.

In terms of the parties involved, armed conflicts, can take the form of a local war between two countries (eg. Iran-Iraq war, 1980-88), or a regional war in which more than two nations are involved in a larger scale conflict, within the same geographical region (eg. the Arab-Israeli war, 1948; 1968; 1973). Obviously, the worst type of war that we have witnessed this century were the two World Wars, where practically every nation was involved. Wars of Independence were seen

following WW2. Civil Wars between two or more parties within a nation are still common (eg. the Lebanon 1975-1991, Sri Lanka, Ethiopia, etc.). Civil unrest is another form of war during which destruction and development go on side by side (eg. Northern Ireland). One of the most serious types of armed conflict that does not receive sufficient media coverage are the very local wars, where a certain group of people or liberation organisation is fighting to overthrow the government. Such people who usually call themselves 'freedom fighters', may also be referred to as terrorists by other nations. (eg. El Salvador, Peru, etc.).

The annexation of Kuwait by Iraq in August 1990 created a new category. This new war has brought into direct confrontation a Western super power with an Eastern regional power. It is not a world war, nor is it a regional war. Nevertheless it is a war in which disaster and damage took place (both in Iraq and Kuwait) of a type not experienced in the past. Despite the images of tanks and trenches, reminiscent of the Second World War, this has been a high-technology war, bringing its own reconstruction problems. (IoAAS call for papers, 1991). In conclusion, in the case of war there are at least two parties involved. A dimension that is not observed in the case of natural disasters. The implication of this dimension, when it comes to reconstruction, is that people, organisations and states intervening for reconstruction are inevitably seen as siding with one party or another. This dimension is particularly acute in the case of civil war or urban unrest, where the community itself is living in conflict. The effect of the 'troubles' on the construction industry in Northern Ireland can be given as an example, where even employed contractors are seen as allies of the enemy and thus their construction sites are targeted for bombing. (For more details see Chapter 8).

Declared or undeclared war. We should register the fact that the threat of war can in some circumstances be as damaging as war itself. The threat of an American invasion of Iraq and occupation of Kuwait, in September 1990 caused hundreds of thousands of refugees to flee both countries, into Jordan and Turkey. The threat also had an initial effect on the international price of oil.

This is not to say that other types of wars are less important. For instance, no one can neglect the effects the 'cold war' had, not only on the two blocks of superpowers, but also on the Developing Countries, where the actual wars were fought out. While in the developed world, where there have been no actual confrontations, its effect was mainly economic due to the arms race between the two groups of nations. Although some would argue that the 'cold war' had a beneficial

impact on the developed nations' economies through the arms trade, investment in defence and employment.

However, it is now believed that the last two years have witnessed the end of 45 years of 'cold war' between East and West. In fact, on the 19th November 1990, 22 countries of the Warsaw and Nato Pacts signed a Non-aggression Declaration and an Arms Treaty that will reduce conventional weapons in Europe by almost a third. The Paris Conference on Security and Co-operation in Europe (CSCE) officially declared the end of the so-called 'cold war', concluding a process that lasted at least three years. The Treaty committed the twenty-two countries to scrap a considerable amount of their military equipment. "More than 60,000 items of equipment have to be cut up, blown up or converted". (The Times, 20 November 1990). The treaty also outlined a range of options on how to dispose of the vast surplus of equipment⁹. How will such a treaty be carried out and what will its effects be on the developing world? Will it be seen as the beginning of a brighter future in which war can be avoided as a means of solving political differences, and in which problems of poverty and North-South relations might take priority. This is unlikely to be achieved as long as the industrialised world continues its investment in the arms industry and if the West does not replace their militaristic economy, with more constructive goods essential for long term development.

"Wars of ambition and fear are also waged with economic weapons, such as inequitable trading terms, sanctions or boycotts. 'Invisible' wars for the hearts and minds of people and nations are more insidious often causing greater suffering" (Zargar, 1988b:37). Recently, economic sanctions have again become a popular form of war in which the receiving side will suffer indirectly, while the other side does not have to cope with the vote losing images of an armed conflict. The August 1990 United Nations sanctions against Iraq is such a case that included even food, and medicine. The 1992 UN sanctions against Serbia is another example.

This is another characteristic that is very different from the dimensions of any natural or even man-made disaster, in the sense that the cause of destruction and economic deterioration is invisible and some times hard to identify. Moreover, and because of its international dimension it is hard if not impossible to counter.

The geographical scope of war is greater than any natural disaster, it often

⁹ The suggested range of options for removing tanks and other equipments from Europe are discussed in the Times, Tuesday, 20 November 1990. Also, in the same news paper some extracts from the Treaty can be found.

engulfs nations or entire regions. Although battle fields can be limited to a particular geographical zone, its impact is felt all over the country (disrupting organisations, economies and communities) and it is not only local communities that suffer, neighbouring communities, and in many cases other countries, have the refugees to look after.

1.6.2. Speed of attack and the on-set of a crisis.

Generally, disasters can be classified into two categories in terms of their speed of on-set. Disasters such as earthquakes, tornadoes, hurricanes, chemical contamination and transport accidents are thought of in terms of sudden and dramatic events, with rapid time sequences, disrupting the usual coping mechanism. While other kinds of disasters such as famines, may have a gradual and prolonged on-set, creeping up almost imperceptibly on a community. In this case the disaster starts with a drought which might last for years, before developing into a famine. Global warming is another example of a prolonged on-set of a disaster the effect of which may not be seen in a life time.

Considering the speed of on-set, war is different from both categories identified earlier and at the same time it shares some of their characteristics. In war the element of surprise is a powerful advantage to any aggressor. The successful preemptive strike can win a war. An example is the Israeli attack in 1968, where the enemy's, in this case Egypt, air force was destroyed in the first few hours. Although the element of surprise plays an important role in war strategies, the build up for war can hardly be a surprise these days. The, usually, long period of social and political instability and the military mobilizations which precede wars can give a greater degree of predictability, particularly with today's advancements in communications. "Furthermore, wars are comprised of many attacks and battles, each one of which might be a disaster and none of which, after the first one, can be wholly unexpected. Thus wars have an ongoing, recurrent character rather than a sudden, abrupt quality". (Meyers, 1991:11).

1.6.3. Duration of war.

Cuny (1983:39) classified disasters in terms of the time span of their occurrence, into cataclysm, and long-term or continuing disasters. Describing the difference between the two he wrote:

"In a cataclysmic disaster, one large scale event causes most

of the damage and destruction. Following this event there may be a tremendous amount of suffering and chaos, but things soon begin to improve. In a long-term, continuing disaster, the situation after the event remains constant or may even deteriorate as time passes".

All natural disasters, except famines and epidemics have a limited period of impact that can be measured in days, weeks or at most months. While most armed conflicts, in particular the prolonged civil wars can last for years and are usually long-term disasters. The Lebanese situation, where the war has lasted for 15 years, has witnessed different stages of renewed hazards, with sudden impacts such as the Israeli invasion in 1978 and 1982, as well as the repeated Israeli air raids on Beirut and the south of Lebanon. Northern Ireland is another example of prolonged civil unrest, in which the same locations and communities are frequently targeted.

The duration of war does not only relate to the amount of damage and loss, but also it makes reconstruction, though necessary, very difficult to carry out before hostilities cease, with the accumulation of damage. (In Chapter 3 we will further discuss how the continuation of war works as a regulating factor for reconstruction). While for instance in the case of an earthquake, the end is identifiable, despite the tremors, the stages of response into emergency, relief and rehabilitation can be more or less defined. Moreover the duration of war is directly related to the creation and maintenance of a 'war sub-culture'. (see 'War Sub-culture', in Chapter 2).

1.6.4. Methods of destruction.

This is one of the most important dimensions in which war differs from disasters. Today our improved scientific knowledge makes it possible to analyze and understand most, if not all causes of natural and technical hazards, to the extent that it has become possible to mitigate against such disasters. While in the case of war the means of destruction and their mechanisms are undergoing continuous improvement day by day, making it almost impossible to predict the effects of the next generation of weapons.

This Section is an attempt to bring together the principal knowledge of the three main types of weapons that have been or could be used in the Middle East armed conflicts, these include: (1) conventional, (2) chemical and biological, and (3) nuclear weapons. This effort is made in an attempt to understand the mechanism of destruction of each weapon and consequently its effects on human settlements. It does not attempt to present a comprehensive study on the different types of weapons,

as this type of knowledge exists elsewhere, and has its own field of studies. What has not been sufficiently established is the direct and indirect links between the type of weapon used and the reconstruction strategies required. Such understanding is very important in determining the most appropriate emergency and civil defence policies. Also it plays a significant role in identifying the scale and type of loss and damage and thus in proposing reconstruction strategies.

This Section is divided into three parts. Each part is concerned with one type of weapon; it first assesses the likelihood of an armed conflict using that particular weapon in the Middle East; secondly it reviews the destructive mechanism of such weapons and their link to reconstruction.

1.6.4.1. Conventional weapons.

There is a widely held view of warfare that the least dreadful weapons are the conventional ones; this is an unrealistic perspective, no weapon is a good weapon. The massive use of conventional weapons is as destructive as a nuclear weapon and as fatal as a chemical one. Recent experiences in the Middle East shows this vividly. For instance, "When Israel invaded Lebanon in June 1982, using the latest and most sophisticated American [conventional] weapons, the human and material cost was devastating for this small country". (MacBride, 1983)¹⁰. A more recent example was demonstrated by the American and British bombing campaign against Iraq in January 1991. Pentagon sources claimed that in order to keep their casualties to the minimum, they used more explosives in the first three weeks than in the whole of the 2WW. "They also claimed that in the first 12 hours of the war, more bombs were dropped on Iraq and Kuwait than during the 17-day Line-backer 2 bombing campaign in Vietnam, in 1972" (the Sunday Times, 27 January 1991).

In short, the real threat of conventional weapons is that they are readily available in the Middle East for both, states and even individuals. Moreover they have been developed and advanced to the extent that they have become real terror weapons. The other threat is the fact that as long as any weapon is labelled 'conventional' it is seen as an acceptable weapon. Thus, cluster, air-burst and fragmentation bombs and shells, phosphorus and vacuum bombs are all part of what, in our view, should be considered as conventional terror weapons. For instance,

¹⁰ MacBride, Seán (Chairman) *Israel in Lebanon; the Report of the International Commission to enquire into reported violations of International Law by Israel during its invasion of the Lebanon*, Ithaca press, London, 1983.

"...the cluster bomb is a canister which on impact sprays up to 650 separate bomb-lets or grenades that then explode on impact" (Jansen, 1983:32). The cluster bomb indiscriminately blasts an area several hundred feet, which makes it a lethal weapon if used against civilian neighbourhoods. Fragmentation bombs were used for the first time in the Middle East by Israel during its invasion of Lebanon in 1982, and also by the Americans in their recent war against Iraq.

In terms of their destructive capabilities, conventional weapons in general depend on creating an explosion that releases flying fragments. This explosion also results in a sudden increased air pressure (blast) spreading in circles and decreasing with distance from the explosion centre. This blast is the main destructive power on property. Another major impact comes as a result of the power of penetration by a shell or rocket¹¹. The author was often surprised, when visiting war-damaged settlements in different countries, to find out the extent to which people can recognise the type and calibre of weapon deployed against them, and even the extent of structural damage they can cause.

1.6.4.2. Chemical and biological warfare.

Recently, during the eight-year Iran-Iraq war, the possibility of using chemical weapons has been brought to light again. It has been claimed that Iraq employed chemical gases during the war, both against the Iranian troops and its own population in the Kurdish city of Halabja and Dojaila village in March 1988. However, these claims were only given particular media attention just after the Iraqi invasion of Kuwait. Today, Israel, Iraq, Iran, Egypt and probably Syria have acquired such weapons. Thus the Middle East contains 5 out of 12 countries who have a chemical capability besides those countries in the Nato and the Warsaw pacts¹².

"There are four main types of chemical weapons: blister agents, such as mustard gas, which destroy the skin and tissue and can cause blindness on contact with the eyes; choking agents, such as Phosgene, which cause the blood vessels in the lungs to burst;.. blood agents, such as Hydrogen Cyanide, which interfere with the

¹¹ A more comprehensive study on the mechanism of bomb destruction was carried out by the author, in March 1990, within the context of the effect of civil unrest in Belfast on its built environment.

¹² According to the *Sunday Times*, 27 January 1991, the rest of the twelve countries are: Burma, China, Ethiopia, North Korea, South Korea, Taiwan and Vietnam. The same source claims that a further 18 countries are trying to develop a chemical capability and will probably do so in the next 10 years.

use of oxygen in the cells and are instantly fatal; and nerve agents, such as Tabun and Sarin, which disrupt the nervous system and cause convulsions and paralysis, and are frequently fatal". (Sunday Times, 27 January 1991).

Some of these weapons have long been developed and even used, for instance 'Mustard gas'¹³ was first used by Britain, France and Germany during the First World War, and a million people were affected. While during the Second World War, although Poison gas was available on both sides, it was not used. Still since then it has been highly developed and tested. The Germans for instance developed advanced 'nerve gases' as early as 1936. By the early 1940's, the British, French and Germans produced a new generation of biological agents.

Although until then those weapons were not used, some of the experiments have resulted in ecological disasters. It is claimed that the British experiment of 'anthrax bombs' on the Scottish Island of Gruyard, in 1947 has left the island uninhabitable until today. Similar results from other tests carried out by the British and the Americans were reported to have taken place in the Caribbean in 1948. (see Socialist Worker, 16 February 1991).

However, the world witnessed the gravest results of such weapons when they were put to use during the Vietnam war. When 17 million gallons of defoliant agents; orange, blue and white were dropped by the U.S. air force over the Vietnamese forests and people. In fact, more than twenty years later the Vietnamese are still living with the effect of those chemicals. Vast areas of forests have not yet recovered and some may never recover. Children are born with different kinds of deformities as a result of that bombing. Also, 'Napalm Bombs' were among the terror weapons used by the Americans in Vietnam (the Four Horsemen, Channel 4 Film), and more recently in Iraq and Kuwait.

As Iklé (1958) underlined, the two principal aims of using chemical and biological weapons are either to cause a great loss in population, both civilian and military, or to reduce the food resources of a nation by using such destructive methods against livestock or crops. In both cases the main obstacle to their use has always been the difficulty of delivering and spreading the effects. This is particularly difficult to implement against livestock and crops, mainly because they are more widely and evenly distributed than the population. Also because of the need for

¹³ Mustard gas affects the skin as well as the respiratory organs. Thus gas masks on their own do not offer adequate protection.

different chemical and biological agents to destroy different kind of crops or livestock, their is the problem that they would leave the attacked nation with other options of food resources, especially if it had a diversity of food supply before the war. However, such attacks on food resources might take months or even years to affect a population seriously. Thus, using such weapons directly against the human population would be a more effective way and for those nations which have nuclear weapons it would be more decisive to use them. But, if the purpose of the war is to conquer people and take land, then nuclear weapons are self defeating and for use of deterrent rather than a practical tool; nuclear weapons produce radio activity, destroy people, physical structures and contaminate land alike, thus making it impossible for the attacked land to be productive.

Thus, the main distinction that set aside the chemical and biological weapons from the conventional or nuclear ones is, that it only affects human, animals and plants, without any physical destruction of property, transportation and communication facilities. In some situations, this might be seen, by a conquering force, as an attractive characteristic.

When talking about *reconstruction*, the points we should keep in mind are that: (1) in the case of chemical attack, "The ratio between consumer and physical resources would decrease, not increase as in nuclear and conventional bombing (with the exception of medical supplies)", and that, "...the impact of these types of warfare upon morale would basically correspond to the general impact of casualties upon morale" (Iklé, 1958:39); (2) however, this might be an idealistic and an irrational perception, for so far there has never been an attack that is exclusively chemical. Chemical weapon have always been used as part of wider conventional attacks, resulting in physical damage to the built environment; (3) Moreover, wherever chemical weapons are deployed, clearing contamination becomes a necessity in order for reconstruction and rehabilitation to start.

1.6.4.3. Nuclear weapons.

The two atomic bombs that were used in Japan during the Second World War, were enough to demonstrate the gravest consequences of using nuclear weapons against cities and human settlements. Despite the fact that nuclear weapons have never been used since, many developed nations went on stock-piling such weapons together with the needed planes and missiles to deliver them. A number of

experiments took place some of which resulted in ecological disasters. However, in spite of all the evidence and efforts of the Nuclear powers, some developing nations have obtained such weapons or they are on their way to doing so.

The likelihood of a nuclear attack in the Middle East has never been greater than it is today, with Israel acquiring its own arsenal of nuclear weapons. Moreover, the direct confrontation of Western super-powers with Iraq, as an Eastern regional power, made the use of such weapons even more likely, especially after the end of the 'cold war'. Although everybody is aware that nuclear weapons exist in the Middle East and can be delivered against cities, all the Middle East countries are entirely unprepared to face this risk. Nothing is being planned to mitigate the potential consequences of their use.

The most serious and certainly the most tragic result of nuclear warfare is the huge number of dead and injured. During the Second World War, casualty rates from the two atomic bombs dropped on Hiroshima and Nagasaki contrasted sharply with those from conventional bombs used on other Japanese cities such as Tokyo. This fact was raised by Iklé (1958:17), when he wrote:

"In Tokyo, the mortality rate per square mile destroyed by high-explosive bombing was 5,200 persons, while in Nagasaki and Hiroshima the rates rose to 20,000 and 15,000 respectively"¹⁴.

The same author explains that this fact is due to the added hazards of an atomic explosion, which (besides the blast and shock waves) is accompanied by a heat flash and nuclear radiation¹⁵.

But, certainly the suddenness of the widespread explosion and destruction of a nuclear attack is the main hazard responsible for the great number of casualties. One can compare the sudden widespread destruction of a nuclear bomb to that of an earthquake, where all the devastation takes place within a few seconds, leaving no time for people to react or take shelter. In contrast with conventional attacks, a 'normal' atomic bomb could cause great destruction within a few seconds, thus depriving the population of an opportunity to take refuge in shelters or to flee after the attack had begun. In the case of nuclear bombing, therefore, protection and

¹⁴ Iklé based his figures upon a study conducted by Los Angeles Scientific Laboratory, 1950, *The Effects of Atomic Weapons*, Government Printing Office, Washington.

¹⁵ The heat flash is a combination of very intense heat and light that lasts for a few seconds, causing fire storms and conflagrations. It was estimated that 5-15% of all fatalities in Hiroshima and Nagasaki resulted solely from nuclear radiation.

evacuation are effective only with advanced warning.

The report of the 'Greater London Area War Risk Study Commission', (GLAWRAS), conducted in 1986, illustrates the possible effects of a nuclear attack on the Greater London area¹⁶. In the following paragraph, some of the report's main conclusions are quoted just to give an idea of the effect of such attack on an advanced city such as London, in order to show how grave the consequences could be on a Middle Eastern city.

"If nuclear weapons were ever used, attempts to restrict their use to military targets would be likely to fail. Should this happen, London would be destroyed" (p.1).

"Even a much less severe attack, involving 31 Mt on the UK, of which only 1.35 Mt would fall on London, would destroy about one third of the city. As a result London might enter a spiral of decline from which it would never recover" (p.1).

Emphasising the difficulty of mitigating the devastating effects of a nuclear attack the report pointed out that:

"All forms of civil defence would be useless against heavy nuclear attacks. The GLC or its successor should therefore restrict its civil defence planning to deal principally with a war scare, conventional attack or the much less likely contingency of a small nuclear attack" (p.2).

However the report listed some mitigation measures that would reduce the effects of a small nuclear attack. These include: "...an extended concept of land-use planning, a public information programme, improved communications, the provision of food and medical reserves, and plans for food rationing, the evacuation of high-risk areas in London, and the manning of essential and emergency services before and after attack" (p.2).

¹⁶ Clarke, Robin (Rapporteur), *London under attack; the Report of the Greater London Area War Risk Study Commission*, 1986, Basil Blackwell, Oxford. The commissioners are: Anne Ehrlich, S. William Gunn, J. Stuart Horner, John Marshall Lee, Peter Sharfman and Frank von Hippel.

1.7. VULNERABILITY AND SOCIAL PREPAREDNESS.

Vulnerability is a general term that implies "...the level of loss that would be caused to an element at risk if a certain level of hazard was to occur" (Coburn, 1990, Oxford)¹⁷. The term can be applied to a single building, a rural settlement or a city. For a long time, the physical vulnerability of individual structures to natural hazards has been well observed and analyzed to the extent that, now it is common practise to design buildings that resist many of nature's forces. The same could be said about a number of entire settlements and cities in the developed world, where physical vulnerability has been reduced on a large scale (e.g. United States and Japan).

However, in recent years, researchers became more aware of the scale of human contribution to the occurrence of natural disasters. The environmental degradation caused by either excessive exploitation of natural resources, (deforestation, desertification, erosion) or by pollution due to rapid industrialisation are some of the examples used by those who support the opinion that disasters are mostly 'acts of man'. Recent studies in the field of disaster management went so far as to sum up with the view that "The term 'natural disaster' can be misleading because it implies that the disasters are solely a result of natural hazards, when in fact, human endeavour is a major contributing factor in creating a disaster" (Cuny, 1986:24), thus, emphasising the issue of vulnerability, an issue in which war differs significantly from natural disasters.

Such a view is based on the argument that disaster is all about 'risk' and that risk is the outcome of a vulnerable situation met by a natural hazard. For instance, if settlements and farms in Bangladesh were not located in flood plains (vulnerable site), the flood itself, as a natural hazard, could not result in a disaster. In the same way, an earthquake in Yemen (1982) of magnitude 5.8 on the Richter scale resulted in a disaster, while the same scale earthquake in California (1990), where buildings are built to earthquake-resistant standards, was hardly a crisis. Thus it is the vulnerable situation of communities, settlements and countries that effectively contribute to the scale and magnitude of a disaster that results from a natural

¹⁷ Notes given by Andrew Coburn at the Disaster Management Centre, 1990, Oxford. UNDR0, 1979, *Natural Disasters and Vulnerability Analysis*, Report of Expert Group Meeting 9-12 July 1979 Office of the United Nations Disasters Relief Coordinator, Geneva.

hazard¹⁸.

Based on more than 25 years of experience in disaster relief and mitigation, Ian Davis (1990, Oxford)¹⁹ observed the progression of vulnerability in the case of natural disasters, when he pointed out that vulnerability may start with underlying causes, such as limited access to power structures and resources, ideologies, unhealthy economic and political systems, armed conflicts and other general precondition factors. Then there are dynamic pressures, such as a lack of local institutions, education, training, appropriate skills, local investment, local markets, press freedom, ethical standards in public life, etc... Under dynamic pressures he also included some macro forces, such as population growth, urbanisation, arms expenditure, debt repayment schedules and deforestation, etc. Finally, what would bring vulnerability to a peak is having, on top of the above mentioned factors, what we might call unsafe settlement conditions. Such conditions include fragile physical environment, where settlements have been located on dangerous sites, also where buildings and infrastructure are poorly constructed and maintained. They also include fragile local economies as well as uncontrolled biological mechanisms. These observations suggest that targeting the cause of vulnerability would reduce the effects of disaster on a particular community. But, certainly it would not eliminate the cause of hazards, such as earthquakes and high winds.

Writers on the subject tend to explore vulnerability more in its physical form, no matter what kind of disaster they are dealing with, despite the recent acknowledgement of the underlying factor of economic and political vulnerability. In the case of war, such understanding of vulnerability is not good enough. Now, it seems, is the right time to start considering what might be as important as physical vulnerability if not more important, and that is the issue of social, cultural & ideological vulnerability. There seems to be little that can be done physically to mitigate war and its effects, while the bulk of vulnerability reduction action could and should be targeted against the source of hazard itself. Unlike natural disasters war

¹⁸ At this point we should note that, for instance in the case of comparison between Yemen and America, although California suffered less destruction, its economic and financial cost is expected to be much higher than the Yemeni one because of the high nature of investment they have put in their cities. On the other hand, recovery seems to be quicker in California because of the degree of development they have achieved. On the individual scale insurance played a great part in compensating victims for their losses.

¹⁹ Notes from lectures given by Ian Davis at the Disaster Management Workshop, Disaster Management Centre, Oxford Polytechnic, Oxford, 17 June - 21 July, 1990.

is initiated by man, and no matter how idealistic this might sound, there should always be a hope to eliminate the cause of war. In our view, war can not be compared to earthquake and other natural phenomena, as being the source of hazard that might trigger a disaster; war by itself is a long-term disaster that is usually triggered by a political question; assassination, kidnapping, military border operations or even just the threat of economic or political interests (these are all types of hazards).

1.7.1. Social, cultural and ideological vulnerability.

It is refreshing to find some authors such as Anderson & Woodrow (1989:13-15), and Wilches-Chaux (1992:30-35) referring to the crucial issue of social vulnerability. They even consider it as one of three categories around which they have designed their analytical frameworks to understand disasters and to compare the experience of different NGOs working in the field. Anderson & Woodrow (1989:13) claimed that, in the context of natural disasters, "Social and organisational vulnerability are obvious when there is prejudice, or conflict within a society. Divisions according to race, religion, ethnicity, language, class, or caste can weaken the social fabric to such an extent that people are more vulnerable to crisis". Such vulnerability could exist within social organisations, political structures on a national and regional scale and could be traced back to the local level, to include informal systems through which people get things done, such as making decisions, establishing leadership or organising various social and economic activities (at this point I have corruption in mind). Such informal systems could be presented in a tribal structure, or even just in the form of a neighbourhood or an extended family. In fact, "The most obvious and devastating disaster resulting from social vulnerability is war when conflict becomes overt". (Anderson & Woodrow, 1989:14).

In a natural disaster situation such vulnerability would certainly influence the degree of the disaster's impact on people. Having a healthy social system would help the community to stand together and serve them in the face of the disaster and the subsequent reconstruction. While, a vulnerable community, with one or more of the above mentioned criteria, would not only fell apart in front of a rising hazard, but it might generate a side conflict, that might develop into a local, or civil war.

Still, all of this need not be enough to result in a disastrous war, unlike natural disasters it is the vulnerability of nations and communities that make it easier for a war to start and consequently accelerate into a disaster. Thus as reconstruction after

war researchers, we should emphasize the social and cultural vulnerability, along side the above mentioned economic and political vulnerability, as a progressive stage of vulnerability to war. The existence of such vulnerability makes it very easy for a conflict to be triggered by the smallest event. Civil strife and wars all over the world are obvious examples that can be used to support such claim. From our region one just needs to look at Lebanon in order to explore this phenomenon. A more recent example is today's situation in Iraq, where losing the Kuwait war uncovered the underlying social and cultural vulnerability between the different sects of Shias, Sunies and Kurds, as well as the fragile political system. Another example can be seen in Europe today, where the war is still going on between Bosnia, Serbia and Croatia.

Cultural and ideological vulnerability to conflict, as well as to natural disasters has been observed through out this study in Iraq, Iran, Yemen and Northern Ireland. It is important to acknowledge that most cultures strongly believe in the strong 'hand of God' whether its called, the 'Lord', the 'Holy Spirit' or 'Allah'. For them, disasters as well as 'holy wars' are justified as being purely acts of God or fought for God. For instance, it was observed in Yemen (Muslims), that they strongly believed that the 1982 earthquake was employed by God as a means of testing man's faith in him. This belief applies on both personal and community levels. The Holy Quran reads:

"Be sure we shall test you with something of fear and hunger, some loss in goods or lives or the fruits (of your toil), but give glad tidings to those who patiently persevere. Who say, when in calamity: 'To God we belong and to him is our return'".
(ii.155, 156).

In the case of armed conflicts such vulnerability has been demonstrated in Lebanon and Northern Ireland where the religious dimension has dominated the war. Such beliefs have positive and negative dimensions. Positively, it helps in shaping the coping mechanism of the society. Negatively, it can make them do less to reduce their vulnerability.

Advocating the conception that disasters are largely an 'act of man', and that man's negligence as an individual, a community or even a government is what really lies behind the extensive loss of life and property, Davis (1988) wrote an article in the Guardian (December 30, 1988). Contrary to the opinion of Davis (1988) and others (such as Cuny, 1981 & 1983), Zargar (1989b:743) wrote, "...there is evidence that disasters are essentially acts of God". Zargar's interesting argument is largely based on his religious believe in God's existence and power. He supports this view with

quotations from the holy books. However, both commentators did not attempt to justify the war phenomenon, which has long been counted as 'a deliberate act of man based on materialistic realities'²⁰. Using the same argument as Zargar's, one can easily suggest that even war could be conceived by some cultures and religions as an Act of God, either to test the faith of a certain community or to punish them. In fact, following the American attack on Baghdad, it was observed in the field, that people largely believed that the hardship brought upon them by the bombardment was directed by God, both as punishment for not observing Islam as a way of life by the society and as a test of people's faith in God. Subsequently, religious feelings grew stronger during and after the war.

1.7.2. Material and physical vulnerability.

Accepting the concept of vulnerability, many researchers have associated natural disasters with poverty and lack of resources of the affected communities. In the case of war, nations can become vulnerable not just because of their poverty but also because of their wealth, natural resources and even their strategic location, e.g. the Arab Gulf states. Furthermore, it seems that the richer and stronger a nation, the greater its chances to get involved in a conflict. However, on individual and family scales the poor are usually the most affected, as they are the least mobilised and the most attached to their small belongings. Nevertheless, when it comes to reconstruction, it has been observed in Khusistan, Iran and in Kuwait that the poor are the ones who returned first to their home land. The rich and the businessmen were still feeling too insecure.

Going back to physical vulnerability, it is very difficult in the case of war, to assess the scale of vulnerability and subsequently to take mitigation measures against war damage, simply because the destructive means are being developed daily to make it neatly impossible to resist. Also because it is not a cyclical occurrence, as in the case of natural disasters where there often appears to be an established return period (average length of time between events, UNDRO, 1979). Thus no one can really predict when or where the next war will take place and what kind of weaponry is going to be employed. However, in the Middle East region, it has become common practice to design at least military installations to resist attack.

In general, "...it is possible to reduce the [war] vulnerability by hardening the

²⁰ This coincides with the view of this dissertation.

infrastructure at very little cost. The infrastructure is all those facilities that maintain civilised life, water supply, health services, electricity supply, communications systems and roads. These can be protected by sensible planning concerning their location and interaction with each other; also by suitable contingency planning". (Ledbetter, 1988:75).

Some of those measures were implemented in Iraq during its war with Iran which proved successful, particularly in the capital, Baghdad. But later on those measures could not withstand the Allied comprehensive attacks that targeted the cities' services, in particular using the most advanced and accurate weapons. It is believed that hospitals should have been located in several areas of the city, also the overall problems created would have been eased if there had been other cities with adequate facilities, besides the capital. "It is clear that important buildings such as hospitals should ideally have more than one supply of water and electricity. Where that is not possible they should have a protected supply". (Ledbetter, 1988:76). The recent experience of bombing Baghdad showed that it is almost impossible to entirely eliminate war vulnerability for a particular city. Nevertheless it can be reduced by:

1. Dispersal of facilities within a town, a region or a country away from military installations that are usually targeted first.
2. The use of parallel technologies, rather than a single method which may contain an unforeseen weakness.
3. Duplication of important supplies and routes of communication. (see Ledbetter, 1988).

Other measures of reducing vulnerability could be achieved through planning decisions, such as relocating a settlement that is in danger from a continuous war effort, i.e. located in a sensitive border zone, between potentially hostile neighbours. This measure, of course, contradicts with the wildly advocated recommendation of rebuilding the original settlements, in order to avoid any unnecessary social or cultural disturbances. (more about settlement relocation in Chapter 3 and Chapter 7).

But, one should not forget that such open advice usually has one or even more hidden faces, that might be interpreted and even used by central governments to achieve their own aims, despite their people's interests. This is because the people's needs do not always necessarily coincide with their government's interests.

It seems that in the case of natural disasters it is easier to take a decision to relocate a community on the basis, that the original site is not safe any more, and usually such decisions are carried out and in some cases forced on the people. While

in a war situation, not to relocate people and even rehabilitate them back on their own land seems to be a favourite policy for some governments, despite all the underlying dangers. For instance, the recommendation to rebuild settlements on their original sites, could be abused by governments, whose aim, behind the re-population of war damaged or recaptured areas, is to avoid future incursions, ".on the grounds that empty land is a clear invitation for invasion or land grabbing" (Davis, 1989), rather than to help people recover and rebuild their lives. An example of such a policy has been observed in the rural areas of Khusestan province in Iran, where the authorities did not consider any mitigative and preventative measures, in case of continued vulnerability to the war hazards. On the contrary, they started to rebuild during the continuation of hostilities of the Iran-Iraq war, thus towns and villages such as Hovelzeh and Bostan, in the south-west of Iran, were rebuilt twice. During their occupation they were razed to the ground, then new settlements were built in their place and people returned and started to settle down again in their new houses. But because of the continuous air raids and bombardment people decided to abandon their towns again with no one to look after them. This is an incident where we should ask if it was appropriate to start reconstruction and rehabilitation while the whole area is still at risk. This might sound rather a strange question if we consider all the professional advice that has always been given to start rebuilding as soon as possible. This issue of when to start and where to build is one of the common dilemmas that are facing planners, dealing with post-war reconstruction and has to be addressed individually. (see Chapter 3).

Using settlers, as a means of defending territories and even as an offensive means, is not a new phenomenon it has been used many times during history. Today, Israel is an obvious example, where settlers from all over the world have been brought to Israel in order to create a population density that would better guarantee its occupation of the West Bank and the Gaza Strip. Currently, thousands of Soviet Jews are arriving monthly to be settled in the Palestinian occupied territories. Such issues raise the importance of discussing the *rights and entitlements of civilians suffering from war damage to their physical environment*.

On the other hand, if we were to give a blanket of recommendation to the relocation of the affected communities, as an approach to the question of post-war reconstruction, then it could be misinterpreted too, and used to answer the interests of the central government rather than the local people. Another instance is where the Iraqi Kurds, were dispersed all over Iraq in the name of their own security, under a

hidden agenda aimed at merging them with the rest of the population, and reducing their power and claim for independence.

1.8. SUMMARY AND CONCLUSION.

The political mainsprings for war still exist. Indeed, as we near the end of the millennium, it seems that these springs are more tightly stretched than ever over the struggle for resources, in a world divided as much between north and south as between east and west. The great suffering and destruction caused by war is likely to continue, as long as building peace is dependent on armaments and other preparations for war, rather than on mutual understanding and the enhancement of societies.

In this chapter three principal areas of concern were identified:

- Concerning the theoretical study of war, we showed how over the years the emphasis has been shifted from war to disasters. The reasons why, in the last few years natural-disasters research has been used as a methodological model to explore the issues of post-war reconstruction.
- This Chapter stated that overdependence on natural disaster literature could be misleading, because war differs significantly from any other kind of disaster in a number of ways. These include, its scope; number of parties involved; the speed of attack; duration of war; types of weapons employed and methods of destruction and finally, population vulnerability.
- War and the arms industry have always played a controversial role in national development. Today's wars are fought for all sort of reasons, some of which may not be seen as irresponsibility on behalf of the State. Governments are expected to plan for development and they too are the principle wagers of war.
- The end of the Cold War has, on one hand, brought a number of fresh hopes for peaceful future development and for regulating the arms market, on the other hand, it has caused the threat of many a North-South confrontation over resources.

Finally a personal concern, that has to do with the continuous development of new weapons systems that enables the soldier, even on the battlefield, to fire more lethal weapons, more accurately to longer ranges: his enemy is increasingly, an anonymous figure encircled by gunfire.



The coming Chapter will discuss the different effects of war and the stages of recovery.

CHAPTER TWO

EFFECTS OF WAR AND STAGES OF RECOVERY: THE SUB-CULTURE OF WAR

2.1. INTRODUCTION.

By reviewing the different dimensions of war one concludes that in comparison with natural disaster, war creates more extensive and multi-faceted damage (also see Cuny, 1983:44-61). Moreover, the degree of this damage differs from one war to another depending on the previously identified dimensions of war. In other words, no two wars are alike in terms of the degree of their effects, that can differ not only from one war to another but also from one battle or attack to another within the same war. However, it is also fair to say, that the immediate impact of all wars can be summarised in human casualties and suffering, as well as destruction to the built and soft environments.

However, and as we explored in Chapter 1, the little available literature that is not merely descriptive of war, contains a great confusion as to the effects of war. There is no clear distinction between, the immediate impact of war, the side-effects of that impact and the long-term effects. This confusion might exist because of the nature of the different available studies, in which experts are mostly concerned with reflecting war effects, in relation to their own field of study. Thus, we find some studies that are concerned with the effects of war on demographic patterns (Curson, 1989; Dahlan, 1989; Faour, 1988); others concerned with social and psychological effects (eg. Iklé, 1958; Raphael, 1986); others with human behaviour and social response to air-raid warning (eg. Mack & Baker, 1961); and yet others, with physical damage and architectural heritage loss (many articles on Dobrovnik); and finally those concerned with refugees (Hamermesh, 1979; Simmonds et al, 1983), etc. As yet, I have not come across a study that represents a comprehensive picture of the effects of war, not even in the damage assessment reports, produced by national or international agencies. (eg. Iraqi report following the Allied bombing, 1991).

A further complication one faces when researching the effects of war is that,

some effects can be explored in much more detail and more easily than others. For instance the damage to buildings and the numbers of deaths and injuries, can be assessed quantitatively. Thus the figures produced have always provided the basic illustration of the effects of wars, as well as of natural disasters. However, the author feels that psychological, social, economic and political damage is equally important to assess in the long run.

To plan reconstruction it is important to present an integral picture of the immediate impact of war on the four bounds that constitute a stable society: the community, the state, the market and the environment (built: housing in particular as well as ecological), and the indirect effects this devastation has on communications, consumer goods' supplies, and the consequent social and economic losses. All in the view that a nation is a social, economic and organisational entity, of which the destroyed and damaged settlements form a functional part.

However, this Chapter does not claim the ability to produce a comprehensive picture of the effects. What it attempts to do is to provide a basic framework (skeleton or even just a check list) for planners and decision-makers, responsible for reconstruction, to use in reviewing the different effects; to identify areas of problems, while making sure that they have not missed one or another of the long list of effects.

To serve the aims of this dissertation an attempt has been made to categorise the effects of war into three categories, in terms of impact and time, while keeping in mind the fact that these categories overlap. We are aware that these categories, may seem like an over-simplification of the problem, still, we believe it is important to attempt to categorise war effects in a manner that goes beyond what has already been established in natural disaster studies. The three categories are:

- **Immediate impact:** The immediate impact of war affects population, state, market and the environment (in its wider sense).
- **Indirect effects:** Due to the immediate impact of war a number of side effects would result, these include socio-economic, cultural, political, administrative and organisational disruption.
- **Side effects:** And long-term results of war, are the accumulative results of the direct impact appeared over a period of time. These are directly related to the amount of rehabilitation that has been carried out during and immediately after the war.

These categories taken together try to represent the most comprehensive picture of war effects and the probable results of engaging in war. Still in practice it may be very difficult to accurately assess such effects. Simply because the end result of any war, on a certain nation, depends critically on the interdependency of many individual effects, some of which may not be immediately observed. For example, one of the side effects of the psychological impact of war within a certain community may be a reduction in man power, which in its turn, would prolong the economic recovery process. Equally important are the side effects resulting from having a considerable percentage of handicapped people.

2.2. IMMEDIATE IMPACT OF WAR: ITS EFFECT ON POPULATION, ENVIRONMENT, STATE, AND MARKET.

2.2.1. Effects on the population.

The direct impact of war on the population, both civilian and military, can be summed up in three areas of concern: (1) Mortality and injury; (2) psychological impact; (3) reduced fertility and (4) migration: both displacement and refugees.

Mortality - even before the controversy over the degree of physical destruction in any out break of war, a fiercer controversy usually (and rightly) erupts over the human cost, and particularly to civilians, which could take the form of death or injuries and disabilities. It has been established that natural disasters attract public and governmental attention through the number of casualties, consequently receives aid and help. The same can be said about war, where the factor of mortality plays a significant role in publicising a particular war.

While, in its review of disaster frequency and mortality in the 1970-81 period, UNDR0 (1986) seemed to have ignored war, along side famine and epidemics of infectious diseases, as major causes for mortality. Other scholars, such as Curson (1989:6-7) have classified war as being third, after epidemics and famines in terms of numbers of deaths caused over the period 1974-81. In a comprehensive assessment of human losses from disasters over the same period, Curson (1989) claimed that, while epidemics have killed 45 million people, famine has killed 40 million people and war has claimed the lives of 9,677,500 people. The importance of this assessment appears, when one compares these figures to the next highest on his list; these caused by cyclones, hurricanes, and typhoons 500,000, followed by earthquakes causing 426,998 casualties. This study shows that the UNDR0 concern covers, only a fraction of the real rate of mortality all over the world. Still, these

figures do not include the casualties over 6 years of WW2, which according to various sources, ranged between 35 and 50 millions. (Shah 1983; Otok, 1989).

Curson's claims seem rather underestimated if compared to those of Otok (1989:219-221), who estimates that the number of war casualties since the end of WW2 is between 16-20 million lives, excluding the victims of civil war and internal political conflicts, which, later on, he estimates as being more than 6 million people.

However, if we looked carefully into the world wide experience of wars, the number of casualties in most cases has been lower than that of survivors (who could have been injured). The exceptions to this phenomenon could be observed in the two cases in which nuclear weapons were used, where they resulted in a large number of dead, and also in instance where deliberate massacres took place. For example, the massacres of Sabra and Shatila south of Beirut, between the 16th-18th September 1982, in which 2000 people were killed.

In the case of natural disasters governments tend to exaggerate the number of human casualties, in order to obtain greater international assistance, while in the case of war one observes the opposite. Both, Iran and Iraq during eight years of war were keen on keeping the number of announced casualties as low as possible, particularly that of the military, in order to keep the public moral high. Also, today, in the Allied-Iraqi war, America and its allies are keen on keeping casualties low, not only theirs but also those of Iraq, especially the civilian ones, in an attempt to give the image of a 'just' war, and to avoid any diversion in public opinion and support.

Writing about the number of casualties resulting from the Israeli invasion of Lebanon, Jansen (1982:22) pointed out that, "The difficulty of arriving at a reasonably accurate figure for the dead, the wounded and the homeless was that one had to juggle with three sets of figures - one provided by the International agencies and by foreign correspondents reporting on a single town or incident; another provided by Lebanese sources, the Red Cross and the police (and these are not always the same); and a third provided by the Israelis".

Injuries - In terms of medical needs, it has been established that war is the worst disaster for inflicting injuries and thus requires the highest surgical needs over a continuous period of time, in which the medical teams have to operate under the most dangerous circumstances. While all types of disaster except perhaps for earthquakes, require low to moderate surgical needs and often only between the first 24-72 hours of the disaster. (Western, 1972 quoted in Cuny, 1983). On the other hand, while the immediate threat of epidemiological diseases due to war are unlikely,

secondary threats are common and all waterborne, personal contact and vectorborne diseases become a possibility, due to overcrowding and destruction of infrastructure and the loss of clean water resources¹. The break out of any communicable disease is made much worse by the continuation of war, which makes it nearly impossible to take measures to identify a disease, isolate it and prevent an epidemic, as well as to take any environmental improvement measures.

Psychological Impact - "There can be little doubt that war is a disaster and that it, too, may scar the minds of its survivors". (Raphael, 1986:221). This is one kind of damage caused by war that is often neglected by planners, architects and decision-makers embarking on reconstruction, it is hard for them to visualise and measure such effects. However, a number of leading studies have been conducted on the psychologically traumatic effects of combat on soldiers and civilians alike. For example Frye and Stockton (1982); Boman, (1982; 1984) studied stress disorder in the Vietnam veterans; Janis (1951) studied the psychological impact of bombing on civilians arguing that there are two groups of civilians living war; those who had 'near miss' experiences of death and those who had a 'remote miss'. The first group develop severe fear reactions, as well as higher levels of psychiatric damage due to anxiety and emotional stress of later air raids. While the second group may show diminished levels of fear and greater capacity to withstand the emotional stress of later air raids. Furthermore, Raphael (1986) and Ørner (1988) supported the claim of Janis (1951), that it is possible to predict the prevalence of severe emotional reactions following bombardment from: 1) the number of non-fatal casualties; 2) the number of survivors in public shelters or homes damaged during an attack; 3) the number of families in which a fatality has occurred; 4) the number of homeless people; 5) the number of visible casualties seen by survivors.

What they all agree on, is that war as an experience, with what it contains of confrontation with death, separation of family members, war time stress, general fear of invasion, bombardment, capture and occupation, may all help develop the syndrome known as Post Traumatic Stress Disorder. Ørner (1988:78) sums up the common reaction to those people so far, "Full psychic reconstruction eludes these unfortunate survivors and the consequences for them may range from fairly mild,

¹ Waterborne diseases: typhoid, paratyphoid fevers sewage poisoning, cholera, schistosomiasis, leptospirosis. Vectorborne diseases: louseborne typhus, plague, malaria, viral encephalitis, relapsing fever. Personal contact diseases: shigellosis, diarrhoea, skin infection, hepatitis, measles, whooping cough, diphtheria, influenza, tuberculosis. (Cuny, 1983:47).

transient irritants to profound psychological disturbance, culminating sooner or later in acts of self destruction either by suicide or spiritual annihilation".

Fertility - War has been classified along other long-term disasters such as epidemics and famine to cause a decline in fertility. A claim that has been supported by Curson (1989:16) when he wrote: "During the First World War the French birth rate fell from 17.9 per thousand in 1914 to only 9.5 per thousand three years later at the height of hostilities. During the same period the German and Austrian birth rates fell by 48 and 42 percent respectively". This has been observed in Iraq during its eight year war with Iran. Although no official figures have been announced, the fact that, between 1984-1989 the government launched the biggest campaign of its kind in the Middle East, to encourage young people to marry and to have children, is an indication of an alarming decline in fertility. The uncertain future accompanying war, discourages young people from marrying. Moreover, as in the Middle East, marriage is related to happiness and celebration, it is naturally seen as inappropriate during war when other people are suffering.

Migration - Populations fleeing the area of conflict, or are under threat to do so, are one of the major phenomena associated with war. It is the most common response to disasters in general and to war in particular. Despite the fact that in recent times, it has been described as a 'disaster myth' (UNDRO, 1986:13-16), it continues to be an important survival strategy. Thus *refugees* and *displaced* people continue to constitute one of the tragic consequences of war and civil strife.

It may seem appropriate at this stage to shed more light over the needs of refugees and displaced people, both groups share the same hardship of having left their homeland, becoming homeless, jobless, etc. But refugees receive more international recognition as they have made the move into neighbouring countries, and have thus become under the mandate of the United Nations High Commissioner for Refugees (UNHCR). While in the case of displaced people who have moved only from one part of their country to another, are considered the responsibility of their own government.

Over the years the official definition of refugees has evolved. In 1951, the United Nations Convention, which was extended by the 1967 Protocol, defines a refugee as:

"Any person who owing to a well-founded fear of persecution for reasons of race, religion, nationality, membership of particular social group or political opinion is outside the country of his nationality and is unable or owing to such fear,

is unwilling to avail himself of the protection of that country; or who, not having a nationality and being outside the country of his former habitual residence as a result of such events, is unable or, owing to such fear, is unwilling to return to it". (UNHCR, 1979).

Hamermesh (1979:348) reported that "The Organisation of African Unity found it necessary to add a sixth clause the *flight from war*". While Simmonds et al (1983:2) stated that in subsequent General Assembly resolutions, the UNHCR's mandate has been extended to include:

"1) Displaced persons who are outside their country of former habitual residence,...; 2) Former refugees and displaced persons repatriated to their country of origin; 3) In specific cases persons displaced as a result of man-made disaster in their own country".

All the above definitions make the determination of refugee status a complex issue. Starting from 1991 the Vietnamese 'boat people', who left their country for HongKong in waves, starting from 1978, have been repatriated by force by the Hongkong authorities with the blessing of the British Government, on the basis that they have left their country more from economic pressures than from fear of persecution.

The number of refugees seems to be growing year by year. In 1951 there were about 1,250,000 officially recognized refugees in the world (Simmonds et al, 1983:3). By 1979, the number of officially classified refugees reached 15,000,000 (Hamermesh, 1979:348). While in 1991, it reached 17,000,000 (Vasquez-Velasquez, 1991:13). "Under the terms of its statute the UNHCR must seek durable solutions for refugees. In order of preference these solutions are: Voluntary repatriation; Local integration in a neighbouring country of asylum; Resettlement in a third country of asylum". (Simmonds et al, 1983:3). However, the main points we need to observe when talking about war refugees and displaced people are:

- 1) There when and how of their return to their homeland is often not clear. After a natural disaster the survivors start almost immediately desiring to go home, usually, it takes a year or two before they return home or settle permanently where they are.
- 2) The war refugees are often part of a planned political agenda and thus their camps may tend to become permanent.
- 3) War refugee camps are at risk of military attack, as has happened with the Palestinian refugees over the last four decades, the Kurds refugees, and those in the Sudan and Ethiopia.

- 4) Unlike refugees of natural disasters, the numbers of war refugees will probably fluctuate with the respective periods of peace and war.
- 5) In designing a camp, the type and area of shelter required by war refugees is another area of difference. Cuny (1977) claimed that often war refugees have fewer possessions with them than those fleeing from natural catastrophes. This point is directly related to the dimensions of war, and whether there has been a warning or not.

Survivors _Victims of war_ In the context of an emergency response after a disaster, and while commenting on the term 'victims', Cuny (1983) wrote: "The term victims has many negative connotations. It provokes images of helplessness, of people who must be taken care of". Still, the same author kept on using the term on the basis that substitute terms, such as 'beneficiaries' or 'recipients' do not adequately describe all the people affected. At the same time, Cuny (1983) suggested the term 'survivors' as a substitute, while keeping in mind that it applies only to those who have escaped a life-threatening situation.

The main argument Cuny (1983) puts forward is that, whether we call them 'victims', 'survivors', 'beneficiaries', 'recipients' or what ever, they are not helpless. "They are capable of making intelligent choices and when special allowances are made so that victims can cope with personal losses, they can participate effectively in all post-disaster activities... the term *victims* should be coterminous with *participant*" (Cuny, 1983:7).

2.2.2. Effects on the environment.

The direct effect of war on the environment can be summarised by: (1) destruction to the built environment, including residential and commercial property, housing, industry, infrastructure, etc.; (2) devastation of agricultural land and crops; (3) damage caused to the various eco-systems. The *destruction of the built environment* is the most frequently portrayed and probably the best indicator of the horrors of war. However, the indirect effect of physical destruction on the local community depends on the type of damage inflicted on the buildings and infrastructure. We can think of a number of broad categories of buildings, where the bombardment could have a different result. Those would include, houses, schools, hospitals, universities, holy places, public and administrative buildings, commercial offices, shops, industrial sites, storage (food, chemical, etc.), ports, communication and finally military buildings. Similarly the infrastructure can be categorised into

roads, bridges, power-generating plants, water supply and sewage systems, etc.

It is a well established military tactic that the attacking force would start an offensive with a massive bombardment (from land, air and sea), in order to preempt a counter attack and thus hopefully to minimise its own casualties. We have witnessed this during the Israeli invasion of Lebanon, in the Iran-Iraq war and most recently during the Allied attack on Iraq. Most attacking armies would claim they are conducting a 'responsible attack', by trying to be highly selective against military targets and sparing residential areas, hospitals, and holy places.

This has never proved to be wholly true in any war, such bombardment could easily be re-directed against inhabited areas, on the bases that the enemy is siting his military installations and gun positions in residential areas or near mosques, churches, hospitals, schools, embassies and so on. The degree of physical damage to settlements could vary from 1 to 100%, depending on a number of factors, such as: the location of the settlement, its strategic importance, the attacking army's military strategies, the bombing accuracy, etc., and sometimes the obsession of military and para-military leaders. In the 2WW the cities of Coventry, Dresden and Warsaw are clear examples of how far man is ready to go, in terms of the devastation of human settlements. This attitude has not changed since then, in fact it seems to have become worse. The world has witnessed over the last 45 years many cases where villages, towns and cities have been systematically destroyed. In Warsaw, the aim of such systematic destruction was to erase the Polish identity. Against the Palestinians, Israel's aim has always been the dispersal of the population, both inside and outside the occupied territories. This was evident during the 1982 invasion of Lebanon, where Israel perceived the UNRWA refugee camps as being the physical and organised presence of the Palestinian people. For instance, Ain Hilweh camp, which was razed to the ground, has been subjected to heavy air bombardment first, then the camp was systematically reduced to rubble by blowing up and bulldozing the surviving houses. The United Nations Relief and Works Agency for Palestine Refugees (UNRWA), stated on 23 June 1982, in a report on the damage in five of its camps during the Israeli invasion:

"Mieh Mieh camp slightly damaged. Bourj el-Shemali: 35% of refugee houses destroyed. El-Buss camp: 50% of refugee houses destroyed. UNRWA Food Distribution Centre, one school, feeding centre and handicraft centre destroyed. Rachidieh camp [housed at the time 15,000]: 70% of refugee houses destroyed. UNRWA buildings seriously damaged. Ain Hilweh camp [housed 35,000]: totally destroyed". (See

Jansen, 1982:18-21).

Examples of total devastation are still taking place. Settlements such as Fao, Najaf, Wadi El-Khassib in Iraq and Bostan, Howizah, Abadan and others in Iran, were razed to the ground between 1980-1988. To paint a picture of what physical destruction is about, Jansen (1982:17), quoted the Times, on 19 July 1982, to have reported: "The Israeli air attacks [on Sidon] must have been among the most ferocious ever delivered on a Lebanese city [this was before Beirut's ordeal]. In the southern sector of Sidon, it looks as if a tornado has torn through the residential buildings and blocks of flats, ripping off balconies and roof supports, tearing down massive walls and collapsing whole blocks. There are still dead in these ruins too".

Housing _ The effect of bombing on residential areas as one of a nation's major resources is immediate, obvious and easily recorded. Probably, easier to trace than any other urban service that can be affected by war or bombing. The ratio of housing destroyed depends on the scale of bombardment as well as on the buildings' strength. Some buildings can be damaged without being hit directly, because of their bad state of repair. For instance, in Basrah, the author observed a number of buildings that had collapsed when an adjacent building was hit.

Homelessness is one of the main forms of human suffering. "During World War II, the number of persons left homeless after a raid using conventional weapons was always greater than the number of casualties. This discrepancy played a decisive role in the rehabilitation and reconstruction of damaged cities. Hamburg for instance, lost 3.3 per cent of its population, but 48% of its dwellings in the air raids. In Frankfurt, less than 1% of the population was killed in air raids, but over one third of the dwellings were destroyed. Air-raid deaths in Kobe amounted to barely 1% of the population, but over one-half of the housing was lost" (Iklé, 1958:16).

In quantitative terms, there is always a certain ratio between the housing stock of a country, (which must be counted as a major resource) and its population, the users, like other services. The effect of a certain war on upsetting this ratio depends on many factors. One of these is the type and duration of the war and the nature of weapons used. Also, the country's degree of preparedness for a war is an essential factor. By preparedness we mean; the availability of evacuation plans, air-raid shelters, early warning systems, etc. Finally, we should keep in mind that, as is the case in most developing countries, pre-war housing stock is usually in short supply due to the continuously growing population.

In general one can assume that the percentage of housing destruction would always be greater than the percentage of fatalities. Thus there will always be a need to supply housing, but this need may not be as bad as one would imagine by observing the destruction of housing areas. And certainly, there may not be a need to rush into supplying temporary housing units, that are often assumed to be part of the government responsibility. It has been established that the undestroyed resources such as housing, transport, etc., would partly absorb the loss from destroyed resources. Such facts have been claimed by many writers such as Iklé (1958), and to some extent it has been adopted by some governments as part of their emergency plans. For instance Iraq depended on this theory, but on a regional scale, where regions in the north and the east absorbed population from the southern regions during its war with Iran. The same could be said about Iran. This phenomenon is what has been identified as 'the elasticity of resources'.

On a city scale the originally least crowded districts would usually experience a greater increase in housing density, in particular if they have suffered less damage. Applying the elasticity concept on housing stock, Iklé (1958:58) wrote:

"A basic process of re-accommodation within a city can now be generalised. In principle, the number of homeless survivors leads to an increase in housing density, and the larger this number the greater the increase. Thus, the concept of elasticity seems fully justified, for the resources yield increasingly to growing pressure".

The same author goes on to clarify that, on the other hand, housing elasticity in a certain city does not necessarily completely absorb the loss from destruction. But this makes one wonder how much the above theory depends on the social context of the affected city. One cannot imagine how the elasticity theory, in terms of housing, can work in a real world that is so far from being ideal, i.e, where there are differences in classes, ethnic groups, religious groups and so on. However, we believe that war does bring people closer together. According to what has been observed from this research, the very concept of elasticity has been observed in Belfast during the 1970's, but within the limitations of the ethnic group. Similarly in Iraq, families, relatives and ethnic groups tended to accommodate each other during the war. It is interesting to note that in Israel and for the last few months, about 2000 Soviet Jews are being daily accommodated depending mainly on the existing housing stock and on families sharing dwellings together. In this case it was possible to do it on a national scale, because of the common belief shared by every body in Israel,

of the need to increase their population and protect themselves as a religious integrity.

*Destruction of agricultural land, crops and forests,*² is yet another direct effect of the impact of war on man and the environment that is often given little attention. This claim is supported by Freedman's (1989:298) observation, "...in spite of the impact of wars and the damage caused to the ecosystems, the ecological effects have not been subject to detailed scientific documentation, and are therefore poorly quantified. The human tragedy is most strongly emphasized".

During war, with the shortage of supplies, whatever available agricultural land becomes an invaluable resource, and hence it may be deliberately targeted. Damage to crops and agricultural land can take the form of one or more of the following factors: (1) Spraying chemicals: the biggest known crime is that of the United States against Vietnam. In an effort to deprive their enemy of food production and forest cover, over a period of 10 years (1961-1971), the Americans sprayed an area of 1.4 million hectares (about one-seventh of the land area of Vietnam), including 100,000 hectares of cropland, with a combination of several chemical agents. "The regeneration that followed was usually slow and sporadic" (Freedman, 1989:303)³; (2) Destruction due to burning and cutting down trees, either to deny cover for the enemy's advancing army or to make way for tanks and heavy vehicles. It has been estimated that "...more than 40% of pine plantations in south Vietnam were burnt during the war, with most fires being ignited by exploding bombs" (Orians and Pfiffer, 1970). Similarly, the palm plantations on the borders between Iraq and Iran witnessed such devastation; (3) During the 1991 Gulf war, because of lack of fuel during winter, people, particularly Kurdish refugees cut down trees to use to keep warm and to cook their food; (4) The war makes it difficult and in some cases impossible to attend to agricultural land, thus farmers become threatened by loosing their crops. Moreover, since the end of the Gulf war, Iraq has not been allowed to use planes for spraying fertilizers, which has meant that its agricultural production, particularly of wheat, has dropped dramatically (AL-Zubidi, 1991); (5) Contamination and damage of the top-soil. This could result from the use of fuel-air bombs to clear minefields and from the movement of army personnel and vehicular traffic, which

² This section has been prepared with the help of Mr Hoffman Alpra, a horticulturist studying for his DPhil at the University of York.

³ Several chemical agents were used, notably a 50:50 mixture of 2,4,5-T plus 2,4-D also known as Agent Orange; Picloram + Cacodylic Acid, etc.

also causes destruction of newly establishing and mature vegetation.

Furthermore, experience from the last few years has demonstrated that an 'environment-friendly' war does not exist, despite the clean image, media propaganda can give of a highly advanced technical war. The simple fact that war causes human casualties proves that it is an ecological disaster, since man, in our view, is the centre of the ecological balance. Today, it is the magnitude of war's impact on the environment that is alarming. The consequences of the recent Gulf war is a clear example on how war [comparatively a short one] could easily become an ecological disaster with a long lasting effect. Some of the geological effects on Southern Iraq are discussed later on in Chapter 5. In this Chapter let us draw attention to two phenomena, the oil slicks and the burning oil field.

These two phenomena held the headlines for over a year, since the beginning of the Allied-Iraqi war in January 1991, when each side accused the other of perpetrating an ecological disaster, until the withdrawal of the Iraqi forces from Kuwait, when they deliberately set fire to more than 600 oil fields. It is estimated that 6 million barrels of oil entered the Gulf waters, and several smaller discharges continued to contribute 400-500 barrels daily, since the end of the war until a year later. The most serious effects occurred along a 560 km. stretch of Saudi coast from Khafji to Abu Ali. Sandy beaches are covered with a strip of oil up to 100m wide. The worst affected were salt marshes and mangroves which act as natural traps for oil. Recovery of these will take at least a decade. On top of that, vast areas of land in Kuwait have non-burning oil lakes, oil has penetrated down to 30cms from the soil surface. (UNEP-UK news-summer, 1991). Sea-birds were another victim of that war, they were particularly vulnerable because they spend much of their time on the surface of the ocean. It was estimated that between 15,000 and 30,000 wading birds have died. Finally, the oil slicks have affected commercial fishing in the area because of fear of oil clogging fishing equipment.

A total of 593 oil fires were still burning by the end of May 1991. By October 1991, all oil fires on land in Kuwait were apparently extinguished. Those oil fires were responsible for the 30,000 km² of a dense smoke cloud, which according to WHO analysts, produced daily emissions of more than 40,000 tons of sulphur dioxide (SO₂), 3,000 tons of Nitrogen Oxide (NO₂), half million tons of Carbon Dioxide (CO₂), and a cocktail of other pollutants. "People living and working under the cloud experienced lowered light conditions and temperature falls in the range of 5-8 °C" (UNEP-UK news-summer, 1991). Widespread respiratory problems amongst babies

and elderly people were associated with that smoke.

2.2.3. Effects on the market and the economy.

While "Disasters disrupt rather than destroy economies" (Cuny, 1983:49), war can certainly destroy, as well as disrupt them. During and immediately after wars, and even in some cases before the attack (during the period of threat), normal economic activities are severely disrupted, due to one or more of the following effects: (1) direct destruction of factories, shops and offices; (2) destruction of infrastructure and communications; (3) people leaving their jobs and occupations in trade for survival and security for themselves and their families; (4) reduction in manpower due to mortality, disability (both physical and mental) and migration; (5) lack of security would drive local businesses and banks, etc. to operate outside the war zone, or even outside the country, thus causing a loss of investment; (6) Loss of crops and deterioration of agricultural land, in rural areas; (7) lack of goods in the local markets causing inflation and a black market, making it very difficult for families to get hold of food, etc.; (8) post-war, local economies (in the war-zone) are bound to suffer competition from centres of production that have flourished during the war because of their relative security.

The speed of economic recovery depends directly on the scale of damage as well as the degree of preparedness. For instance, in Abadan, Iran, it was observed, that despite the fact that the refinery was severely damaged, it managed to operate at reduced levels. This made it possible for the refinery to come back to 40% of its pre-war production within only 2 years. Following the war, the refinery's work force was employed in recycling damaged machines and equipment, as well as on the production lines. Thus providing a considerable level of employment. Similarly, on the other side of the border, but this time following the Allied bombardment, workers in Iraqi factories were employed to clear rubble, rebuild and to maintain machinery in their factories.

The speed of recovery following war is generally affected by the fact that national and international insurance does not provide cover to businesses in the case of war or civil strife⁴. Thus reconstructing the economy and helping business and industry to rebuild often becomes a governmental responsibility. The way this is approached differs from one country to another. For instance, while Iran could only

⁴ Insurance is provided in many cases of technical and natural disasters.

help its factories by allowing them tax-free machinery imports and offering long term loans, Kuwait on the other hand could afford to give almost 100% compensation. (More on reconstruction and the local economy in Chapter 3).

2.2.4. Effects on the state: administrative and organisational.

For decades now it has been well established between urban planners and urban sociologists that a city is "...a complex of interrelated physical and social functions. It is comprised of a network of many relationships between individuals, groups, and material parts" (Iklé, 1958:5). Thus it is a living relationship between individuals; both as households and dependents, as well as families and the other functions of housing, markets, transportation, working places, cultural activities, food supplies and of course, the state. This interrelationship between communities and the state is more complex than ever in today's world. During war, one or more of the above relations will be affected, and in most cases all of them, bringing a measure of disruption to the entire functional system of the city.

The latest conflict in the Gulf brought to mind the fact that in a city such as Baghdad, one of the above components could be completely destroyed, while another related one could remain undamaged. The Allies claim of pin-point bombing accuracy of governmental ministries and installations, in their war against Iraq, meant that they have established a new way of paralysing a city, though destroying its services and communications systems, without inflicting severe damage on its physical structure.

Apart from physical destruction, the state's economic and administrative organisations following war will also be affected at all planning and administrative levels: national, regional and communal. A phenomenon in which war is distinguished from other natural and man-made disasters, which at most, would affect the communal and local organisational pattern. However, the degree of damage differs from one level to the other depending on the dimension of the war itself (according to the type of war, see Chapter One). Nevertheless, it is almost a rule that "After the war the central, and to some degree also the regional, administrative bodies will still function. Yet the communal structure of the areas which are mainly affected by war will be destroyed". (Herz, 1991).

In countries where a local or communal administrative structure exists, it tends to suffer the most as a result of the refugee problem in or out of the war zone; destruction of infrastructure (roads, railways, communications, etc.); destruction of

housing; of agricultural and industrial structures and mortality. Moreover, war often highlight the social struggles in a society and underscores the inherent inequities within a political system, as well as the government's inability to cope with the situation. Often the involvement in war can lead to profound political and social changes within a society.

Furthermore, the political nature of war makes it inevitable for a militarised war-time government to evolve, with all the features that accompanies such a state. Such a type of government could evolve in order to counter possible external intervention; that could more easily use the war to initiate internal unrest, revolutions, etc. On the other hand, the huge task of reconstruction has to cater not only for physical reconstruction but also for economic, social and environmental recovery; thus, it inevitably increases the role of administration in the social, economic and political spheres, making the effects of war on the state administration even more acute.

2.3. WAR AS A CULTURAL EXPERIENCE: STAGES OF RECOVERY.

Experience of natural disasters involves a range of activities which are inter-related, and cover different time periods, these activities often over-lap. It has been established that the disaster 'life-cycle' has four main phases. These phases are: pre-disaster, relief, rehabilitation and reconstruction (see Cuny, 1983; Park, 1989:196). Inevitably the period of time occupied by each phase, and the specific details of activities carried out, will vary from one type and scale of disaster to another. However, this is not the case with war, because war has no life-cycle which makes its extremely difficult to conventionally identify the different stages of recovery as we do with natural disasters. Thus, in this Chapter we attempt to derive a different way in which we can look at the various stages of war and recovery in a flexible, but comprehensive manor. It is suggested that this could be achieved by answering a number of questions that are central to the understanding of war effects and to the planning of reconstruction. For instance, is there such a thing as a war culture? If so, what are the characteristics of such a culture? Can the study of this topic enhance future reconstruction policies?

To help promote this thesis, this section explores the assumption that war is a very strong cultural experience, through which the different stages of war recovery are displayed. In many instances the post-war 'sub-culture' displayed by society will have been born through terrible and traumatic events during the war itself. Thus the nation, its communities and its individuals are indeed shaped by fire. This Section

explores the notion of the 'sub-culture of war', in both its 'official' and 'popular' faces, as a phenomenon that manifests itself from the very first day or even before that, during the period when the threat of war starts to affect the existence of community life. The two faces; official and popular; government and people are closely interrelated and, at the same time, tangibly differ from each other.

2.3.1. What is war sub-culture?

The term 'Culture' is said to be derived from "...the past participle of the Latin verb *colere*, to 'cultivate', and draws some of its meaning from this association with the 'tilling of the soil...' In later times, 'culture' took on a more specific sense, indicating a process of progressive refinement and breeding in the domestication of some particular crop, or even the result or increment of such a process. Thus, we speak of agriculture, apiculture, 'culture of the wine', or of a bacterial culture". (Wagner, 1975:21)⁵. In this sense the term 'culture' is mostly employed either to denote the elitist connotation of creativity and evolution, or it is used in its historical context to refer to knowledge, productivity and way of living of a certain civilisation. *Taqâfa*, the Arabic synonym of 'culture', gives a more precise meaning of refinement and education. Thus, when speaking of 'human culture', we are talking about what makes man different from other species: the refinement of his mind and his activities.

The definition of culture, as it is implied in this paper, is closest to that given in the Collins Dictionary; "...the total of the inherited ideas, beliefs, values and knowledge, which constitute the shared basis of social action". This is probably the widest meaning given to the word culture. In other words, "culture is the expression of mankind in society" (Aysan & Oliver, 1987:10)⁶. Thus, war sub-culture is an expression of the every day life and activities of a society that is living at war; everything from making bread to people's post-war ambitions and dreams.

Looking into 'war sub-culture' is an attempt to consider the *effects* of war, the destruction not only of buildings but of ways of life, attitudes of mind even religious practices and the subsequent reconstruction, in a manner that goes beyond the well established physical determinations of economic resources, material, climate and topography. It is an attempt to study factors which have influenced reconstruction

⁵ Wagner, Richard, *Invention of Culture*, 1975.

⁶ Aysan, Y. & Oliver, P., *Housing and Culture After Earthquakes; A Guide for Future Policy Making on Housing in Seismic Areas*, Oxford Polytechnic, 1987.

issues and policies, without being given proper recognitions of their importance; i.e. hard learnt feelings and attitudes, bottled up creativity and frustrated educational ambitions. In other words, the expressions of every day life of a society living the abnormal circumstances of being at war, and is gradually becoming used to it, to the extent that bombardment, food rationing and personal deprivation become part of its normal background.

2.3.2. Official and popular war sub-culture.

Although a war sub-culture can exist almost everywhere where war has preoccupied people's lives, it tangibly differs from one nation to another, depending on and reflecting the aspects of the overall culture. Within any one country, the 'popular sub-culture' differs from one region to another; and within the same region, from one ethnic group to the other, and between social classes. However, there may be a substantial differences between the way people live and express their war affected lives, and the way these things are perceived and responded to by the government of that country.

Observing these phenomena, the author attempts to classify war sub-culture into two broad categories, official and popular, each of which displays the full characteristics of a national or regional culture, and goes through three main stages of cultural development: preparation for war, coping with its pressures while in progress, and finally recovering from war, with the remnant of this sub-culture being gradually incorporated into their evolving overall post war culture.

In the same way as the cultural expression differs from one society to the other at the 'popular' level, it also differs from one government to another on the 'official' level, mainly depending on the 'political culture' of different regimes. The growth of so called nationalism and the seemingly endless need to create more and more new nation states, has brought into existence an institutionalised (or artificial) type of official culture. Thus, institutions like 'Ministries of Culture' and 'Information' have become such an essential part of every state, that, in many countries, they are the instruments through which the 'ideological culture' is promoted and the 'political culture' is enforced. During a war, these instruments take on an even greater significance in justifying the war and maintaining the 'correct' public attitude⁷. It is

⁷ It is important to note the ever growing international importance of such institutions during war and there extended links to private Public Relations organisations (PRs). It has been said that the Kuwaiti PR exercise in the USA was largely responsible for the involvement of the USA in the liberation of

with these institutions that '...truth so often becomes the first victim of war'. To observe the official war sub-culture, one only needs to wander the streets of a city living at war, and compare the popular graffiti with reading what the newspapers and television say about the situation.

On the other hand, it maybe more difficult to gauge the depth of the 'popular' support of the war culture. To register such culture, it is not enough to observe in the field or carry out questionnaire surveys; it is essential to have a close relationship with the people, to live among them. It is necessary to be in a position of trust for people to talk about their suffering and the different ways their lives are affected by the war. These views almost certainly will contradict those of the official culture. In fact, it seems that in many cases, the longer the war lasts, the further the official and popular war sub-cultures move apart, and the less the solidarity between the people and their government becomes.

2.3.3. Preparations for war are the start of the sub-culture.

Before a disaster occurs, it is very much 'business as usual' in the area. Social and economic activities continue as routine, and quality of life for locals is normal. With wars this phase is marked by public anxiety over the prospect of something going wrong and the built up for conflict. However, it should be noted that **social preparedness** is more likely in the case of war than in any other disaster, particularly those that do not occur regularly (eg. earthquakes). Social preparedness includes all measures that are deliberately and systematically undertaken to reduce the negative effects of attacks. This includes, call up, early warning, civil defence, stockpiling of food, etc.

Looking at the situation in Baghdad, during the latest war, one wonders how people managed to survive and cope with the heaviest bombardment in history, which left the city's civilian life totally paralysed, without supplies of any kind, and accompanied by the strictest economic embargo ever imposed on a country. In my view, the answer is the existence of a war sub-culture, developed through the Eighties during Iraq's eight year war with Iran. The characteristics of this phenomenon are displayed in the social and economic survival systems, formal and informal power structures, imposed attitudes and beliefs, imported technology, etc.; all have played

Kuwait. More recently the role of international PR institutions have been emphasised during the Serbian-Croatian conflict.

a part at both the official and popular levels. Similarly for Iran, it is the experience forged in that war, that helped the Iranians cope with the aftermath of the June 1990 earthquake, the well organised official relief services were established during eight years of struggle with Iraq and her allies.

The construction of air raid shelters, the development of warning systems, the stock piling of food, the means of rationing resources and the huge investment in the military are all part of the 'official' culture of war time. They are most easily observed, partly because of their physical nature, but also because they are all pervasive. Although to a certain extent, the dominating political power might be expected to 'cultivate' the popular war culture, the strength and direction of this propaganda may be due to the recurrent impacts of the war; practice makes perfect. Every victory, air raid or bombardment is an opportunity to carry this sub-culture one step further. Certainly it seems, the greater the damage and suffering, the better prepared is the ground for the subculture to grow. These things maybe strengthened by the experience of war on a local and personal scale, i.e. for a particular town, neighbourhood or family.

The period of preparedness has to do with the nature of the cause for which the war is being or about to be waged. This is more a subculture of 'putting right a fundamental wrong' or 'seeking revenge', or a way of gaining internal popular support or distracting people from the hardship of dictatorship or 'restoring national pride'. It is a culture of 'winning the cause', of achievement of objectives, etc.

The new culture starts to display its characteristics in the form of preparedness for the war; the longer this period lasts the more mature the culture can become. For instance in the case of the latest Gulf War, there was no forewarning period. The attack on Kuwait took everyone except the Iraqi army, by surprise. In this case the Kuwaitis had no time to develop a 'preparedness' culture, whereas the period from August 1990 to January 1991, prior to the response by the Allies, gave the Iraqi people time to recall the war subculture that had developed during the Iran-Iraq war. This has helped, to a certain extent, to reduce the suffering of the people. The fact that many people did not accept the seriousness of the warning may be a measure of how effective the Iraqi propaganda machine was in acclaiming victory.

In fact, evidence from different wars seems to suggest that socio-cultural forces have primacy either in maintaining resistance and physical survival, and or in maintaining political solidarity, at least at the beginning of the war, and particularly if the war was seen to be justified in the eyes of the people. In a war situation with

few resources, one observes the new priority given by the public to religious beliefs and feelings, and the survival immediate family, both are usually supported and encouraged by the State.

In the case of Baghdad, although many measures were officially planned to try to reduce casualties, such as evacuation, when the real attack came, the population left the city without the support of the government. No camps were set up, and no evacuation plans were announced, and still, it is said that 60% of Baghdad's population left during the bombardment, to safer areas near the Iranian border. This shows the predisposition of people when threatened to band together to share resources of housing and food. At the family level, describing the way Umm-Ali managed to sustain her family during the war, she says:⁸

"During eight years of war with Iran, we used to stockpile almost everything that we might need for our daily life. In fact, now, we have a special storage room. After the end of that war, we kept on stockpiling grain, flour, rice, oil, etc. It became more of a habit. We always tried to keep the storage room full, despite the fact that supplies were available. During the American bombardment, it all became useful". (Baghdad, April 1991).

Thus, part of the preparedness for the war was to convert the usage of one room or at least part of a room (usually the safest, which at the same time becomes the living room) into a storage room. In Baghdad, almost everything was stored, even gas and petrol. These were usually stored on the roofs, because people were aware of the danger involved in storing them inside their homes.

The finding of the safest shelter is another aspect of preparedness as part of a war sub-culture. Families would select rooms or spaces (usually corridors and under staircases, with minimum openings) as a place where most of the activities were performed, windows were taped to avoid flying glass. The other option they had available in Baghdad, because of the previous war with Iran, was the use of public shelters provided by the government. But these shelters presented different types of problems. For instance Abu-Jamal, head of a family of eight members explained that:

"At the beginning of the air bombardment we used to spend the nights in a public shelter, for there is one just around the corner. But, after a few nights, we could not bear any longer

⁸ Umm-Ali, an Iraqi house wife, in whose house the author lived during part of his last visit to Baghdad in April 1991.

the lack of privacy that caused many arguments and fights. So, we decided to go back to our home, where we stayed until the end of the war. At the time, we thought that if we were to die, then, it was God's will, and nothing could prevent it." (Baghdad, May 1991).

2.3.4. Surviving the war.

People are the main resource for reconstruction and development, hence it is important to maximise the survival of people. It is also important to understand the kind and degree of human suffering imposed on a particular community, in order to better assess the capabilities of that community to reconstruct. The knowledge of mitigation in the context of war, comes under the heading of civil defence, which is well researched and documented elsewhere. War, however has some singular characteristics. For instance, the calculation of risk is dependent on the artillery capability and weapons sophistication possessed by the enemy, as well as the armed defence capacity of the home army. This information unlike that of natural disaster is confidential to the government and not disclosed. Civilians have to be protected but protection from against loss and damage from war is often the lowest priority of a government embarking on war.

The source of hazard is not static and with the delivery of new stocks and types of weapons, the magnitude of risk, as well as the geographical areas at risk, can change very quickly. This could make vast numbers of the population defenceless over night. It has even been claimed that a high degree of civil defence may encourage the politicians and army commanders to initiate a conflict more quickly than if their civilians were at high risk. In other words, mitigation measures in case of war can escalate the risk of attack. In the long term this may help to create more sophisticated weapons to ensure the upper hand, should the war be launched. It could be said that a pre-emptive strike by the enemy on the civilian population is equivalent to a community being struck by an earthquake.

War does not only cause the destruction of property but more importantly, the disruption of normal life and the creation of havoc and panic in the community, which is a major concern. Thus even where it is possible to save lives by measures such as evacuation and shelters, still the disruption of ordinary life causes political and administrative pressures on the government. So, the most difficult task of civil defence in war time, is the continuity of normal, productive life, while remaining reasonably protected from further attacks.

Thus the effectiveness of civil defence plays a significant role in reducing the number of casualties. Also, the provision of war-shelter is important. Reviewing the 'Report of the Greater London Area War Risk Study', Clarke, R. (1986:96) observes that, "The initial survey of London's built environment immediately revealed a finding of direct relevance to civil defence: only 3.5% of Londoners have access to any kind of basement or cellar".

The images brought to us from Bosnia show that people do not stay in shelters all the time waiting for a peace break-through, or for relief agencies to hand them food, they have to take the risk of wandering around the streets seeking bread and milk and even to do their jobs, when possible. Soon after the war starts, people will develop their own ways of dealing with the daily demands of life, they will become content with the minimum of living standards in their efforts just to stay alive. In fact, it is not only the people but also their governments, who will have to meet needs from the resources left undamaged.

As soon as war strikes, all social and economic activities are disrupted, and an emergency period follows. Search and rescue operations, burying the dead and caring for affected people (the injured, orphaned, shelterless) take top priority and has to be carried out while attacks are continued. Naturally, the emphasis is on speed and efficiency. For days and maybe weeks, efforts are normally made to provide food, water and medical care to survivors, and to stop continued loss and disruption related to the war (such as casualties, spread of fire, collapse of damaged buildings and structures, etc).

It has been established that resources escaping destruction, such as housing, transport, etc., would partly absorb the loss from destroyed resources by being more intensively used. Such facts have been observed by many writers who studied evidence in WW2, they have been adopted by some governments as part of their emergency plans; it is the case for Iran, Iraq and Israel. This notion depends on the overall social and cultural system and of course on the type of sub-culture that has been created during the war. For instance, are the people ready to accommodate others or not? As an example, Iraq depended on this theory, but on a regional scale, since regions in the north and the west absorbed the southern population during its war with Iran. The same could be said about Iran. This phenomenon is what has been identified as 'the elasticity of resources'. Although 'the elasticity of resources' does exist as a phenomenon, it is not necessarily part of the official planning. Moreover, there is always a danger of over-simplifying when assuming that, for

instance, on a city scale, the originally least crowded districts usually experience a greater increase in housing density, in particular if they have suffered less damage.

2.3.5. Recovery and war sub-culture.

War subculture is not only about 'preparing' for and 'surviving' the war, it has also a number of other dimensions that are evident after the end of the war and which are of crucial importance for the reconstruction of the society. The strengthening and rebuilding of social relations is one of the positive dimensions of this culture:

"One of the conciliating outcomes of this war is that it brought the neighbours close to each other. We shared shelter, food and fuel. Without the war we would probably not know Abu Iual's family better. They are very kind neighbours". (Umm Mohammed, Baghdad, May 1991).

War tends to bring people closer to each other, in an extraordinary solidarity that can leave its traces in the society for generations to come. Also, based on the suggestion that 'suffering stimulates artistic creation', one might argue that much of the development in literature and art in general is owed to war. Popular songs, poetry, literature, fiction and painting describing the war with its suffering and victory are all expressive forms of war subculture. The author has been particularly interested in wall graffiti, as an outstanding feature that exists almost everywhere, where there is an armed conflict. It reflects people's feelings and conveys the State's political and ideological messages.

Wall graffiti has always been an expressive type of art that responds immediately to the social, economic and political circumstances of a certain nation, and demonstrates strong, often otherwise unspoken, messages and feelings. This is particularly true in the case of civil strife. In places such as Iran, Iraq, Lebanon, Northern Ireland and the Israeli occupied territories, wall graffiti, pictures representing the war, portraits of the President, Imam or the leader, and slogans against governments and occupation forces have become part of the urban culture.

In Iran a more sophisticated version of this phenomenon, which developed after the revolution and during the war, can be observed. In this case, every conceivable use was made of emotively laden religious symbolism, in order to present the war against Iraq as being a holy war, that aims for the liberation of the holiest Muslim shrines. Although religious symbolism is largely discouraged by Islam, it was used

in Iran in the form of wall graffiti and street portraits, because of the strong message it conveys to the people in the street. In some of these graffiti, like in those found in the main mosque of Khoramshare, the religious structure obviously tries to portray all those lost in the war as innocent martyrs. These images are surprisingly close to Christ-like figures as they are known in Christianity. Also, the official anti US, USSR and Israel messages have become part of the landscape.

Meanwhile on the Iraqi side images of Nationalism and Arabism are dominating features in the streets and squares of most towns and cities. In the same way, images of the early spread of Islam by the Arabs were brought to life again, particularly those of the 'Qadisia Battle', in which the Arabs conquered Persia in the year 637 A.D.

However, this form of mass communication could also be found in Northern Ireland in its most sophisticated type of political propaganda. "Periodically under attack from the IRA, passively resented by one third of its citizens, outnumbered by a Catholic majority in the whole of the island, the majority population of this new Protestant State of Ulster laboured to project a sense of separate culture and identity. The introverted imagery of past myths became the territorial justifications of the present. Thus William of Orange, the red, white and blue of the Union Jack and the red hand of Ulster became the mainstay of separatist Ulster identity and wall painting the outward expression of an inward insecurity". (C. Gallagher & A. Hanratty, 1989:100)⁹. Equally, the Republicans (mostly Catholics) created their own graffiti which incorporates symbols of the Celtic culture and Catholic suffering. The Republican graffiti even went as far as associating the IRA with other international revolutionary movements, such as the Palestinian Liberation Organisation (PLO) and the African National Congress (ANC).

2.4. POSITIVE EFFECTS OF WAR.

Although it is hard to believe that any war can leave positive effects on the affected community, still experience shows that war, similar to other forms of disasters, may have short as well as long term constructive effects. For instance, it is a well known fact that the Welfare State in Britain owed a good deal to the effect of the Second World War (although there were other causes such as the extension to a democratic parliamentary and local government framework). The war stimulated

⁹ Gallagher, C. & Hanratty, A., *The War on the Walls*, Ulster Folklife, Vol. 35, 1989.

solidarity and upper class willingness to meet the expectations of social equality - or lesser inequalities¹⁰.

Furthermore, war brings to the surface the underlying basic pre-war problems of a certain society, that might have been overlooked previously. As Cuny (1983:12) observes, "It reduces all issues to their most fundamental level and strips away all the ancillary issues that obscure or confuse the fundamental questions that must be faced. Critical decisions, previously unaddressed, can no longer be ignored, and choices must be made".

There is no stronger indicator than a national war to highlight the inherent weaknesses within a certain society and within its governmental organisations. Certainly, not all the problems we face in a post-war situation are caused purely by the war. The war may have acted beside its destructive role as a means of bringing into sight long existing problems that have only been magnified by the war.

"... when you embark on reconstruction planning everyone you talk to blames this or that problem you encounter on the disaster. But gradually as you proceed it becomes all too apparent that at least 90% of the problems you are confronting were present well before the disaster occurred. All that has happened is that the disaster has acted as a surgeon's scalpel to expose these latent weaknesses in buildings, the urban fabric, the planning system or the administrative infrastructure". (George Nez, quoted in Davis, 1989b:14).

This phenomenon could be considered a positive one, if it was handled in a constructive manner; to pursue a comprehensive wide-ranging planning of reconstruction that would overcome many of the existing problems. For instance, it was the earthquake in Guatemala in 1976 that brought awareness to the middle- and upper-class families of the extent of poverty in their own country. And what followed that, was the establishing of many voluntary organisations to help the poorer communities. In other words, it was the earthquake that forced the old order into change¹¹.

Also, due to war and its subsequent reconstruction, governments find themselves more engaged in the development of different areas of the country, some of which may have been previously ignored because of their remoteness. Later, governments find it difficult to withdraw their services, or even to reduce their level,

¹⁰ From a discussion with Ed Cooney, Reader in history, University of York, 1992.

¹¹ For more details, see Cuny (1983:12).

without facing criticism from the community. Thus war and the subsequent reconstruction may mark the beginning of more responsible government development plans.

From the Middle East experience, one can argue that the war in Iraq, may for instance have long-term positive consequences. It was due to the war's pressure that Iraq's technology progressed so rapidly. Although in the case of Iraq most of the technological advancement took place within the military sphere, other industrial sectors have benefited too.

Probably if it was not for the Iraqi invasion of Kuwait and the subsequent liberation, Kuwait would have never seen the light of political reform and witnessed its first steps towards democracy, no matter how little the reform has been. After all, it may be true that, "There is nothing like a war to shake up a sleepy nation and cause people to think about themselves.... It depends on the price that is being paid, by whom it is paid and to what ends the means of war are directed, can war be a vehicle for development in spite of disaster" (Zargar, 1988b:36). Reviewing the reconstruction experience of Western Europe, Japan and South Korea, one can find many examples that support such a statement. From our own region Iraq seems to be such an example, Iran also achieved an outstanding degree of industrial and agricultural self-sufficiency, largely during the war.

2.5. THE IMPACT OF DEFENCE AND MILITARY CONSIDERATIONS ON CITY PLANNING AND ARCHITECTURE.

"Man's desire and need for protection are as old as his aggressive impulses, and few of his occupations have absorbed as much of his attention, time, effort, and capital as the design and construction of defences against the transgression of his human enemies".

(De La Croix, 1972:8).

Right now, the closest example for us that supports De La Croix's observation is York city, a medieval fortified city in the North of England, where the author has been living for the last three years. North of York and at the English-Scottish border stands Hadrian's wall; a 73 mile impressive man-made defensive structure. Many would agree that perhaps the most impressive example of 'defensive architecture' is the Great Wall of China started in the second century B.C., which shows how much man is ready to make the effort to defend himself (3,720 miles). However, numerous examples of defensive and offensive architecture can be found all over the globe;

fortified towns, cities, walls, observation towers, castles and so on. But, the main question that comes to mind is, what about modern warfare, and man's defences against it? Do they still affect the landscape and the built environment as they used to do until the 19th century?

This Section supports its argument mainly with examples taken from the Middle East, but it also refers to international examples when needed. In general this Section does not attempt to make a typological or chronological classification of the effect of defence and military considerations of human settlements in the Middle East through its history. But, it is rather an attempt to demonstrate the importance man has given to the defence of his settlements; a need that in some cases set the parameters for their siting and planning.

This was not only true in the past, defensive measures are still affecting and shaping our settlements until today, but with the growing range and power of offensive weapons, new defensive measures were introduced. Supporting this argument, Collins (1972) wrote:

"Throughout most of the history of civilization, the size, shape and interior arrangements of cities have been strongly affected by man's desire to protect himself and his possessions by means of fortifications. Each advance in the technology of weapons has led to more elaborate methods of defence against them".

Some urbanists went even further, to claim that the formation of the city as a whole, is the result of war or at least of preparations for war. One of those urbanists is Paul Virilio, who claimed that, "There are two great schools of thought on urban planning: for one, the origin of the crystallisation of the city, of urban sedentariness is mercantilism; for the other -the minor one with Phillip Toynbee- it's war, commerce only coming afterwards" (Virilio, 1983:3).

The Middle East; the so-called Fertile Crescent and Mesopotamia, have witnessed man's first transition from a food hunter into a food producer some 10,000 years ago. Thus moving from cave mouths and temporary hunter's camp into self-built, permanent habitations, that formed the nuclear settlements for a village and later on, for cities and an urban culture. As those permanent settlements grew in population and activity, as well as in wealth, the inhabitants felt the need to protect themselves and their property from the aggressive intentions of others, who were either less-fortunate and envious or who had till then, led a nomadic way of life. Thus they surrounded their settlements with walls.

The Middle East accommodates man's earliest-known permanent stone fortifications, built in Jericho around 8,000 B.C., over-looking the river Jordan. A tour across the Region reveals its rich culture of defensive architecture that belongs to different eras and ages. Some of the cities such as Jerusalem, are still surrounded by defensive walls that were built over different periods of time. In other cases such as Baghdad and Damascus, one can see the remains of great walls that once surrounded the whole city.

However, the physical protection of the city, by surrounding it with walls, was not necessarily the only means of defence, location played a crucial part. The cities of Karak in Jordan and Mousel in Iraq were built on top of hills, depending on their location as their main defensive means. Thus, the need for defence played a crucial role in selecting the location of a newly established city; it was as important as the need for a fresh water source or a commercial route on which urban life depends. In this context Petra, in the south of Jordan is a good example.

Even before the invention of explosive shells and the rifled gun-barrel in the nineteenth century that finally rendered the concept of built fortifications less valid, some of the settlements in the Middle East during certain historical periods, did not need fortifications at all, as they depended on the concept of regional security. A concept that is not new, it was known and practised in ancient Egypt, as well as during some periods of the Islamic Empire. De La Croix (1972) claims that, although the Egyptians were familiar with fortified towns, their cities as far as is known, were not fortified. Probably this ancient concept of regional security is the closest to today's understanding of defence, where there is no particular need to fortify a certain city, (a process that is almost impossible given today's advanced offensive technology); thus attention has been directed towards the formation and up keep of a large military force. Nowadays, the large percentages of national budgets devoted to national defense, suggests that although man has widely given up built fortifications, still his age-old fears have remained the same, and defence is still absorbing as much of his attention, time, effort and capital as ever.

However, many observations can be recorded in the Middle East and else where, where twentieth century modern military considerations have influenced the design of various elements of the built environment. In his leading article *Disasters as Agents of Change*, Ian Davis (1983), listed some of the influences the Second World War has had on architecture and city planning in Europe and America. Where he claimed that, the *autobahn* network built by the German Third Reich in the 1930's

was intended to aid the rapid development of the troops. His claim is based on Barlow's conclusion that the location, the width and the foundation of the network, reveals that they were designed to facilitate tank transportation¹².

The other influence indicated by Davis (1983) is in relation to the concept of urban decentralisation, where the fear of air bombardment of the dense and concentrated urban centres, has been used by town planners and urban reformers to advocate the dispersal of both, industries and the industrial population, in the form of 'new towns' or 'satellite towns' based on the concept of 'Garden Cities'. The same author also pointed out, that the 1950s Interstate Expressways in the USA, were stimulated by the need to evacuate large cities in the anticipation of nuclear attack. Finally, Davis (1983) observed the very important political fact that: "...there is no better way of obtaining finance for a favourite project than to claim it as an urgent response to a military threat, whether real, assumed, or even imaginary" (Davis, 1983:301).

The significant difference in the impact of military considerations on town planning in the Twentieth century and that of the earlier examples seems to be that, the defence considerations at that time, were counted in the constitution of the city. Thus, they were part of the preparation for war rather than the war itself. While today, except in a few cases that are mainly in the developed world, the means of defence started to affect the built environment, either during or after a war. As a matter of fact, it is easier to observe the impact of armed conflicts and political instability on architecture and city planning in countries where they are either threatened by war, or even living through it. Almost all countries in the Middle East can be categorised under one or the other.

In Europe, probably, Northern Ireland, represents the most long standing case of political instability. A study carried out by the author on the city of Belfast, revealed that the civil unrest that has been going on for so long, has not only affected the built environment of the city, but has actually shaped its urban life. Right from the physical segregation of the two communities, marked by the so-called 'peace lines', to the influence it had on the design of buildings to withstand bomb attacks, particularly the governmental ones¹³.

¹² Barlow, M. (1939), (Chairman) *Royal Commission in Urban Development*, London.

¹³ This study was conducted in March 1990. It discusses the effect of the 'troubles' in Belfast on its architecture and planning and is part of Chapter 8.

In general one can say that military buildings; bunkers, blockhouses, anti-aircraft shelters, anti-aircrafts defences, submarine bases, etc. are all kinds of reference points or landmarks demonstrating the extent to which war, with its reality and myth, occupies from our daily space.

The effect of a war is not necessarily reflected only by military objects and or even civil defence structures on their own. It could be reflected by every day structures such as housing (for more detail see the author's study on housing design in Belfast). The settlements built by the Israelis to accommodate the Jewish settlers in the 'West Bank' and the 'Gaza Strip' are clear examples, where housing has been designed as a defensive 'castle' on hill tops, with strictly controlled access. Such designs are meant not only to provide protection for the settlers but also to generate fear in the hearts of the indigenous Arab population¹⁴.

Following its war with Iran, Iraq was faced with the difficult and significant task of destroying and removing the defensive fortifications, constructed during the eight-year war. Especially those close to the inhabited areas, in the outskirts of Basrah. These fortifications were described by O'Ballance (1988:101), as follows:

"The Iraqi defensive trench system came to be studded with bunkers, weapon emplacements and dug-out shelters for the infantry, ever-ready to repel an enemy attack... Behind this strong frontal trench were communication trenches leading back to large underground shelters used for sleeping, feeding and resting... In front of the main defensive trench were jumbles and lines of barbed wire fencing and entanglements, fitted with booby-traps, sensors and other surveillance equipment".

One of the defensive measures used in modern warfare is minefields, in which vast areas are planted with thousand or millions of land mines and in some cases, as in the Iran-Iraq war, water mines. Normal life can never return to the mined areas until they are totally cleared. A very difficult and expensive task that has been proved in Vietnam, where hundreds of people are said to have been killed or injured, since the end of the war, by mines left by the Americans.

During the Iraq-Iran war, another technique with devastating environmental consequences has been the deliberate flooding of vast areas of desert plantations. One of these areas was 12 miles to the east of Basrah, on the east bank of Shatt al-Arab, known as Fish Lake. "The main obstacle within it was a deep half-mile wide

¹⁴ Barakat, Sultan (1988), *The Martyrs Neighbourhood; the Rehabilitation of an Historical Quarter in the Old City of Jerusalem*, B.Sc. thesis, submitted to the University of Jordan, Amman.

channel that ran along the length of the lake, which was itself covered by five strong defence lines"¹⁵ (O'Ballance 1988:194). Such a swamp, if left, could be another threat to the environment of Basrah which is already surrounded by them.

Other methods were used, such as destroying large tracts of date palm plantations by both Iraqis and Iranians. This, for instance, was done by the Iraqis to deny their use as cover by the Iranian 'human waves'. Some of these plantations were hundreds of years old and a considerable section of the local population of Basrah region were economically maintained by that industry. The harvesting and shipment of dates provides jobs for a large labour force at harvest time¹⁶. It is almost an impossible task to replant the lost palm trees, although the Iranians have done a good job on that¹⁷. However, part of these plantations are unlikely to be replaced, as they were intended for the new urban population of Fao, south of Basrah.

Finally, during the Iran-Iraq war it was common to see mass concrete barriers placed on pavements in the streets and around the main public places. Some of these were destroyed a few months after the cease-fire. In fact, the author was one of those who recommended doing so, as they could be seen as obstacles in the face of a return to normal urban life. Nobody at that time could predict the American bombardment of the Iraqi cities two years later. On the other hand, air-raid shelters, bunkers, and anti-aircraft defence towers have all become and still are features of the main cities in Iraq, such as Baghdad, Basrah and Mousel.

2.6. SUMMARY AND CONCLUSION.

In this Chapter we have tried to argue that the effects of war can be seen to fall into three overlapping categories, in terms of impact and time: immediate impact, indirect effects and side effects. We then explored each of the categories in more detail to conclude that war, unlike any other disaster, leaves multi faceted effects on society, affecting its four bounds of stability: the community, the state, the market and the environment. This examination provided a basic framework that can be consulted and used as a check list to ensure that none of the awful effects of war are

¹⁵ According to Edgar O'Ballance (1988), the work on the Fish Lake had begun in 1982. It was littered with under-water barbed-wire entanglements, mines, electrodes and sensors.

¹⁶ Unpublished report, *Basrah Development Plan, 1975, The Third Report*, prepared by Llewelyn-Davies Weeks Forestier-Walker & Bro. For the Ministry of Municipalities, Baghdad.

¹⁷ From a personal observation during a visit to the war-damaged areas in Iran, from 3-15 January 1991.

over-looked when planning for reconstruction.

Furthermore, in an attempt to explore the different phases of recovery leading to reconstruction this Chapter introduced the notion of the sub-culture of war. The development of this sub-culture during the war brings to the surface the underlying basic pre-war problems and shortcomings of a certain society. They will undoubtedly be associated with the very motives for the conflict itself. In this sense, they can indicate popular feelings which in some instances can be considered positive, if handled in a constructive way. War as a cultural experience manifests itself in every aspect of the daily life of a society living at war through people's attitudes, to literature, poetry, songs and the media. Of course there are many issues associated with a free press that we can't go into here, but governments have a responsibility to pursue comprehensive, wide-ranging reconstruction planning that should try to reconcile differences, meet grievances, release the energy of people and regenerate hope.

One could argue that the war sub-culture, for instance in Iraq, has had some long-term positive consequences; its technology can be said to have advanced more rapidly. Although most of this was within the military, other industrial sectors in Iraq have benefited too, such as textiles, petrochemicals etc. If part of our definition of culture has to do with modernisation and the consequences of industrialization and urbanisation, then certainly, any increase in productivity as a result of the war, can be put to good use by a responsible power structure. Also the changes that usually take place in the role of women in society, is a similar phenomenon, and both need to be encouraged and sustained after the war. Part of the post-war phenomena is the problem of mending the hearts and minds of those who have so terribly suffered. The paralysis that comes with despair due to loss of loved ones or the equally debilitating need to seek revenge for the family or community losses must be healed. Here there is a need to understand the exact nature of the sub-culture that has developed during the war.

The formation of this 'sub-culture of war' can be a new beginning for the devastated societies. If it was not for the Iraqi invasion of Kuwait and the subsequent liberation, Kuwait would probably never have seen the light of political and social reform and witnessed its first steps towards democracy. Moreover, the recent dismantling of the Ministry of Local Government in Iraq may be seen as a step towards decentralisation and possibly a wider administrative and political restructuring. Reviewing the post-war reconstruction experiences of Western Europe,

Japan and South Korea, there are many examples that support such a notion. In the Middle East, Israel seems to be such an example, and also Iran, which achieved an outstanding degree of industrial and agricultural self-sufficiency, mainly during their war with Iraq, much out of necessity, it has to be said.



The coming two Chapters (3&4) will explore in more detail the activity of reconstruction, which is the main concern of this dissertation. They will do so by introducing cross cultural perspectives of the current context of thinking on the planning and management of post-war reconstruction.

CHAPTER THREE

CONTEXT OF THINKING ON THE NATIONAL PLANNING OF POST-WAR RECONSTRUCTION: Cross cultural perspectives

3.1. INTRODUCTION

To reconstruct is to construct or form again; i.e. to recreate something that existed before and was at a certain stage lost or damaged. The question of whether reconstruction differs from development has been addressed several times. Amirahmadi (1989) claimed, "As yet we still have no real idea how war reconstruction differs from normal development the subject remains in its infancy". However, it is misleading to enter the dilemma whether reconstruction differs from development or not. Post-war reconstruction, to the author's mind, is the first step that has to be taken in the development process after war. Reconstruction could be distinguished from any other form of normal building or development by the level of complexity involved in its process (emotional energy; righting wrongs; rebuilding lives; solving differences to achieve national goals, etc.), and the magnitude of the task that has to be undertaken in the most pressing and demanding economic, political, social and cultural circumstances. Jeffery Diefendorf (1990:1), rightly wrote, in the context of WW2, "...reconstruction was one of the greatest tasks ever faced by planners, town authorities, and regional and national politicians, as well as by private citizens in their capacities as renters, property owners, architects and workers".

The word 'reconstruction' is generally understood as 'physical rebuilding' of destroyed settlements. Furthermore, it is not unusual, in some literature, to find 'reconstruction' being used interchangeably with 'housing'. (Azimi-Bolourian, 1986). However, from reviewing the different effects of war (see the previous chapter) it became evident that physical rebuilding is just one segment of a wider process of reconstruction following war which involves economic, social and psychological readjustment, and that housing constitutes a significant part of that segment. Advocating a comprehensive and self-reliant reconstruction strategy for war-damaged

areas in Iran, Amirahmadi (1986:122) wrote, "...the term *reconstruction* refers to the totality of mental and manual activities directed toward relieving the victims, mending the damages and improving the quantity and quality of the pre-disaster structures, operations and relationships".

In the context of natural disasters, the reconstruction phase seems to be better defined, perhaps because reconstruction after natural disaster is seen as an opportunity for future risk reduction and reform. Thus, reconstruction is a clear stage in which attempts are made to introduce preventive measures that are based on hazard, vulnerability and risk analyses. (UNDRO, 1982:3). On the other hand, in a post-war context, the 'prevention' of another war is widely left to politicians and peacemakers. Thus, post-war reconstruction tends to become absorbed by planning. After WW2 for example, when a reoccurrence of war was inconceivable, continued vulnerability to its impacts were not considered, and thus reconstruction was combined with development and evolved into 'planning'. This fact can be demonstrated through the experience of post-war reconstruction in the United Kingdom, when the establishment of the Town and Country Planning Act in 1947 aimed at the improvement of amenity by rebuilding what had been destroyed, but not in order to make the impact and effects of another war less severe. (Lewis, 1988b:26).

The aim of this chapter is to provide, as clearly as possible, a picture of some of the different dilemmas which could possibly be involved in the context of planning for reconstruction, in order to clarify some of the vast complexity of the process itself. To appreciate this complexity, one should imagine him or herself being faced with the task of reconstruction during or immediately after a war. When would one start thinking and acting for reconstruction? Where? and How? What are the priorities - political, economic, social restructuring or physical reconstruction? Who would make the decisions - private individuals, town authorities, or regional and national authorities? How is it possible for a devastated post-war economy to recover?

Concerning the physical rebuilding, how would the rubble and debris be cleared and who would pay for it? Would it be easier and cheaper to abandon the devastated settlement and to start planning a new one? How would building material and labour be made available in the market? Would they be imported or would it be possible to produce them locally? How could building materials be allocated and who would finance reconstruction? How could the demand for immediate housing for a suffering population be reconciled with the time needed to design and construct permanent

housing? Should temporary shelters be provided? What about historic cities and monuments, should they be rebuilt in a way that retain and recapture their traditional character? If so, which historic buildings should be rebuilt in such a way? Are the building and property legislations adequate to guide decision-makers? Furthermore, how is it possible to tackle the social problems that resulted from the war - disability, homelessness, destitution, prostitution, etc. and what is the role of the architect and planner in all this?

3.2. THEORY AND LITERATURE BACKGROUND.

"While reconstruction following natural disasters has received serious attention from academic communities and various international relief organisations, the same can not be said about reconstruction after war. As a result, there is little conceptual understanding of the many complicated issues that are involved in post-war reconstruction". (Amirahmadi, 1991). This statement is particularly true concerning the reconstruction after war which has taken place in the last 50 years. However, reconstruction after the Second World War has been researched and documented in a number of studies, and as early as 1943, in the United Kingdom for instance. (eg. Tyerman, 1943; Purdom, 1945, etc.)¹.

In 1956, although the reconstruction in Europe was not completed, Leo Grebler published the first survey of the reconstruction of the bombed cities of Western Europe in which he described the shape that reconstruction was taking, seen by the eye of an outsider². Grebler's survey only touched the surface of physical reconstruction - housing, streets, and monuments. In the same year, an important conference took place in Erfurt, in the German Democratic Republic on the subject of urban planning and reconstruction in historic cities.

According to Diefendorf (1990:2-3), interest in research on the experience of post-2WW reconstruction in Europe was not revived until the mid-1980s. However, "Most of this work consists of detailed studies of development in single cities or countries, but some consists of comparison of the developments in different cities or countries".

¹ Tyerman, Donald (1943) (ed) *Ways and means of rebuilding, a report of the London Conference of the Town and Country Planning Association*, Faber and Faber, London; Purdom, C. B. (1945) *How should we rebuild London?*, J. M. Dent & Sons, London.

² Leo Grebler (1956) *Europe's Reborn Cities*, Urban Land Institute Technical Bulletin 28, Washington, D.C.

To write this Chapter few years ago, the author would have faced a number of difficulties, due to the following reasons: 1) lack of documents on the subject (Davis, 1988b; Zargar, 1989b, El-Masri, 1992); 2) the fact that most of the available literature deals with the aftermath of Second World War in Europe. Consequently, "...the significant differences between the contexts of damaged European countries with the present devastated nations such as Iran, Iraq or Lebanon, drawing conclusions from then for the present situation, is not without difficulty". (Zargar, 1989b:427); 3) the absence of a satisfactory conceptual framework for the study of reconstruction after war. (Zargar, 1989a; Amirahmadi, 1991; El-Masri, 1992).

In order to bridge some of these gaps a comprehensive *literature search* was conducted over the last 3 years. This search had two main aims in mind: 1) to develop the author's knowledge on issues of post-war reconstruction, which included an understanding of the previous work and research carried out in regard to the topic. It played an important role in informing the author as to the main findings of other studies and identifying ways in which this dissertation can relate to previous research; 2) in doing so, there has been a conscious attempt to avoid 'rediscovering the wheel', thus this literature review was meant to march in formation with those who have already left useful research signposts. The best strategy was to talk with colleagues and professors who have done work in the area, obtaining the benefit of their knowledge about sources of information. The Bibliography on Settlement Reconstruction After War, prepared by Dr. Akbar Zargar, in 1989, served as a base from which to start an intensive library research (index, the Dissertation Abstract International, On line Search and Computer search of a number of UK libraries). The result of this was to add a number of items to Zargar's Bibliography. However, it has to be said that many of these items were collected during participation in workshops and conferences related to the subject.

The last decade has witnessed a particular growth of interest in the subject of post-war reconstruction. We can see the start of this development at the *Beirut Symposium* in October 1982³. This event represented the first academic concern with the subject and was followed in March 1986 by the *International Conference on Reconstruction of the War-damaged Areas*, organised by Tehran University and the

³ Symposium on the *Rebuilding of Beirut*, organised by the American University of Beirut and the Goethe Institute. See Friedrich Ragette (Ed.), *Beirut of Tomorrow; Planning for Reconstruction*, American University of Beirut, Lebanon, 1983.

Iranian government⁴. In June 1987 a conference was held in Bellagio, Italy, in an outstanding attempt to study the European experience of reconstruction after WW2⁵. This study was the first serious attempt since the work of Leo Grebler in 1956⁶.

In 1988 and 1989 the *First* and the *Second York Workshops on Settlement Reconstruction* were held at the Institute of Advanced Architectural Studies, University of York. The two workshops brought the subject of reconstruction into focus and identified the different dilemmas facing those concerned⁷. Also in November 1989, Iraq held its *First International Symposium on Post-war Reconstruction in Basrah and Fao*⁸. Research in post-war reconstruction was acknowledged and the issue of 'War as a Disaster' was highly recognised at the International Conference, *Disasters and the Small Dwelling*, held in Oxford, September 1990⁹. In his key paper *Review of Twelve Years Experience of Disasters and Small Dwellings*, Fred Cuny (1992:23) considered reconstruction following armed-conflicts as an important issue that was highlighted during the 1980s, when he said: "... in terms of milestones there are the continuing conflicts around the world - Lebanon, Afghanistan, Sri Lanka, Iran-Iraq. We learned a lot there about how difficult it is to provide reconstruction when wars continue... We need to look more at dealing with conflicts and how we cope with reconstruction afterwards... there are some good case-studies of those conflicts mentioned". (Cuny, 1992:26).

In January 1991, Iran held its *Second International Conference on Reconstruction*, at which over 80 overseas representatives were invited to present their papers. The latest in a series of international events was the Third York Workshop, held at the Institute of Advanced Architectural Studies in July 1991. (For

⁴ The proceedings of this conference were published in *International Conference on Reconstruction of the War-damaged Areas*, University of Tehran, Iran, 1986. An English version was first published in 1990.

⁵ See, Jeffry M. Diefendorf (Ed.), *Rebuilding Europe's Bombed Cities*, Macmillan Press Ltd, London, 1990.

⁶ Grebler, Leo, *Europe's Reborn Cities*, Urban Land Institute, Washington D.C.

⁷ See Lewis, James (Workshop Convenor) *Settlement Reconstruction Post-war: Report of Two Day Workshop, 16-17 May 1988*, and Cockburn & Zargar (Workshop Convenors) *Settlement Reconstruction After War: Second York Workshop 16-18 May 1989; Full Report and Guidelines*, both published by the Institute of Advanced Architectural Studies, University of York.

⁸ *The First International Symposium on Post-war Reconstruction in Basrah and Fao*, Ministry of Culture and Information and Ministry of Housing and Construction, Baghdad, 18-20 November 1989.

⁹ *The International Conference, Disasters and the Small Dwelling*, Disaster Management Centre, Oxford Polytechnic, Oxford, 2-6 September 1990.

details on some of the conferences in which the author has participated, see Chapter 5: Field Work and Learning Tools: Methodology).

It is important to note that these events have witnessed a number of attempts to identify a conceptual framework and to draw attention to the dilemmas faced by reconstruction planners following war. The most significant of these attempts have been made in the writings of Ian Davis (1986; 1988a; 1988b; 1989b) where a number of assumptions and observations concerning the different dilemmas of reconstruction were identified. Another significant contribution to the issue has been made by Hooshang Amirahmadi (1986; 1989; 1990; 1991)¹⁰. These attempts revealed that the real challenge is to grasp the different social, cultural, political and economic dimensions of reconstruction in order to be able to formulate a comprehensive conceptual framework. This dissertation has accepted this challenge and as far as possible reconstruction has been treated as a multi-dimensional issue.

In conclusion, the recent developments in the subject and the growing number of conferences and workshops helped to overcome some of the earlier identified difficulties. This Chapter focuses on the various aspects and dilemmas involved in the process. In writing it two conscious attempts have been made: 1) to refer to some of the most recent research on the subject; 2) to divide the literature into two periods according to when the war took place, in order to take account of the previous experiences plus the type of damage, weapons used, economic circumstances, etc. It is suggesting that in order to reach a comprehensive *planning strategy* for reconstruction of war-damaged areas, it is important to establish a cross-cultural perspective in which one can identify a number of reconstruction dilemmas, which, when put into a particular context, can be used as reference points for the formulation of a conceptual framework for deriving the reconstruction policy.

In suggesting so, this Chapter draws on cases from Europe and elsewhere following WW2, mainly, Britain (Gibson, 1941; Rigby & Boyne, 1953; Beazley, 1962; Johnson-Marshall, 1966; Hewitt, 1965; Tyrwhitt, 1991, etc.) Belgium (Uyttenhove, 1990; Puissant, 1991) Czechoslovakia (Noemiller, 1991), Finland (Palojärvi, 1990; Vennamo, 1990); France (Baudoui, 1990; Bauer, 1991); West Germany (Dittmann, 1989; Bosma, 1990; Gutschow, 1990); East Germany (Wimmer, 1989; Beyme, 1990; Paul, 1990); Greece (Doxiadis & Vafeiadis, 1977); Holand (Johnson-Marshall,

¹⁰ Professor Hooshang Amirahmadi is the Director of the Middle Eastern Studies at Rutgers University, USA. He is originally from Iran and currently conducting research on the economics of post-war reconstruction.

1966; Benevolo, 1971; Taverne, 1990; Budok, 1991) **Italy** (Faludi, 1991); **Japan** (Shimizu, 1989; Beard 1991; Ishimaru, 1991; Wildes, 1991); **Norway** (Tvinnereim, 1988); **Poland** (Ciborowski, 1956; Zachwatowicz, 1955; 1965; Ghilhome 1988; Karsten, 1988; Cobb, 1991; Jankowski, 1991; Nowicki, 1991, etc.); **Tunisia** (Emery, 1991); **USSR** (Blumenfeld, 1991); **Yugoslavia** (Peschich, 1989).

Most importantly, it explores the reconstruction experience of a number of countries following more recent wars (1960s-1990s) in the Middle East, Asia, Africa and Latin America: **Afghanistan** (Leslie, 1990); **Egypt** (Halcrow et al., 1976; Culpin et al., 1976); **El-Salvador** (Martinez, 1992; Vásquez-Velásquez, 1991); **Guatemala** (Margoluis et al, 1989); **Iran** (Amirahmadi, 1986; 1987; 1989; 1991; Zargar, 1988; 1989; 1991; Parsa, 1988; 1989; 1991; Pour, 1988; Saebi, 1991, etc.); **Iraq** (Barakat, 1989a; 1989b; 1989d; 1990; 1991; 1992; Ghazala, 1989; Al-Zubaidi, 1991; Khalil, 1991); **Kuwait**, (Al-Bahar, 1991); **Lebanon** (Peterson, 1983; Khalaf, 1983; Mallat, 1983; Willerval, 1986; El-Masri, 1988; 1989; 1991; 1992) **Liberia** (Jeff, 1990; Johnson, 1990; Tawiah, 1990); **Mozambique** (Prince, 1989); **Nigeria** (Awatona, 1991); **South Korea** (Huh, 1989; Shim, 1989); **Sudan** (Saleh, 1991); **Syria** (Saad, 1991); **Vietnam** (Nguyen, 1989) and **Zimbabwe** (Awatona, 1991).

The gathered experiences from a wide range of cross-cultural case-studies, suggests the existence of a number of *common* issues and dilemmas. These issues must be carefully considered when formulating a reconstruction strategy and they should also be observed during the process of reconstruction, in order to reduce possible undesirable outcomes.

To help formulate a framework, these issues are to be considered in this Chapter at the national and in the following Chapter (4) at the local or regional levels. At the national level, they include the organisational form of reconstruction, the definition of national goals and objectives, national economic revival and financing methods, public - private relationship and their roles in reconstruction, etc. At the regional and local levels they include: damage assessments, identification and mobilisation of available and potential resources, people participation in the process, compensation, etc. In other words these issues could be considered under two headlines: formulation of policies (Chapter 3) and implementation (Chapter 4).

All these issues are considered, while keeping in mind the existence of a number of factors that inevitably shall regulate and in some cases dictate the reconstruction strategy and its outcome. These factors include the continuation of the war, the prevailing national politics and ideologies and international politics and

relations. The last two factors have been extremely underestimated in some of the recent examinations of the subject, and in some cases deliberately ignored. The author feels strongly that these factors attempt to should be '*objectively*' examined, and that post-war reconstruction in any Middle Eastern country should be seen within the pragmatic national/international political and economic spheres.

3.3. REGULATING FACTORS OF RECONSTRUCTION POLICIES.

3.3.1. The continuation and the intermittent recurrence of attacks.

Undoubtedly reconstruction is very much affected by the continuation of war. In fact, in some cases, reconstruction may never begin before the total termination of hostilities (eg. the reconstruction of Basrah and Fao in Iraq). Even when it does, reconstructed projects still run the risk of destruction. Amirahmadi (1986:129) cited the General Administrator of the Central Headquarters for the Renovation and Reconstruction of War-damaged Zones in Iran, who said during the war: "...a significant part of the repaired and reconstructed sectors by the Headquarters were again destroyed, and the extent of the damaged areas increased by the Iraqi missile attacks and bombardment at the end of 1363 (1984) and beginning of 1364 (1985)".

During war, understandably, most of the country's resources would be directed towards military expenditure. This concern is actually reflected in the small amount of reconstruction work that takes place during the continuation of a war and which is generally directed towards the benefit of the military or at the best to raise the public moral. Of course, this is also dependent on how 'popular' the war is.

During confrontation between two countries, one can identify three types of regions in which reconstruction is required: Firstly, regions that are still involved in war. Secondly, liberated regions and finally, threatened regions.

Regions involved in war: obviously, the main concern would be to offer logistic and engineering services to the military forces. (Kamrava, 1986:76). In this context, reconstruction is principally attentive to the re-establishment of water and power networks, telecommunication facilities, roads, bridges and the construction of buildings necessary for military services. Most of such reconstruction work is usually carried out by Military Engineering Divisions. As far as the civilians are concerned, "Requirements for protection and for survival must be distinguished and both provided for in efforts to reduce social vulnerability". (Lewis, 1988b:10). Hence the evacuation of civilians from war zones becomes a priority.

Liberated regions: Experience from Iraq and Iran showed that during their eight-

year war, the priority in the reconstruction of liberated regions was given to the reinforcement of military defensive positions. Thus, the construction of fortifications is done first. The second step would be to try and encourage people who have left the region to return, in accordance with the rule that 'uninhabited regions are invitations to the occupier'. For this to become possible, a clearing operation is required, which is often undertaken by the military. The aims of such operation are: the removal of dead bodies of soldiers and civilians, the removal of damaged military vehicles and equipment along with the clearing of mines and military booby traps, and the cleaning of polluted rivers and water resources. All this is undertaken with the view that the region is still under threat, which means that no great investments are committed.

The threatened regions: These are mostly adjacent regions to the war zone that occasionally come under air or missile attack. Usually, many military installations and army support units are located in these regions. (Karmava, 1986:76). Hence reconstruction effort is only directed towards damaged installations and buildings that are supporting the military.

The threat of further destruction must shade the thinking of politicians and planners alike not only during war but also immediately after cease-fire, when there is no permanent peace agreement. "A lasting reconstruction also needs a lasting peace" (Amirahmadi 1989:46). A situation of 'no peace-no war' will not only slow reconstruction, it will also lead to inefficient use of the scarce resources in restructuring the defence sector. On the other hand, a lasting peace requires proper reconstruction and development, something that has recently been recognised by Dr Boutros-Ghali in his first press conference as Secretary-General of the United Nations, which was given in New York on 19 March 1992, when he said "...we will not be able to have real peace without development". He went on to reveal that in places such as Cambodia and El Salvador, "...economic, social and technical assistance to be given to the protagonists of the dispute once peace has been reached". (UNA, May/June 1992)¹¹.

3.3.2. National politics and ideologies.

Post-war reconstruction is a highly political and ideological issue. In many ways reconstruction after war has a much deeper political dimension than reconstruction

¹¹ United Nations Association (1992) *New World*, May / June 1992, London, UK.

subsequent to natural disasters, although it has been argued that any examination of disasters in the context of development automatically becomes political. This effect occurs mainly because war is waged and halted by politicians and reconstruction is bound to follow the political trend. In the same way, war and politics cannot be separated; reconstruction can not be divorced from politics. This fact coincides with the view of Amirahmadi (1991:12) who wrote: "Reconstruction tends to become politicized". Wars are fought usually because of some perceived injustice - this needs to be 'reconstructed' too.

Although the inter-relation between reconstruction and politics is widely recognised its role has been played down by researchers and writers from the Middle East, for different reasons. The author has the advantage of being something of an outsider and (hopefully) impartial from politics in all of his casestudies (Iraq, Iran, Yemen and Northern Ireland) and thus he intends to try to give more of a pragmatic view of reconstruction issues.

The political dimension of reconstruction can be seen as three fold: (1) the conflict between a raised expectation on behalf of the affected communities and the inability of the state to deliver. The situation is usually made worst by the state assuming full responsibility and the need for urgent actions to meet these expectations, which in turn tends to provide cheap solutions; (2) the delays in taking political decisions that are crucial for reconstruction and have to do with economic and military restructuring; (3) the reinforcement of the ideology and politics of the ruling party, by employing the physical form of reconstruction (i.e. city planning, war memorials and constructing monuments).

War in general raises expectations for post-war economic upturn (Amirahmadi, 1991; Saebi, 1991). Expectations are further increased by promises continuously made by politicians and Heads of State. Statements such as "...every destroyed house built of mud will be replaced by a modern one" (Saddam Hussein, 1988 in Basrah); and "Our reconstruction shall be an exceptional experience for history.... We have proved the contrary, we can build as well as destroy our enemies" (Hashimi Rafsinjani¹², 5 January 1991) are examples of the initial raising of expectations. However, soon after the cease-fire in a time of economic crisis and shortage of almost everything, politicians begin to recognise that the promises are too expensive

¹² Personal note, during the Second International Conference on Reconstruction of the War-damaged Areas, held in Tehran, 5-15 January 1991.

to achieve and social tension between people builds. This social tension and dissatisfaction adds pressure on the state for implementation of immediate corrective measures, which are often temporary and cheap solutions.

Amirahmadi (1990:261) observes that the factional struggles over political power in a largely fluid post-war period, as well as the economic crisis, encourage disagreements over a reconstruction strategy. Thus, too much time reduces the political will for reconstruction of war-damaged areas, while it tends to support the regeneration of the national economy. The same author sums up with the view that, "Political factionalism tends to prolong the disagreements and prevent practical initiatives to be implemented. Thus, it is not surprising that while in recent years the need for reconstruction of war-damaged areas has increased throughout the world, the political will for it has diminished. Most governments tend to regenerate their national economies at the expense of reconstructing war damage". (Amirahmadi, 1990:261).

Such political struggles over decision-making that must have led Beard (1991:88) to write, "In fact, the experience of London, San Francisco and Tokyo raise the question whether any modern city can be planned except under a dictator! I do not refer to the mere construction of costly civic centres so dear to the hearts of Main Street, or grand boulevards such as Haussmann cut in Paris or Burnham laid in Chicago. I refer to city planning in the broadest sense, including every phase - transportation, housing, railway terminals, markets, factory zones, street plan, public works, parks, public buildings, and monuments showing forth the national spirit". In short, dominant political intervention, at the national level, tends to postpone the reconstruction of the war damaged areas.

In almost all post-war situations one senses governments' reluctance to take decisions that undermine the strength and the domination of the military, even if such decisions are crucial for the reconstruction efforts. For instance, the decision to integrate military personnel into some kind of vocational training in the fields of masonry, welding, plumbing, carpentry, surveying and mapping, reinforced concrete work, irrigation, etc., could lead to an astonishing miracle in the success of reconstruction schemes. In addition, the replacement of military service with voluntarily service in reconstruction, could make a greater use of the countries' young engineers and technicians. But as long as there is little or no political will to openly discuss the future of the military, it remains frequently impossible to implement any of these ideas and to make better use of the enormous man power and technical

capability committed to the military.

Finally, post-war reconstruction must account for some very critical political issues. These issues include managing the post-war military and para-military forces and of factionalism within the state. Reconstruction of intra-state relations is not an easy job, particularly in societies which suffer from a dominating political culture. It is even more difficult to reconstruct the state-society relations, particularly those between the state and its opponents, both inside and outside the country. While democratization and public participation are often prescribed as the only means for creating political legitimacy, most post-war states are too fragile and unstable to allow for their full implementation in the short-term. Thus it is not thus surprising that most post-war societies are characterized by political discord and internal conflicts. Yet, "...there is no alternative to national reconciliation if reconstruction is to be successfully implemented". (Amirahmadi, 1991:10).

In terms of employing the reconstructed environment to serve hidden political agendas, cities around the world are full of ancient and modern examples, as illustrated by the reconstruction of Fao city, in Iraq and Hoveizeh in Iran. In an attempt to capitalise on the opportunities created by war-destruction to emphasis national ideology, Mousavi, Prime Minister of Iran, put emphasis on the fact that, "...we should not merely stress the physical structure of urban and rural areas. Rather, by close observation and evaluation of what has occurred, we should seek appropriate methods compatible with the principles and values of our Islamic Revolutionary country. Such methods should be feasible and practical with the existing political policies and economic circumstances of Iran". (Mousavi, 1986:22).

Today's Paris owes its admirable urban pattern to the architect of Napoleon, Haussmann, who considered city riot control as one of the advantages of his proposed new straight wide street layout, beside other major aims such as slum clearance and traffic improvement. Likewise Belfast is one of the last European cities where riots and civil strife are taken into consideration during planning or construction. (see the Chapter 8).

Beside aiming at urban modernisation, German Reconstruction during the 2WW, was influenced by the dominating ideology and "...provision was still made for specifically National Socialist characteristics: parade streets, party buildings and the like". (Diefendorf, 1990:7).

On the other hand, there is a growing recognition that the interest of local and national governments and that of their people do not always coincide. It seems that

through war and its resulting need for relief, and later on reconstruction, many regimes maintain their status: using reconstruction as both a means to punish some communities and to reward others, as illustrated by the sharp contrast between reconstruction and development in Central and Southern Iraq, in comparison with the Kurdish North. A similar example can be found in Iran, where the Western Central regions received more attention than the Northern Kurdish regions or even the Southern Arab-populated regions.

One could find in Germany and in countries occupied by Germany during the 2WW that reconstruction was used to heal the 'unhealthy' urban environment. But for them the term 'unhealthy' was used in a social and political sense. In other words, "...planners believed that crowded, contaminated housing produced, on the one hand, a politically radicalised working class, and on the other hand, a biologically weakened working class that could not make its proper contribution to the fatherland". (Diefendorf, 1990:6).

We all agree that Germany during the war represented the most extreme views, nevertheless, Diefendorf 1990, claimed that even Le Corbusier, during his Vichy era proposals for new cities demonstrated similar lines of political thoughts. Niels Gutschow, 1990, points out that some German planners almost welcomed the destruction of the Metropolis, arguing that the great industrial city was already a 'dead' social form of human organisation. Such planners "...suggested building either a number of smaller new cities, or greatly spreading out the old city in such a way that the city was dominated by the natural landscape, the soil, rather than the other way around". (Diefendorf, 1990:6). They strongly opposed rebuilding the cities as they had been laid-out, even if technical improvements were to be made.

Warsaw represents an outstanding example of political, social and ideological reconstruction, in response to its systematic destruction by the Nazi which was planned to erase its historical and cultural traces. They also planned to rebuild the city, but this time it was to be replaced with a much smaller German city, with none of its original Polish and Jewish features. Later on, after its liberation, Warsaw went through a symbolic reconstruction, that was taken to the extreme of rebuilding the Old City exactly as it looked before the war.

However, it is important to note, that some of what might appear to be political reconstruction strategy, would be nothing more than an enthusiasm of a planner or an architect to implement his revolutionary ideas. For instance, Martin Wagner, based at Harvard University along with Walter Gropius, urged planners after the war

to abandon the ruins and start again with smaller new cities. From their point of view this was the solution for modern town planning and better urban environment. Certainly, it seems, they were not aware that their proposals coincided with some of the most extreme proposals put forward under Nazi Germany, as we showed in the previous Sections.

The issue of monumental reconstruction to serve political agendas will be discussed further in the coming Chapter (6) on Reconstruction in Iraq. To conclude, it is important to recognise the political dimension reconstruction can have and what frustration that might generate among reconstruction makers. The only recommendation one may have is "..the struggle is bitter and victories are few. One must pacify, temporize, agree and in general like a fire: be ready to dampen down, reduce only to advance later". (Puissant, 1991:14).

3.3.3. International alliances and politics.

In the case of natural disasters international assistance is normally available or at least offered, even with the absence of diplomatic relations, (eg. the June 1990 earthquake in Iran), while in the case of reconstruction after war "International assistance will strictly follow political alliances". (Davis, 1986:49).

In a proud national struggle for survival some war-devastated countries may attempt, at least publicly, to refuse the assistance of some countries, which they view as being allies of the enemy. For example, "..the Nigerian government insisted, at the beginning of the relief and reconstruction task, that it did not want any assistance from France, Portugal, South Africa, Rhodesia, Gabon, Ivory Coast, the Joint Church Aid, the French Red Cross and the Nordic Red Cross, amongst others. They had all been accused of supporting 'Biafra', the breakaway Eastern Region of Nigeria (Awatona, 1991:19).

Economic blockades and embargoes by the industrialised nations against the poorer ones, have always constituted one of the main obstacles in the face of reconstruction. For instance, it has been claimed that one of the reasons why reconstruction in Iran is continuing in a very slow manner is because of the political relations between Iran and other industrial nations. It has been claimed by the President of the Islamic Republic of Iran that, the frozen assets of Iran in USA and other European countries, have made reconstruction much more difficult. Thus they are not only depriving Iran of aid and assistant but also putting obstacles in its way to obtain international fund and blocking its trade. Something that has lead the

Iranian President to say, "We do not want help from the international community, because there are other people more in need than us, we just ask them to leave us alone and to allow us to stand on our feet, and we will never be a burden on other people"¹³. (H. Rafsinjani, 1991).

The most recent example that can be used to demonstrate the extent in which international politics plays a role in national reconstruction is the Gulf War (1991), where a sharp contrast can be seen between international assistance and technical aid given to Kuwait and the continuing international embargo against Iraq. Iraq is said to be recovering very slowly from the devastating war, depending entirely on local resources and power, while Kuwait has almost returned to normal within 12 months from the end of the war in February 1992. (More about Iraq's reconstruction in Chapter 6).

Today there is a greater need than ever to consider the role of international politics in reconstruction and development in the Middle East and elsewhere in the South. With the collapse of the Eastern Block, and the world-wide rush towards a market economy, a 'New World Order' is currently under restructuring, where the developed Western Countries are moving the Berlin wall into a North/South divide. Such a hidden agenda embodies another threat for the war-torn developing countries.

On the one hand, it has strengthened the position and the role of the United Nations. Today, we are seeing the USA, UK, France, and Russia etc. refusing to publicly interfere in conflicts in the Middle East and Eastern Europe on a bilateral basis. It seems they are ready to act only under the flag of the United Nations.

Another characteristic of this decade has been the growing international environmental consciousness. Never before has there been such a global understanding, if not commitment, to a single world living on a fragile planet. Some governments have become very much aware that what happens in one part of the world is ultimately having an impact on the rest of the planet. Unfortunately, it appears to have taken a number of catastrophes, for environmental consciousness to gain worldwide support. Among them, the irreparable damage caused to the ozone layer and the scientifically supported phenomena of global warming, due to chemical emissions. This consciousness, however, still lacks an understanding of the associated human dimension and in which social and economic inequalities between

¹³ Personal note from an opening speech, during the Second International Conference on the Reconstruction of War-damaged Areas, Tehran, 5 January 1991.

North and South are overlooked. Basically, a Northern consciousness that claims all ecological problems to be 'global' is, in a sense, making the whole world responsible, overlooking the fact that it is the, "Industrial countries such as EC members [that] account for 70% of carbon dioxide emissions and 84% of chloro-fluoro-carbon (CFC) production" (Kelly & Bastian 1992:10). Thus it may seem that 'global' solutions are sought by pushing the entire responsibility and burden of adjustment on to the South. The climax of this one sided consciousness, was brought out in Rio de Janeiro in June 1992, at the United Nations Conference on Environment and Development (UNCED).

On the other hand, there is a threat that most of the international funds will be directed towards the reconstruction of Eastern Europe, rather than the reconstruction of war-torn developing countries. A demonstration of that is the establishment of the European Reconstruction and Development Bank. Parsa (1991:11) went further to suggest that even the funds of the rich Arab oil States would probably be redirected towards investment in Eastern Europe.

It seems that more than ever, the South has to empower itself by cooperating to meet these apparently aggressive roles of the North. "Certainly development must mean improvement in living conditions, for which economic growth and industrialisation are essential. But if there is no attention paid to the quality of growth and to social change one can not speak of development." (ICIDI, 1980:48). For the South, the economic forces of the North are a strong current to swim against. Aid does not necessarily imply development, it simply increases dependency. The North is again safeguarding its immediate interests and position of power by two means, the aid 'carrot' on the one hand, and the 'stick' of sanctions on the other. Instead of only being dependent on the North and Northern institutions, the South has to become organised *within itself* in the different fields of education, culture and economy. Education, seems to us, has to be the key issue; investment in mutual education and cultural programmes would lead to a better understanding and toleration of cultural diversity within regions in the South; and this in turn to trading with each other, in place of fighting each other.

Thriving regional economies, based on direct cooperation among Southern States, could in part be one way of economically empowering the South, without having to entirely submit to the over whelming domination of the international market by the North. Regional economic communities are needed to ensure the survival of the South in a world that is increasingly becoming economically polarised.

In a jointly written paper with Aylin Orbasli, the authors suggested a number of *Prerequisites for a more even future*, which is necessary if a country is to get on with its reconstruction.

- "The achievement of equity and social justice between rich and poor in one country, between nations and among generations.
- Greater satisfaction of basic human needs, allowing more attention to be paid to improving the environment.
- The education and role of architects and planners in the North and South should be reformed to acknowledge cultural diversity, and to build on peoples creativity and capacities. What is needed is to join forces with and support existing worldwide human right groups to ensure 'urban justice'.
- The need for more responsible attitudes from governments to insure that local resources are controlled, safeguarded and managed by all sectors of society.
- A radical change in the present international economic order, which impoverishes peoples and generates a dramatic and in most cases irreversible environmental deterioration". (Barakat & Orbasli, 1992:6).

3.3.4. National Economic aspects of reconstruction.

Unlike most natural disasters, war affects the whole economy of the country. Thus, post-war reconstruction is dependent on the state of the national economy following war. However, the state of the economy is itself dependent on a number of factors: 1) pre-war economic conditions; 2) the extent of damage to economic installations and the degree of commercial and industrial opportunity and productivity losses; 3) the short, medium and the long term potential for revival of the economy; 4) the availability of national and international resources; 5) the degree of adaptation needed, as a result of population displacement, mortality and occupation of territories.

In general, "Wars generate budget deficit next to a huge private liquidity, inflation, unemployment, and poverty among other problems". (Amirahmadi, 1991:6). More importantly, one of the after effects of war is the intensification and acceleration of economic tendencies operative during the war. (Al-Zubaidi, 1989; Saebi, 1991). One of these tendencies can be observed in the industrial sector which, due to tariff and trade barriers, is likely to have shifted emphasis from export to home markets, an aspect that must be addressed following war. Another tendency could be the central government's approach to provide people of the war damaged areas with direct contributions in cash and food, etc. This approach could be

expected to change once the war is over, and the government should shift emphasis from direct contributions to revitalising the economy of the war-damaged regions by improving the economic infrastructure, activating productive sectors, and creating employment. (Azimi-Bolourian, 1986:64). This issue is more urgent to consider, in countries where there is little or no formal infrastructure to distribute income or even aid (eg. social security). Thus, the only way for money to reach the unemployed would be through labour intensive projects and this approach requires an organisational capability and speedily available investment. This would also help to control inflation and even out consumption.

However, "Before the preparation and implementation of post-war reconstruction plans, the general economic ground must be surveyed afresh, and agreement as to what it is that needs to be planned and how it should be planned, must be accomplished. This involves a new investigation and analysis of facts and a comprehensive study of traditional habits, customs and ideas". (Saebi, 1991:1). Immediately following war, there is a need for the collection of statistics on a nationwide scale, in order to help identify areas with urgent economic and social problems, as well as to up date the knowledge on available resources and the condition of the people.

Saebi (1991:3-6) cited five categories in which various kinds of statistics need to be gathered, which can be applied to measurement of economic trends and used in assessment of the success rate of economic policies of reconstruction of the war damaged areas: employment, national product, national expenditure, prices and finally finance and money supply. The same author emphasises the importance of having up-to-date information and statistics during the different stages of reconstruction planning and implementation.

Next, it has been argued that one of the roles of the state is to achieve economic 'normalisation'. "This is usually achieved in two stages: (1) bottleneck-removing stage; and (2) capacity utilization stage. Only after the war economy is normalized can the government set to achieve economic growth. Among the bottlenecks to be removed first are shortage of foreign exchange and shortage of skilled labour force. These two bottlenecks are critical because they form the prime condition for increasing the utilization rates of the existing productive units. Underutilization of these capacities is the main cause of decline in the war economy. These considerations force the government to plan for foreign cooperation, export earnings, and education". (Amirahmadi, 1991:3).

Post-war governments will be faced with the task of creating sound economic policies that are directed toward generating more public revenues, redirecting the available cash toward productive use, encouraging investment, creating jobs, and undertaking redistributive reforms. (Amirahmadi, 1986; 1988; 1990; 1991; Green, 1991; Parsa, 1989; 1991). One of the major requirements for a smoother return to economic activity in the post-war era is, of course, a careful control of the monetary system to help prevent continuing unemployment and increasing inflation. The other, just as important, is the problem of the urban conjunction and refugees. Furthermore, in a regional context, it has been claimed that these objectives could be better achieved through, both, taxation (on those who benefited from the war) and incentives (to those who lost).

Commenting on the taxation approach Amirahmadi (1991:6) wrote: "Past experiences indicate that a progressive tax policy is particularly helpful". A clear example supporting this statement, can be found in the French approach after the Second World War, where the government imposed a *national reconstruction tax* to redirect part of the windfall profit that some businesses and individuals had made during and because of the war to finance the reconstruction. (Baudoui, 1990). A similar measure has been introduced by the Islamic Republic of Iran. On the other hand, the government package of incentives for the private sector could include soft loans, loan guarantees, subsidized business services for export-promotion, import-substitution strategy based on domestic resources to save foreign exchange, etc.

Time is needed for industries within the war damaged areas to recover and to provide employment, mainly because of the heavy cost of renovating industrial infrastructure (roads, railways, airports, ports, high and medium tension power-lines. "The high cost of such a recovery calls for careful planning through which utilization of economic, financial and manpower resources could be optimized". (Azimi-Bolourian, 1986:64).

Experience gained from reconstruction after war indicates that the most healthy, most simple and practical way of creating quick employment is activation of the construction industry, which includes building materials production, contractors and builders. (Azimi-Bolourian, 1986; Davis, 1989; Cockburn, 1990). Reviving the construction industry will create immediate employment to able-bodied persons, generate income, stimulate people to improve their own environments and encourage the young people to enter technical vocations. This view has been echoed by Outi Berghäll (1992:2), when she wrote: "Construction in general and housing construction

in particular acted as an engine for development of the whole economy [post-WW2]. Even afterwards shelter construction has been used as an instrument to level off the ups and downs of economic cycles". The same author further claims that, "At present building construction still plays a central role in the economies of the industrialised countries. About half of all fixed capital formation takes place in this sector. If civil works are included, the share of the entire construction sector is two thirds"¹⁴.

3.3.5. Social and psychological aspects of reconstruction.

"Man is the principal factor in development, no matter whether this development takes place in a virgin land or in an area destroyed by an act of war". (Azimi-Bolourian, 1986:65). During war the survival of people becomes the main priority of governments through their emergency and civil defence plans, because People are the essential resource for recovery and reconstruction. (Lewis, 1988:28). Furthermore, it has been argued that the survival of people must be induced, facilitated and planned as the foundation of reconstruction and development.

Following survival, a number of steps have to be taken in order to enhance, enrich and improve the society and its ability to contribute to the reconstruction efforts. Thus, "...the whole reconstruction process should be seen as a means by which exalted human values should be enhanced ...as such the government's responsibility does not end with reconstruction of the city's physical structures and/or infrastructural system". (Azimi, 1986:65). This consideration is particularly important if we are to change the conventional attitude of viewing the war-survivals as recipients of aid, rather than as agents of development (Cuny, 1983; Lewis, 1988, etc.). Reconstruction texts are full of political slogans that emphasis the role of the people in reconstruction. As the Iranian Prime Minister said, "Our greatest asset in reconstruction is the powerful faith and unchangeable determination of our people. In the future, as in the past, the government will trust in the inexhaustible power of the nation; which is ever ready for self-sacrifice and reconstruction, rather than depending on the annual budget allocation alone". (H. Mousavi, 1986).

In order for this people power to extend into production for the sake of reconstruction and prosperity, "Social policies would have to include considerations

¹⁴ Berghäll, Outi (1992) *International Experience on Shelter and Economic Development*, paper presented at the National Conference on Shelter and Economic Development, held in Kampala, 14-16 January 1992.

for the provision of basic needs in such areas as health, education, housing, and recreation". (Amirahmadi, 1991). In general these are long-term policies which should be implemented in parallel to the reconstruction efforts in the war damaged areas. (Miljkovic, 1986). On the other hand, social development is an issue that was considered crucial to the reconstruction of a number of African countries following their wars for independence. It was seen to assist with a more even way of handling inter tribal frustrations. It was felt that in a tribal or ethnically divided communities, "Social development planning must be given considerable importance if a comprehensive and useful blue print to guide the country's progress was to be created". (Awatona, 1991:4). Though this sounds right it does not replace the underlying need of equality and justice from those in power.

However, there are a number of social needs that have developed exclusively due to the war and its consequences. Some additional organisations may have to be provided to support those who have suffered in the war, particularly, the physically and mentally disabled population, amongst whom are the disabled war veterans and ex-servicemen, as well as children. To achieve this there would be more flexible approach to building regulations and the modification of existing buildings to accommodate the disabled. (Ghazala, 1989; Davis, 1989b; Amirahmadi, 1991).

Dealing with refugees and displaced people is another important aspect of reconstruction and social development. Policies that make the refugee population and other war-inflicted groups become used to a victim's mentality should be avoided. The critical point is that wherever possible state policies should increase independence rather than increase dependency.

3.4. FORMULATION OF RECONSTRUCTION POLICIES:

The establishment of a national strategy.

The establishment of a suitable reconstruction strategy, is a major aspect and occupation of countries that have just emerged from war. Amirahmadi (1991:1), defined reconstruction strategy as "... that body of knowledge which helps determine the most important tasks that have to be implemented at each stage of reconstruction, the type and amount of resources needed, and the location of reconstruction projects. A strategy involves defining goals and objectives, setting priorities and targets, making plans or facilitating market mechanisms, and formulating policies for implementation".

However, from reviewing the past experience of a number of countries, it

became evident that not all post-war governments had a reconstruction strategy established and ready for implementation in the sense referred to by Amirahmadi. Some countries such as Jordan and Syria, following their war with Israel in 1967 and 1973, returned to their pre-defined development plans. Recovery and reconstruction was slow and painful for the inhabitants of the war-damaged areas of Al-Karama in Jordan and Al-Qunitra in Syria. Three observations are evident from past-experiences relating to national reconstruction strategy: 1) the need for a national strategy directly depends on the nature of the war itself and the extent of the damage inflicted on the society; 2) establishing a strategy seems to require a long time, as lengthy and arduous debates are bound to erupt, particularly in contexts where different ideologies and social groups, have to be catered for; 3) while each nation's strategy for post-war reconstruction may be unique and relevant to that country only, a framework might be developed from the different issues and discussions that are common to all post-war nations.

3.4.1. Administration and organisation.

To identify the planning and the implementation machinery for the various programmes of reconstruction is the first step in a national reconstruction strategy. It is important to determine *who* takes the decision to build *what*, in which priority and when and who controls and directs the resources for reconstruction; patterns of administration and organisation are of the most significant issues. The available literature does not throw much light on the 'model of administration', so we will.

Model 1: To establish an independent body with an executive role.

This option is widely accepted following disasters in general and wars in particular. It very much reflects the centralised decision making nature of the pre-war or pre-disaster government. The independent body could take the form of a Ministry, a Supreme Council (eg. Yemen) or even just an Executive Office. The French Ministry of Reconstruction established following WW2 is one of the outstanding examples, where the Ministry had the responsibilities not only of preparing reconstruction plans but also of financing them and supervising the implementation. The most recent example is the establishment of the Croatian Ministry of

Reconstruction in April, 1992¹⁵. Being a newly established body, this model usually enjoys the advantage of having a clearly defined set of tasks, coordinated in a single agency. But, it suffers from the following major disadvantages: 1) it takes away recovery and reconstruction tasks from a wide variety of ministries, who are likely to be more capable of dealing with such tasks within their own responsibility (eg. the Ministries of Urban Planning, Health, Agriculture, Economic Affairs, etc.); 2) it lacks operational experience of planning and implementing construction programmes. Hence such a model may be more appropriate in a context where the disaster is recurrent and experience can be accumulated in the field. For example, in a country like Turkey with a continuous vulnerability to earthquakes this model has been established since the late 1960's; 3) finally, it usually has a short life-span. Consequently, its employees are often more concerned about the future of their jobs than the future of the reconstructed settlements.

Model 2: To establish an independent authority with a coordinating role only.

In Japan, until 1945, the Ministry of the Interior controlled city planning, but for post-war reconstruction planning an independent organisation, the War Damage Reconstruction Agency was established. The agency gave directions for war damaged cities to make and institute their own plans, under the guidance of the Agency. This model was highly acknowledged by Ishimaru (1991:5) when he wrote: "It can be said that Japanese technical bureaucrats, in a sense, played extremely efficient professional roles". Similarly, following the Nigerian civil war in 1970, the *Federal Ministry of Economic Development and Reconstruction* was established with the task of coordinating the allocation of resources. The various government ministries were allocated implementation responsibilities. For instance, the Ministry of Works was responsible for the designing and actual reconstruction of roads, bridges, water supply undertakings and buildings. Ministry of Agriculture was responsible for agricultural projects including tree crops, food crops, live-stock, fisheries and forestry.

This model of administration avoids the shortcomings of Model 1, in the sense that it does not take responsibility from the concerned ministries, on the contrary it co-ordinates between them. But, being equal to any other ministry, it does not have

¹⁵ In fact, in a few months time this Ministry was abolished and the reconstruction responsibilities were transferred to the Ministry of Building and Environment. (Matija Salaj, Zagreb, September 1992).

the decisive power to solve conflicts or problems arising in the field, either between ministries or between government and communities. This can cause problems unless it is closely associated with the head of the government.

Model 3: *To establish a reconstruction authority within an existing Ministry.*

In Egypt, following the October War of 1973, the Ministry of Public Housing was re-structured, in order to accommodate the arising reconstruction needs and was renamed as the Ministry of Housing and Reconstruction. The main problem was the emphasis that was given to providing public housing on the account of other needs of reconstruction. (Culpin, 1976).

An example, is the Council for Development and Reconstruction (CDR) created in 1977 as an agency of the Ministry of Public Works, in Lebanon, with the task of supervising all reconstruction and rehabilitation work. Such a Council has the advantage of building on an existing experience of dealing with public works and it is not seen by other ministries as a competitive body. On the other hand, it takes away part of the traditional responsibility of other departments, and it does not usually have the necessary authority.

Model 4: *To form reconstruction cells within each appropriate ministry.*

"This approach has the advantage of keeping responsibilities where they belong; but the major problem is one of coordination and demarcation lines between the ministries, who often compete for resources and roles in the reconstruction process". (Davis, 1986:50). Iraq's experience in the reconstruction of Basrah and Fao (see Chapter 5) is very close to this model, despite the fact that the role of the Supreme Council for Reconstruction was to co-ordinate between the different ministries, when it came to implementation, great confusion took place due to overlapping of responsibilities.

Model 5: *To form a Reconstruction Planning Office at Presidential or Cabinet level.*

The government of Jamaica has adopted a similar model in which, "Each relevant ministry provides personnel on a secondary basis to form an integrated planning team, which will be under the Prime Minister's or President's authority. In this way his rank can reduce the problems of competition or failures of co-ordination between ministries" (Davis, 1986:50). This is a rather comprehensive model that has the advantage of coordination and power. This is particularly true if the role of such

an office does not include implementation as was the case in Yemen following the 1982 earthquake.

Remark- The problem with the five mentioned models is that they represent an extreme centralised view of reconstruction. They lack the possibility of coordination at regional and local levels, also they do not allow enough space for local communities to participate in the process of decision making. The fact that reconstruction can be an enormous and costly task that will stretch the public sector at all points, means that allocation of roles to a wide range of governmental departments is essential, as well as the delegation of authority to non-governmental bodies. (Davis, 1986:46). Thus what is needed is a model which can provide for the following: 1) *Central* co-ordination of all efforts of reconstruction on a national level carried out by the central government and its agencies; 2) *Regional* co-ordination, carried out by a number of administrative units in all war damaged areas, that can be coordinated by a central regional authority; 3) *Communal / local* administrative structure that would look after the immediate concerns of the people living in war-damaged areas. Some of the reconstruction needs are best addressed by local bodies, such as: housing, relocation / resettlement, local infrastructure and health. (Herz, 1991:6).

The organisational pattern of the Iranian reconstruction agencies could serve as a model, in which regional as well as local coordination are accounted for. The Iranian model has the following hierarchy: 1) The Supreme Council, which consists of the Prime Minister, Minister of Interior and a representative of the Imam, this body is in charge of all important policy decisions; 2) The Central Reconstruction and Renewal Committee, which consists of the representatives of 14 ministries, chaired by the Minister of Interior, whose responsibility is to report to the Supreme Council. This committee is responsible for execution of any reconstruction work with national importance; 3) Reconstruction and Renewal staff in every affected province. The staff is headed by the Governor-General and is composed of director-generals of the executive agencies at the provincial level; 4) Finally, a similar but auxiliary staff is formed in every province throughout the country, in order to provide back-up support to the reconstruction efforts. In provinces not directly affected by the war, the auxiliary provincial staff in each province are in charge of rebuilding of one particular city, town or rural area in the war-damaged regions. For example, Tehran and Mazandaran Provinces have assumed reconstruction of Khorramshar and Susangerd respectively. These staffs also provide manpower and material support to the

concerned cities. (Chamran, 1986:39; 1991). Supporting provincial staff is organised under leadership of the provincial Imam and is voluntary. A number of public, semi-public and volunteer institutions play a role in the reconstruction.

The existence of too many organisations could be as confusing and cause as many obstacles as the non-existence of any organisation at all. Amirahmadi (1989) gave institutions in Iran, as an example of overlapping responsibilities and confusion, when he wrote: "The latest addition to the list is the Council of Policy Making for Reconstruction, which is duplicating the Government function in drawing up a plan for reconstruction of the nation's economy. The Council and the Ministry of Planning and Budget are separately drawing up plans, while the other ministries are still going ahead with their own projects and programmes. Before reconstruction can be launched the problem of parallel organizations must be resolved, perhaps eliminating some and integrating others. So far, attempts in this direction have failed, and perhaps the way to tackle this problem is not to address them individually but as part of a complete reorganisation of the state structure in the direction of a more controlled centralism". (Amirahmadi, 1989:45).

However, experience has shown that whatever the model of reconstruction organisation and the number of groups participating, there are four basic requirements in order to act effectively. "Each assisting group needs: Authority to act; competence to act; resources to act; acceptance by the community in question... Often governments are at fault since they clearly have the authority and resources to act, but often lack the vital knowledge needed for the tasks at hand. This is hardly surprising in view of the lack of prior experience they may have in war reconstruction. This highlights the need for detailed preparedness planning". (Davis, 1986:46).

3.4.2. Damage assessment and resource evaluation on a national scale.

Having a notional knowledge of the extent of damage to the economy, infrastructure and settlements is the first important step towards drawing a national strategy for reconstruction. Equally important is to evaluate the surviving resources and the conditions of the people. This nation-wide operation, has surfaced in most of the reviewed casestudies. Military reports usually play a decisive role in estimating damage, particularly during war. (eg. the experience of South Korea, Shim, 1989; Syria, Saad, 1991). Underestimation of announced losses is a common phenomenon, in order to maintain the public moral and deceive the enemy.

However, in most cases this survey was conducted at the end of the war. For

instance, following the Nigerian civil war a survey of damage was conducted over a year (1970-71) by the Building Branch of the Ministry of Works, Housing and Transport. "This exercise was, however, far from being comprehensive as it was limited to publicly owned buildings". (Awatona, 1991:9). Such approach meant that only damage to health centres, schools and Federal Government buildings, etc. was assessed, leaving residential and private property out of the exercise; and consequently the bulk of the reconstruction was limited to public buildings and conducted by 24 selected contractors. (Awatona, 1991:10). In this particular case lack of funds was given as reason for the rather selective assessment, in other cases urgency as well as the great scale of damage were the reasons. (eg. damage assessment in Iraq following the Gulf war, 1991, see Al-Zubidi, 1991).

In fact it is understandable that at a national level it might be impossible to conduct a detailed (door-to-door) damage and needs assessment. In order to draw a national strategy without having delays, it is sufficient to have an overall view of the scale of damage and of the surviving resources. A more detailed assessment has to be conducted at local level, when it comes to planning and implementation of reconstruction.

3.4.3. Defining goals, objectives and priorities.

Following the establishment of an administrative body for reconstruction and after surveying the extent of damage and needs, as well as identifying the available resources, the logical step is to establish a list of goals and objectives to be achieved over a certain period of time and according to a particular priority. To help clarify this point, let us take the list of post-war reconstruction objectives, drawn by the Nigerian government following its civil war in 1970, as an illustration. The objectives read, (Awatona, 1991:5-6):

1. The rehabilitation of the war-damaged areas of the country and the reconstruction of the economy as a whole.
2. To achieve a high rate of growth of output per head of population. (This may entail the adoption of appropriate national population policy and family planning programmes).
3. The creation and the maintenance of job opportunities.
4. The realisation of structural and institutional changes that would help to increase self-reliant and self-generated growth of the economy.
5. The maintenance of a balanced development of the national economy by

concentrating on growth points and productive capacities, without excluding the provision of subsidised social services in the economically backward areas of the country.

6. Investment in technical and higher education to produce high-level and intermediate Nigerian manpower.
7. The provision and maintenance of a satisfactory level of social services which the economy and the people can bear at any given time.

Comparing this list of objectives with what has been achieved 20 years later (see Awatona, 1991), one concludes the following points concerning establishing objectives and priorities:

1. In setting objectives, the government should be realistically modest and not utopian, accounting for resources, needs, perceptions, expectations, potentialities, and constraints. (Amirahmadi, 1991:3). More importantly they have to be realistic in terms of accounting for global trends, as well as international and national constraints and opportunities.
2. It is important that the reconstruction goals can be read in their economic, political, ideological, social, cultural, etc. constructs.
3. To implement such goals, however, "...they have to be decomposed into workable, feasible, and specific objectives at social, sectoral, and territorial levels, covering all spheres of the society's political economy". (Amirahmadi, 1991:3).
4. To achieve these objectives they have to be arranged in order of priority order, reflecting immediate needs, long-term goals, and/or resources availability.

The fact that no country or society can afford to accomplish everything at once, makes it impossible to avoid deciding on an appropriate sequence of the tasks which have to be implemented over a period of time, using the available resources. However, reconstruction priorities differ from one country to the other and from one kind of war to another. What has been established is that "An effective priority plan will involve: Determining, at a regional scale, whether to rebuild all damaged settlements during one phase, or in a phased sequence determined by local authorities. Establishing a priority list with tasks defined in sequence of their importance. There are various ways in which in priority listing could be defined". (Davis, 1986:48). Priority could be given to the reduction of risk of further damage by reconstructing the military first; or repair or demolition of dangerous structures; re-establishing lifeline resources (medical facilities, water supplies, drainage, etc.); or vital administrative facilities; community services; buildings of symbolic importance for the community; key economic installations that will generate work,

etc.

Reconstruction in Finland (1945-1975) can be given as an early example of defining priorities, where their plan of priorities were: 1) the reconstruction of destroyed public buildings and communications; 2) the construction of houses for the Karelian refugees (15% of the population), and returning soldiers; 3) construction for the new industry, to supply goods for war debt payments. In a later example, the Government of Zimbabwe's Plan of Reconstruction after its Independence, had the following priority: 1) Infrastructure (commercial; agricultural; water development, tourism and energy). 2) Land settlement and agricultural development (intensive dry land resettlement; irrigation schemes; rural health; educational and infrastructural facilities; etc). 3) Capital investment in training programmes. 4) Reconstruction of government buildings; rural infrastructure; education; health; forestry; animal disease control and minefield clearance. 5) Refugee programmes. (Awatona, 1991:33).

While the Iranian government's priority programme as in May 1989 was: 1) Oil and energy: the reconstruction and development of oil refineries and petro-chemical complexes and power stations. 2) Agriculture. 3) Reconstruction and restoration of factories producing building materials. 4) Housing: first priority is with those units which require restoration and repair. Priority is also with housing of families with employment. 5) Reconstruction of industries that can provide maximum employment and production and requires minimum foreign currency. (Zargar, 1989b:725-726).

From the above examples and from reviewing many other cases, one can see the priority economic reconstruction enjoys after war. Which is not necessarily the case after natural disasters. Usually, the reconstruction of the national economy after war is followed by the priority to reconstruct the war damaged-areas (the physical reconstruction); and finally the correction of social imbalances caused by the war.

"Too often authorities assume that the need is to rebuild homes, factories, roads and infrastructure. They are right, but they may be incorrect in assuming that their first task is to initiate such physical reconstruction. There are normally pre-requisites to attend to first, such as: reconstruction of the economy, which when buoyant will produce wealth that will initiate recovery initiatives, thus taking pressure off the public sector; reconstructing the building industry. Radical changes may be needed to modernise this industry and all the product supplies that service it". (Davis, 1989a:14). In giving priority for economic reconstruction a number of issues have to be explored. This seems to start by identifying *Industrial sectors* of growth, and revenue generating activities and supporting them. For these sectors to flourish

they need a certain degree of infrastructure. The issue of reconstructing and improving infrastructure becomes important. Increasingly, today's wars leave their most devastating impact on infrastructure. The most significant example is the devastation of Baghdad following its bombardment between 16 January and the 25 February, 1991. Thus, well-designed infrastructural policies are usually considered the most needed for a more successful reconstruction. "Yet, infrastructure projects are costly and have to be prioritized and undertaken in stages. Even then, as the past experiences indicate, a bottleneck-removing policy should be followed. It must be also noted that specific economic sectors and regions have their own (what may be called) life-line infrastructures, without reconstruction of which they may not be successfully reconstructed". (Amirahmadi, 1991:8).

Other commentators recommended that, "Infrastructure and social community services must parallel and be integrated with building reconstruction". (Lewis, 1988:10). In most cases while exposed infrastructure (roads, bridges) suffer the most damage, underground infrastructure (water pipes, electricity, etc.) suffers less damage than say, buildings. Underground infrastructure seems to deteriorate more because of lack of maintenance during the war, than because of direct damage.

In a more comprehensive view of economic recovery and physical reconstruction some experiences such as that of Finland, USSR and Britain related directly the economic recovery and productivity to the building industry. An approach that has been recently acknowledged by Davis (1989a:14) when he wrote: "Before rebuilding towns and cities, it is necessary to analyze and rapidly expand the capacity of the local and national building industry to cope with the enormous task of reconstruction. This will relate to contractors, craftsmen, the work-force, building supplies, and the relevant professions -engineers, architects and planners". Scarcity of building materials, that are usually required in considerable quantities following war, is often the cause for delay or even abandoning reconstruction projects. Too often, governments' plans to import building materials are also hindered by shortages of funds and foreign currency. Thus, a common recommendation has been made to strengthen the local building industry in order to meet promises of housing supplies and reconstruction. Applied research on suitable local building materials and ways of developing the role played by contractors, builders and craftsmen are well established needs. (Cockburn, 1990). Developing the building industry should aim at creating the much-needed employment quickly and increasing the range of materials that would be locally available at different demand points. This would

reduce transportation costs and rapid price increases.

Nevertheless, there are some cases, where the role of the building industry was not considered. Post-war reconstruction in Nigeria is such a case. (Awatona, 1991:31). Shortages of building machinery is another issue that was faced in the USSR after WW2, where in some places despite the availability of local building materials the lack of machinery made the task much more difficult. (Bluminfeld, 1991:25).

In terms of priorities some commentators put issues of political democracy, women rights, land and tax reforms and social security as prerequisites for any reconstruction, on the basis that "People who do not feel secure can not contribute to the development of their community, so reconstruction must commence with the resolution of the social security problem of the nation before successful rebuilding of the economy can begin". (Amirahmadi, 1989:45).

Finally, one should draw attention to the often hidden agenda of reconstruction priorities. In many countries, reconstruction of the national defence system was the first priority for post-war rebuilding. Astronomic investment, badly needed for general recovery and reconstruction, is redirected towards purchasing weapons and training soldiers, on the basis that force is needed for security, without which no long-term investments and reconstruction can take place.

3.4.4. Reconstruction and Development.

"Development is the complicated pattern of economic, social and political change that takes place in a community or a society as it changes from a traditional status. The transformation to modern status includes social and political consciousness, division of labour, literacy, urbanisation, industrialisation and a broad general participation in the overall development activities at national, regional, local and village level". (Poostchi, 1986:1). This definition of development implies that development is a process, with a kind of change that embodies improvement of forces of production; liberation from dangers of nature; modernity; industrialisation and expansion of freedom, etc. Furthermore, it has been argued that development is *'not to develop things but to develop people'*, (UNESCO), which means that development should aim at the advancement of the whole human being; spiritually, morally and materially. Palojärvi (1990) cited that "Development is to improve the position of a nation or a selected part of it... The position may be defined in terms of certain standards, e.g. health, nutrition, education, mental well-being, population

growth, etc."

Considering the above definitions in the light of the fact that wars do not just destroy part of what exists; they also prevent the society from making new investments, to utilise its production capacities and resources, and to develop its skills and technical capabilities, proves the strong relationship that should exist between reconstruction and development. Therefore, developmental reconstruction may not be concerned with damaged items but deficits that would remain after rebuilding all destroyed structures.

At the beginning of this Chapter we claimed that post-war reconstruction is the first step that has to be taken in the development process after war. Other commentators saw a slightly different relation between development and reconstruction. For instance, Zargar (1989:742), in relation to natural disasters, identified three modes of development: first, not to consider the development dimension at all, but rather the re-establishment of the status quo. Secondly, to work towards reducing vulnerability (eg. to strengthen buildings to withstand future hazards), and thirdly, to believe that there is a greater opportunity to initiate development programmes after disasters, on the basis that more resources will be available (in the form of aid) and that the survivors are ready to accept change. While, Amirahmadi (1991:18-20) perceived development after war as part of reconstruction. In fact, he divided the process of post-war reconstruction into two stages: the 'replacement stage', the aim of which is to return to the status quo and the 'developmental reconstruction stage', which should focus on developing the society beyond the pre-disaster level.

Reviewing past experiences of post-war reconstruction, reveals that governments perceive the relationship between reconstruction and development, more as we identified it earlier. Recognising the magnitude of the task and the need for social and economic reconstruction following war, governments attempt to review and adjust their pre-war development plans, interrupted by the war, rather than drawing new reconstruction and development plans. For instance, following the Nigerian civil war (6 July 1967 - 15 January 1970) the Second National Development Plan was reviewed and announced, to serve as an immediate reconstruction plan "...designed primarily for the rehabilitation of persons, construction of infrastructural facilities and economic activities, as well as for the complete reconciliation and reabsorption of the indigenous of East-Central State within the Nigerian community". (Ministry of Economic Development, 1975 in Awatona,

1991:3). At this point, let us mention that the last aim is of particular importance following civil war (eg. Lebanon, Yugoslavia, Croatia, El-Salvador, etc.). An aim that is usually ignored or forgotten in the drive towards physical reconstruction.

Of course, thinking of reconstruction as a step in an ongoing development process is no easy task, as it involves recovering the war's *opportunity costs* and then going beyond such recovery. "Reconstruction at this stage enters the field of development and becomes concerned with socio-economic transformation in the direction of broad national goals. Long-term comprehensive planning and strategic thinking becomes the most urgent, as does government financing and international assistance. For example, decisions must be made regarding what is useable and useful from the past and of the old structures some of which have to be preserved, while others ought to be scraped or restructured". (Amirahmadi, 1991:19-20).

3.4.5. Resource mobilisation.

Past experiences show that resource mobilisation and allocation for reconstruction is a decisive element in formulating a reconstruction strategy. Unskilful mobilisation and utilisation of resources following war has often led to delays in reconstruction. (eg. Iran, Parsa, 1991). Resources in general have to go through three stages of identification, mobilisation and utilisation. The importance of resource identification without waste of time, has been discussed in a previous Section along with damage assessments on a national level.

In order to better identify resources both existing and potential, it is helpful to think of resources in terms of types: (1) human; (2) material or physical; (3) services and (4) financial or credit. All these resources have to be identified in terms of their immediate and long-term exploiting possibilities. Furthermore, it has been claimed that resources could also be identified in terms of "... quality (e.g. inter-institutional cooperation and coordination, skilled workforce, training institutes, dynamic and modern sectors), amount (e.g. abundant, scarce and sufficient), distribution (e.g. concentrated in certain areas or in the hands of a few families), costs (cheap, expensive or competitive), function (e.g. local leadership), ease of use (e.g. accessibility, availability and convertibility), and impact (e.g. dependency or self-sufficiency). Finally, indigenous resources must be distinguished from external resources and these latter must be carefully identified in terms of the foregoing characteristics, their national origins, and the conditions attached to their purchase, transfer or adaptation". (Amirahmadi, 1991:19-20).

Reading through the different case-studies one can see how different types of resources have been emphasised in different countries following war. For instance, most of the literature dealing with Western European reconstruction, highlights the importance of mobilising financial resources, while that from Eastern Europe, emphasises the role of human resources. In most recent literature on reconstruction in the Middle East, the issue of services and military sectors as a resource has been identified.

"The identified resources have to be mobilized before they can be utilized and mobilization aims at widening accessibility to resources. Resources mobilization is a largely government-led and organized action but private groups are equally indispensable". (Amirahmadi, 1991:19). In conclusion, cross-cultural experiences over the last 50 years shows that resources can be mobilised in different ways, depending on the local cultures and on the organisational pattern of reconstruction administration. The following are some demonstrations of how resources can be mobilised.

Human resources- Surprisingly, almost all the case-studies have shown that people can be mobilised for reconstruction using the same machinery that was used to mobilise them for war, i.e. official propaganda machines. Ministries of Information and Culture employing the ever growing media used nationalism, patriotism, and democratic practices to mobilise the population towards reconstruction. Thus slogans were created to serve the same purpose of mobilisation. In the Soviet Union, slogans such as "aids to the liberated areas" and "producing for the reconstruction" became part of daily life (Blumenfeld, 1991). Similarly, in Britain "Homes fit for Heros" in WW1, and most recently in Syria, "We fight by a hand and build by the other". (Saad, 1991). Further mobilisation can be achieved through means of popular organisations, self-help projects (eg. USSR, Finland), incorporation of women's inputs into the reconstruction process, and twinning between regions and cities, so that those who were not directly affected can help rebuilding the damaged areas, have been equally important. The latter was a characteristic of reconstruction in USSR, and later on Iran.

Military - and para military is another important aspect of resource mobilization to play a role in reconstruction. The role played by military forces in clearing the city of Warsaw of debris is a well established example, also the role played by the Iranian and the Iraqi military in the reconstruction of war damaged settlements and the restoration of infrastructure. Equally, there is a great role for ex-service men, but this

role has to be planned carefully, as it involves a sensitive transition of these forces from fighters to reconstructors. In 1988-1989, the return of ex-service men from the Iraqi-Iranian border area to the streets of Baghdad and Basrah, did not help reconstruction as was anticipated. On the contrary, they caused all sorts of social problems and unrest. What would we expect from people who have spent 8 years in the army, who were taught nothing except killing, and on their return to their homes found that Egyptian workers have taken over all the jobs and in some cases their families.

Financial resources - and the way they have been mobilised is clearer in the literature dealing with reconstruction after WW2, than in that dealing with reconstruction in developing countries. Mofid (1989) suggested three ways, that can be pursued by governments to mobilise financial resources towards removing funding constraints on post-war reconstruction. These are: self-help, regional help and international help. Under self-help, one can list a number of methods that have been used in different countries, including 'War Loan Drive', selling government reconstruction bonds, and facilitating self-finance by the people.

Another phenomenon was the financial framework created and developed to accomplish reconstruction especially in the Western European cities, where privately initiated redevelopments were largely encouraged, especially in the city's central areas with aid given from the government in the form of low-interest long-term loans. This added an impressive momentum to the reconstruction undertaken by the government and its public agencies, all under general city-planning regulations.

The International Bank for Reconstruction and Development was established in 1944, with two main aims; "... to provide the capital so urgently needed to assist a war-torn Europe to recover once the fighting ended. Afterwards, it would turn to economic development around the globe" (Urban Edge December 1988). By 1949, according to Edward Mason and Robert Asher, The International Bank for Reconstruction was not able to cope with the growing demands of financing post-war reconstruction. "In response, the United States created the Marshall plan to assist the financing of European recovery" (Urban Edge, December 1988).

Still, in many cases the absence of appropriate financial schemes was largely behind the delay of the reconstruction projects. For instance, in the East End of London, Walter Bor (1989) emphasised that, "Appropriate financial and man power resources should have been made available to complete the reconstruction within the scheduled 20 years".

Material resources - "...may be mobilized by expanding mineral exploration and exploitation activities, extensive use of local materials and simplified techniques, particularly in construction works and in energizing small factories, workshops, farms, and services. Creating proper communication channels and transportation networks are particularly important for resource mobilization". (Amirahmadi, 1991:15-17).

3.4.6. To centralise or localise decision making.

We are all aware of the disadvantages of over-centralised planning systems, which weakens public accountability, local capabilities and often results in planning and architectural decisions being taken at the centre, imposed on the local people, and not meeting their real needs. (More on this issue in Chapter 9). Cities, like Fao, in Iraq and Hoveyzeh in Iran are recent examples of reconstruction by decree, in which no consultation with the local survivors took place. The result was the rebuilding of ghost towns.

The dilemma of centralisation versus local decision-making is not confined to today's reconstruction. Following the Second World War, planners in European countries such as France, Belgium and Germany faced with the problems of reconstruction, looked back to the experience gained during and after the First World War in hope of deriving some lessons. Thus in Belgium, for instance, planners concluded that "...the absence of strong centralised planning had resulted in a failure to modernise during rebuilding in 1920s". (Diefendorf, 1990:6). Uyttenhove (1990), went even further to claim that some of the planners who were involved in the rebuilding after 1919, and particularly those who were trying to draft strong planning legislation in the 1920s seized the opportunity presented by the German occupation during the Second World War to put their earlier concepts into action. It is claimed that reconstruction in Belgium was largely based on centralised town and regional planning. Such centralised approach dominated not only the wartime planning but also the post-war planning approach until the early 1960. This resulted in the widespread application of modern planning concepts that practically shaped post-war reconstruction.

In France too, as Baudoui (1990) shows, reconstruction was centrally directed. A reconstruction ministry and several subordinate agencies were established aiming to rebuild and at the same time providing a strong legal framework for post-war town planning. The Netherlands was not an exception either, Middelburg city is a clear example of reconstruction by decree that was directed from the Hague. Moreover,

"In Nazi occupied Norway, centralised reconstruction planning began in June 1940 under Norwegian leadership but with German supervision". (Diefendorf, 1990:7). One can also argue that it was the war that created central planning and reconstruction agencies in Britain and consequently it was the war and the centralised reconstruction that made it possible for Donald Gibson to realise his dreams of modern Coventry. Nevertheless, Post-WW2 reconstruction experience also showed that in places where the pre-war planning system enjoyed a degree of decentralisation, at least at the planning level in city councils such as Coventry and Rotterdam, made it possible for reconstruction to start after a few days of the bombardment in the form of clearing debris, and planning for reconstruction.

Reading through different case studies of reconstruction after war it became evident that total decentralisation, is almost impossible, particularly in places where centralisation is a strong culture. However, and because of the importance of involving the local communities and "Since the planning on a communal level is essential for the policy of reconstruction (if only to regulate the relocation and resettlement processes)" (Herz, 1991), it is vital to have communal planning authorities to implement the measures which other centralised units consider necessary. Thus, the so-called 'controlled decentralisation' concept came into existence. (eg. Iran, Amirahmadi, 1989:46). Controlled decentralisation is seen as a half-way solution that could meet the needs of the centre and to some extent those of the people.

On the other hand, it is believed that the rebuilding of communal administration should not attempt to establish the former structure but to build an administrative structure especially fit to deal with the problems of reconstruction. "Effective management of the efforts to reconstruct the war damaged areas requires political and economic development of an organisational structure which promises to redress communal grievances and satisfy communal identity needs" (Herz, 1991:6). The immediate goal of this type of administrative reconstruction is to assess interactively and objectively what is at issue in the situation of the war-damaged areas, and to differentiate needs from interests. This process is important because once the different basic needs of the various communities can be identified, and each of them acknowledges the validity of the needs of the others, then a constructive and co-ordinated process of reconstruction can commence, and the groundwork for a more comprehensive reconstruction might be established.

3.4.7. Timing of actions and phases of reconstruction.

The most important observations in relation to timing and phases of reconstruction centres around three points: (1) inevitably, reconstruction has to go through stages of 'restoration and repair', 'planned reconstruction' and 'development', reflecting the availability of resources and patterns of organisation; (2) the question of when to start reconstruction has always been a matter of debate, (Dittmann, 1989); (3) similarly speed of reconstruction has also been a matter of debate; (4) still, the reconstruction of war damaged cities took decades to accomplish, and in some cases 50 years after the Second World War, reconstruction is still going on. (East Germany, Wimmer, 1989).

The issue of formal and informal reconstruction is another significant observation that relates to timing. While most countries during WW2 did not wait for the end of the war to start Phase 1 (restoration and repair) of formal reconstruction, most cases from developing countries did, (Iran might be an exception). On the other hand, there seems to be an on-going informal reconstruction in all cases during the war.

In the USSR while the war was still in progress, as areas were liberated from German occupation, urgent measures were taken to restore their economic and cultural life. "First, with army aid, roads and railway lines were rebuilt, water and power provided, and bakeries opened to save the population from starvation. Civilian reconstruction started with factories, schools, hospitals and health centres. Prefabricated barracks for 300 people, which could be assembled in four to six hours, served as primary emergency shelters. The repair of homes was commenced immediately and a network of factories for building materials and prefabricated units was established. (Blumenfeld, 1991:21). It has been claimed that during the war, from 1941 to 1945, about one million dwelling units were built, of which 400,000, evenly divided between apartments and single family houses, were in cities. (Blumenfeld, 1991:26). The experience of WW2 showed that "... one must not see the end of the war in 1945 as the starting point for reconstruction... Clearly people began to think, and in some cases act, on reconstruction almost as soon as the destruction happened; they did not wait until the end of the war. Some of this activity was official. The damage often required immediate action, such as clearing streets of rubble, sealing off or dynamiting buildings that might cave in, repairing utility and water lines, repairing lightly damaged housing, and the like". (Diefendorf, 1990:5). Actually it has been claimed, that it was during the war that a lot of reconstruction

experience was gained, and later on put to use after 1945. Against this view, some commentators believe that the best time to reconstruct is after the war, when the people are returning or have returned (so that they can participate in the process) and in order to avoid further damage and double reconstruction. (Davis, 1988; Amirahmadi, 1986;1989;1991). Others believed that "Nothing positive, however, could be done during the war except the tasks of clearing away the rubble, the demolition of derelict buildings and erection of temporary shops for the bombed out shopkeepers" (Johnson-Marshall, 1966:296).

However, everybody seems to agree that the best time to plan reconstruction is during the war so that the nation is ready for a rapid reconstruction when the war is over. (Hewitt, 1965:9). According to Diefendorf (1990), during the Second World War, planners, architects as well as private citizens without architectural training, composed essays, made sketches and thought about what the reconstructed cities should look like. It is such approach for reconstruction planning that allowed planners at Tokyo municipal authorities to begin drafting plans for reconstruction on the very day Japan surrendered, August 13, 1945. (Emerson Wildes, 1991:90).

Speed of reconstruction is a clear area of debate. On the one hand, fast reconstruction is seen as an essential factor "...to capture political will and public's enthusiasm which are the most critical for allocation of the ever decreasing resources to reconstruction". (Amirahmadi, 1991:17). Also, it is needed in order to catch up with the speed of people's return to their own settlements. In Tokyo, it was warned that, "Every day that passes without sharp decision makes the task of city planning more difficult; for every week sees ten or fifteen thousand houses going up in the ruined district. It is not likely that citizens who have restored production and business in wooden houses will readily consent to tear them down to make room for a new street and park plan". (Beard, 1991:83). On the other hand, it is believed that gradual reconstruction, allows more space for local people to participate and most importantly, it helps to develop the needed local skills internally, thus, there would be less need to rely on so much outside help. Nevertheless, experience showed that it may take years and decades for a city to reconstruct after devastation of war. (Poor & Zargar, 1991).

3.4.8. Training, education and research.

The lack of trained professionals (eg. policy makers, economic and physical planners, architects, engineers, managers, local leaders, public work officials, credit

administrators, producers, and builders, and intermediate personnel to assemble information on the population and its disruption), is often an obstacle for any reconstruction strategy. This is particularly true in Third World countries. Thus, special attention should be given to training issues and to what could be called 'reconstruction education'. In some cases a specialised Government branch has been established to look after training activities, as in the case of Nigeria. In addition reconstruction education should facilitate technical training for ex-service men to equip them with skills that could help in transferring them from fighters to builders, thus making their future employment easier.

Finally, cultural policies have to be thought through carefully. Part of these policies have to do with preserving cultural physical symbols that allows cultural continuity. More importantly cultural policies of promoting peace, tolerance and mutual understanding through education are needed.

3.5. SUMMARY AND CONCLUSION.

This Chapter started by defining the term *post-war reconstruction*. It briefly reviewed the existing body of knowledge about the reconstruction context, emphasising the fact that despite the obvious lack of literature, a recent growth in knowledge on the subject can be observed. The last decade has witnessed a particular growth of interest in the subject. That has been symbolised by the holding of a number of national and international conferences and the publishing of a number of documents.

Aiming at providing a picture of some of the different dilemmas which could possibly be involved in the context of planning for reconstruction, this Chapter identified two areas of concern. Within each area, the experiences and observations of other authors were evaluated and grouped under 'main headings' of issues, which it is felt the reconstruction process should consider at the stage of formulating a national reconstruction strategy.

- ***Regulating factors or constraints.***

These are factors that inevitably shall regulate and in some cases dictate the reconstruction strategy and its outcome: The continuation and the intermittent recurrence of attacks; national politics and ideologies; international alliances and politics; national economic aspects of reconstruction; social and psychological aspects of reconstruction.

- ***The establishment of a national strategy.***

In order to formulate a national strategy a number of issues should be considered: Administration and organisation; damage assessment and resource evaluation; defining goals, objectives and priorities; reconstruction and development; resource mobilisation; centralisation versus local decision making; timing of actions and phases of reconstruction; training, education and research.



In the next Chapter, a further analytical review of knowledge will be presented to highlight two areas of concern:

- Settlement reconstruction planning.
- The implementation of physical reconstruction.

The issues or headings that are being highlighted in these two Chapters will be further discussed and developed in the case-studies Chapters and in the concluding Chapter.

CHAPTER FOUR

ISSUES OF POST-WAR SETTLEMENT RECONSTRUCTION PLANNING & IMPLEMENTATION.

4.1. INTRODUCTION.

In the previous Chapter a number of *common* issues and dilemmas of post-war reconstruction planning at a national level were derived. This Chapter is a continuation of Chapter 3 and focuses on issues of post-war reconstruction at regional and local levels. It sets out to explore two areas of concern: (1) settlement reconstruction planning and (2) implementation. Using the same methodology as in Chapter 3, this Chapter aims at drawing out a number of issues and dilemmas that are often faced during settlement planning and implementation.

4.2. ISSUES OF SETTLEMENT RECONSTRUCTION PLANNING.

In considering the issue of settlement reconstruction planning it is crucial to keep in mind two main points:

- "Reconstruction planning inevitably reflects whatever planning process is the 'norm' in a given country at a given time". (Davis, 1988b).
- Not necessarily all the problems faced by reconstruction planners have resulted from the war. Many problems and issues "...were present in the pre-war town or city, or its administration and the war damage (like a surgeon's scalpel) has exposed such deficiencies and weaknesses". (Davis, 1986:45).

Concerning the first point, it is safe to say that in most of Europe the pre-war approaches of planning, as well as the war-time approaches of rebuilding continued after the war. In fact no country was starting from scratch, at least on the planning level, which really helps explain the rapidity of reconstruction in many places. This also explains the delay and the waste of resources that characterised reconstruction in a number of newly Independent countries and developing ones because of the absence of an appropriate planning mechanism. Recent examination of reconstruction following WW2 revealed that, "Viewing Reconstruction as a post war

phenomenon, the scholars of the 1950's overlooked the extent to which wartime developments continued into the postwar period". (Diefendorf, 1990).

The pre-war / post-war continuity of patterns, attitudes and mechanism is not limited to planning. Amirahmadi (1991) claimed:

"To begin with, reconstruction is an orderly and predictable process. For example, damaged cities and industries are rebuilt on the same sites, the pre-disaster trends in population and urban growth continue during the reconstruction period, and dominant economic sectors and social groups continue to be dominant. The tendency for the pre-war trends to continue is reinforced by two powerful forces: uncertainties attached to changes in policies and the biases of the existing institutions in restoring the pre-war order. It is also easier and faster to restore the old than to recreate the new... It must be recognized that it is impossible to completely maintain the status quo as it is impossible to implement a tabula rasa".

For instance, Post-WW2 reconstruction planning in the USSR "..was not something started in an ad hoc way, but was a resumption _ with modifications based on wartime changes _ of the previously established planned development of the productive forces of the USSR". (Blumenfeld, 1991:21). This observation supports the general feeling that planning patterns are bound to continue, but there is a need to introduce some changes and adjustments. Davis (1986:46), wrote, "It is likely that normal pre-war planning procedures and building approval mechanisms will need urgent reappraisal, to make them applicable to the challenge of reconstruction planning. Unless reconstruction plans are on a small scale, it will be necessary to review all normal planning procedures for the very much more demanding context of reconstruction planning. In particular, existing tendering procedures for road building, infrastructure and building may not be appropriate if rapid rebuilding is required. In lieu of these patterns, negotiated contracts and approvals will prove more effective".

Concerning the fact that war adds to and exposes already existing problems and defects, the Nigerian experience following its civil war serves as an illustration. Awatona (1991:12), claimed that, "The acute shortage of high-level and intermediate manpower was one of the major factors which made the implementation of reconstruction policy objectives difficult, or in some cases impossible" (Awatona, 1991:12). A deeper examination of the issue established, that such sudden lack of professionally trained people, is in fact a pre-war deficiency which was only exacerbated by the civil war.

Finally, some planners have warned of the danger of associating immediate detailed construction with planning, claiming that plans should be achieved by the continuous guidance of current development and thus "...they require both courageous imagination, (for who can foresee tomorrow) and a tenacity of purpose that must never degenerate into obstinacy". (Tyrwhitt, 1991). In post-war reality this approach seems to be too relaxed.

4.2.1. Crisis and opportunity.

The reconstruction literature is full of reference to the fact that war creates a number of opportunities to improve on the pre-war situation, and that usually among the survivors there is a great hope during, and immediately after the war of a better future. These claims were made on the basis that, "To the survivors who take the opportunity to learn from their experiences, the world changes from being a simple, manageable, predictable place to a place of change, a place of increased possibilities created by war". (Stewart, 1988:85).

Other commentators, went further to claim that war is an opportunity to introduce major and radical physical and social changes, based on their belief that "Only two circumstances might bring fundamental changes: total war - or total peace". (Blumenfeld, 1991:39). What is apparent in the literature is that there is a lot of generalisation concerning 'to whom' war is considered an opportunity. In some references it is claimed that reconstruction after war is an opportunity to everybody, as it represents the future and there is no return to the past; "...the dead can not come back from the grave". (Stewart, 1988:85). Such a generalisation is very much apparent in literature dealing with reconstruction after the Second World War. Nevertheless, there is evidence that much of what was publicised as an opportunity and better future during WW2, was part of a calculated policy to strengthen public morale. (Whittick, 1950:148).

In a more recent literature, building upon experience gained mainly in situations of natural disasters and to a less extent of war in the Third World, authors came to the conclusion that in every disaster there are two groups of people; those who gain from the disaster and those who lose. "There is a galaxy of people, agencies and commercial enterprises that gain from disasters: airlines companies, trucking companies, relief agencies, relief goods suppliers, the insurance industry, media (even academics such as myself). The losers are.. those who die or are injured, and their relatives. National and local governments lose heavily, with the impact being

felt on lives, hospital care, and direct and indirect economic losses". (Davis, 1989a:13). Such observations, supports those who claim that the ultimate winners are those who are rich already, and suffered the least, while the losers are usually the poor, making the position of the disaster victims more unequal. (Cuny, 1983)

In Europe, "Almost everywhere town planners viewed the bombing as unprecedented opportunity to introduce radically modernising changes in the urban fabric on a scale that had been almost impossible in existing built-up cities" (Diefendorf, 1990:5). Thus war and reconstruction were vehicles for physical change. Rebuilders could, and for the first time, go beyond what Haussman had done for nineteenth-century Paris. "Generally speaking planners wanted to use reconstruction to heal the 'unhealthy' metropolis left by the age of industrialisation, housing speculation and rapid unplanned growth. At the same time, reconstruction planning often looked back to earlier conceptions of ideal urban forms; it was shaped by pre-existing institutions and laws and was guided by individuals with pre-war or war time experience in reconstruction planning" (Diefendorf, 1990:5). For instance in Coventry and Northern France, "...this idea of healing the ills of the metropolis was expressed primarily in technical terms. That is planners wanted to modernise the technical infrastructure of the cities to provide better streets, sanitation systems and modern housing with air, light and modern equipment... planners wanted to give rebuilt cities functionally distinct zones. Housing, industry, culture, government, recreation: each was to have its own separate location. This sort of thinking was found all over Europe during the war, in fascist and democratic countries, and it is certainly a part of the modern town planning movement" (Diefendorf, 1990:5). In other places, it was an opportunity to introduce smaller changes. Grebler (1964:475) cited that, "War destruction made it possible to replace the main rail station of Rotterdam and a secondary station in Milan (Porte Garibaldi): the latter has been an obstacle to full development of the Centro Direzionale, Milan's new business centre on a site of partial war damage rounded out by deliberate urban renewal".

Others saw reconstruction as an opportunity to reduce settlements vulnerability, not only, against natural disasters but also against man-made disasters, such as wars, urban fires and industrial accidents. Davis (1986) advocated the opportunity to take a number of planning measures such as, "The decentralisation of potential bombing targets. Building wider streets to provide access for rescue and fire fighting services after the collapse of buildings. Land use control to avoid the development of residential accommodations and school adjacent to factories, producing vital

commodities, etc. In addition, it is vital to consider secondary risks such as fire-spread in new urban planning and building design, as well as mitigation measures against natural hazards, i.e., earthquakes or flood risk zones". (Davis, 1986:48).

Such opportunities were fully exploited in Japan, where the Reconstruction Council of August 1945, decided upon a number of fireproofing, decentralisation and zoning measures, as well as earthquake resistant building laws, which have affected both fire and earthquake vulnerability ever since (see Emerson Wildes, 1991). Reconstruction also provided opportunities to architects and planners to experiment with their ideas and the latest fashions of urban and regional planning. The new city of Bizerte, Tunisia can be given as an example. Under the French colonial power and during the 2WW, the city suffered 77% damage and a decision was taken to build a new utopian city near by to replace the old Arab city. P.A. Emery (1991:75) wrote, "The experience was exhilarating. For the first time in France it would be possible to plan an entirely new city according to the most recent accepted city planning principles... Bizerte was to be the first of the garden cities of French reconstruction".

4.2.2. To replicate what existed before the war or to reform urban environment.

Michael Ivanovich Kalinin, the post-war USSR President, was reported (in Blumenfeld, 1991:30) to have said "Now the question arises - how to rebuild. We may simply restore the buildings on the foundation of the old plan, or we may provide a new plan. It seem to us that all creative forces of our architects and builders should be devoted to the matter, and, in the first place, the adequacy of the old plan should be subjected to review.... It may be objected that the replanning of cities complicates and even delays building and that this measure is achieved at rather high cost. I agree completely, but I still think it has to be done. After all, cities are rebuilt for centuries, and therefore monetary expenses in this matter have to be approached without stinginess". This statement portrays the attitude that swept across Europe during its reconstruction. Where the general policy was not to reconstruct any heavily damaged building if it interfered with the new city plan, while preserving slightly damaged buildings, if they do not interfere with the plan.

The main phenomenon that distinguished and influenced the process of rebuilding the war-damaged cities in Europe was 'Urban Renewal', a concept that had already started in the United States as an articulated national program for the renewal of its cities and towns years before the 2WW. It was well developed and understood

by 1949. This concept was defined by the American city planner Leo Grebler (1964:13):

"Urban renewal refers to a deliberate effort to change the urban environment through planned large scale adjustment of existing city areas to present and future requirements for urban living and working. It extends to non-residential as well as residential land uses. The process involves the re-planning and comprehensive redevelopment of land or the conservation and rehabilitation of areas which are threatened by blight, or are to be preserved because of their historical setting and cultural values, all in the framework of an over-all plan for a city's development".

Such concepts combined with the 'modern movement' in architecture and the fashion of 'open planning', guided and influenced the reconstruction process in many European cities, at different scales. "Many architects and town planners, as well as other voices said that the response to the challenge of the destruction should be to create a 'City of Tomorrow' which has nothing to do at all with the old. That rubbish had fortunately been blown away by the bombs... Such a reconstruction plan was the Marcel Lods' plan for Mainz designed in the attitude of Le Corbusier's 'Vision Plan of Paris 1925' (Breitling 1983:51), in which a vast stretch of the traditional 'rive droite' was to be demolished and replaced by straight motor-ways, skyscrapers and linear buildings, with careful isolation and preservation of the main historic monuments, such as the Royal Palace.

In many cases the above underlined part of the urban renewal definition was totally forgotten. For example "The completion of Coventry's new centre, requires considerable demolition of buildings spared by the bombs (despite its historical importance) and a new layout rounding out the rebuilding plan and there are numerous similar cases" (Grebler 1964:15). As a result, we have a series of anonymous mass apartment and office buildings, widely spread over the cities replacing their traditional buildings and transforming their medieval skyline and character.

Later on, "The tendencies of modern architecture... were more and more criticised... many architects and politicians have regretted that they followed Le Corbusier's advice, 'il faut tuer la rue corridor' and that they had dropped the wall-to-wall pattern" (Breitling 1983:57). In the rebuilding of the European bombed cities, an 'International' style was very much visible, this resulted in the loss of identity and character of the cities. "Unidentified photographs would rarely enable the observer to spot the country or the city; a Parisian project might be in San

Francisco or London; a Stockholm project might be in Chicago" (Grebler 1964:44).

Lewis Mumford (1966:4), wrote in his introduction to Johnson-Marshall's book 'Rebuilding Cities': "Many seemingly ideal images conjured up during the last generation have proved, on experiment, aesthetically depressing and socially value-less, despite their sanitary or technical excellence and superficial order. Among the latter, I would count many of those multiplying high-rise flats, no matter how widely spaced, whose excessive first costs and equally extravagant upkeep have no valid justification. Except, perhaps, the dubious one of furnishing larger profits to the contractors and suppliers of materials, larger fees to the architect, or larger ground rents based on excessive densities, to the land owners".

Nevertheless, there are some cases in which the important and beloved parts of the destroyed downtown were kept and restored despite their high cost either for their religious, historical or cultural value. On the other hand, and mainly in the Eastern European block cities, political expressions guided the reconstruction and shaped the urban environment to express socialist power and nationalism, as well as to remind people of the damage caused by the war and the success brought by the new political currents, through the restoration of some identical buildings and the preservation of others as ruins.

It was only in 1981 that East Germans resumed reconstruction on the old urban structures. Before that monumental socialist architecture "... that corresponded to the 'Theses of the Athens Charter', dominated the reconstructed urban structure, resulting in bold structures, but no actual buildings" (Wimmer 1989:6). Particularly during the first phase of reconstruction, that was identified by Wimmer (1989:5) to be from 1945-57. He also claimed that even during the second phase which lasted until 1971 "... the city's streets and squares continued to be overdimensioned". Such cases could be found in Dresden's Altmarkt (Old Market) and in Berlin's streets; Rathau & Liebknecht¹.

However, attempts were made to modernise damaged towns while using local building styles, something that actually started after the First World War. Diefendorf (1990:7) claimed that during the reconstruction after the First World War planners and architects made up local styles where they did not exist, or no interesting local style can be identified. The same author also claimed that such an approach of emphasising local styles "...became the basis not only for small-town reconstruction

¹ According to the author's own observation in a visit conducted in September 1987.

during the First World War but also during the Second World War". Claiming that architecture during reconstruction after the 2WW took a subordinate place, Diefendorf (1990:8) accused the wartime reconstruction planners of being "...first of all technocrats and bureaucrats interested in technically modern cities". He also argued that "They generally felt that their work - obviously necessary given the destruction - stood outside politics and was part of the European-wide trend toward urban planning. When architecture played a role it usually followed a conservative aesthetic and resulted in the endorsement of regional styles. Even here, these styles were sometimes artificially concocted historicist facades, behind which stood relatively modern buildings made up of standardised elements". (Diefendorf, 1990:8).

Side by side with the reconstruction and comprehensive redevelopment of inner cities bombed areas, the post-war planned decentralisation of new towns and the concentration on planned suburban development were largely applied, as an answer to the severe shortage of housing and other real estate facilities and as "reception stations for the people and activities to be dislocated later by urban renewal" (Grebler 1964:19). In Warsaw, Stolica (1954:6) claimed that "...in addition to the residential areas in the centre of the city..., new settlements have already sprung up in the suburbs".

The new and increased demand for facilities, which were to be located in the central areas, demanded the reconstruction and the expansion of the existing centres in a totally new design. In other cases the creation of entirely new planned centres at a distance from the old ones became an acceptable approach. "Hamburg, emerging from sever destruction ..., is planning a new centre, 'City Nord', in an area about ten miles from the old ..., the new centre has been designed for more than 5 million square feet of offices and a labour force of 30,000-35,000" (Grebler 1964:40).

Walter Bor (1989)², gave a description of post-war planning in Europe as whole, and in Britain in particular:

"It was seen simply as: survey, analysis, plan the one and only plan,... the main emphasis was on physical planning, which was derived from transport planning".

The same author, pointed out some lessons from his experience in post-war planning in London's East End, "The planning philosophy at that time was simplistic and

² Bor, Walter (1989). "Reconstruction of London East End After War Damage". A paper represented in the Second York Workshop, on Settlement Reconstruction Post-War; Institute of Advanced Architectural Studies, University of York.

deterministic, too physically oriented with inadequate regard for social and economic aspects,... social policy should have been more flexible, to cater for a wider range of incomes and allow for co-operative and self-built housing". He also emphasised the fact that there was too much pulling down and rebuilding and not enough conservation and rehabilitation.

In short, "The experiences of thirty years post-war city development and architecture had created a complete change of mind. The anti-historic, progressive approach to planning as exemplified by Brasilia has almost disappeared. Interest in the human values of heritage and environmental awareness have risen enormously" (Breitling 1983:64). "The great mistake of reconstruction in Europe after 2WW was the fact that these elementary human requirements were not taken into account" (Euggn Gross, 1983)³.

"However, it is necessary to recognise that despite the Utopian aspirations of would-be reformers, there are normally very limited opportunities for major reforms in urban planning on account of previous investments in services which will be very costly to replace or relocate, and due to the highly complex patterns of land ownership". (Davis, 1986:45). Of course, besides depending on the scale of pre-war investment the reform opportunities depend also on the degree of damage. The contrast between the two approaches of reconstructing Basrah and Fao in Iraq, can be given as an example. Where in the case of Basrah, and because of its long history and high level of investment, the opportunities to reform were rather limited, while in the case of the relatively young city; Fao total reform was applied. (More about Basrah and Fao in Chapter 6). Rotterdam is a case where the reconstruction scheme "...was based largely on the old city pattern, but proposed a considerable number of new streets, street widening, and the opening up of public spaces in front of existing and proposed public buildings". (Johnson-Marshall, 1966:320).

In short, the rising opposition between those who want to rebuild the settlement to its pre-war form and those who want to capitalise on the opportunity to reform and modernise, should be seen as a healthy sign for any reconstruction programme. The challenge is to achieve a balance, retaining what was good in a settlement with a cultural or symbolic value and at the same time, use the opportunity to improve the

³ Gross, Euggn (1983) *An Organic Approach to Urban Planning, in Beirut of Tomorrow Planning and Reconstruction*. American University of Beirut.

built environment.

4.2.3. Conservation of historic towns, districts and monuments.

The issue of protecting cultural property in the event of armed conflicts was raised by the Hague Convention in 1954. At the time of the Hague Convention a particularly important UNESCO publication was issued: *Protection of Cultural Property in the Event of Armed Conflict, Museums and Monuments VII*, Paris, UNESCO, 1956⁴. Furthermore a number of publications can be found in which the issue of conservation after war-damage has been thoroughly researched, the latest of which and within a Middle Eastern context is that of AL-Hasani & Weiss (1988), *Methodology for conservation of war-damaged structures in downtown Beirut*, published in *Icomos Information*, April/June, no.2. (also see, Pane, 1950; Rhodes, 1974; Burr, 1982; Jones; 1988). Most of the references refer to mitigation measures to protect monuments and art objects. These documents could be useful in the case where war is building up gradually. Nevertheless, war continues to destroy cultural monuments and damage historic towns. Most recently, this issue was thrown into the spotlight by the terrible bombing of Dubrovnik, Croatia. Being on the World Heritage list, the Dubrovnik experience highlighted the limitations of the World Heritage Convention in protecting historic sites during war⁵. (see Williams, 1992:16).

Moreover, during post-war reconstruction, concern for the preservation of historic cities and monuments might seem somewhat marginal with respect to more urgent and pressing problems. (Galdieri, 1986:60). In many cases, the losses in the architectural heritage sustained during the 2WW, were strengthened by other losses during the reconstruction process, where the medieval buildings of bomb-damaged cities, such as Coventry, Canterbury, Frankfurt and many others have been replaced by modern 'International' brutalist concrete structures, a fault that has been recognised and criticised in the mid 60's and was largely behind the growing attention

⁴ See also Burr, N.R. (1952) *Safeguarding our cultural heritage: a bibliography on the protection of museums, works of art, monuments, archives and libraries in time of war*, Library of Congress, Washington, D.C.; Jones, B.G. (ed) (1986), *Protecting historic architecture and museum collections from natural disasters*, Butterworths, Boston; Del Cid, D. (1986) *Emergency protection to damaged structures* in Jones, B.G. (ed) (1986); Pane, R. (1950) *Restoration of buildings after the war*, *Museum*, 3, (1), pp. 78-89; Rhodes, P.S. (1974) *The structural assessment of buildings subjected to bomb damage*, *Structural Engineer*, 52, 9.

⁵ The proceedings of the 'Post-war Reconstruction and Conservation in Croatia Conference', held at the Institute of Advanced Architectural Studies, York, 23-28 November 1992, represent the most comprehensive knowledge so far available on post-war conservation in Croatia.

given to conservation and rehabilitation of historic towns and city districts in the last three decades. Moreover it made people in Europe more conscious of the historic continuum embodied in the urban scene of previous eras.

This was not always the case, emphasis on restoration was apparent in the rebuilding of some war-damaged cities. The main objective was to preserve their cultural heritage and it was seen as an answer to the emotional needs of the hurt people. The conservation and reconstruction of historic and traditional buildings served as a demonstration of national pride and self confidence. Ciborowski (1967:43) wrote:

"The reconstruction of historic Warsaw satisfied a social need that was not of a material, but of psychological nature. The rebuilding of the Old Town was a protest of the Polish people against the barbaric destructive forces of Fascism. In the eyes of the inhabitant of Warsaw it was a symbol of the historic continuity and everlasting life of his own city, the city of his fathers and of his children".

Thus, considerable resources were devoted to the reconstruction of historical and architectural landmarks in Italy, Spain, Britain, Leningrad and in both east and west German cities. The largest single project of this type can be found in Warsaw.

In some other cases such as Rotterdam, the reconstruction schemes were largely based on the old city pattern but with new architectural expressions. Considerable number of new streets were proposed, as well as street widening and the opening of new public spaces in front of existing and proposed public buildings (for more detail, see Johnson-Marshall, 1966:319-348).

After forty years of reconstruction, the European experience showed clearly that, "...those cities which kept and restored at least some important and beloved parts of their destroyed downtown got not only the approval of their inhabitants and visitors, but were economically the most successful" (Breitling, 1983:49). In Munich the centre was reconstructed without any substantial change. It was subjected to criticism for neglecting the contemporary architectural thinking. But, "...within less than ten years Munich had become the most appreciated big city in Germany, a 'metropolis with a heart', 'Germany's secret capital'. While most of the other cities already were losing population, Munich grew and grew, increasing from about 700,000 to 1,3 million inhabitants" (Breitling, 1983:53).

Consequently, during the last three decades conservation has been seen as a method towards town regeneration and economic development, this perspective largely encouraged conservation and restoration and made it possible to be financed

by its own economic yield.

This European recognition of the values of its architectural heritage and the damage it sustained, was recently confirmed in the announcement of the European Award for the Reconstruction of the City, by the Philippe Rotthier Foundation in 1982. This award came as "...a reaction against the neglect to which the city has been subjected, first as a result of war time bombing and subsequently by brutalist concrete constructions" (Philippe Rotthier, 1987). This prize was last awarded to Ernst Schirmacher, for what was described by the jury⁶ as, "the heroic reconstruction of the Saturday Square in Frankfurt,... this restitution shows a total mastery of traditional construction techniques and the architectural vocabulary of the German city". Ernst Schirmacher reconstructed six houses in this square, with their half-timbered frame construction based on a massive stone ground floor. Still they were not constructed exactly as they were before the 1944 destruction. It is well worth quoting some of his reconstruction principles:

- I. The reconstruction should occur exactly on the old site in the handed down forms, it should be historically as correct as possible in its forms, materials and construction.
- II. All changes which would have been necessary in the restoration of the pre 1944 houses should be allowed in the reconstruction; we are talking about the interior arrangements and above all about the restitution of the historic halls.
- III. Each house has to be thought of and planned as a unique and individual house.
- IV. The houses have to be conceived in such a way as to allow the creation of; separate apartments of high quality and commercial premises on the ground floor corresponding to their traditional use.

Although we might agree or disagree with his principles, which might be seen as an attempt to hold on to time and create a museum, such an approach shows us the degree in which today's Europe regrets its neglect of the cultural heritage in its post-2WW reconstruction.

In brief, nowadays Europe is living a new era of architecture and planning generated from its post-war experience. As Leonardo Benevolo, said: "Formerly we had tried to change the old city in accordance to the models of the new city; now we have to improve the new parts of our cities according to the values we have

⁶ The jury of the European Award for the Reconstruction of the City 1987, was composed of Marc Breitman, Dan Cruickshank, Maurice Culot, Miguel Garay, Jean Philippe Garric, Leon Krier and Francois Loyer.

re-discovered in the old".

4.2.4. Public and private roles and investments in reconstruction.

Almost in all of the reviewed case studies, including some cases of what used to be known as Socialist countries, the state has come to recognise that because of the scale of the task of reconstruction the public sector on its own can not cope with the growing demand. A simple conclusion that took time to realise. For instance it was only in the mid 1980's that Vietnam recognised this fact and allowed private investment in reconstruction. (Nguyen, 1989). Elsewhere, a mixed approach for the implementation of reconstruction programmes has always been an attractive proposition, (eg. South Korea, see Huh, 1989:13-15; Shin, 1989:5-7). It must be noted, however, that there has not been a fixed formula for such a mix, as the amount of the ingredients in the mix have varied from case to case and time to time. However, issues such as, the degree of burden of the public sector and the dominating ideological and political structure, as well as the availability of private resources for investment, influenced the formula of such a mixture.

In conclusion, there have always been attempts to develop private initiatives through 'market mechanisms', particularly in sectors that are seen as attractive investment opportunities, requiring moderate investment with high returns. Such attempts were apparent in Japan following the 2WW, where as part of 'democratising its economy', Japan was forced to implement radical reforms in land ownership; liquidation of big and central enterprises and the enactment of a Labour Act, allowing more space for private and small investment in economy and reconstruction. (Shimizu, 1989:8). Despite the fact that these reforms were introduced as "...fundamental measures for the eradication of Japan's militarisation,... they had a far-reaching positive impact on the framework of Japan's economy". (Shimizu, 1989:10).

Commenting on the issue of market mechanism, Amirahmadi (1991:4-6), touches on a sensitive issue and that is the association of the market with capitalism, which has been for a long time rejected in a number of countries, and nominally still is in other countries in the Middle East, when he wrote: "It is only unfortunate that the 'market' gets always associated with 'private' cause and is considered 'capitalistic' while it could equally contribute to a public cause and be part of a broader social policy. A good example is the West Germany's 'social free market' experience in the post-war period. Gorbachev's perestroika also recognizes this new

conception of market mechanisms". (Amirahmadi, 1991:5).

4.2.5. Housing provision.

The housing crisis is world-wide, particularly so in the developing countries. Shelter being second to food as a human necessity it is almost always (rightly) seen as a reconstruction priority. What has been and needs to be questioned further, is the fact that housing is seen as a finished product that needs to be urgently delivered to war-devastated areas.

During and immediately after war the housing crisis becomes even more acute. This is partly attributed to war destruction, partly to migration and refugees, and partly to the legacy of the almost total cessation of civilian building activity during the war.

Often, arguments over the need for temporary shelter are bound to be raised. Conventionally, it was believed that the right approach is to provide temporary housing for the displaced population allowing time to rehabilitate industry, accumulate building materials and to draw up overall plans and organise the means of financing the physical reconstruction. "In considering housing in this post-war period it is necessary to separate schemes of an emergency nature, some of which were of a temporary character, from houses built in conformity with long-term planning. In trying to provide houses quickly it was not always possible to wait until fairly extensive plans for residential areas could be put into operation". (Whittick, 1950:141-142). This has been the general feeling following 1945.

However, following more recent experiences the attitude has changed to recommend, "In situations where there is acute time pressure to satisfy immediate shelter needs arising from housing losses, there may be no alternative to such a policy. But, it is worth noting that it is a very costly option amounting to a 'double reconstruction'" (Davis, 1986:49). Furthermore, it is common today to read arguments that discourage the provision of temporary housing altogether. (eg. Peterson, 1983).

Arguments against providing temporary housing centre around three issues. Firstly, whether the survivors are capable of sheltering themselves in one way or another, following the disaster, or the war-destruction. Secondly, that temporary buildings have a tendency to become permanent. Experience as early as the First World War suggest this. Describing Belgium's experience, Puissant (1991) wrote:

"..as soon as all the population had been 'housed', that is to

say, once it had found shelter, reconstruction was considered accomplished and many temporary structures continued to house families. This situation was perpetuated during the inter-war years and still exists now [1950s], to the disgrace of some human settlements".

Thirdly, temporary structures proved to be exceedingly expensive and that at a little additional cost and effort permanent buildings could be constructed. Of course, temporary housing is even more expensive in countries where houses have to be imported.

In general, the evidence suggests that world-wide reconstruction experience supports the notion of investing directly in permanent housing these days. Of course in some cases, where the situation was such that it was impossible to wait and that it was necessary to utilize temporary shelter, either for climatic or even political reasons, a limited number of temporary housing where provided⁷. In these cases it has often been recommended that such structures "...should be built not at the periphery of urban areas but in the heart of the cities", (Puissant, 1991:9) in order to make use of the existing public utilities (water mains, gas, electricity, and sewage) and most importantly to adapt them to the existing social and economic patterns and not to attempt to create new communities. However, in most cases in the immediate reconstruction period, no significant steps were taken towards the rebuilding of permanent houses and the people had to undergo a period of hardship.

For instance, in Vietnam the stipulated rents established in 1958, were not related to salary, thus the rents now are too low compared to salaries. At present they are considered irrational and insufficient for the minimum costs of housing administration and maintenance. "This results in old housing not being repaired or renovated for a long time and the quality of housing construction is falling day by day, ... still new housing is not sufficient to meet the needs of the growing population and the replacement of the destroyed houses. the financial investment into the renovation of old houses is too small. The administration and use of houses is neither rational nor efficient, which accounts for the diminishing housing stock" (Nguyen 1989:4).

Recently, in an attempt to find a better solution for the housing problem in the context of the country's economic and social conditions, the Communist Government

⁷ It might be the case that a temporary housing policy is enforced on the State by aiding countries. The political pressure put on Croatia to accept German prefabricated houses can be given as an illustration. This information was obtained during the authors field visit to Croatia in September 1992.

directed its policies towards 'self-help housing' and joint activities with the people and the local governments. Nguyen (1989:8), claimed that "Self-help has a very important role to play in the strategy of the contemporary transitional stage towards socialism". In this approach the provision of the physical infrastructure, such as; water supply, electricity, roads.... are the responsibility of the local or central government, for which the user pays an annual land tax.

The same conclusion has been reached by other researchers. In the context of housing reconstruction in Beirut, Peterson (1983:43-44) recommended four basic principles for Government to pursue:

"First, if possible keep people where they are. When a disaster is a man-made, political one, this is not always easy. Many will want to seize the opportunity to redistribute the population, but as much as possible, people who want to stay, should be able to do so.

Second, follow the concept of 'appropriateness' as it has come to be used in the last decade. That means using materials and methods that are appropriate to the situation.

Third, self-help: give as much responsibility to the people as possible, but be sure the necessary supporting facilities are in place and functioning: financial resources (grants or loans), materials availability, transport, infrastructure. That is, use the aided self-help concept....

Fourth, try to avoid temporary housing if at all possible; it drains resources and energy, though the immediate distribution of tents or plastic sheeting can save lives".

More recent experience of reconstruction in Iran (Amirahmadi, 1990; 1991) and Afghanistan (Leslie, 1990), suggest that in a post-war context the role of central government concerning housing provision should be preparative only, [i.e. mobilizing and directing the needed resources toward housing construction]. These arguments are based on the assumption that if government directly commits itself to the actual construction of housing projects, it would practically take away funds and other resources from more important purposes. And that, "The concentration of scarce resources in the housing sector would create shortages and bottlenecks in other sectors. Given secure employment and adequate means for construction of low cost housing, people will do the rest themselves". (Amirahmadi, 1991).

The current emphasis all over the world on housing quality, beside the traditional issue of quantity, supports the latter arguments; more involvement of the local population is needed in the housing and reconstruction process.

4.2.6. Legislation and issues of land.

Having thought of different aspects of reconstruction planning, reconstruction planners, economists and politicians, almost always, reach the conclusion that there is a great need for proper legal frameworks in terms of new laws and enabling legislation, for their policies to be implemented and reinforced. Thus, "...it has become evident that the reconstruction plans, which are not supplemented with a strong development control, produce a rise in land prices and speculation that can make all plans uncertain" (Breitling 1983:58) and in most cases, a legal frame work had to be created or adjusted to address issues of town planning, urban zoning, building laws, land ownership, compensation, etc.

In terms of town planning the introduction of the 1947 Town and Country Planning Act represents one the most significant pieces of planning legislation, that has had a strong impact on planning in Britain ever since. At the time the planners were not very optimistic due to the shortage of resources from the war effort, a fact that can be found in Tyrwhitt writings: "Here, at long last, we have within our grasp the means to plan, in the shape of the 1947 Town and Country Planning Act, and it turns out to be but a mirage -an image of what can be- one day, but not now, not for a long time yet. And yet you across the Atlantic, with the economic means but lacking the law, you must in your way, feel as frustrated as we do". (Tyrwhitt, 1991).

However, it is worth noting that in order to change and develop planning laws, urban zoning, etc., there has to be the motivation by Government to invest in capital works and thus to increase the demand for construction, which may not necessarily be immediately possible. For instance, lack of Government investment in reconstruction in Nigeria meant that there were "...very few requests for new planing and design projects received by Ministry of Works, Housing and Transport" (Awatona, 1991:14), this meant among other things that the planning procedures, building bye-laws, codes, zoning etc. from the colonial era remained unchanged. When the urgency of post-war period could have acted as a stimulus for radical change.

Price control legislation, along with a proper compensation procedure, to make available to public authorities an adequate proportion of low cost land, would help in bringing to life the hoped for reconstruction and redevelopment plan. In Rotterdam for example, such development control helped to make it possible for the Dutch to reconstruct the port with the finest modern equipment and facilities, turning it into one of the greatest ports in Europe (see Johnson-Marshall 1966:326).

Tendering procedures for infrastructural and building construction have to be

accurately evaluated to match the post-war demand. It is very often the case that pre-war contracting procedures are ill-suited to reconstruction needs often leading to lack of control and corruption. Commenting on the Nigerian context, Ikoku (the State Rehabilitation Commissioner, 1970) noted: "There is a lot of corruption in our rehabilitation work and we admit it openly. Control is very slack, direction in vital areas is almost non-existent... profiteering in rehabilitation materials has gone on, there have been loopholes in the award of contracts which has led to substantial losses". (quoted in Awatona, 1991:15).

Land ownership and other related issues such as future speculation, can often be one of the obstacles facing reconstruction, particularly in urban areas. A striking example is Tokyo's experience, where the reconstruction plan had the ambition of providing the city with vast areas of municipal parks and a 'green belt'. Later on, because of the complex ownership patterns and because landowners failed to volunteer the hoped-for co-operation (due to lack of resources, the city could not afford to buy the land), today Tokyo's five municipal parks total three acres. (Emerson Wildes, 1991:91).

However, land reform and ownership readjustment did play a crucial role in the implementation of other reconstruction plans, in other cities in Japan, for instance in Hiroshima. Following ideas of land reform that were generated originally in Switzerland and Germany, Japan established its unique system 'Kukaku Seiri' (see Ishimaru, 1991). Basically, because of lack of finance, land for streets, parks and public urban spaces are not purchased, but an agreement is worked out by reducing the amount of land owned by individuals, on the basis that the value of what is left of the land goes up because of the increased convenience and environmental improvement brought about through street and open space replanning. In cases where the new price is not high enough to cover the old price, compensation is made in cash. Equally, if the new price is higher then a levy is imposed. However, this method has come under recent criticism when Ishimaru (1991) wrote: "... the land readjustment method creates very unequal situations for each landowner,... and the right to property is, in some cases violated".

Land acquisition by city councils has been a common practice all over Europe during and immediately after the war. In Coventry, "The Council's policy has been,.. to buy up all the land needed, using powers of compulsory purchase more as a matter of convenience than anything, in order to let land, as separate building sites, on long leases, and to meet all reasonable objections to its proposals, which do not

lead to sacrificing a principle of policy or of design". (Rigby & Boyne, 1953:439). Compulsory land acquisition was also practised in Rotterdam (Johnson-Marshall, 1966:320). More recently it has been practised in Fao, Iraq (Barakat, 1992) and in Khoramshare, Iran (Mohandes, 1991).

While in rural areas, the most significant post-war land reforms took place in Japan, in which the parasite landlordism was abolished and agricultural lands were distributed to tenants. According to Shimizu (1989:8-13), the main points of the reform were: (1) All tenant lands owned by absentee-landlords and exceeding the limit of holding by resident-landowners (1 hectare on average) are compulsorily expropriated by the state and distributed them to tenants at value; (2) Maximum areas of holding land for land-owning tillers was limited to 3 hectares on average; (3) The way of paying farm rents was unified and they had to be paid in money; (4) The implementation of the reform should be completed within two years. These land reforms had two main consequences for post-war Japan's economy. "One impact was the increase of production in agriculture... Land reforms stimulated owner farmers to do their best to increase agricultural production... The other impact was the expansion of the domestic market, particularly in the rural areas, through the increase in agricultural incomes". (Shimizu, 1989:11).

4.2.7. Issues of resettlement.

Following war, the question of whether or not to rebuild a settlement on its original site sometimes arises, especially if it was severely damaged. One of the reasons most often cited for resettlement after war is the continued or expected threat. For example, following the liberation of the Syrian Al-Qunitra Province in 1973, occupied by Israel in 1967, a decision was made not to rebuild the severely devastated city of Al-Qunitra, but to leave it as a reminder of the Israeli occupation and the subsequent liberation. Near by, about 6 km, Ba'ath city, named after the ruling party of President Hafiz Al-Assad, was planned and 600 houses for government employees were constructed along with the main service buildings (Saad, 1991). Similarly, the German invasion of USSR in 1941 made it necessary to evacuate a substantial part of its industry mainly, armaments, chemical and machine-building factories eastward to Siberia, beyond the range of destruction. Thus, new settlements were built to house the factories and the workers communities. In addition, new mines, and oil wells had to be opened, steel mills constructed, and so forth, which transformed what used to be an agricultural region, into one of the greatest industrial

bases of the USSR. It has been established that the success of these settlements is in part due to the fact that housing followed industry instead of the opposite, where settlements are built first and jobs are brought in second. (Blumenfeld, 1991:21).

In another case, the extensive damage and the extremely high cost of rebuilding the city of Khoramshar, in the south west of Iran, were given as reasons why some people believe the city should not be rebuilt on the same site. (Azimi, 1986:66; Al-Mohandes, 1991). In such cases resettlement is maybe seen as a cheaper and quicker solution for reconstruction.

However, the author believes that too often issues other than future threat and immediate economic benefit lie behind some decisions of relocation. Wars may provide convenient pretexts for population concentration, control, the conglomeration of population groups to achieve national or regional plans of minorities integration, or even as a means of dispersing large communities that may participate in political unrest. The decision to relocate a number of Kurdish villages in the North of Iraq can be interpreted as such. In taking such a serious decision, one should consider not only the extent of damage and the feasibility of recovery, but also the role of the city in the region, its historical importance, and the role played by its people during the war. And most importantly the degree to which the inhabitants are ready to accept such relocation, and to perceive the new settlement as their home.

Rebuilding a new settlement adjacent to the old one is a very serious decision that stands very little chance of immediate or even medium-term success⁸. For instance, the French attempt, in Tunisia after WW2, to rebuild a new Bizerte across the bay from the old city was not a success. Despite the exciting images of modernity, people did not leave their old settlement. Basically, because the rebuilding of the new city took years and as the aim was not to allow people in until the architectural dream is complete, people meanwhile restored their own homes to acceptable standards and quickly accustomed themselves. Also, because there were heavy investments in the urban and industrial land of the old town and many people did not look favourably on such a sweeping planning project, from which land speculation was entirely excluded. Emery (1991:80) justified these results when he wrote, "...an operation as delicate as the transfer of an existing city without the possibility of rapid action or of profiting from the psychological shock of war on a

⁸ We have to keep in mind that the concept of 'success' is subjective and time related. The issue of resettlement success is discussed in more detail in Chapter 6.

displaced population demands great prudence and much discernment". The same author went further in explaining that: "Administrative, legal and financial questions relating to the status of the land of the new city and of the property of the citizens raised complex problems and it is not certain that the new and daring solutions proposed to the administration, which would help to accelerate the work by interesting private initiative, will be immediately understood and adopted either by the administration or by public opinion unfamiliar with the mechanism of city planning". (Emery, 1991:81-82).

Another dangerous practice in terms of resettlement has to do with the myth that grouping villages into bigger settlements will reduce costs, speed reconstruction and improve agricultural productivity. Amirahmadi (1990; 1991:9) is one of those professionals who advocate such an approach, apparently from a purely economic viewpoint. He wrote, "An integrated rural policy should focus on regrouping smaller dispersed villages into larger settlements with social service areas and marketing centres". In our study of reconstruction and resettlement in Yemen we came to the conclusion that unless such resettlement policies are approached from a socio-cultural as well as a material perspective, the chances for success are minimum.

4.2.8. Attracting pre-war population back.

Although the natural tendency among people is to return to their home towns and villages when the war has ceased, it could be the case that the population do not return at the speed desired to revive the settlement, this is mostly the case in prolonged wars where people having left their home settlements and established themselves somewhere else, find it very difficult to move back. In such cases direct incentives might be needed to attract at least the younger people. These incentives could take the form of creating employment opportunities; ensuring employment and income; provisions for home ownership; providing job placement facilities for war veterans; distributing land for housing, developing small-scale industries; creating share holding opportunities in public industries through long-term and easy credit; and providing provisions for educational facilities, etc. (for more details on this issue see Azimi, 1986).

In Iraq, in an attempt to avoid the problem of people not returning to their own settlements, special Province population registrars were established. These registrars kept records of the inhabitants of each location, who were allowed to travel and migrate across the country, but without having the right to buy property outside their

home-Province. Thus insuring that people will eventually return to their settlements.

As important is the issue of attracting back the service sector such as, businesses, banks, insurance companies, small workshops, etc. This suggests more investment in infrastructure, financial and physical security, as well as socially stable conditions.

4.2.9. Reconstruction and civil defence.

Baker (1978), claimed that during the 2WW no attempts were made to provide anything more than emergency shelters, in Britain. These shelters took different shapes and materials, from steel trench shelters to reinforced concrete ones, as well as surface shelters strengthened with timber or pre-cast concrete⁹.

"For those engaged in post World War II reconstruction it was inconceivable that war would ever occur again" (Lewis, 1988b). The 2WW was seen as the end of all wars in Europe, so not many reconstruction projects took into consideration the possibility of a new start of the war, ignoring the need to make the impact and effect of any other possible war less severe. Nevertheless, Ian Davis (1983), argues that the concept of 'urban de-centralisation' and the building of the 'New Towns' in Britain after the 2WW was an example of considering the possibility of a new war. It was in the 50's that Europe started to recognise the possibility of a nuclear war. In countries like Switzerland, Norway and Sweden the provision of nuclear shelters became compulsory in every house, school and public building (see, Building Design, February 18, 1983:6).

On the other hand many commentators agree on the fact that, "Reconstruction after war should take account of continuation and recurrence of war and the need to survive, as in reconstruction after earthquake and tropical cyclone" (Lewis, 1989), especially in cases where the war has no declared end¹⁰. It has been concluded that "...the location and design of settlements and their shelter can all contribute in increasing the protection of civilians should war occur. Factories, power stations, fuel storages, government headquarters and barracks are most at risk and therefore it is better to avoid locating them in highly populated areas. Two basic measures can be taken; evacuation and shelters" (Zargar, 1989b).

⁹ For more detail, see Baker (1978) *Enterprise Versus Bureaucracy*. Also see Mallory & Ottar (1973), *Architecture of Aggression*.

¹⁰ The Iran-Iraq war is one such, they only reached a cease-fire in August 1988. The possibility of a new start of the war is still there.

4.2.10. Traffic problems and solutions.

This is an issue that was highlighted in reconstruction cases in Europe. During the post-war period a large increase in automobile ownership occurred in all West European countries. Street patterns in most of the European cities and specially in their old centres were not convenient to the motion and parking needs of the motor vehicle. Consequently, the adaptation of the streets to the vehicles became an important need and the destruction of the war was seen as an opportunity to do that. "European response to the invasion of its cities by the auto-mobile has taken two main forms, both of which involve a great deal of urban renewal. One is to adjust the street pattern, the other to expand mass transit facilities" (Grebler 1964:25). The first approach included many measures, such as, widening existing city streets, laying out parallel streets, enlarging plazas, designing traffic circles, building urban expressways with more or less limited access and the introduction of ring roads. The concept of building parking structures in strategic locations was widely applied in most of the cities. The other main approach to traffic solutions, was the strengthening of public mass transportation. Subway systems were widely introduced to serve the downtown areas emerging from the reconstruction, as in the case of Rotterdam, Milan and Hamburg. War destruction made it possible to relocate some of the railway stations, offering remarkable opportunities for urban redevelopment on newly available and centrally located sites, such as in the case of Rotterdam.

As a whole, cities with long term, over-all traffic strategies and balanced traffic and pedestrian needs as well as good public transport, had the most satisfying solutions to their traffic problems. Nowadays, "...business turnover in pedestrianised streets rose 25% to 100% and the proportion of commuter travel made on public transport to 80%" (Breitling, 1983:57).

4.3. THE IMPLEMENTATION OF PHYSICAL RECONSTRUCTION.

When it comes to the implementation of reconstruction in a particular settlement a number of issues arise, such as: damage and needs assessment; local participation, compensation; speed of reconstruction; choice of building technology; quality control of environment; and finally monitoring and evaluating the results. All of these issues are related and interdependent. For instance, the damage assessment is needed if compensation is to be given. Similarly, speed in reconstruction is bound to affect quality and the role of the local population. In the following section we will explore each of the issues in detail, based on a review of the available literature.

4.3.1. Local needs assessment.

In a previous Chapter we explored some of the possible effects of war on local communities. We reached the conclusion that they are vast, diverse, and complex, necessitating a *multi-faceted* approach to post-war reconstruction. However, planning for reconstruction and managing resources and implementation without a proper assessment could lead to waste of resources and long-term social problems within the community.

"Whilst a survey of the survivors' needs is an obvious necessity, there is persistent evidence that such surveys are either cursory reports or often omitted with total reliance on the opinion of officials of what they believe people need. (Davis, 1986:45).

Davis's remark made during the *First International Conference on Reconstruction of War-damaged Areas in Iran*, is based on years of experience of dealing with reconstruction and rehabilitation after natural disasters. His criticism of such a 'top-down' approach for assessing damage and people's needs, reflects the general awareness concerning the need for more appropriate survey methods to collect the type of information that would reflect the real needs of the local population. This awareness has developed, largely, during the early 1980's. Authors such as Taylor (1981); UNDRO (1982) and Cuny (1983), have established the foundation for such developments. Their arguments have been based on the fact that traditional ways of surveying people needs, depending mainly on collecting quantitative data suffers from a number of shortcomings. El-Masri (1992) summarised the traditional inadequacy in three aspects:

1. Lack of familiarity with the local situation: housing conditions and processes (finance, connections, arrangements) construction methods, habits and culture, people's resources, household characteristics, location characteristics, etc.
2. Inappropriate techniques of assessment: quantification of needs (counting the number of houses damage and families affected), no distinction between 'needs' and 'wants'.
3. Weak management of assessment: exaggeration, lack of a proper definition of the objectives of assessment, lack of co-ordination between different intervenors, assessment based on intervenors self interests and available resources.

On the other hand, in the literature dealing with reconstruction after war two main issues are apparent: first, the fact that emphasis is put on national damage assessment, rather than local assessment, contrary to most literature dealing with

natural disasters. This is, probably, because of the difference in the nature and scale of war damage and the relatively limited losses due to natural disasters. Secondly, assessment of local damage tends to be mostly concerned with physical and structural damage. A typical example can be seen in the writings of Amirahmadi (1991), who, although he acknowledges the different types of war damage, ends up highlighting the physical losses.

"Different types of war damage may effect human, material, institutional, financial, cultural and historical resources. They may have been damaged beyond repair or may be repairable. Moreover, different types of damage are repairable or replaceable at different costs and with different degree of difficulty. War damage also differs in terms of their age structure and importance to nation, locality, family, and individual. Finally, the ownership is a critical matter. The damage item could be publicly or privately owned and it could belong to a wealthy or a poor family. The ownership consideration is particularly important since wars usually create confusion about ownership while reconstruction tends to restructure the old property arrangements in damaged areas". (Amirahmadi, 1991).

Talking about physical damage, it is helpful to know that there are a number of useful documents in this field. (eg. Rhodes, 1974, dealing with the structural assessment of buildings subjected to bomb-damage in Northern Ireland; Lok et al., 1989). Reference to more documents is given in the Chapter dealing with Belfast.

However, recent examples of literature can be found, in which attempts have been made to derive techniques of assessing damage and measuring people's needs, based on a mixture of quantitative and qualitative research methods in post-war situations. (eg. in Iran, Zargar, 1989; in Afghanistan, Leslie, 1990; in Lebanon, El-Masri, 1992). Still, these attempts suffer some confusion as to who could do the assessments, and when, how and what are the skills needed.

Conventionally, government or military engineers would carry out the job of assessment. Their work seems to have the following characteristics: first, their main concern is "...to find competent and well experienced assessors who will be able to determine whether a given building needs to be: (a) repaired with minor measures by the owner or a local contractor; (b) repaired with major structural improvements; or, (c) demolished due to its unsafe condition". (Davis, 1986:45). Secondly, they are mostly concerned with assessing damage to public buildings and infrastructure. In few cases where compensation was given, these surveys were extended to include private buildings and dwellings. Thirdly, aerial photographs can play a significant

role in such surveys but are often not available. (eg. United Nations aerial survey in Afghanistan, Leslie, 1990). Fourthly, Governments play down the scale of losses in order to avoid a decline in public moral.

Another alternative for conducting damage assessment has been advocated, and that is, to employ an independent agency, to do the job. Amirahmadi (1991) wrote:, "A careful record of all variations of damaged items should also be kept, preferably by an independent agency with specialized branches. The condition of independence may be guaranteed by institutionalizing different representations within the organization".

Recently, communication skills of assessors have been given a greater importance. Damage assessment should go beyond counting destroyed structures and the number of deaths and injuries, to determine the extent of damage, type, importance to the local communities, ownership, local priorities for reconstruction, and most importantly, opportunities and difficulties of replacement, and financial value. An interesting example is the Mission Report, written by Jolyon Leslie (1990) for the United Nations Centre for Human Settlements (Habitat) on the impact of war on the rural and urban settlements in Afghanistan. In his report Leslie (1990) emphasised the importance of surveying the surviving resources that can be used for reconstruction. Thus he looked into building materials supply, building skills, water supply, drainage and sanitation, electrical supply, roads and transportation, public buildings (medical, educational and religious). Still, he fell short of evaluating the surviving administrative structure, means of enforcing legislation, the justice system, etc. This shortcoming represents one of the most typical attitudes by intervenors, who too often assume that the local systems are either non existent or at the best unable to cope with the reconstruction programme.

Finally, a significant gap exists in the literature in terms of the desirability of, for instance, record-keeping of damage assessment and the up-dating of such information, despite its importance in determining compensation for the war victims; matching available resources to needs; and in setting objectives and priorities for reconstruction.

4.3.2. The promotion of local participation in reconstruction using local resources.

This particular issue is very controversial within the available literature. In some studies such as those dealing with reconstruction after the Second World War, self-help construction of housing seems to have been dominant in almost all European

Countries including the USSR, more perhaps due to the lack of public resources than concern about the role of the population, it has to be said. For example, because of the great demand on housing that could not be met by the state on its own, encouragement was given in the USSR to urban citizens to rebuild their own houses (rural populations had to reconstruct their own houses anyway). A popular pamphlet, 'How to Build Your Own House' was widely distributed. The pamphlet contained not only the usual information on traditional building methods, but also on the making of gypsum blocks, earth bricks and brick vaults, on the utilisation of brick rubble and on simple material tests. It has been claimed that almost 15% of the reconstructed urban houses were built by this method. (Blumenfeld, 1991:28).

Furthermore in Finland, where Government propaganda claimed there was "No iron, no steel - but a lot of land and timber! No capital wealth, no foreign exchange - but plenty of muscular arms and a desire to work!" (Vennamo quoted in Palojärvi, 1990:6), the mobilization of the maximum rate of self-help housing construction, combined with land reclaims and improvement of infrastructure, combined to achieve 50% of the nation's housing need within 10 years of the end of the war. People were given free manuals on how to cut timber and construct houses. Most of these houses are still in use. (Palojärvi, 1990:6; Berghäll, 1992).

Nevertheless, in more recent examples of reconstruction after war in developing countries, where the reconstruction of cities have been perceived as an opportunity for political propaganda and ideological reflections, and because of the patterns of planning and development that were inherited from the colonial era, a number of cities have been rebuilt without any involvement of the local population. (eg. Ba'ath City in Syria; Hovizah in Iran; Suez in Egypt; Fao and Basrah in Iraq, etc.). In most of these countries the debate over reconstruction was almost exclusively limited to governmental bodies. Little or no attempts were made to involve the local population at the problem-defining, decision-making or the implementation stages. The consequence of such attitudes was, "...the poor and the low-income families were at a considerable disadvantage because their interests were collectively undefended". (In Nigeria, Awatona, 1991:19). In reaction to such practices, commentators, with experience based on working in post-disaster situations, such as Davis (1986; 1988a; 1989a) and Lewis (1988b; 1989), expressed caution of suspending the role of the local population during the reconstruction process. For instance, Davis (1986:46) wrote, "There is an acute danger of responding to the challenge of reconstruction by bringing in external resources to reconstruct peoples' homes and settlements. Past

experience, from numerous locations, have indicated that the surviving population have often become mere spectators, while others rebuild their town or city. External help will almost always be needed, but it must be provided in a supportive role to strengthen what already exists rather than supplant the local resources of skills, manpower and knowledge". The findings of our study of the reconstruction programmes in Yemen, following the Dhamar earthquake 1982, coincides with such an observation. But, what should be noted is the fact that natural disasters cause to a large extent limited damage, in comparison with war and at the same time attract large amounts of external help and resources, (although it never exceeded 30-40% of the total amount needed, Cuny, 1983). This factor alone encourages governments and their professionals to take over the whole responsibility of reconstruction.

Other commentators went to the extreme of suggesting that "...the role of the government should be limited merely to provision of technical and indirect assistance such as mobilization and extension programmes, subsidizing construction of small-scale brick factories and the needed fuel, etc". (Azimi, 1986:65). The role of the state and the local population will be discussed in more detail in Chapter 9.

4.3.3. Compensation.

Paying compensation to individuals and families for the loss of their homes and positions during war is a common policy that has been followed by a number of countries. Similarly, it is a common practice that people, small businesses and companies would expect and wait for government's decisions on the amount and nature of compensation paid for war damage. It is interesting to note that insurance companies do not cover losses due to war and civil strife, in the same way they do for natural disasters. Thus, over time, compensation has become to be established as a governmental responsibility.

However, when it comes to paying compensation a number of dilemmas arise: (1) In most cases the initially promised 'full compensation', is never realised, governments always end up paying a fraction of what they have promised to pay (eg. Iraq, Barakat, 1989; Iran, Saebi, 1991; Belgium, Uyttenhove, 1990; France, Baudoui, 1990, etc.); (2) Different models of compensation have been followed in different countries in terms of type (finance, building materials, land, etc.) and in terms of methods of distribution. For instance, in Belgium following WW2, "The government has finally decided to compensate in full all war damage sustained by a category of people classed as 'economically weak' and to compensate in part, damage sustained

by those economically more secure. It is likewise understood that material assistance will be given to the dispossessed by setting up collective work projects and cooperative societies". (Puissant, 1991:13); (3) Relating the amount of compensation to the degree of damage, may lead to families inflicting further damage to their property in order to qualify for larger compensation, something that has been observed by the author in the traditional quarters of Basrah, and coincide with an observation made by Davis (1986:45); (4) There is growing opposition to the idea of direct compensation to the survivors (victims), Azimi (1986:64) wrote: "...funds allocated by government to the region should be infused into the areas not in the form of direct cash payment to people, but rather in the form of wages and fees. In other words, government money should create employment and be placed at the service of redevelopment and reconstruction"; (5) One should be aware of the issue of inflation following war and of the national financing system. In most cases, and because of inflation the announced amount of compensation loses its value by the time it has been distributed and by the time people start reconstruction; (6) It could be the case that compensation for personal belongings and houses is never given to individuals, such as in the case of post-war Nigeria, simply because it is too expensive to administer; (7) Companies, industries and small businesses need to be compensated too, but their compensation does not necessarily take the form of cash. For instance, it could take the form of cuts in income tax and machinery import tax, proportional to the degree of damage.

4.3.4. Speed of reconstruction, building technologies and quality control.

The time factor plays an essential role in reconstruction. The conventional approach has been to assume urgency. Hence the desired speed in reconstruction called, in a number of countries, for the industrialization of the construction sector, especially for housing and service buildings. In most cases, it was thought that speed of construction could only be achieved through the application of industrialised building technologies, prefabrication and mass production.

Vietnam's experience in this field gives us a very good example to learn from. Since the end of the war there, it is said that in Hanoi, many multi-storey, prefabricated housing projects were built, using the 'montage' building method of large wall sized concrete panels. Although this method demonstrated, like elsewhere, the possibility of supplying a high number of square meters of living spaces in a short

time, it failed to answer the local economic and social conditions of Vietnam.

Over the last three decades, the long-term problems associated with industrialised building systems became well established; these tend to be highly dependent on imports, and a high quality transport infrastructure maybe needed to move the finished panels. Also inexperienced management of large, high-tech industrial plants is hampered by government restrictions. On the other hand, conventional methods use 'local' and appropriate building materials and can be more easily upgraded to meet modern needs.

Today, many people and some professionals have lost faith in prefabrication and over-industrialised construction techniques. However, what seems important to learn from those experiences are the essential properties of industrialization. This may include the simplification and mass production of building components; speed of construction, advanced management techniques, etc. (see Azimi, 1986:67). Parsa (1988; 1989) in relation to building technology in Iran, argues that what is needed in reconstruction is the employment of *appropriate technology*, which does not mean "...elementary or primitive technology". He went further, to assume that the term appropriate has to do also with the local values and beliefs. Recent research has concluded that if a new technology is to be introduced to a certain community and is to be adopted, the intended users must not only understand it but also consider it to be a good idea by their own criteria. Thus, according to Dudley (1991), it has to be *reasonable*: a new idea must be amenable to reason. It must fit in with the people's view of the world; *recognizable*: before someone can make a reasonable evaluation they must have a clear idea as to what it is; and finally, *respectable*: a new technology or practice will only be adopted when it is seen as "...something which people like us do".

Again, Vietnam's experience, is a good example that demonstrates the shift in emphasis in reconstruction from prefabrication to more appropriate technologies. After years of reconstruction, the Vietnamese construction industries could not provide the ever growing demand on cement and imported steel. Thus, they had to depend more on locally available materials; burnt and sun dried bricks, tiles, lime, timber, bamboo and small reinforced concrete components are mainly used these days. According to Nguyen (1989), more research is taking place aimed at producing light weight walls and floor panels from pressured cement and tree fibres, to replace the commonly used reinforced concrete. But the main lesson the experience of Vietnam suggests is that, "Building materials are no longer produced

and provided only by the government as they were in the past, but may now be sold in the market place as a consumer good" (Nguyen 1989:4).

This approach towards appropriateness has influenced even the prefabrication industry where it continued to exist; although GDR like elsewhere in Eastern Europe have not given up industrialised housing systems, still, "...panel construction introduced in 1956, has as from 1981 been differentiated for purposes of downtown area reconstruction, in such a way as to permit both adaptations to existing architectural styles and completely new and modern replacement construction" (Wimmer 1989:9).

It is important to note that following WW2 and despite the improvement in building technology, the reconstruction of cities took much longer than was anticipated. For example, 10 years after the war Coventry still looked damaged (Johnson-Marshall, 1966), as well as Rotterdam (Benevolo, 1971b:740). On this basis, some authors argue that gradual reconstruction maybe more appropriate as it guarantees quality and satisfaction. "Given that there will be internal political pressures, as well as external forces advocating the priority of fast reconstruction, it is important to balance this desire against other needs that may be in conflict with a rapid response such as: the need for a well-planned environment; the need for well-built buildings; the need for safe building." (Davis, 1988:48).

Other commentators went further to claim that speed in reconstruction can only be achieved at the expense of quality control, standards can easily be relaxed by builders, craftsmen and inspectors. For example, Amirahmadi (1990:263) cited that, "Reconstruction tends to be an emotionally charged process during which pressure for quick response is high. *Safety considerations* therefore are usually relaxed for speedy satisfaction of needs and emergencies".

4.3.5. Monitoring and evaluation.

In general, supervising the implementation of reconstruction programmes, monitoring the progress and collecting feedback, as well as documenting the process and the final product are all areas of studies that have not been given appropriate consideration. This is apparent in the limited number of studies available in which a proper evaluation of reconstruction has been carried out, even in Europe following the Second World War.

A great number of mistakes would have been avoided during the reconstruction of cities in Iran and Iraq, if a monitoring system existed and continuous feedback was

available. The main problem is that governments see the moment in which they sign contracts as the end of their role, and if any feedback is to be collected in the field then it is either technical or administrative.

An interesting example can be found from post-WW2, where experimenting in modular houses was a common feature of reconstruction projects. For instance, in France, the Ministry of Reconstruction in 1946 undertook a number of experiments. The 'Cite d'Experiences' at Noisy-le-Sac, near Paris was one of the sites where samples of prefabricated houses from all over the world were erected to be studied and evaluated. Of course this allowed only for technical evaluation and not the way the houses would function over the years when put into their living context.

On the other hand, it has been argued that emphasis should be put on implementing some of the theoretical reconstruction schemes and allow for their evaluation in order to adjust and develop any newly proposed schemes, keeping in mind that, "A planner is no different from any other form of artist. He can only develop through creation, creation in his own four dimensional medium with the raw materials of men, trade, bricks and trees and the sequence of seasons, not on paper pinned on a board". (Tyrwhitt, 1991:17-18). Innovation in town planning is also important. The post-war French government "...allocated war-devastated towns to all the prominent architect-planners in the country, including Le Corbusier, Lurcat, Perret and others, and retained them to prepare reconstruction plans, again with a maximum of individual freedom". (Bauer, 1991:41-42).

In conclusion, "Reconstruction should be carefully documented and evaluated and results published periodically in various forms and places. This is needed for the better management of reconstruction and for the transfer of the experience to the general public (to encourage participation), academic communities (for theoretical development), and to practitioners in other countries and in the future. An information bank has to be established along with well-defined evaluative criteria. While governments should be involved in documentation and evaluation of reconstruction activities, these are best and most accurately achieved by independent agencies outside the governments' sphere of direct influence. Such agencies should have access to key data and policies and be operative at all governmental levels". (Amirahmadi, 1991:20).

The evaluation and documentation of reconstruction plays a crucial role in assessing the long-term implications of reconstruction on the socio-cultural and economic life of the community. Part of the long-term impact could be a reduction

in physical vulnerability to future wars (Ledbetter, 1988:75) and/or to natural disasters (Davis, 1986;1988b) and/or to social unrest (Stollard, 1989). All of these side effects or impacts need to be registered and in fact planned for in future reconstruction. Most importantly, reconstruction programmes are bound to have some kind of long-term economic impact, through the massive construction activity, which could on one hand, have a positive impact on the local economy, and on the other a negative one on the on-going building activity outside the reconstruction areas. Another side effects could be that, the migration of workers and their families into the affected areas would result in an extra burden on the already stretched local services and accommodation. "In many post-earthquake situations: Skopje, Yugoslavia 1963, El-Asnam, Algeria 1980, Popayan, Colombia 1982, the pre-disaster population doubled within a few years of reconstruction activity". (Davis, 1986:49). All these issues need to be observed and detected as they appear and reconstruction policies should be adjusted accordingly, thus comes the need for flexible reconstruction policies.

4.3.6. The role of the media in supporting reconstruction programmes.

Talking about mobilisation of human and material resources, we touched on the crucial role played by the media as a propaganda machine. Moreover, the media plays an important role in educating the population in areas of civil defence, mines, reconstruction, building materials, etc. It could also play an international role in attracting funds and support from neighbouring countries. Furthermore, a humanely social role for planners could be made more effective through the media.

4.4. SUMMARY AND CONCLUSION.

This Chapter gave a taste of the different dilemmas that reconstruction planners are inevitably going to face when drawing up plans for particular settlements. The issues that were argued varied from whether the planner should see reconstruction as a crisis or an opportunity, and whether to replicate what existed before the war or reform the environment, to drawing attention to questions that have to be addressed during reconstruction. These can be categorised under the following headings: conservation of cultural heritage in reconstruction; public and private roles and investment; housing provision; legislations and issues of land; resettlement policies; attracting back the pre-war population; reconstruction and civil defence; traffic

problems and solutions.

Concerning implementation, this Chapter gave rise to a number of arguments that have to do with: local needs assessment; the promotion of local participation; compensation; speed of reconstruction; building techniques; quality control; monitoring and evaluation, and finally the role of the media. All these arguments will feature again in the coming Chapters on casestudies, where we will explore in more detail the governmental and local attitudes towards reconstruction in Iraq, Yemen and Northern Ireland.



The coming Chapter (5) presents the main research methods that have been used in the preparation and development of this dissertation.

CHAPTER FIVE

FIELD WORK AND LEARNING TOOLS: METHODOLOGY.

5.1. INTRODUCTION.

In this chapter, two main research methods that have been used in the preparation and development of this dissertation, besides the literature review, will be introduced. These include: (1) a number of workshops, conferences and short courses, that were used as *learning tools* over the period of this study (1989-1992) and; (2) field-work case studies.

5.2. LEARNING TOOLS: WORKSHOPS, CONFERENCES AND SHORT COURSES.

Due to the limited amount of published information on the planning and management of reconstruction after war and because of the evolving nature of the subject, it was agreed, with the supervisor of this dissertation, that one way of developing the knowledge concerned with this issue, would be through attending and participating, as well as organising a number of national and international events. These workshops, visits, conferences and short courses have played a significant role in the development of this study over the last 4 years. In some of these events the author presented papers, in others he acted as the convenor.

This section will report briefly on the most significant of these events, emphasising the ways in which they contributed to the overall development of the subject of reconstruction after war and to the particular development of this dissertation.

5.2.1. The Second York Workshop on Settlement Reconstruction after War, 16-18 May 1989, York, UK.

This Workshop is very well documented and reported elsewhere (see Cockburn & Zargar, 1989a). The value of this workshop to the author can be seen in three ways: Firstly, it was the first specialised event, on the subject of reconstruction after

war, in which the author participated. Thus it represented a good chance to meet, for the first time, a number of experts, only previously known through their writings. It was an opportunity to exchange ideas and develop the focus of his doctoral work.

Secondly, 22 papers were presented, including one by the author, entitled '*Consideration of cultural heritage in post-war reconstruction - the case of Basrah, Iraq*'. Most of these papers were crucial for the development of this work and are referred to in one part or another of this dissertation.

Thirdly, one of the main outcomes of this workshop was the introduction of a set of Guidelines, addressed to responsible authorities, for the reconstruction of towns and cities devastated by war. (edited by Dr. Ian Davis, 1989b). These guidelines are discussed in-depth in Chapter 5 of this dissertation, where they are also used as a general framework to evaluate the Iraqi experience in reconstruction.

5.2.2. National Identity in Contemporary Arab Architecture Conference, 14-16 October 1989, Baghdad, Iraq.

The proceedings of this conference are well documented elsewhere. (Iraqi Ministry of Housing and Construction, 1989, in Arabic). It was attended by more than 60 delegates from all Arab countries representing academics, government officials and independent professionals. This conference came about as an occasion to represent the Iraqi government's great desire to reflect the so-called 'Arabic identity' in their newly built settlements.

A desire that was emphasised in the form of a question, when the President addressed the members of the Association of Engineers and Architects on 10 October 1984: "...where is your own identity and architectural character of this era, that is to be inherited and talked about by the coming generations?..". In fact, this very question was taken as the slogan of the conference.

A number of interesting but unrelated studies on Islamic - Arabic architecture were presented by well known Iraqi and other Arab professionals. The author's own contribution was a paper entitled '*Opportunities to achieve national identity through post-war reconstruction*'. However, he was the only speaker to really address the subject of the conference to the needs of reconstruction in Iraq. But the greatest value of this conference was that it was the first time that the Iraqi government announced its reconstruction plans for the cities of Basrah and Fao.

Finally, it was a great opportunity to develop relationships with Iraqi officials and academics that proved to be crucial for carrying out the reconstruction case

study on Basrah and Fao.

5.2.3. International Seminar on the Preservation and Rehabilitation of Historic Districts, Towns and Monuments in some Developed Countries and their Relevance to Developing Countries, 1-15 November 1989, IAA Santo Kiriko Creativity Centre, Bulgaria.

Organised by the United Nations Centre for Human Settlements (UNCHS Habitat) and International Academy of Architecture (IAA) this seminar aimed at addressing the two-fold problem facing governments in developing countries; of how to provide the population of big cities with suitable shelter, while preserving and rehabilitating historic and architecturally significant areas.

Under the chairmanship of Professor Pierre Vago of France, Honourary President of the International Union of Architects, nine internationally recognised lecturers, representing the 'developed world', were invited to present their experiences, followed by twelve speakers from the 'developing countries' presenting their country reports. The author was the only representative of a university and presented a paper entitled "*Conservation versus reform in post-war reconstruction: the case of Basrah, Iraq*". Despite the fact that this event had the unfavourable flavour of the 'developed' preaching to the less-developed, it was a perfect forum for the author to table the problem of war-damage to national and international heritage (in the developing countries) and the reconstruction dilemma that follows, of whether to restore what has been damaged or to construct new structures.

The two-week seminar emphasised the slogan 'inventory, protection, conservation, rehabilitation and maintenance' of the historical and architectural heritage (IPCRM). It was hoped that "...the dissemination of the 'developed worlds' experience to the 'developing world' will help their governments in the implementation of the IPCRM of their heritage, within the framework of their national shelter strategies". (UNCHS, 1990:1)¹.

The conclusions of the seminar centred around the importance of establishing, in each country, "...an effective body at governmental level responsible for the elaboration, implementation and monitoring of its IPCRM policies regarding their national heritage". The responsibilities of such a governmental body were envisaged to be the following:

- 1) It should encourage financial and technical support for the implementation of

¹ For more detail see *Preservation and Rehabilitation of Historic Districts, Towns and Monuments*, UNCHS Habitat, Nairobi, 1990.

IPCRM programmes.

- 2) It must be responsible for the training of national experts, the elaboration of national IPCRM programmes, and coordinating national and international co-operation between different institutions and organisations on a national level, or within the framework of bilateral or multilateral co-operation.
- 3) It should also encourage community participation in IPCRM programme implementation.

What was interesting is the pragmatism with which issues were raised and discussed, something that is not necessarily reflected in academic and NGOs meetings, where idealism seems to dominate. This must have been due to the fact that each government was represented by a governmental official. Finally, the event was long enough to encourage informally exchange of ideas and develop relationships, as well as helping to establish long lasting friendships between the participants.

5.2.4. The First International Symposium on the Reconstruction Campaigns of Basrah and Fao, Baghdad, Iraq, 18-20 November 1989.

For the purpose of organising a number of international seminars on the issue of post-war reconstruction in Iraq, the High Committee was formed in 1989. This Committee was chaired by the Minister of Housing and Construction and its membership included a number of Under Secretaries of State for various ministries, Head of the Engineering Department at the Presidency Diwan and four Director-Generals of the ministries that participated in the reconstruction programmes of Basrah and Fao, in addition to the Ministry of Culture and Information.

Under the slogan '*The reconstruction of Basrah and Fao is an honour complementary to that of their defence*' (Saddam Hussein, 1989), the First International Symposium was convened in Baghdad during the period 18-20th November, 1989. The aims of the Symposium were:

- 1) To demonstrate the outcome of the Iraqi experience in post-war reconstruction of Basrah and Fao, and
- 2) to acquire knowledge of similar previous international experiences.

It was attended by 550 specialists from Iraq and abroad representing government officials, planners and city mayors from 26 countries. The author, who was one of nine invited international speakers, delivered a paper entitled "*Some Recommendations for the Reconstruction of Basrah and Fao*" (Barakat, 1989f). The

rest of the speakers represented the experience of reconstruction in Vietnam, East and West Germany, Britain, Japan and South Korea. Speakers also included representatives from UNCHS (Habitat) and UNDP. From the Iraqi side each ministry presented its own experience during the reconstruction of Basrah and Fao, beside a number of studies on the history and development of the two cities. Altogether, 23 studies were presented during the main sessions of the conference.

Before that, on the first day, all the participants were flown to Basrah on a day visit, where they saw the war-damaged areas and the reconstruction that had taken place, both in Basrah and Fao. The outcome of the Symposium, based on the author's evaluation, can be summarised in the following points:

1. Although, in general, all countries that have been involved in war during the last five decades have witnessed the long term effects of war (human casualties, physical destruction and social and economic disruption), the reconstruction policies differed from one country to the other, depending on the particular circumstances of that country. It has to be noted that, in some countries, reconstruction policies and processes were largely responsible for transforming that country's economy from that of a developing to a developed one. (eg. South Korea).
2. The Iraqi post-war reconstruction experience had the following distinctive features:
 - a. The total dependence on national resources through out the stages of planning, implementation and finance.
 - b. The timing of reconstruction that exploited the national feeling for defence and reconstruction.
 - c. The role played by the leadership at all levels, from the President to the executive engineers on the reconstruction sites, which encouraged and gave moral support for the hard pressed workers.
 - d. Innovation in planning, management and technical means to implement what seemed to be an impossible task, within a pre-determined timetable.
 - e. The adaptation of the competitive tender between the different executive authorities, which was intended to aid the speedy completion of projects.
 - f. The considerable marginalisation of the local population in all the stages of planning and implementation of reconstruction.
3. The Iraqi experience seems to suggest that:
 - a. Reconstructing, maintaining and improving the infrastructure of war-devastated cities, particularly those where a considerable portion of population continued to live in them, such as the city of Basrah, encourages the return of those who fled the city during the war.
 - b. The employment of the public sector in its full capacity, combined with a central command, to reconstruct a city that has political, economic and social importance, proved to be efficient beyond dispute, compared to the more conventional and slower pattern of planning and implementation usually employed. (This does not mean that it was successful from the 'users' point of view).

- c. The use of a pre-determined timetable, along side competition between the different implementing bodies, proved reconstruction miracles can be achieved.
 - d. The exclusive use of in-country resources did help to accelerate the implementation.
 - e. The special attention given by the President to the reconstruction campaigns, represented by field visits to the construction sites, along with the continuous presence of high ranking officials and professionals on site, helped to resolve all bottle-necks as they arose and 'encouraged' the workers.
4. The First International Symposium recommended the evaluation of the reconstruction of Basrah and Fao in the longer term, to determine the value of these achievements on an administrative, planning, preparation, design, implementation and supervision of the construction programme.
 5. The Symposium recommended the use of the regional and international experience available in the field of reconstruction.
 6. The Symposium reinforced the authors' doubts that, while infrastructure and buildings were achieved, consideration of cultural appropriateness were not.

5.2.5. Oxford Programme of Disaster Management, Disaster Management Centre, 16 June - 20 July 1990, Oxford, UK.

This 5 week course has, probably, contributed the most to the development of this study and to the author's general knowledge. The course attempted to equip the participants in three main areas of knowledge. The first was concerned with various stages of natural-disaster management including preparedness, emergency, rehabilitation, and mitigation planning. The second concentrated on management skills, while the third area was mainly concerned with developing the participants' abilities to design and run training courses, in an attempt to disseminate the knowledge. The main focus of the course was the importance of 'mitigation planning' to reduce 'vulnerability' to natural disasters, and the fact that these measures should be incorporated in all reconstruction programmes.

Thus, the course covered different topics that included: post-disaster issues; needs assessment and field survey techniques; the role of NGO's in an emergency; risk assessment for preparedness planning; mitigation planning; post-disaster shelter and reconstruction case-studies; setting up public awareness programmes; management skills; self management; training and communication skills; designing and running workshops. Some of the knowledge received during this course has contributed to the development of Chapter 2, on the effects of war and the stages of recovery.

Although the main thrust of this course was towards natural disasters, the course directors Ian Davis and Y. Aysan gave full encouragement to the author to relate these topics to the area of post-war disasters.

5.2.6. Disasters and the Small Dwelling, Disaster Management Centre, 2-6 September, 1990, Oxford, UK.

This international meeting was conceived as a follow-up to a previous conference on the same topic held at the Oxford Polytechnic in 1978 (see Davis, 1981). This time more than 65 delegates from all over the world came together with the intention of producing a series of practical recommendations, to help establish the Agenda for the next meeting of the International Decade for Natural Disasters Reduction, 1990-99 (IDNDR).

In the afternoon of the last two days the meeting broke into four informal discussion groups. The headings under which discussions took place were: risk assessment; emergency planning; risk mitigation and training and education.

The author's contribution was a paper entitled '*The rebuilding of Fao city, Iraq: a case of central government post-war reconstruction*'. The importance of this conference was that it reviewed twelve years' experience of disasters and small dwellings and was the first international event, in recent times, at which war was recognised as a disaster and the issue of reconstruction after war was considered alongside similar issues concerning natural disasters.

This conference emphasised the need to view issues of vulnerability, mitigation and reconstruction within a socio-cultural and behavioral context. Thus the main input towards the IDNDR's Agenda centred around three themes: *process, realism and knowledge*.

Knowledge gained during this conference has fed directly into Chapters 1, 2 and 9 of this dissertation. The full proceedings have recently been published (see Aysan & Davis, 1992, *Disasters and the Small Dwelling: Perspectives for the UN IDNDR*).

5.2.7. The Second International Conference on the Reconstruction of War-damaged Areas in Iran, 5-15 January 1991, Tehran, Iran.

Organised by the Central Council for the Reconstruction of War-damaged Areas and the University of Tehran, this conference was the second of its kind to be held in Iran. The first was in March 1986, and its proceedings were published both in Farsi (1986) and in English (1991). The Second International Conference was opened with

a welcoming speech by the President of the Islamic Republic of Iran: Ali Akbar Hashemi Rafsanjani, and was attended by other high ranking politicians, officials, scholars and experts from Iran and representatives from twenty-two countries.

The announced aims of the conference were to exchange experience and technical information; review and evaluate reconstruction achievements in Iran and to propose ways of dealing with the existing and future problems relating to the reconstruction of the war-damaged areas.

During the general assembly of the Conference 23 papers were presented, the subjects of which covered a wide area that included: urban and regional planning policies; reports on reconstruction efforts in Iran; case-studies from other countries; organisation and implementation of reconstruction; technology and construction methods; economic and financial aspects; relocation and resettlement, as well as the psychological and sociological aspects of reconstruction. The author's contribution came in the form of two papers, the first entitled *'Be realistic, demand the impossible: an evaluation of the reconstruction of Fao, Iraq'*, and the second *'Community prosperity through reconstruction management'*, co-authored with Charles Cockburn. The afternoons of the second and third day were devoted to three specialised workshops on the following subjects: 1) Planning, urban design and architecture. 2) Infrastructure and building technology. 3) Economic and environmental aspects of reconstruction.

The conference included a rigorous four-day tour of the war-damaged regions in South-west Iran and the reconstruction projects going on there. These areas included Isfahan, Abadan, Khoramshar, Susangerd, the villages and cities of Dehlavieh, Tinikhe, Bostan, Bint Kwar, Howeyzeh, Subhaniyah, and Dezful, in all of which the reconstruction in progress was closely observed. The following conclusions and recommendations were the outcome of the conference.

1. Reconstruction is a multi-dimensional issue that requires an overall view and is not just a matter of physical and material reconstruction; normal life must be encouraged to return to the affected area.
2. The conference strongly recommended the building of social and physical infrastructure in urban areas, as well as preparing an agricultural base as a means of employment *prior* to housing reconstruction. Setting up the production of local building materials, needed for reconstruction, in the same areas where they will be utilized to reduce costs, is imperative.
3. Reconstruction is primarily for the people, therefore, their traditions, beliefs, aspirations and participation must be seen as an integral part of the reconstruction process.

4. The use of modern building technology and prefabrication may be necessary to accelerate the reconstruction process,.. The type of modern technology should be parallel with the needs and aspirations and at the service of the people.
5. Every reconstruction programme should reflect the 'spirit of defense and heroic resistance' of the people, as a memorial to the loss of life and destruction.
6. The return of the people to their land will shape and influence the reconstruction programme, which is inevitably a continuous and gradual process. This should not be interpreted as an opportunity for delay or hesitation in the progress of the whole.
7. Islamic architecture in Iran has a high value, but unfortunately it has not been properly recognised as a basis for reconstruction planning and design.

5.2.8. The Third International York Workshop on Settlement Reconstruction after War, 21-23 July 1991, York, UK.

Following the recommendations of the two previous workshops on Settlement Reconstruction after War held at York in 1988 and 1989², and building on their conclusions, the Third International York Workshop on Settlement Reconstruction Post-war was organised at the Institute of Advanced Architectural Studies, University of York, 22nd-24th July 1991. This workshop was fertile ground for the author to develop his doctoral research. He had the chance, under the supervision of Charles Cockburn, to develop the themes that were to be discussed during the Workshop, to act as the Chairman to some of the sessions and finally to write the final report; all of which were very useful to the development of this thesis.

The Workshop had four main aims; to provide an international forum to discuss the possible implications of different reconstruction policies; to receive reports on recent experiences, developments and advances in reconstruction and to review interdisciplinary thinking on the subject; to explore reconstruction issues of particular research interest (settlement planning, outside intervention, local participation, socio-cultural and economic dimensions and environmental impacts); and to reach conclusions on ways of involving governments and international bodies in the development and application of sound policies that would help to promote better reconstruction practices. Moreover, this workshop was planned with the wider aspiration in mind; namely, *to make the reconstruction policies of governments more responsive to the needs of people, through encouraging a network of future*

² For the previous reports see Disasters, Volume 12, Number 3, pp. (209-211).

workshops and study centres to promote such policies, disseminate knowledge and monitor practice across the world. More than 40 delegates, from twenty countries attended the workshop and 25 papers were presented.

If the previous two Workshops succeeded in raising the importance of the subject and explored the multidimensional impact of war as a disaster and provided the opportunity to explore some of the more sophisticated aspects of reconstruction planning, which may have been previously over looked by architects, planners and engineers; this Workshop helped to prove the growing international interest in the subject and succeeded in getting even more people involved in the development of reconstruction planning issues. In particular it attracted, for the first time, some decision-makers, whose decisions in reality are shaping the reconstructed environment. The presence of Mr Manoochehr Mohandes from the Industrial Progress & Development Company of Iran, who is undertaking the programming of the reconstruction of Khusistan Province under a five year plan, and the contributions received from Mr Saad Al-Zubaidi and Mr Khamees Muhammad from the IDRISI Centre for Engineering Consultancy, Baghdad, Iraq, added a special dimension to our meeting³. Furthermore, it strongly identified a number of issues that were not given proper attention in post-war reconstruction policies, such as the environmental and cultural impacts of war and their role in the subsequent reconstruction.

The main conclusions and recommendations to emerge from the Workshop centred around three issues: (1) the preparation of a 'Reconstruction Charter', embodying principles of 'good' government practice; (2) the creation of a network of study centres, to be coordinated by the IoAAS and devoted to the collection and dissemination of information on the planning and management of post-war reconstruction; (3) the need to address issues of environmental sustainability at every stage of reconstruction work and long-term planning.

The Reconstruction Charter has been produced and developed as part of the this dissertation (see Chapter 10). It was presented at the following events. (For more details on this Workshop and the Charter see Barakat, 1992; Barakat & Cockburn 1992b).

³ We regret the fact that Mr Al-Zubaidi and Mr Muhammad, were not able to reach York on time for the Workshop because they were refused visas at the British Embassy in Amman, despite the fact that the University has done its' best to facilitate this matter with the Home Office. Nevertheless, having to do a 19-hour journey from Baghdad to Amman, where they stayed for a week, Mr Al-Zubaidi and Mr Muhammad managed to send their contribution in the form of a video film and a full paper.

5.2.9. Roots of the Future; a Global NGO Conference in Relation to the 1992 Earth Summit, 16-20 December, 1991, Paris, France.

The Paris conference *Roots of the Future* brought together more than 860 representatives of citizens' groups, social movements, grassroots groups, as well as environment and development NGOs from 150 countries. The conference was held at La Villette, Paris (the science and industry city), 16-20 December 1991 and was funded primarily by the French government.

This event is part of the ongoing world-wide consultation between NGO's to draw out their common strategies and agendas, concerning environment and development for the *Earth Summit* in Rio de Janeiro, June 1992⁴. The first conference in this series of international NGOs meetings was held in Tabrak, Tunisia, December 1988, where the issue of the deteriorating state of the environment was brought to light. As a direct result of this meeting an inter-regional consultation process started (comprising the regions of Africa, Asia, the Caribbean, Latin America, North America and Europe). In June 1989 a second conference took place in Manila, in which the present international economic system and development model were identified as the principal causes of the deteriorating environment. A common conclusion was reached, and that is:

"Only sustainable development, development which caters for the needs of today's generation without compromising the ability of future generations to use the same resource base, can save humankind from the impending catastrophe. Such sustainable development, can only be possible if it is people-based". (ELCI,91)⁵

In early 1990 the Environment Liaison Centre International (ELCI), Nairobi, Kenya, circulated among the NGO community a *Proposed Guidelines Towards 1992*, which also included a proposal for the establishment of an *NGO International Steering Committee for 1992*. Thus, the Steering Committee came into existence and since then a number of preparatory meetings have taken place in which scores of NGO representatives have participated (in Bergen, May 1990; Nairobi, August 1990; in Cairo, November 1990; in Geneva, March 1991; in Nairobi, May 1991; and in Geneva, August 1991). The Paris Conference was considered the summit of these

⁴ The Earth Summit is also known as the United Nations Conference on Environment and Development UNCED. In June 1992 the world's leaders met in Rio to agree 'Agenda 21': a programme of planetary and human survival into the 21st Century.

⁵ ELCI (1991), *Justice Between Peoples - Justice Between Generations*. Synthesis of Citizens Movements Responses to Environment and Development Challenges.

meetings, which was meant to be the most comprehensive NGOs meeting ever held and the most universally represented. This conference was followed by a meeting in New York, in March 1992, where the final version of the Paris Agenda was agreed.

The Paris Conference had the following objectives:

1. *To share* information and experience for achieving equitable development and environmental sustainability.
2. *To promote* networking and solidarity among NGOs and people's organisations.
3. *To activate* NGO strategies for impacting the Earth Summit.
4. *To adopt* an NGO strategy for action: AGENDA YA WANANCHI (Citizens' Agenda).

It also had the wider aspiration of strengthening civil society around the world "...in the hope of gradually transforming the way in which our societies are organized and the way that decisions are made on issues which affect the well-being of all". (ELCI, 1991).

AGENDA YA WANANCHI, is the main document to emerge from the Conference and is also known as the *Citizen's Action Plan for the 1990's*. It is claimed that the document takes its roots from suggestions and materials submitted by citizen's movements from all over the world over the year 1990-91. However, it was in fact drafted by an international committee, dominated by specialists from the North and ELCI. It focuses on the challenges facing both governments and citizens, with the central theme of the active participation of citizens in building the new world order _ "...a world more socially just and ecologically sound than the world we have today". It can be seen, in an optimistic mind, as an important statement produced by groups of diverse backgrounds or just another piece of wishful thinking.

For the author's part, it was surprising to find that the document nowhere acknowledges war as a disaster facing both government and citizen. Neither does it mention the challenge due to natural disasters, or the need to evaluate the worth of the enormous resources spent on reconstruction and mitigation, in at least 60 countries.

Although the document was open for debate, the very formal nature and structure of the meetings did not allow for the time and participation required to express the real concerns of the participants. The hierarchical structure of both the plenary sessions and the workshops⁶, the lack of translation particularly during the

⁶ Every afternoon the conference split into six working parties over a period of 16 working hours. The issues discussed at these workshops were: *Human Settlements, Forests, Ocean and Coastal Areas, Mountain and Hilly Areas, Financial Mechanism and Transfer of Technology and Perspectives on the Industrialised Countries and Group of 77 Countries*.

workshops, the pre-determined choice of topics and the highly sectoral approach, all meant that it was very difficult for the participants to influence the Agenda. The workshops were mainly dominated by elite-experts, whose mother tongue was also the language of the workshop. However, by the end of the conference a number of adjustments were presented at the Concluding Plenary Session and were adopted by the participants, part of which were our concerns about war and reconstruction. The final version of the Agenda YA WANANCHI was presented to governments at the Earth Summit in Rio, June 1992. It is also hoped that this document will become means of lobbying for NGO's beyond Rio, and well into the 1990's.

Supported by and representing the Institute of Advanced Architectural Studies, University of York the author participated at this conference. Going to Paris we had four objectives in mind, all of which were actually achieved to a certain extent. These objectives were:

1. *To publicise* the work that is being carried out at the Institute on the subject of post-war reconstruction.
2. *To receive endorsement* of the York Charter for Reconstruction after War at an international level.
3. *To gather* information concerning international organisations involved in the same area.
4. *To receive critical feed-back* on both the Charter and the establishment of a Post-war Reconstruction and Development Unit (PRDU) at the Institute in York.

We distributed the York Charter, some Institute reports and publications and exhibited panels documenting the effects of war and the different approaches for reconstruction. This self explanatory exhibition proved useful, as it allowed the author to also attend the Workshops. More than 25 individuals and organisations signed the Charter.

Our contribution was more obvious at the three-day Workshops dealing with the issues on *Human Settlements*. The author drew attention to the fact that, while a considerable amount of NGO involvement followed natural and man-made disasters, the Agenda YA WANANCHI made no mention of either or of their consequences. Likewise, no mention of reconstruction after war, as if we were living in an ideal peaceful world, faced only with the problems of progressive development. This argument was well received and the York Charter was circulated between the participants. On the second day of the workshops, the author was allocated half an hour to clarify the issue of post-war reconstruction and to explain the work that is been carried out at the IoAAS. Following a debate on the content of the Charter, the author was voted on to the Drafting Committee, which consisted of the workshop

chairperson, the moderator, the secretary, the reporter and two other participants.

The Drafting Committee had the task of adjusting the YA WANANCHI Agenda in accordance with resolutions reached by the participants at the Human Settlements workshop. Being on the committee gave me the chance of working with a number of well-known participants, as well as the chance of ensuring that our concerns were being included in the adjustments to the Agenda.

In conclusion, attending the Paris Conference was a great experience, from which the author gained new knowledge and established a number of future contacts. He also managed to influence the Agenda YA WANANCHI, to include a recognition of war as a disaster and governments responsibilities towards it. Also included was an appeal to all governments to establish international commitments and procedures to address the complex problem of reconstruction after wars and to recognise the entitlements of civilian non-combatants suffering from war damage to their built environment.

5.2.10. Building for Safety, Disaster Management Centre, 29 March - 3 April 1992, Oxford, UK.

This event was part of a project funded by the Overseas Development Administration, ODA, United Kingdom, jointly undertaken by Cambridge Architectural Research and the Disaster Management Centre, Oxford Polytechnic. The Building for Safety Project, 1991-1993 is developing a range of guidelines for building improvement programmes for low-cost construction in 'natural' hazard-prone areas.

The outputs of the project include:

1. **Building Principles for Safety:** technical principles and details of low-cost hazard-resistant construction. This will be presented in the form of 5 volumes, each concerned with one type of building construction; Building Safely in Brick Masonry; Stone; Earth; Timber; Reinforced Concrete.
2. **Communicating Building for Safety:** guidelines for methods of communicating technical information to local builders and householders.
3. **Programmes for Building Safely:** guidelines for setting up and running programmes, including the organisation of training programmes and financial options.
4. **Building for Safety Compendium:** an annotated compendium of information about building improvement programmes.
5. **Building for Safety Case-studies:** case-studies of previous builder training programmes.

The author was invited to this event as one of the case-study writers, where he contributed on reconstruction in Yemen, along side other case-studies from Colombia, Jamaica, Vietnam, Guinea, Iran, Turkey, Guatemala, El Salvador, Ecuador, India and Peru. Although reconstruction and mitigation of natural disasters is not a main concern of this dissertation, the discussions and exchange of ideas left the author with many valuable insights.

The following points are a summary of the valuable observations obtained at this meeting: Firstly, the idea of introducing general guidelines for reconstruction was criticised, on the basis that it is, yet, another attempt to enforce universally applicable solutions. However, as the discussion developed further, it was felt that the existing gap in knowledge about designing *training programmes* justifies such guidelines. This observation meant that we should be careful in the way we approach the production of 'post-war reconstruction guidelines'. Secondly, it was felt there was little justification for producing technical manuals, as there are already many volumes. Particularly in that the technical information provided may not be appropriate to the place in question. It was argued that, if the target group, as is claimed, are householders and small builders, then the information may be too complicated. Equally if the target group is to be engineers and architects, then it is too simple and may be humiliating for them to read. This brought to mind the fact that any recommendations or guidelines should address a specific audience.

Thirdly, the idea of establishing an annotated compendium of information about building improvement programmes, along side producing a book on case-studies of previous builder training and general improvement programmes was well received. This helped to support the assumption of this dissertation that *..people and authorities, faced with the great task of rebuilding their settlements from the ashes, do not need yet another 'outsider' to suggest ready solutions, on how, when and what to rebuild. They would rather receive a wide range of evidence on others' past successes and failures in reconstruction.* Thus the role of this study therefore, should be to draw attention to a number of aspects and issues that ought to be taken into account when considering the task of rebuilding and rethinking future settlements.

Finally, the vital need to introduce communication as a component of any reconstruction programme. This is an element for developing the concept of people participation in reconstruction. In short, the Building for Safety Guidelines recommends that: (1) Improvements have to be made to buildings. (2) Householders and builders need to know: why to change, who to turn to, what are the options, and

how to do it. (3) Development workers need to present options which in the eyes of the intended beneficiaries are: reasonable; recognizable and respectable. (4) The designer of a communication strategy needs to consider the target group who will *deliver* the message, what tools will be used and whether the intended beneficiaries have understood the message.

5.2.11. International Forum on Habitat, Poverty and Environment, 20-23 April 1992, Tunis, Tunisia.

This event was organised jointly by ENDA Tiers-Monde (Environment and Development in the Third World), based in Dakar, Senegal, and Habitat International Coalition, based in Mexico. This was the last NGO preparation meeting before the opening of the Earth Summit in Rio in June 1992. The author's participation in this event came as a direct result of his contribution to the Paris Conference: *Roots of the future*, in December, 1991. He presented the second edition of the York Charter for Reconstruction After War.

The presentation was followed by a discussion that revealed the extent of international constraints faced by developing countries, not only to purposeful reconstruction after war but also on the development process as a whole. It was widely agreed that reconstruction after war, along side other development issues, may best be considered at a global level, on the long journey to becoming accepted practice.

This meeting drew the author's attention to the environmental dimension of reconstruction. Furthermore, the Housing Rights Charter, which is currently under preparation by a specialised group of HIC, can be used to further develop the York Reconstruction Charter.

5.2.12. The 7th International Seminar on Earthquake Prognostic, 22-26 September 1992, Asian Institute of Technology, Bangkok, Thailand.

Organised by the Disaster Preparedness Centre at the Asian Institute of Technology, this seminar focused on four main areas of concern:

- a. Earthquake prediction: Why is it worth doing? how can it be done? and how much effort and resources should be devoted.
- b. Earthquake insurance.
- c. Risk analysis and seismic hazard assessment.
- d. Measures of Protection.

It was very interesting to participate in such a highly scientific forum, and to

observe the way in which groups of geologists, engineers and researchers were fighting over their share of the internationally available resources for earthquake risk reduction, each claiming that their area of specialisation was the most important.

However, this seminar was particularly useful to the development of Chapter 7 of this dissertation. The author presented a summarised version of that Chapter on the reconstruction in Dhamar. It has to be said that the author's conclusions came as something of a shock to a number of participants, who had been involved in the planning for the Dhamar reconstruction.

5.3. CASE-STUDIES AND THE FIELD WORK.

In order to support the argument of this dissertation in favour of *general recommendations and approaches*, it was felt necessary to conduct field work in four countries: Iraq, Northern Ireland, Iran and Yemen, respectively. Each visit had its own objectives that have tried to embrace our overall objectives and was concerned with particular findings to support a certain thesis. In Iraq, the author visited the war-damaged areas of Basrah, soon after the cease-fire in August 1988. Later on, in November 1989 when he was invited by the Iraqi Government to participate in the '*First International Symposium on Post-war Reconstruction in Basrah and Fao*' he conducted his second field visit⁷. The third field visit took place in April 1991 following the announcement of a cease-fire between the Allied and the Iraqi forces. The field visit to Belfast, in Northern Ireland, was conducted in March 1990⁸. The field visit to the war damaged areas of Iran came as part of the author's attendance at the *Second International Conference on the Reconstruction of War-damaged Areas in Iran*, 5-15 January 1991⁹. The field work in Yemen was conducted between the 9th and the 23rd of November 1991.

When in the field, a main concern of this study has been to devise a method of research and analysis by which the physical, social, cultural and political reasons underlying the central government and the local inhabitants responses to the post-war conditions and housing provisions could best be ascertained. This section presents

⁷ The invitation included travel and accommodation expenses.

⁸ Accommodation and travel expenses were covered by the Third World Studies Course at the Institute of Advanced Architectural Studies, University of York, to whom I am thankful.

⁹ Travel and accommodation expenses were covered by the Iranian Government.

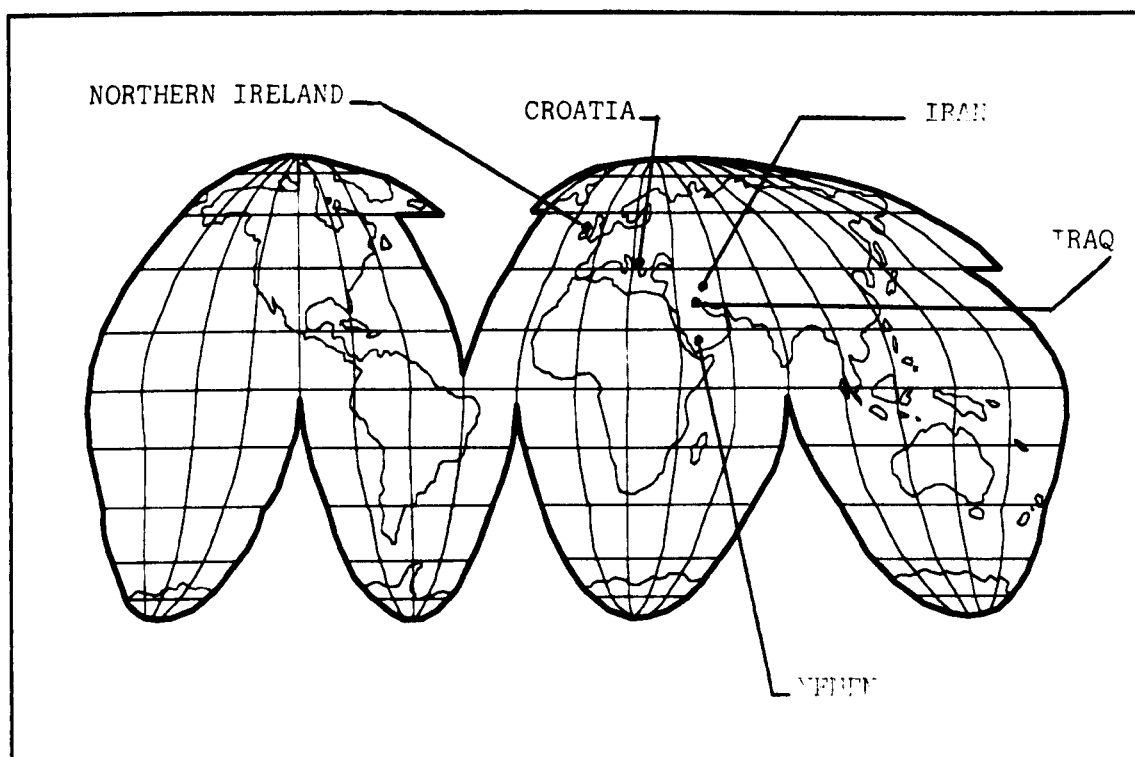


Figure [5-1] Countries where field visits were carried out: Iraq, Iran, Yemen, Northern Ireland and Croatia.

the research methods used, both before and during the field work. In general, the research methodology for each case-study was developed in the conventional three stages of:

- a. Review of existing knowledge on the subject.
- b. Conducting a field study and data collection.
- c. Analysis and documentation of findings.

The fact that each case-study had different objectives from the others, and the fact that they were not intended as comparative studies, has meant that there is no need to restrict oneself to the adoption of a single research method. Furthermore the nature of each specific case-study and the availability of information and access to data, largely dictated the methodology of collecting and thus the analysis of the data.

5.3.1. Review of existing knowledge.

Prior to each field visit comprehensive *research, interviews and discussions with experts and literature review* was conducted in order to expand the author's knowledge of the context, as well as to prepare the ground for each field visit. It is important to note the different degrees in which this stage has been useful to the research. For instance, in the case of Yemen, virtually all the references that have been published on the Dhamar earthquake and its reconstruction were consulted (and

there have been many, see the attached Bibliography). Contacts were made with a number of individuals in the U.K. who have been involved in the reconstruction projects at one stage or another: Yasemin Aysan¹⁰ (visited the area in December 1982 and carried out a needs assessment study); Jolyon Leslie¹¹ (Oxfam's Officer for the Contactor Training Programme, May 1983 - December 1988); Professor Cor Dijkgraaf (Director of the Institute of Housing Studies, Rotterdam and a consultant for the Dutch government on the Self-help Programme); Andrew Coburn (from the Martin Centre at Cambridge University, who carried out an evaluation study on the Building Education Programme) etc. Moreover, the International Conference 'Disasters and the Small Dwelling' held in Oxford, September 1991 provided an ideal arena to meet a number of experts on the Yemeni reconstruction. One of the disappointing facts was that none of the 10 letters addressed to Yemeni officials were answered, including those addressed to the Executive Office. The outcome of this phase was a written report that encompassed a careful review of the consultants collective experience on the subject and the literature available. Thus covering the level of destruction, casualties and damage to property, emergency relief and shelter provision, and the actions taken by the Government to rehouse and relocate the affected communities. It also included a brief historical insight into the social and cultural life of Dhamar Province. This report highlighted a number of issues that needed to be observed during the field visit, as well as a number of questions that lacked answers.

Similarly, researching about Belfast, many references were discovered that enabled a comprehensive study to be conducted beforehand. Literature has been used here in two main ways. The first has been to furnish the needed historical and architectural background, by reviewing certain books and articles. Although, academic papers specifically on the subject of the research are rare, some published articles and unpublished papers and dissertations were consulted, such material provided the second main usage of the literature. At this point the author acknowledge the help received at the Library of Queen's University and more so at the Linen Hall Library, where access was permitted to their 'Political Collection', which contained unique material on the 'troubles' in Northern Ireland. Furthermore,

¹⁰ Y. Aysan is Director of the Disaster Management Centre, Oxford Polytechnic, Oxford, U.K.

¹¹ J. Leslie currently working with the UNHCS in Afghanistan. Besides written communication with him I have meet him in Tehran, Iran, January 1991 and in London, August 1991.

contacts were made while I was still in York, that facilitated the arrangements for the visit. Before going to Belfast, Dr. Paul Stollard from the IoAAS was consulted.

On the other hand, in the case of Iraq, and due to the absence of information, data and official documents concerning the war damage and the reconstruction at the time of the field visit, the author was limited to gathering information by interview. In those days, few people outside Iraq knew what had taken place in terms of reconstruction or after the Iraq/Iran war, what the Governments policies were and how they were implemented.

5.3.2. Conducting field studies and data collection.

To help establish a general research methodology a number of primary as well as secondary sources were reviewed. The writings of Gardner (1978); Bell (1980); and most of all Adam & Schvaneveldt (1985) present researchers with a clear and general understanding of research methods in the social sciences. Casley & Lury (1981) discuss some particular problems and difficulties usually faced by researchers in Developing Countries. They also draw attention to a number of issues that have to be observed by researchers while collecting data in Developing Countries. The writings of Chambers (1983; 1990); Chambers et al. (1989) and McCracken et al. (1988) introduces the Rapid Rural Appraisal research method, and the Chamber's 'set of biases', or what is referred to as *Rural Development Tourism*. All of these references had an influence on the author's general understanding of research methods for this study. Some of them were more useful in particular contexts than others. For instance, the Rapid Rural Appraisal (RRA) and the Chamber's methods were found very useful during the field visit to Yemen. Furthermore, recent publications on research methods gave the author some insight into qualitative research and evaluation, e.g. Patton (1990) and Shaffir & Stebbins (1991).

Most of the available academic research on post-war reconstruction so far, has restricted itself to literature review and in some cases in-depth examination of one particular location, in an attempt to reach conclusions on how to rebuilt that particular place or region. We have in mind the work of my close colleagues Souheil El-Masri (1992, Al-Burjain village in Lebanon) and Akbar Zargar (1989, Khusistan region in Iran). By contrast this study attempted to explore the issue in a number of *different* contexts and over a number of years, using the author's objectivity as an 'outsider' in all cases. Thus attempting to introduce an international perspective into the subject, hopefully, without falling into the trap of 'universally applicable solutions'.

It is believed that avoiding this trap is possible through a meticulous understanding of the cultural, social and economic context, for each case-study.

Reading through each of the case-studies, and from the way the data has been collected in the field, one can see that the approach to data collection did not attempt to be *highly structured*, in which questionnaires or set strategies were imposed; rather it was primarily relying on observation and informal interview. In fact, the data collected throughout the dissertation has been very much influenced by the empirical approach of social research in which the researcher "...goes into' the social world and makes observations about how people live and behave". (Adam & Schvaneveldt, 1985:19).

To a significant degree, carrying out research requires having a clearly defined purpose and access to useful data. In these terms, Adams & Schvaneveldt (1985:103) cited that "Two very common designs in the study of social institutions and human behaviour are the exploratory and descriptive research designs"¹². Because of the different nature of each case-study and what is required from it, the two approaches for designing a research method, identified earlier, were used. The first visit was *exploratory* research, as in the case of researching the reconstruction of Basrah and Fao, where of the author's cultural affinity helped to seek out new insights, ask questions, add knowledge to the area of study by registering, often it seems for the first time, what actually took place in Iraq following its war with Iran. Up till that time there was virtually no published information about the scale of destruction; the reconstruction policies and campaigns; or the people's reactions, etc. Hence the study had to be *flexible* enough to seek knowledge and insight wherever possible. The author was able to build an analytical methodology that could be used later on in subsequent visits, in a more tightly designed way. (For example a long-term evaluation of the reconstruction of Fao City, from the users point of view).

On the other hand, a *descriptive* research method was employed to evaluate the reconstruction programmes that have taken place over 9 years in Dhamar, Yemen. This was necessary because the goal of this particular study was to investigate and portray as accurately as possible, people's reactions towards their reconstructed settlements. The end result of this study was an attempt to conclude why they had that particular reaction, in relation to the reconstruction policies. Such an approach

¹² For a detailed description of the two designs as well as their areas of strength and weakness, it is recommended to read the writing of Adams & Schvaneveldt (1985:101-117).

for research was suggested due to the many previous reports and published information that was available beforehand, concerning for instance the scale of damage, the reconstruction policies, the general context, etc.

Of course, employing a descriptive research technique, in the case of Dhamar, does not mean that the study was a *highly structured* one concentrating on quantitative data. In fact, it was the opposite, emphasis was put on qualitative data. Furthermore, the large scale of the Dhamari study, and the limited time available gave a validity to the examination of locations by observation, that characterises much of today's anthropological and development research. What it means is that the author went to Yemen, with a predetermined idea of what he was seeking to know, with an intension to visit a number of identified villages, for different purposes and to question the way people had adjusted their new homes provided by the government.

In Belfast the research looked at the effects of civil unrest on the urban life of the city, and used both the explorative and descriptive approach. There was a considerable amount of information available to the author, before going to Northern Ireland that had to be explored and the situation there had to be described before conclusions could be drawn.

In summary, in order to conduct the different field visits appropriate data collection techniques were used, to satisfy the different explorative and descriptive needs for each place. They maybe summarised as follows:

The possible: 'The art of the possible' for the author, as an individual researcher was to learn about the highly political context that in turn would dictate the way the research was conducted.

Be flexible: Be flexible to change (my visit to Yemen was delayed for more than a year), adapt to different cultures, follow social customs, exploit ad hoc opportunities and interview everyone in the field, for everyone has a point of view.

Few resources: Funding my field work has always been a great problem. Much time was spent raising funds. Preparation, contacts in advance and making the most of what was available in the circumstances influenced my work.

Make opportuntties: With only three years to finish this study in four different countries, time in the field was going to be limited and difficult of access. While in the field, every opportunity to interview people and observe the situation had to be taken.

Acceptable practices: Use of techniques that are acceptable to the locals. For

instance, while officials did not mind me using a tape recorder in Belfast, it was impossible to do so in Iraq.

Be Innovative: The one off nature of this study does not permit highly structured research for every occasion. Pursuing the innovative approach is also important.

Thus, an attempt was made to come up with a series of research procedures that met the above conditions and hopefully enabled investigations to be rigorous in the pursuit of the truth and perhaps go beyond the boundaries of conventional quantitative research methods. This was based on meetings with officials and key informants, observations and finally conducting semi-structured interviews with local people and community representatives in the reconstructed settlements.

Finally, it is important to emphasise again that the author enjoyed a considerable advantage as an Arab-Muslim in Iraq, Yemen and in the war-damaged areas of Iran (Khusistan is mostly Arabic speaking). All previous studies on reconstruction in Yemen, for instance were carried out by Westerners, who applied western derived anthropological, architectural and economic research methods. Most of whom could not communicate directly with the locals, neither could they analyze or justify their findings, without reference to the questionnaire form. This was obviously not the case in Belfast, but the fact of my clearly not being a Westerner, did, I believe, elucidate from my interviewees a certain 'realistic' response to my questions.

5.3.2.1. The timing of the field visits.

It is important to note that in terms of timing of the field visits, although there has always been an attempt to pre-determine the visits' time, the author did not have full control because of a number of minor reasons. However, the timing of any visit has some impact on what the researcher is likely to experience and how. For example, the first visit to Basrah and Fao came in December 1988, a few months after the August cease-fire with Iran. At that time, rubble clearing had not started, people were just beginning to return to their settlements. The date of the second visit, (November 1989) was organised by the Iraqi Government. This visit was a few months after the completion of the Fao and Basrah reconstruction programmes. The period between October-January (beginning of winter) is considered the best time in

terms of climate in Southern Iraq. Thus the author missed the summer, when temperatures could easily reach 50°C in the shade, with no electricity to run the air-conditioning units.

The visit to Dhamar, Yemen, (November 1991) was nine years after the December 1982 earthquake, and consequently at least two to three years following the completion of the latest reconstruction project. However some projects were completed 4 and 5 years ago. In additionally, it was just after the harvest season (September-October), which made it possible to interview both men and women in the same family. Thus, overcoming one of the handicaps identified in the evaluation of the Self-help Programme by a Dutch team, who conducted their visit in September 1988 during the harvest season. (see Dijkgraaf, 1989:15).

Thirdly, the visit took place at the beginning of winter to counter the *fair season bias*. Although the winter is dry and might seem a suitable season for visitors, it is the hardest season facing the locals, when dry and dusty winds fill the place. It is very cold at night, reaching -3 or -4°C below zero. It is also the season when food is more rare. 1991 was particularly hard because the last three rainy seasons were not as wet as usual. Fourthly, the visit came a year following the Gulf War, that meant a new 'dimension' had to be considered; the return of a million migrant Yemeni workers from the Gulf States. The impact of this was particularly evident in the Dhamar region and its reconstruction projects, as we shall see in the coming Sections. Finally, the visit took place at a time when the Executive Office for Reconstruction (EOR) was in its last days before being abolished in December 1991. This meant that the staff and their vehicles could devote more time to help the author¹³.

Still, conducting the visit in winter had the handicap of a very short day and since most of the settlements were in remote areas over bad roads, it was almost impossible to travel after sunset, yet there were no hotels.

On the other hand, and because of the accelerated political events since August 1990 (the invasion of Kuwait), the author's third visit to Basrah and Fao that was planned to take place in August/September of that year, had to be re-scheduled several times and eventually cancelled. While his visit to Iran was planned as part of an international conference that was timed by the organisers to take place during the best season to visit the Khusistan area.

¹³ On 22 November 1991 an earthquake struck the region of Ibb to the south of Dhamar. I learned recently that the Government took the decision of maintaining the EOR.

5.3.2.2. *Meetings with officials and key informants.*

Due to the strong *formal and informal political* character of the topic of this dissertation and of the reconstruction programmes investigated in the case-studies, it was important to understand and respect the local political and social structures, in different contexts and to try and operate within them. Meeting officials was one of the basic methods used, not only to collect information and to have an insight into the situation, but more importantly to pave the way for the coming field work and gain access to the damaged and reconstructed areas. Meetings with officials ranged from embassy officials in London, to field architects and engineers, to Ministers and Mayors, as in the case of Basrah.

Access to officials varied, depending on the way they perceived research. The word 'evaluation' or 'investigation' was never used. For instance, in both Iraq and Yemen the author was made welcome as an Arab, while in Belfast, although the author was generally welcomed some people thought that I would do better studying a Middle Eastern context. Of course, different officials in different countries, showed different degrees of co-operation over information and documents. In many cases eventual co-operation of some officials was only possible as a result of pressure put on them by more influential figures.

Diplomatic observation of the local etiquette and customs enabled the researcher not only to 'integrate' himself but also to learn more about local customs, values and beliefs. Diplomacy, as employed in the Yemeni, Iraqi and Iranian visits, includes everything from observing local customs, to adopting local dress and in the case of Yemen joining the men chewing 'qatt'; the local substitute for alcohol. These latter proved good occasions to question and listen. As are the invitations to eat and drink endless cups of coffee, a means of bridging the gap between researcher and his host. In Belfast, assimilation was not possible. Although I met the locals in the pubs, the fact that I do not drink alcohol did inhibit our discussions.

5.3.2.3. *Personal Observation.*

"Information about processes and about invisible structures is not readily derived from counting things". (Peattie, 1983 quoted in Hamdi, 1991:82). All the case-studies required gathering data by informed observation. Furthermore observation was used because "... quality of information is sought first by observation, analysis, and explanation of what is seen and told. Observation provides a check on explanation and, vice versa, one interpretation may be refined by another

until some consensus is reached over the issues or problems in question". (Hamdi, 1991:82).

In Yemen, the author developed a check list, based on an appropriate framework. This made it possible to register and cross check some of the rather dubious remarks made by the various interviewees. In Belfast, first-hand observations took the form of systematically walking or driving with the interviewees around the inner city areas with a large scale map and camera, noting and photographing features like barriers, bricked-up buildings, wall murals, etc. One result was the 'classification of barriers' at the 'interface lines', recorded in Chapter 7. The observation technique was similarly employed in Iran and Iraq. However, in Iraq and in many places in Iran photographing was not allowed. Making sketches helped to record a number of significant images.

5.3.2.4. Semi-structured Interviews.

The semi-structured interview was appropriate to gather qualitative information on a wide range of questions, in a short time, with the limited resources available. They were conducted with engineers and architects, local organisations' representatives, as well as local inhabitants and beneficiaries of reconstruction programmes (users). Also, the interviews included those with local influence, such as community leaders (sheiks), school teachers, etc).

In Dhamar this type of interview and discussion was carried out with officials during evening gatherings in the 'Diwan'¹⁴ and proved to be of a great value. Away from the official atmosphere of the office, sharing dinner or chewing 'qatt', allowed the conversation to progress more revealingly, creating an ideal opportunity for obtaining genuine expressions about the advantages and the shortcomings in the management and administration of the Reconstruction Project.

The questions and conversations carried out during the interviews were structured differently to give an insight into the physical, social and attitudinal factors that corresponded to the aims of each case-study. This proved to be useful for obtaining underlying beliefs and thoughts. One final point about how the interviews were conducted in Belfast, is that they were held with the use of a tape recorder when ever possible. This had many advantages for me as an outsider. The following

¹⁴ In Dhamar I was kindly offered accommodation in the Executive Office's Diwan. The Diwan is a separate room within the camp of the office, where the engineers and managers gather to chew qatt in the afternoons.

sections discuss some additional issues that have to do with the use of interviews:

a. Language.

Although the basic language in Iraq, (Khusestan) Iran and Yemen was Arabic at the beginning it was difficult to understand the local dialect. Particularly as each locality has its own expressions. (For example, in Dhamar, the term *Dhalma* is used instead of *Matbakh* to denote a kitchen, and *Haar* is used to denote an animal shed).

Again, in Yemen, the fact that there was a daily Jordanian film on TV, meant that people watching it in Dhamar city and some other towns, found it interesting to talk to a Jordanian. This experience showed the need to spend one or two days in the field getting used to the spoken dialect. This point makes me wonder how was it possible for non-Arabic speaking researchers to conduct their surveys and interviews with comments having to pass through a translator? Especially in situations where one meets a group of people and more than one expresses his or her point of view at the same time, some of whom might be quickly silenced by the man dominating the conversation. In some particular cases, the intervention of my companions in an attempt to explain what people intended to say, proved to be a handicap, particularly when he became carried away trying to interpret on their behalf.

Similarly, in Belfast, I found it difficult, at the beginning to understand the Irish dialect. To keep asking people to repeat what they have said does not allow for continuity in the conversation. Thus, the use of the tape recorder was helpful, for analysis and documentation of the findings.

b. Suspicion, Fear and Expectations.

In a few cases, particularly where people have a reason to fear either the authorities or the military, (for instance in Dhamar, where other than those intended in the reconstruction programme had squattered the reconstructed houses), there was suspicion and uncertainty as to why we were visiting their settlement. Some expressed their fears that we might be there to re-possess the house. In a single case we were asked to swear to 'Allah' that we did not intend any harm. It was necessary to say that we were there to learn from *their* experience of reconstruction, in an attempt to avoid repeating similar mistakes in the rebuilding of the war-damaged settlements in Iraq. Their strong feelings and association with the suffering of Iraqi people provided an opening topic of conversation that turned the focus from the 'outsider', to the problem of war destruction and the subsequent reconstruction. The

way these conversations developed, counters, in the author's experience, the assumption by many researchers, that the people's knowledge is in some way limited and less valuable.

Similarly, while in Iraq it was important to explain why we were there. The above explanation also helped the people not to develop any potentially damaging expectations as to why we were there. We made it clear that we were not there to offer any material help. The informal atmosphere of talking to people without a questionnaire, helped to 'integrate' the author with the people living through the war. They had, it seems, filled in many questionnaires in the hope of compensation. During the conversations we had to be careful not to discuss people's political preferences, or their views about the war.

5.3.3. Analysis and documentation of findings.

For the purpose of documenting and analyzing the findings of each case-study, a separate frame work was formulated to serve the aims and objectives of that particular study. Furthermore, following each visit, a full report was written, on the basis of which a number of conference papers and articles have been published (see bibliography).

In the case of reconstruction in Iraq, the *11 Underlying Principles for Reconstruction after War*¹⁵ (Davis, 1989b editor) referred to later in Chapter 6 are used as a general framework to evaluate their experience. While in Yemen, the aims were: to reach conclusions concerning the assumed efficiency of centralised project-based reconstruction; to highlight the importance of culturally sensitive approaches; and to derive a reconstruction management model, based on the direct involvement of the local people. Here a framework was needed to measure the degree of acceptance by the population of their reconstructed settlements, in order to assess the success or otherwise of the programme. (Chapter 7). The findings of the field visit to Belfast were documented and analyzed under certain headings appropriate to this study such as, the impact of the 'troubles' on urban design; the effect on construction industry; reconstruction compensation, etc. (Chapter 8).

Finally, although the findings from the field visit to Iran are not included in a separate chapter of this dissertation, they are referred to and used to support a

¹⁵ These principles were derived by participants at the Second York Workshop on Settlement Reconstruction, held in May 1989, at the Institute of Advanced Architectural Studies, University of York, UK.

number of arguments throughout the dissertation, such as in discussing the context of thinking on the planning and management of post-war reconstruction. (Chapters 3 & 4).

5.4. Summary and conclusion: methodological observations.

It seems appropriate to conclude this Chapter by listing a number of observations concerning the research and research methods in the subject of reconstruction after war. Hopefully, by considering some of the following observations, researchers can in the future carry on with further studies on this important topic of reconstruction after war.

1. War, whichever way you look at it, is a disaster of the greatest magnitude, with multi-dimensional effects, it is difficult to gather accurate information or to assess the damage in a comprehensive way. It is recommended that small case-studies are carried out over a wide area.
2. 'Truth is the first victim of war'. The researcher should structure his/her research to check the propaganda against the facts.
3. The nature of the subject, requires the researcher to be discreet when carrying out field work.
4. Conducting field work can be dangerous. The aftermath of war lives on long after the event; ruined buildings, buried mines and physical disability.
5. People's response to questioning is certainly affected by fear and suspicion.
6. The degree of confidence the researcher enjoys, being an outsider or insider, plays an important role in conducting research.
7. Objective research is needed. Certainly being an outsider may help, but the scenes and stories of suffering make it difficult. The more one becomes aware of political facts and history, the more difficult it maybe to be objective, especially when looking into the role of the state and their reconstruction policies.
8. Cross-cultural studies are important to help present reconstruction at an international level. The format in which the findings are written or published has to be carefully considered, in order to reduce the natural bias in all of us to be interpreted as favouring one side or another.



The coming three Chapters (6, 7 & 8) will present the field work carried out in Iraq, Yemen and Northern Ireland respectively.

CHAPTER SIX

POST-WAR RECONSTRUCTION IN IRAQ; THE CASE-STUDY OF BASRAH AND FAO.

6.1. INTRODUCTION.

This Chapter examines the reconstruction campaigns of the southern cities of Basrah, the second largest city after the capital, Baghdad, and Fao carried out by the Iraqi government following their devastation during the eight-year war with Iran (1980-1988). It also touches on the reconstruction of Baghdad following the American-British bombardment (16 January-25 February 1992).¹

The author visited the war-damaged areas of Basrah soon after the cease-fire in August 1988. Later, in November 1989 he was invited by the Iraqi Government to participate in the *'First International Symposium on Post-war Reconstruction in Basrah and Fao'* and conducted his second field visit. The third field visit took place in April 1991 following the announcement of a cease-fire between the Allied and the Iraqi forces. The reconstruction campaigns were completed in record time, based on a predetermined time-table, despite having to work in adverse weather conditions and the remoteness from the points of supply. Basrah's reconstruction was started in February, following two months campaign of rubble clearing, and lasted until June 1989, when the work on Fao started. This city was rebuilt in a surprisingly short time; 114 days. While reconstruction in Basrah did not go beyond repair of the infrastructure and street beautification, Fao was totally rebuilt according to a new city plan.

This study sets out to examine the reconstruction approach and the effects of policies on implementation. An attempt is made to identify some of the positive as well as the negative aspects, hopefully in a constructive criticism. It concludes by listing a number of observations and assumptions concerning *centralised government reconstruction*. The author understands that wars are generally imposed on people

¹ Another air-attack by the Americans was carried out against Iraq in January 1993.

by their governments, with all the trauma of life dominated by the centre. But he does not feel that the post-war period, in the 1990's and beyond, need necessarily be exclusively dictated by the exclusive needs of the government.

Besides displaying many of the dilemmas that have been discussed in the previous chapters, this case-study sets out to test the main hypothesis of this dissertation that *'Settlement reconstruction should be an integral part of a nation wide development,...., reconstruction that takes the form of a series of centralised projects (infrastructure, housing and public buildings) is unlikely to be resource efficient or culturally sensitive'*.

6.2. WHY BASRAH AND FAO?

The Iraqi reconstruction study is the first in a number of casestudies that are intended to help formulate a *'set of recommendations for the planning and management of reconstruction after war'*. The reconstruction of Basrah and Fao was selected as a case-study for the following reasons. Firstly, it is the only planned programme of reconstruction that has been implemented in Iraq following its war with Iran. The other organised reconstruction campaigns that are currently being undertaken in Baghdad and Basrah are due to the Allied attack in January/February 1991. Secondly, they are an example of the total domination of the State, where in theory the central government was keen to assume full responsibility for every aspect of reconstruction. However, in the view of this author, the government, by its actions, was not able to deliver in an appropriate manner.

6.3. AIMS & OBJECTIVES OF THE STUDY.

The *aim* of this exercise is to investigate how a State emerging from war, confronted by a massive need for rehabilitation and reconstruction responds to such extreme circumstances in the short-term. It emphasises the fact that *the State needs reconstruction as much as reconstruction needs the State*. The study also attempts to highlight some of the successes and failures of the reconstruction campaigns of Basrah and Fao, by employing the *11 Underlying Principles for Reconstruction after War²* (Davis, 1989b editor). By so doing this study sets out to achieve two objectives:

² These principles were derived by participants at the Second York Workshop on Settlement Reconstruction, held in May 1989, at the Institute of Advanced Architectural Studies, University of York, UK.

- a. To stress the importance and the extent of the political dimension in reconstruction after war.
- b. To reach conclusions concerning the *assumed efficiency* of centralised project-based reconstruction.

In reaching the above objectives it is necessary to make the following two declarations. Firstly, the author is trying to learn some lessons from the Iraqi's experience in reconstruction, so that those who suffered from the war may benefit. He in no way means to understate the achievement of the Iraqi Government in the reconstruction of Basrah and Fao. He simply suggests that, in general what has been built should not be seen as an end in itself. On the contrary, it should be seen as a first step in a long process of rebuilding. At the same time, reconstruction should be considered as an open experiment for local discussion and involvement, not least for the government planners. Secondly, this study is based on a short-term evaluation, and thus concerned more with the government policy aspects of implementation and decision-making. It is appreciated that in order to make a more objective evaluation of the rebuilding of Basrah and Fao, there should be a certain period of time within which the good and bad results will 'float to the surface', as a result of practical and realistic interaction between the built environment and its users: the people. In fact this was the main objective of this study, and a field visit was planned to take place in 1991, two years after the completion of the reconstruction of the Basrah and Fao. But unfortunately because of the dramatic events that have taken place since then; the Iraqi occupation of Kuwait from August 1990 until February 1991, it became virtually impossible to conclude such a study within the time target of this dissertation. Nevertheless, we have gathered sufficient indicators that can be used for this short-term evaluation and can be helpful in guiding us in future reconstruction work.

6.4. THE CITIES OF BASRAH AND FAO: GENERAL CONTEXT AND THE SCALE OF DAMAGE.

6.4.1. The Province of Basrah

This Section will discuss Basrah; the Region, with its different geographical, environmental and demographic data. Later, it will concentrate on the two major cities of the Region: Basrah and Fao.

The city of Basrah is the main administrative centre in the southern macro-region (province) of Iraq, where, there are four macro-regions; Northern,

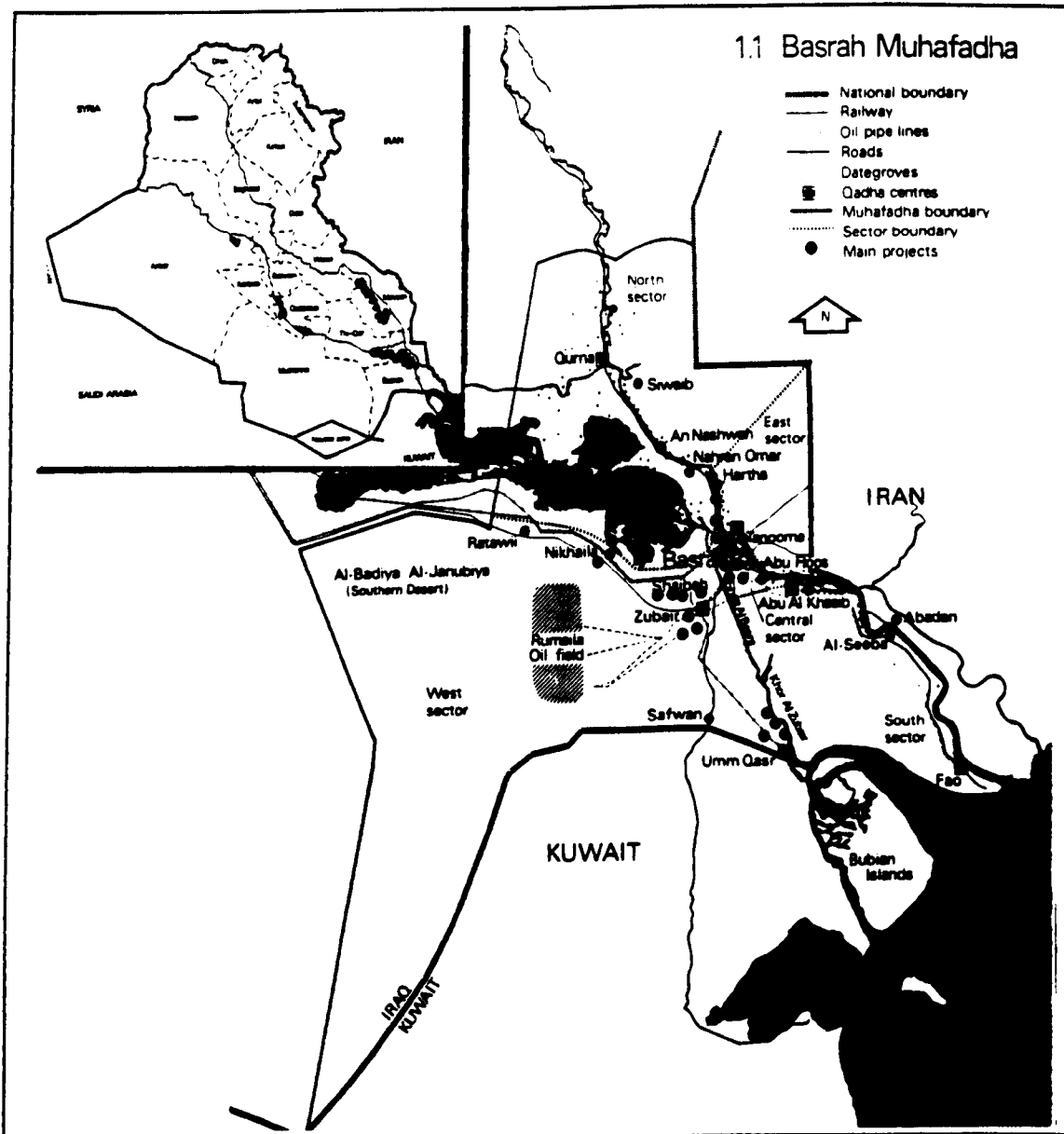


Figure [6-1] Basrah Region, the location of the Cities of Basrah and Fao.
[Source: Llewelyn-Davies 1973:18, 1st Report].

Middle, Western and Southern Region. Basrah is the administrative capital of Basrah County (Mouhafada) which is one of the 16 Counties in Iraq. Basrah County includes 7 Sub-Regions (Qadha); Basrah, Abu al Khassib, Al Quma, Al Fao, Al Zubair, Shatt al-Arab and Al-Madina³. The total area of the Basrah Region is 19,702 km².

According to statistics in 1977, the region's population was 1,008,626 which is 8.4% of the whole Iraqi population. Out of this population 79.4% were urban inhabitants living in the main city of Basrah and the other smaller towns spread

³ Unpublished report (1975). *Basrah Regional Plan*. (Arabic), prepared by the Regional Planning Committee, for the Ministry of Planning, Baghdad.

through out the region⁴. However, according to more recent statistics conducted in 1987, due to the war, the population of the region has dropped to 872,000.

The Southern Region gained its importance because of many factors, which continued functioning until the beginning of the war: firstly, the Region accommodates the main part of the Iraqi industrial investments, including the Oil industry⁵. Secondly, its strategic importance as the only Iraqi port and gate-way to the rest of the world, which gave it a great commercial importance; thirdly, its importance as an agricultural centre, especially palm plantations, vegetables and seeds. As well as the factors mentioned above, the Region has an extensive infrastructure network, including railway lines, roads, highways, port facilities, electricity and water supply systems⁶. However, these same factors caused the region's suffering and destruction during the war.

a. Geography and Climate

The Basrah Region is part of the Mesopotamia lower delta lands. The term Lower Delta means the area from al-Amara south-wards to the Arabian Gulf. The Region is covered by the 'tails' or vagrant tributaries of the Euphrates and Tigris rivers, and is the cause of the deltaic mud of the Shatt-al-Arab and the Marshes (swamps) Hor-al-Hammar, with low lying alluvial deserts on either side⁷. The whole Region was covered with water during the early geological centuries and a large area of the Region is still covered with water, such as the Marshes.

The earth of the region, and especially in Basrah city, is salt-sedimented delta earth; throughout the year stagnant water remains because the level of the ground water is very high⁸. In order to reach this water it is necessary to dig only a few meters. The soil in this area justifies the construction methods of traditional houses,

⁴ Unpublished report 1985. *The Basic Design of Basrah City*. (Arabic), prepared by the Urban and Regional Planning Team at the Ministry of Local Government, Baghdad.

⁵ According to the Llewelyn-Davies (1973) planning report, among the industries invested in Basrah County are the following: oil and gas production, heavy engineering, ship building and repair, chemical fertilisers, petro-chemicals, paper, construction materials, power and water treatment, fishing, agricultural services and warehousing.

⁶ Unpublished report, *Basrah Regional Planning*, 1975.

⁷ Unpublished geographical handbook, Admiralty (1944) *Iraq and the Persian Gulf*. Prepared by the British Naval Intelligence Division.

⁸ Al-Ani, Khatab (1972) *The Agricultural Geography of Iraq*. (Arabic), Baghdad.

as we shall see later. However, the spreading water canals and creeks are reducing the level of this ground water. The cross section of the upper ground level is of three layers; the surface is 2.5-6 meters deep and it is hard muddy earth, the second is a very soft weak muddy layer 10-20 meters deep, the third level is sand and is the most compact⁹. "The whole area is unsuitable for multi-storey structures, since sizeable buildings must have raft foundations. The use of piles is restricted by the cost of sinking piles to the great depth required" (Llewelyn-Davies 1973:118, First Report).

Basrah is built entirely on alluvial mud laid down by the river, while the whole area is flat without any notable topography. Nevertheless, in Old Basrah and Ashar and along the Ashar river, the ground level rises up to about 6.00 meters above sea level, while at Fao the ground level varies between only 1.00 and 1.80 meters above sea level. Throughout, the region roads and railway lines have been mainly constructed on bunds at elevations between 1.80 and 2.50 meters.

"During the floods the water levels of Hor-al-Hammar, the Gurmat Ali and the Shatt-al-Arab rise considerably above the general ground level of the surrounding land, causing inundation of large areas" (Llewelyn-Davies 1973:115, First Report). Almost the entire municipal area has been surrounded with dams to protect the city against these inundations. However this protection can not fulfil its purpose completely, because of the uncontrolled creeks, through which the high water level will expand over the city. Shatt-al-Basrah, a recently built canal linking the Hor-al-Hammar to the Khor-al-Zubair at the Arabian Gulf, is intended to work as a flood-way, discharging the flood water. However these flooded areas represent one of the main obstacles for any suggested expansion of the city.

The climate is sub-tropical, hot and moist in summer and mild with rare falls of rain in winter. The monthly mean temperature rises from 12°C in January to 34°C in July, the mean yearly temperature being 23.9°C. In Fao, temperature could easily reach 50°C during July and August. The average humidity may reach 47% in Basrah City during August, due to the surrounding water areas; the marshes and Shatt-al-Arab waterway and the Gulf. "The highest mean relative humidity occurs in January 81% and during summer it does not fall below 46%" (Llewelyn-Davies 1973:116, First Report). On average it rains for 32 days a year during winter

⁹ According to a personal interview with Ibad Sami, Conservation Architect in Basrah. January 1989.

(November-March). The highest fall occurs in December 36.7mm. The mean annual rainfall amounts to 162.5mm, but can be as high as 302mm. or as low as 70mm.

"The prevailing wind direction is North-West, followed by westerly winds. Winds from North-East, East, South-East and South are relatively rare. Winds during the hot season, June-August, rarely blow from East, South-East or South; whereas in the cooler seasons, winds from those directions are more frequent" (Llewelyn-Davies 1973, First Report, p.116). Dust storms are quite frequent, where particles of sand and dust from the arid terrain are blown by the wind high into the air and remain suspended there. The climatic conditions as described above were fully understood by the previous generations of inhabitants. Their understanding was reflected in the shaping of the traditional built environment, a privilege that does not exist in the newly developed areas.

b. Population, culture and Religious structure.

The only distinction to be felt in terms of race in Iraq is that between Kurd and Arab, otherwise the fundamental distinctions are not those of race, but of religion. About 93% of the people are Muslims, and Islam is the official religion of the State, but Muslims are of two sects Shia and Sunni. The Sunnis are split by the racial distinction between Kurds and Arabs (see Al-Kalaf 1965).

Within the small non-Muslim minority, the largest single group is the Christians and they are divided into many churches and sects. Previously, a minority of Jews lived in Iraq, especially in Baghdad and Basrah. They then controlled a great part of the economic life of Iraq, as traders and money lenders, owning some of the traditional houses both in Baghdad and Basrah. However, all of the Iraqi Jews left for Palestine, after the announcement of the Jewish State on the land of Palestine in 1947.

The former religious distribution of the population is reflected very clearly in the city of Basrah, both in terms of social and physical patterns. Although the city and its inhabitants have been Westernised, the traditional areas have retained their culture, which predominates even in externals, such as dress and food. Here you still find both men and women in their traditional dress with their traditional need for privacy. On the other hand, in the modern part of the city and especially in the Corniche area of Shatt-al-Arab, one can see the decline of social identity and religious values. In the modern part of the city there are a number of modern hotels

with bars and night clubs, which are now the substitute for the old Coffee or Tea Houses as social gathering places in the traditional areas.

c. Local economy.

The role of Basrah as a cultural, administrative, service and distribution centre of the Region is fairly clear. Commercial activity provides the main characteristic of the city, due to its location and the fact that it is the main Iraqi port. The greater part of the local population is maintained directly or indirectly by commerce and the activities of the port, as well as the date palm industry. The packing and shipment of dates provides jobs for a large labour force at harvest time¹⁰. The commercial character is also reflected by the high concentration of shipping companies, commercial agencies, international banks, as well as the Magil port and its railway headquarters.

Although Basrah Region is the location of massive industrial investments, which were supposed to provide about 60,000 jobs up until 1990 in both industrial plants and port facilities¹¹, Basrah itself is not the location of major industrial plants. Still, there are some local crafts within the city itself which are necessary for its urban life: metal-workers, carpenters, masons, bricklayers and blacksmiths, as well as some light industries, such as food processing. There are also a considerable areas of warehouses. As a whole, Basrah's industries are mainly concentrated in two zones: near Shatt al-Arab on the way to Abu-al-Kassib and on the way to Al-Zubair.

On the basis of data from the 1947 and 1957 census and from the 1973 Household Survey, the Llewelyn-Davies report, stated that only 20% of the population (or sample population) were actually employed in 1973. The ratio of women actually working to the total female population is reported in the same study to be 2.7%. This low participation by women in the work force can be expected to increase because of the war and its results.

¹⁰ Al-Kalaf, Jassem (1965) *Demographical, Economic and Natural Geography of Iraq*. (Arabic), Baghdad.

¹¹ Llewelyn-Davies Weeks Forestier-Walker & Bor (1973). *Basrah Development Plan, Third Report*. Unpublished report prepared for the Ministry of Municipalities, Baghdad, Iraq.

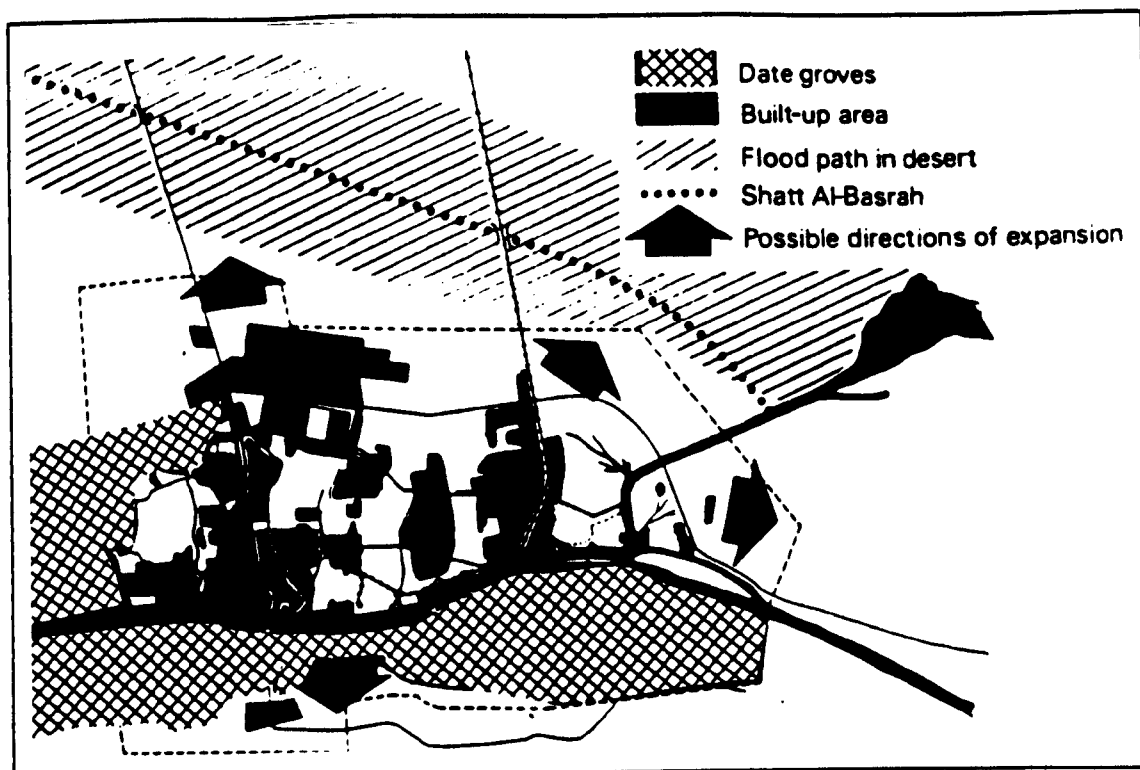


Figure [6-2] The general layout of the City of Basrah.
 [Source: The Municipality of Basrah, 1989]

6.4.2. The City of Basrah.

Basrah city is situated on the western side of Shatt-al-Arab¹², in the Southern Region of Iraq, 80 km to the north of the Arabian Gulf and 600 km south of the capital Baghdad, to which Basrah is connected by two roads, a highway and a railway line. "The City lies within the area of the date groves, which form a narrow fertile strip of an average 7km width on either side of the Shatt-al-Arab" (Llewelyn-Davies 1973:114, First Report).

With a population of 452,102 in 1977, Basrah city has 44.8% of the Region's population, with this population Basrah is considered the second largest city in Iraq after Baghdad. The following are the population assessments calculated by the Basrah Regional Planning Committee in 1985, based on average growth rates of 3.7 % per annum¹³:

¹² Shatt-al-Arab waterway, flows from the confluence point of Tigris and Euphrates rivers at the town of Qurna into the north west tip of the Arabian Gulf, at the city of Fao.

¹³ This assessment ignores the effect of the Iran-Iraq war, although it was made during the war. The average growth rate and the age and sex structure should be expected to change substantially after the war. Also the number of migrants from the surrounding destroyed rural areas have a significant impact on the city's growth.

Year	Population
1977	452,102
1980	509,883
1985	616,700
1990	733,818
2000	1,055,297

Table 6.1. The estimated population growth of Basrah.

The above projections and assessments have been revised in a population census that was carried out in 1987, which estimated the total population of the city at approximately 350,000, with a decrease of more than 100,000 over the eight years war with Iran¹⁴.

"The land use pattern of Basrah is characterised by the scattered historical development of the city with its polarisation around several centres; Old Basrah, Ashar and the port of Magil" (Llewelyn-Davies 1973:118, First Report). Nowadays, the pre-existing vacant land and date groves between the various traditional centres are very much reduced, Ashar and Old Basrah form almost one settlement.

The oldest residential areas are Old Basrah and Al-Ashar. Houses here belonged to the former wealthy merchant class and most of them are of the 'traditional courtyard' type, while the Corniche (on Shatt-al-Arab west bank) and the area immediately behind, were developed as a wealthy residential area. The other old residential district is to be found in Magil, which has developed since 1916 for Europeans running the Magil port. There houses were of large executive type built of yellow brick in the Anglo-Indian style. In between those settlements the less fortunate people lived in sun-dried brick houses. After the 2WW the *sarlfas*¹⁵ started to appear, on the boundaries of the residential areas.

Housing schemes in Basrah started as early as 1951, when the municipality began the development of 'Jamhooria' district. The houses were set back to back in blocks and built of low standard local bricks. The second attempt to solve Basrah's housing problem was in 1955-59, when the Ministry of Housing built the

¹⁴ Information gathered during the *First International Symposium on the Reconstruction of Basrah and Fao*, November, 1989.

¹⁵ Sarifas are squatters houses constructed with reeds and can be waterproofed with mud. A sarifa house generally consists of one or two rooms and a small open yard encircled by a tall reed fence.

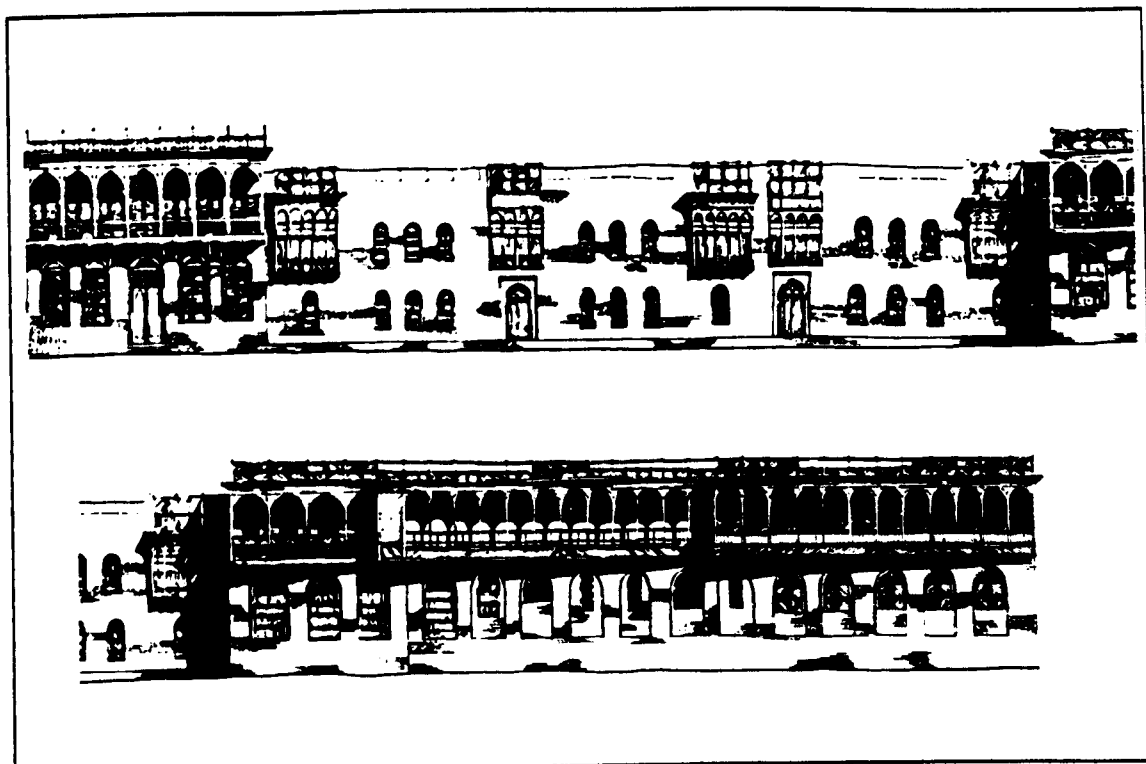


Figure [6-3] *The traditional architectural style, Ashar Creek area.*
 [Source: The author, 1989]

'Al-Asmai' housing scheme. The houses were arranged in blocks of greater size and better community facilities than 'Jamhooria'¹⁶. A large terraced-housing project was built in Maqil in 1958.

(Ba'ath City) to the north of 'Hai-al-Hussein', was another scheme to house the *sarifas* people and to provide them with basic amenities, which was part of the clearance programme in 1965. Hai-al-Hussein was laid out in regular plots on which they built their own houses. Streets were left unpaved until the mid 70's, when electricity was supplied and water was provided at public taps. However, the most recent residential areas were developed in the form of suburban houses around the 14th of July Street and on both sides of Ashar-Maqil Highway. Most houses are of the detached villa type for middle class families.

On the other hand, the main commercial area is concentrated in Ashar. The 'suq' is located in the narrow streets of the traditional area and extends into the surrounding area. The new business district in Ashar is located around 'Thowra' Street, behind the Corniche area. "The Old Basrah Market is located in the centre of Old Basrah. A traditional suq with vaulted alleyways did exist in Old Basrah, but

¹⁶ Both of the housing areas were characterised by the Llewelyn-Davies (1973) study as run down areas, although the majority were less than 20 years old.

it is now almost completely in ruins" (Llewelyn-Davies 1973:119, First Report). Other secondary commercial areas are located in the newly developed districts such as 'Khamsa Mile' and 'Jamhooria'.

Finally, it is important to note that Basrah has always been known for its fine traditional architecture, to the extent that it has been reported that, "The areas of traditional housing in Basrah must have represented the largest and finest of their kind in the Middle East" (Llewelyn-Davies 1973:122, First Report). These areas have suffered the most during the war. Additionally, no attempts have been made to protect buildings of architectural value during the war. Moreover, they became threatened from the reconstruction and renewal plans. (For more details see the author's MA Dissertation: *Conservation of Architectural Heritage In Rebuilding the War-damaged Areas, the Case of Basrah, Iraq, 1989*).

6.4.3. The City of Fao.

Although the word *fao* in Arabic indicates a wide gap between two mountains, it is strongly believed that the city name of Fao is derived from *Fauo*, which means a flat piece of land open to the viewers or more generally a narrow strip of a territory being enclosed between two obstacles. A similar word; *Fay* is still used by the local inhabitants of the region to indicate the same previous meaning¹⁷.

Al-Fao was founded by the military leader U'ttobha bin Ghazzwan during the Caliphate of Omar bin Al-Khattab. It has always been historically closely associated with the city of Basrah, that was established in the 7th century. However, some archaeological excavations revealed that the town probably dates back to the 25th century BC.

The city of Fao lies 90km to the south of Basrah's city centre, on the western bank of Shatt-al-Arab waterway, very close to the Arabian Gulf. The administrative area (Qadha) of Fao stretches to constitute a triangle, with its head on the Arab Gulf, its base on the Dhuwaib creek to the north with Shatt-al-Arab forming its eastern border, with a total area of 1220 km². Because of its geographic location Fao is considered of great strategic importance for Iraq.

¹⁷ "Fao, the City of Sacrifice and the Gateway for Great Victory", a publication of the Ministry of Culture and Information, Department of Information.

Fao's pre-war population of 25,600 inhabitants was maintained mainly from agriculture, where the area was famous for its fertile fields¹⁸. Before the war the palm tree plantations dominated the region for ages. Its date product represented 20.6% of the gross product of Basrah and 4% of that of the country. Fao owed a great deal of its wealth to its leading port and crude oil exporting terminal, by which Fao became the only Iraqi access to the sea and its main gate way towards the rest of the world. Ironically, this strategic commercial importance became the cause of its suffering and destruction during the war.

The modern city of Fao is relatively new, with very little architectural character. The exception, however, are two main mosques in the centre of the city that are built of mud-bricks. The rest of the structures were either built of sand brick or concrete blocks, of one or two storey height.

6.4.4. Basrah and Fao during the war (1980-1988).

Basrah and its entire Region were seen by the Iranians as main targets, because of their economic and strategic importance as the only Iraqi port. Thus the entire Basrah Region was situated in the war zone from the beginning of the conflict in September 1980. (see Stork, 1986:19).

On the second day of the war (23 September), Iran's air force made their first attack on Basrah (see W.O. Staudenmaier, 1983:43). These attacks lasted for the whole period of the war. It was reported by Edgar O'Ballance (1988:37-38) that, "...by 3 October 1980, the oil storage tanks at the Basrah refinery, across the Shatt-al-Arab were on fire. The oil terminal at Fao was deserted and partly destroyed by Iranian artillery fire, and resulted in 70,000 people being evacuated". These attacks were mainly against industrial and port targets. Joe Stork (1986:19), claimed that, "In the first days and weeks of the war, Iran managed to shut down Iraq's main export facilities, near the port of Fao on the Gulf".

This destruction of the industries and port facilities, affected Iraq's economic structure as a whole and Basrah's in particular. The overall damage to the infrastructure in Iraq from September 1980 until July 1988, was estimated by Kamran Mofid (1989) to be of \$126.0 billion. This figure does not include oil revenue losses. Nevertheless it includes losses in industry, agriculture, energy, material damage to the oil sector, telecommunications, housing and health.

¹⁸ Iraqi Central Statistics Body (1977:24), in Arabic.

The same author claimed that the total economic cost of the war to Iraq (including oil revenue losses, GNP losses, military costs, ..etc.) during the above period was \$512.0 billion. Mofid (1989:1), indicated that this sum represented only the monetary cost of the war. "It does not include inflationary costs, the loss of services and earnings by the many people killed, the depletion of national resources, the postponement of crucial development projects, the cost of the delayed training and education of the young people. And finally, it does not include the cost of payments to the thousands injured in the war who are not able to contribute fully in the creation of wealth for the national economy".

Furthermore, the total economic cost of the Iran-Iraq war for both countries was estimated by Mofid (1989:2) to be \$1,156 billion, "..the cost of the war exceeds the total oil revenue which Iran and Iraq have received throughout this century. From 1919 to July 1988 in Iran's case and from 1931 to July 1988 in the case of Iraq, the total joint oil revenue earned is the sum of \$418.5 billion".

The war affected the greater part of the local population of Basrah, who were maintained directly or indirectly by industry¹⁹, commerce and the activities of the port. Moreover it led the Government to give up the economic role of Basrah and to shelve its current Five Year Plan, only the projects which had already begun would be continued on an annual review basis²⁰. Nevertheless, Abdel-Wahid Al-Qarnawi, the Mayor of Basrah claimed:

"Despite the current economic situation, there are some big projects which we managed to accomplish during the war, such as the new international airport 35km to the north-west of Basrah and Shatt Al-Basrah project".

Many attempts were made by Iran to cut Baghdad-Basrah road, in order to surround Basrah and capture it. One of the main attempts took place on 18 June 1982, in the form of five large 'human-waves' and lasted until 3 August, but each wave was either held or counter attacked by the Iraqis (see Edgar O'Ballance 1988:93).

However, until 1984 the Iranians mainly shelled the outskirts of Basrah, which was justified because of the special consideration given to the Shia majority of Basrah's population. Iran had been confident that the Basrah Shiats would eventually

¹⁹ These industries were planned to provide 60,000 jobs by the year 1990.

²⁰ According to a personal interview with Mr. Namir Zenal, Chairman of the Regional and Urban Planning Department, in the Ministry of Local Government, Baghdad.

heed to the call for an uprising against the Iraqi Government, but they did not respond to Iranian appeals. "On 12 February, heavy Iranian artillery fire was directed onto the city of Basrah, really for the first time, killing ten civilians and injuring many more. This unexpected bombardment caused alarm and refugees began to flood south-wards towards Kuwait" (see O'Ballance 1988:93-142).

Since that day and for the last four years of the war until the 20th August 1988 cease-fire, Basrah was subjected to a daily heavy bombardment, in some cases 400 shells per day²¹, leading to the destruction of some areas of the city and its outskirts. Detailed information or estimates about the scale of damage or the number of casualties are not available. However, it was reported by the 'Guardian' (15 August 1989) that according to the Governor of Basrah, nearly 2000 people were killed and many more were injured. Almost 95% of all homes, offices and shops were either demolished or badly damaged and entire areas of traditional architecture were destroyed and subsequently left to deteriorate during the eight-year war.

Luckily as Dr. Fu'ad Al-Mu'amin²² stated, Basrah suffered less than other cities, such as Fao, Halabja and a series of border villages ranging in size from 200-1000 inhabitants, which were totally destroyed and reduced to rubble. On the other hand, Basrah suffered more than Baghdad, where the damage was mainly caused by isolated missile attacks and air-raids. The scale of damage in Basrah was equivalent to that which occurred in AL-Sulimania, Khanaqin and Al-Amara. It was mentioned by Mr. Hammid Turki, the Head of the Planning Division at the Governorate of Basrah, that in general, the areas that are near Shatt-al-Arab suffered the most, followed by those close to important strategic sites, such as the oil pipe lines, the old airport, the harbour and the Governorate²³.

In respect of the traditional areas and according to the author's personal observations, both Al-Ashar and Old Basrah sustained a great deal of damage from the bombardment. The scale and nature of the damage was greatest in Al-Ashar, because of its situation closer to the border. Various types of damage occurred to different buildings; some of them were totally destroyed. However, since the

²¹ According to a personal interview with Mr. Adel Said, Chief Architect at the Department of Local and Regional Planning in the Ministry of Local Government, Baghdad. In January 1989.

²² (Civil Engineer) Chairman of the Consulting Engineering Office at the Technical University, Baghdad.

²³ According to a personal interview with Mr. Hammid Turki, the Head of the Planning Division at the Governorate of Basrah. In January 1989.



Figure [6-4] *The devastation of the Corniche Area of Shatt-al-Arab, Basrah.*
 [Source: *The author, 1989*]

traditional area was constructed as a homogeneous entity, in which each house was structurally reliant on the neighbouring buildings, the damage to some units could affect the stability of their surroundings.

In addition to the destruction in the traditional areas, severe damage occurred in the modern part of the city, especially in the Corniche Area of Shatt-al-Arab. This caused the destruction of many buildings belonging to the period of the sixties and seventies, which were unsympathetic to the local style of architecture.

The government had a policy of compensation for the victims each according to the scale of damage. It was reported by the 'Guardian' (August 15, 1989) that in Basrah, "Compensation of about 1,000 dinar per family (\$2800 at the official rate) is being paid to cover the cost of repairing houses, replacing furniture and dead animals". In the same article it was also claimed that "... thousands of poor people were given free parcels of land on which to build homes". During the war the people themselves moved to other parts of the country, either to live with relatives or on their own depending on the amount of money given by the government²⁴.

²⁴ According to a personal interview with Mr. Adel Said, Chief Architect at the Department of Local and Regional Planning in the Ministry of Local Government, Baghdad, January 1989.



Figure [6-5] *The total devastation of the city of Fao.*
[Source: The author, 1989]

Finally we ought to mention that Basrah managed to resist the Iranian occupation because of its strong fortifications. In addition to Shatt al-Arab the major obstacle between the Iranians and Basrah, the Iraqis had flooded a large area, about 16 miles wide, known as Fish Lake, on the east bank of Shatt al-Arab. It was claimed by Edgar O'Ballance (1988:196), that by 26 February, the Iranians were closer than ever to Basrah (about 6 miles from its outskirts) and their position enabled them to bombard the city's environs with artillery.

On the other hand, Fao was one of the most important strategic targets to be occupied by Iranian forces. It was under cover of darkness on the night of 9/10 February 1986 that Iran attacked Fao peninsula with a great number of forces. They managed to occupy the whole triangular area, taking the shape of a bridgehead and protected on the sides by salty marshes and soft soil, thus cutting Iraq's access to the sea. This occupation was seen by Iran as the first step towards occupying the city of Basrah.

Eventually, the whole city of Fao, was razed to the ground. Its people and buildings suffered terribly during its two year occupation, both from Iran and later

during its liberation from the Iraqi forces. The city is said to have been struck by an unbelievable seven million shells during the period of hostilities²⁵.

'Blessed Ramadan'²⁶ or the so-called 'The Battle of all Battles', was the huge Iraqi operation that was suddenly launched on 17 April 1988, by the 'Seventh Army Corps' supported by the 'Presidential Guards', which reached deep into the Iranian defences at Fao. It was a successful 35 hour operation that drove the Iranians out of their positions and terminated two years of occupation. This operation had a very decisive impact on the course of the whole war. Iraqi sources claim that it was this battle that eventually forced Iran to accept the cease-fire that was declared by the UN Security Council Resolution 598 in August 1988.

According to Iraqi estimates the number of Iraqi troops killed in the battles for Fao, from 1 September 1980 until 18 April 1988, were 52,984. The same sources also claimed that Iran lost 120,000 soldiers during the occupation of Fao and more than 30,000 during the Iraqi liberation²⁷. Thus almost 200,000 people excluding civilians were killed in less than 26 months.

6.5. THE RECONSTRUCTION CAMPAIGNS OF BASRAH AND FAO.

Nothing was declared or published by the Iraqi government regarding the scale or the nature of war-damage during or even after the eight-year war with Iran. The issues of war-damage and reconstruction were, and probably still are considered highly political and no doubt controversial and can only be addressed and discussed by Iraqi officials. An exception to this policy of secrecy and obfuscation was the publicity material that suddenly flooded Baghdad, after the completion of the reconstruction campaigns of Basrah and Fao.

A period of six months of complete silence about the effects of the war and the plans for future reconstruction followed the announcement of the cease-fire in August 1988. The author visited Iraq in December 1988 when most people were still reluctant to talk about the war or even reconstruction. "Most of the officials that were interviewed refused to supply any document or official paper or even copies of old reports and maps on security grounds" (Barakat, 1989). It was not until February

²⁵ As it is stated on the memorial Gate of Al-Fao.

²⁶ After the Islamic holy month of fasting; Ramadan.

²⁷ "Fao, the City of Sacrifice and the Gateway for Great Victory", a publication of the Ministry of Culture and Information, Department of Information.

1989 that the subject of reconstruction became a public issue, when the President paid a visit to Basrah and announced that the city was to be reconstructed. Before that, Four Army Engineering Units had worked for two months on a comprehensive clearance campaign of the city.

Suddenly, and due to the war, Basrah gained a special degree of sympathy and support, generated by its resistance and stand against the continuous attempts to capture the city. The situation doubled its importance for the country and gave a flying start for its reconstruction and development. This fact was felt by the author during his meetings with the Iraqi officials and public. It was also reflected in the huge amounts of Government aid and public donations and gifts, collected by the Basrah and Al-Fao Reconstruction Committee. Nowadays, Basrah is seen as a symbol for the Iraqi strength, pride and honour. It has been given many different nick- names such as 'Basrah al-Samida' (The Everlasting City) and 'Madinat al-Modoun' (The Greatest City or the City of Cities). These official names, that were mostly derived by the Ministry of Culture and Information, were claimed to have helped to generate enthusiasm from the local inhabitants to rebuild the city. Similarly, Fao was given its second name, The City of Sacrifice and the Gateway for Great Victory, symbolising the great sacrifices that were made to liberate the city following its occupation for almost 2 years (1986-1988).

6.5.1. Planning of reconstruction.

Following the cease-fire in August 1988 the Supreme Committee for the Reconstruction of Basrah and Fao (SCRBF) was established in a Presidential Decree and was headed by the President himself. This Committee consisted of the Prime Minister, Ministers of Local Government, Housing and Construction, Defence, Industry and Military Industrialization, Transportation and Communications, Agriculture and Irrigation. It also included representatives of the General Establishment of Post and Communications and the General Establishment of Iraqi Ports, as well as the Mayor of Baghdad and the Governor of Basrah.

In December 1988, the Committee took the decision to rebuild Basrah within 3 months starting on the 13 March 1989, and later to rebuild the city of Fao within a similar period. The Committee also took the decision to employ only the government's construction capabilities, depending mainly on local experts and resources, and thus turning down hundreds of foreign contractors and businessmen,

who flew into the country immediately after the cease-fire in anticipation of participating in the great effort of reconstruction.

In order to better understand the reconstruction efforts and evaluate them objectively, it is important to explore some of the announced, as well as the underlying aims behind the campaigns. It was declared that the reconstruction of Basrah and Fao within a short period, using Iraqi skills, had two main directions:

- An indication of Iraq's great power and its determination to restore peace through the reconstruction of cities that are still practically under the threat of war.
- An effort to attract families back to their original settlements, in an attempt to further emphasize the first aim.

Other aims can be read through the lines of different official papers, as well as unofficial declarations during interviews by the author. For the Iraqi Government the reconstruction of Basrah and Fao, within 90 days each, was seen as:

- A symbolic representation of the heroic stand of the two cities against the Iranians continuous attempts to capture them. (Al-Majed, 1989). "The reconstruction of Basrah and Fao is an honour complementary to that of their defence". (Saddam Hussein, 1989).
- A declaration of the Iraqis' outstanding creative ability through which, a lesson was to be given to the rest of the Iraqi people and the world. (Al-Hadithi, 1989).
- A way of saving millions of dollars. According to the Ministry of Culture and Information, initial estimates of the profits that would have been made by the foreign companies if they were to participate in the reconstruction, stood at hundreds of millions of US\$. (Ministry of Culture and Information, Arabic, 1989).
- A proof that the Iraqi mentality is not a backward one, and it has never been, either during war or peace.
- An emphases of "...the deep meaning for the leadership of President Saddam Hussein, as a hero of war and defence as well as of peace and reconstruction within the great cultural Iraqi renaissance,.. to build the new Iraq". (Ministry of Culture and Information, Arabic, 1989).

Although all of the official documents, publications and presentations referred to the effort as the 'reconstruction campaign of Basrah and Fao', what actually took place in Basrah was merely the beautification of the city's streets and public spaces, with little improvement of infrastructure. However, in Fao it was a campaign of physical reconstruction which included infrastructure, public buildings and a few houses.

The Ministry of Local Government became the planning body of the SCRBF, responsible for transforming the wishes and the decisions of the Committee into workable plans. It was responsible for the preparation of plans and architectural designs for the different sectors of the city of Basrah, as well as the plan of Fao. Thus its staff produced Master and zoning plans for Basrah and Fao; designs of the intended 'Tower of Basrah' and the 'Three Gates' (never implemented). It also prepared contracts, time targets and bills of quantities for other Ministries, participating in the execution of reconstruction.

Additionally, the Supervision Department was created as an independent body reporting directly to the Supreme Council. This Department was based in Basrah and headed by the Governor of Basrah and comprised of technical and administrative staff. It was charged with the task of:

- Co-ordination between the different executing authorities.
- Close supervision of the quality of work-in-progress.
- Evaluation of performance and reporting on progress being made.

The Supervision Department worked in close co-operation with the National Centre for Construction Laboratories, which was responsible for quality control.

6.5.2. Reconstruction Implementation in Basrah.

a. Clearing the rubble.

In effect, the implementation of the reconstruction started when the Military Engineering Units began clearing the city on the 19th December 1988, in a manner that reflected the immediate concern of the government to clear the city. Abdel-Wahed Al-Qarnawi, the Mayor of Basrah emphasised that:

"Our main concern nowadays is to clear the city and the suburbs of the rubble and ruins, to fill the swamps, to clean the small rivers and creeks and to maintain the infrastructure of the city and the civilian services (schools, hospitals ..etc.)".

Within two months (19 December 1988 - 14 February 1989), the army removed 3,000,000 m³ of rubble and ruins; filled in 3,430,000 m² of swamps around the city, including some defensive swamps; and removed 6,000 damaged vehicles, weighting 14,000 tons of scrap metal.

The Ministry of Defence reported that the army demolished 2,500 unsafe buildings and removed the front line fortifications at Shatt-al-Arab. The destruction of mass concrete barriers began, which had been placed in the streets and around the

main public places during the war.²⁸ necessity of clearing the destruction, as a start to the rebuilding of a damage city, is one of the most significant issues highlighted by the case of Basrah. When the war was over and Iraq's resources were directed towards reconstruction, one of the major tasks facing the Iraqis (in order to bring back normal life to the city), was the destruction and removal of the defensive fortifications, constructed during the last eight years, especially those close to the inhabited areas on the outskirts of Basrah. These were described by O'Ballance (1988:101), as follows:

"The Iraqi defensive trench system came to be studded with bunkers, weapon emplacements and dug-out shelters for the infantry ever-ready to repel an enemy attack... Behind this strong frontal trench, were communication trenches leading back to large underground shelters used for sleeping, feeding and resting... In front of the main defensive trench were jumbles and lines of barbed wire fencing and entanglements, fitted with booby-traps, sensors and other surveillance equipment".

The next project was the clearing of wide areas of minefields on land and in Shatt-al-Arab waterway. Thus, by January 1989 the government already had a contract with a private company to clear Shatt al-Arab waterway²⁹. Because of political differences with Iran over the position of the national borders and because of the dramatic events that took place since the invasion of Kuwait in August 1990, it was only possible to clear part of Shatt-al-Arab, namely the part that passes through Basrah.

Then, the next task was the reclamation of vast areas that had been flooded as a defensive method. One of these areas was 12 miles to the east of Basrah, on the east bank of Shatt al-Arab, known as Fish Lake. "The main obstacle within it was a deep half-mile wide channel that ran along the length of the lake, which was itself covered by five strong defence lines"³⁰ (Edgar O'Ballance 1988:194). Such a swamp if left could be another threat to the environment of Basrah which is already surrounded by marshes, such as the great marsh of AL-Hammar.

²⁸ According to an announcement made by the Ministry of Information in an Iraqi TV programme, on 11 January 1989.

²⁹ According to a personal interview with the Mayor of Basrah. In January 1989, Basrah.

³⁰ According to Edgar O'Ballance (1988), the work on the Fish Lake had begun in 1982. It was littered with under-water barbed-wire entanglements, mines, electrodes and sensors.



Figure [6-6] One of 10 rebuilt pedestrian bridges in Basrah.
[Source: The author, 1989]

b. Reconstruction and Beautification.

In order to implement the reconstruction plans drawn by the Ministry of Local Government, the City of Basrah was divided into three working sectors, each allocated to one of the implementing ministries. The first sector consisted of the central and southern parts of the city, which were mainly residential areas and was the responsibility of the Ministry of Local Government. The Ministry of Housing and Construction was allocated the second sector: northern and western parts of the City. Finally, the third sector which was mainly the commercial area was the responsibility of the Municipality of Baghdad. Each of these authorities, in their turn, sub-contracted to a number of government contractors and was charged with reconstruction, maintenance and beautification of its sector. Typically, this work included paving roads; rain water disposal networks; paving side-walks; earth filling; planting of trees, particularly palms; restoring and extending drinking water networks; traffic works, which included designing and implementing intersections and traffic lights and sign posts; rebuilding pedestrian and car bridges, as well as installing and painting street furniture.

On the other hand, the Ministry of Agriculture and Irrigation was charged with the clearance and treatment of the main rivers penetrating the city (Jubaila, Rabat,

Khandag, Khora and Saraji). The Ministry had previously prepared detailed studies to develop these rivers in 1980, which included dredging, linking those close to each other to allow better water circulation, stone paving, and construction of retaining walls. But, these studies were not carried out because of the war.

Furthermore, the Ministry of Industry and Military Manufacturing was charged, along with the Ministry of Transportation, with the responsibility of replacing and extending the electricity and telephone networks. At the same time, the rest of the ministries and public authorities were charged with the rebuilding and beautification of all the buildings and facilities that belonged to them within the city of Basrah. As an example, the Ministry of Religious Affairs, was to rebuild all the damaged mosques and churches. While the Ministry of Education was to rebuild all the damaged schools, the Health Ministry was to rebuild and guarantee the functioning of all its clinics and hospitals. The General Establishment of Ports was responsible for the clearance of Shatt-al-Arab, and the re-opening of Megeal Port, a job that included surfacing and removing several ships, pontoons, ferries and concrete blocks.

c. Competition between the implementing Ministries.

One of the distinctive characteristics of the campaign was the competition set by the Iraqi Central Government (represented by the SCRBF's Supervision Department) between the different implementing ministries and authorities, in which the Municipality of Baghdad won the first place followed by the Ministry of Housing and Construction. The Ministry of Local Government was in the third place. The main aim of this competition was to evaluate the finished work of each authority and consequently to evaluate the whole campaign.

This evaluation was intended to achieve three objectives; firstly a high quality of construction that meets international standards, secondly, a high speed of construction and thirdly to try to ensure the economic goals of the reconstruction programme. The Supervision Department allocated 30% of the grade to each of these objectives, leaving 10% for the consideration of obstacles facing the execution of plans of each authority.

The competition results were announced by the Central Government during the First International Symposium on the Reconstruction of Basrah and Fao (October 1989). In which, Baghdad Municipality achieved the first place with the grade of 90.2% of the overall results, 87.3% in quality of work, 100% in speed of implementation, and 100% on saving on the cost. The Baghdad Municipality saved

ID 2,138,000 on the overall work allocated to it, from the initial cost of 7,516,000 set by the Supervision Department. The Supervision Department believed that this saving was due to the following factors³¹:

- The high level of co-ordination and planning for resources and functions, also the administrative unity on all levels played a crucial role.
- Cuttings in the number of machines (construction vehicles) and personnel employed by the municipality, where the number of vehicles did not exceed 600, while the number of personnel did not exceed 1500.
- The total dependence on its own resources and working force abilities. Thus it did not hire any independent contractors. The only contractors involved where those needed to produce cement and sephelt for it was impossible for the Municipality to move its plants from Baghdad to Basrah.
- It did not depend on one source for as a building materials supplier, also it used the railway as an exceptionally cheap means of transport.
- Good maintenance of its machines and vehicles and the availability of a good amount of spare parts.
- The municipality made use of its long previous experiences with similar work of beautification in Baghdad.

The Ministry of Housing and Construction, was awarded the second place, where it scored 85.5% of the general evaluation, which was made of 77% work quality, 94% speed and 87.3% cut in expenses.

- The final cost was higher than the initial estimation by ID 3m.
- The Ministry used a huge number of vehicles and personals, where the number of machines used exceeded 2800 while the total labour exceeded 11,000.

6.5.3. The reconstruction of Fao.

Following the announcement of the completion of the reconstruction campaign of Basrah on 14 June 1989, "It was decided, upon instructions from the President's Office, that the same Ministries who took part in the Campaign for the reconstruction of Basrah might proceed with the same competitive method for the reconstruction of Fao". (MCI, 1989:21). This meant that the same model of management of implementation was to be used, despite the great difference between the two contexts. The context of Fao differs from that of Basrah as follows:

³¹ For more details see *Basrah, the City of Cities; Facts and Figures*, the Iraqi Ministry of Culture and Information publication in Arabic, Baghdad, 1989.

- 1) The city was totally destroyed during the war and later on was levelled by the Military Engineering Units. Thus, it had no inhabitants, no ready shelter to accommodate the workers.
- 2) It lost its two main sources of income: the crude-oil exporting terminal and the palm plantations, without which it can never revive; especially because the nearest urban centre, Basrah, is 90km away.
- 3) Al-Fao is located in a relatively remote area far from the points of supply of building materials and was no more connected to Basrah or to Baghdad by railway. Also it had no drinking water supplies, or electricity supplies or even communications.
- 4) The work was to start at the beginning of summer and continue through the hottest season of the year, where temperatures could easily reach 50°C in the shade.

Nevertheless, it was for the very reasons we mentioned above, that the Iraqi Government saw the reconstruction of Fao as a challenge and insisted on rebuilding the city on its original location. The SCRBF (1990:75) reported, "The decision to rebuild Fao on its original location and to a better standard than it had been, ..is an acknowledgment of the blood that has been shed by Iraqi martyrs on its sacred soil". Thus, Fao was to be rebuilt as a symbol of liberation and victory. Millions of dinars were set aside for that purpose.

a. The design of the city.

The Ministry of Local Government was assigned the task of preparing the structural plan of the city. In December 1988, the Ministry announced a competition, limited to its planners, to design the city of Fao, "..in a manner that reflects its symbolic value" (Al-Yamori, 1989). Five proposals were produced within 45 days and exhibited in a special ceremony for the President and the Committee to choose their favourite. Consequently, one designed by Planner Mozafar Al-Yamori was chosen³². Mr Al-Yamori admitted that the competition time allowed only for a one day visit to the site. Of course the very short period of time that was given to the Planners to plan the city meant that the plans were not thought through carefully enough.

Later "..the government asked private architectural offices to contribute to the effort of rebuilding, by not charging for their design services, ... the Ministry of Local Government arranged for them to visit Al-Fao" (Barakat 1989b:63-64). Mr. Namir

³² Mr Al-Yamori died in an accident, on the construction site, during the implementation of Fao.

Zenal, Chairman of the Regional and Urban Planning Department at the Ministry of Local Government, had talked to *Al-Qadessia* Newspaper on 20 October 1988, about the new design and planning of Al-Fao city. He said that they took into consideration the political importance of the city as a symbol of liberation, as well as its economical role as a secondary port for the Basrah Region. He also said that another four plans were completed for new residential settlements around Al-Fao, as a substitute for the villages destroyed in the war.

In terms of urban design and the overall image of the city, the government attempted to reflect the Islamic and Arabic identity in the newly designed areas. This desire was expressed by the President when he addressed the Iraqi Association of Engineers on 10 October 1984: "...where is your own identity and architectural character of this era, which is to be inherited and talked about by the coming generations?..."³³.

But, this concern can be and was interpreted in different ways in Al-Fao, where reconstruction was based on large scale clearance. The author drew attention to this aspect in 1989 when he wrote "... the intended reconstruction plan of Al-Fao has at its centre a great open space, surrounded by the city's main administrative and commercial buildings. Within this space the two surviving mosques are to be preserved as a memorial to the war and another modern civic monument, representing the Iraqi victory is to be added. This paved open space will function, 'apart from a vast heat store', as a festival square with a small green area, plus a military museum, cinema, theatre and restaurants. It is also the place in the city where the roads from Basrah and Shatt al-Arab cross"³⁴. All very symbolic but whose symbols, from where and why? They are certainly nothing to do with Islamic or Arabic architecture and do not in any way provide any reassurance to the President's question concerning the future generation" (Barakat 1989b:81).

The city plan was divided into several self-contained zones each accommodating 2,000 residential units. The major dominating features of the city are the 'Festival Square', the 'Martyrs Memorial' and the 'Triumph Gate'. The square occupies the heart of the city and takes the shape of an octagonal star with a

³³ This quotation was considered in October 1989 the theme of the 'Symposium on National Identity in Contemporary Arab Architecture', held at Baghdad. Where the design and planning of Fao was released publicly for the first time.

³⁴ According to a personal interview with Mr. Mozafar Al-Yamori, a senior planner at the Ministry of Local Government, Baghdad. In January 1989, he proposed the structural plan of the new city of Al-Fao.

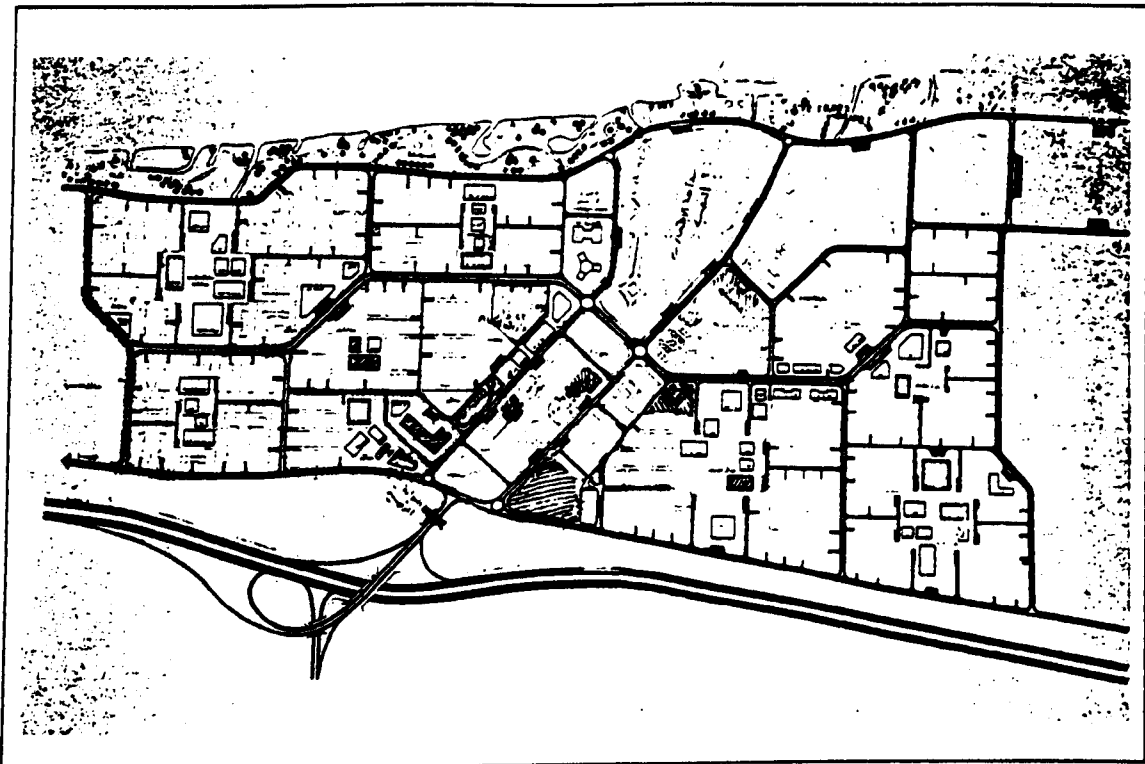


Figure [6-7] The master plan of the reconstructed city of al-Fao.
 [Source: The Ministry of Local Government, 1989]

diameter of 170m surrounded by a pre-cast colonnade with 92 columns. The Memorial represents the focal point of a huge space built between the governmental buildings and is surrounded by water. The Gate contains two main arches for vehicles, each 8.1m high and another two pedestrian arches each 6m high. The 30,000 pieces of stone that cover its concrete structure, along with a specialised team of engineers and technicians, were brought from Yemen!

Concerning the residential buildings the Government adopted, as we mentioned earlier, the idea of independent sectors, each of which will be called after an Arab country and believe it or not, the houses of that sector will represent the traditional houses of that country. For this purpose, the design of the housing were imported from; Jordan, Palestine, Tunisia, Egypt, Libya, Syria, Saudi Arabia, Morocco and Yemen. Mercifully, these designs are said to have been undergoing some modification, in order to ensure they are suitable for the local environment. It should finally be said, that these designs will be imposed on the people who will have to implement them to ensure the final intended image.

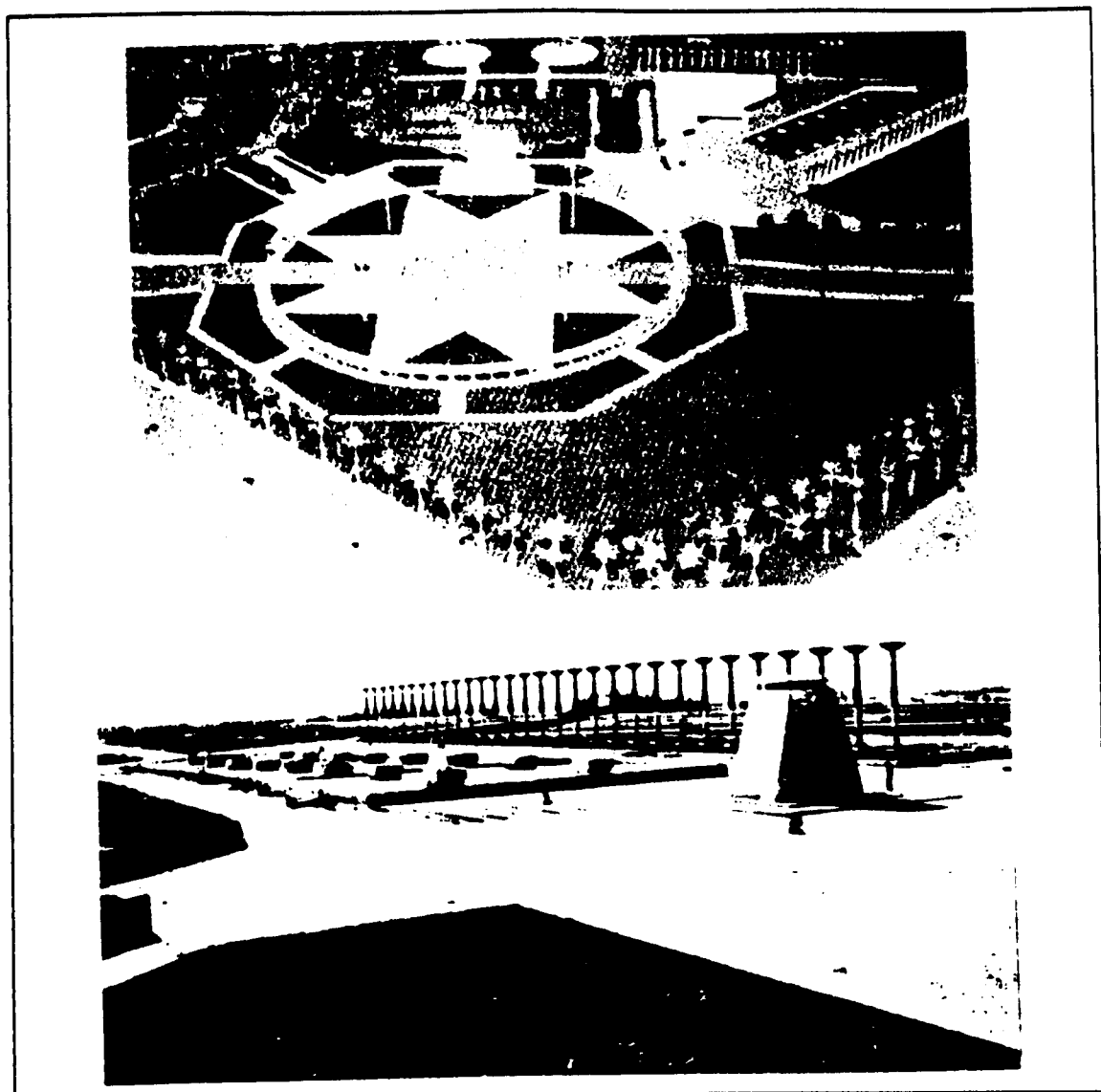


Figure [6-8] The 'Festival Square' in al-Fao.
 [Source: The Ministry of Local Government, 1989]

b. Implementation.

As in the case of Basrah, Fao was divided into three implementing zones: Northern, Central and Southern. The Ministry of Local Government was responsible for the Southern zone and its work mainly included the implementation of water and sewage networks, as well as traffic engineering and road paving. The Municipality of Baghdad was responsible for similar work in the Northern and Central zones.

However, it was the duty of the Ministry of Housing and Construction to implement all the required buildings in Al-Fao city. In its turn this Ministry divided the work, on a competitive basis, between four contracting companies owned by the Ministry. At this stage it is important to note the change of attitude in allocating work, for in Fao the Ministries were implementing work that was closer to their

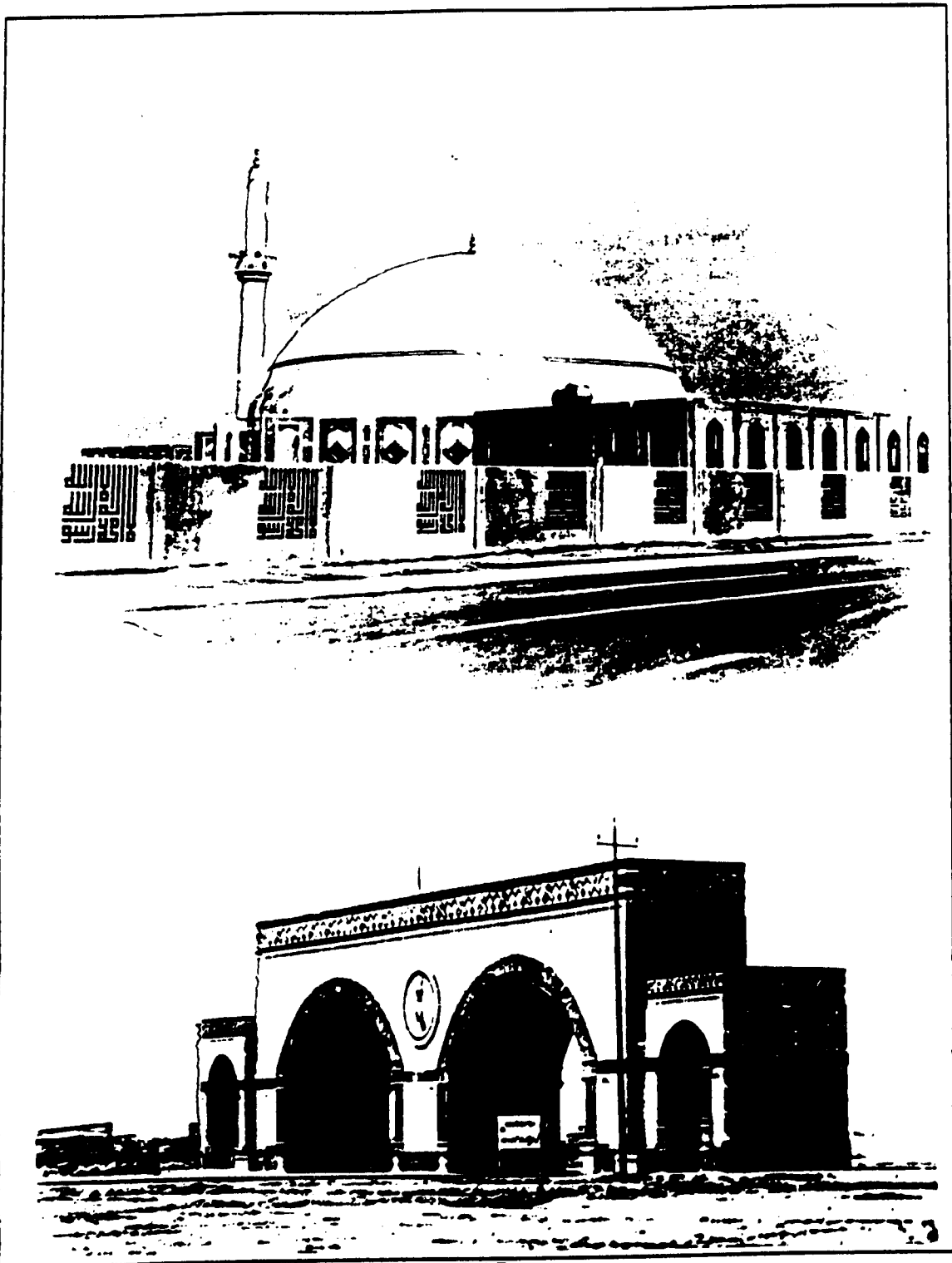


Figure [6-9] views from the reconstructed city of al-Fao.
[Source: The author, 1989]

experience. The following is what has already been built when the city was officially opened by President Saddam Hussein and his guests (Arab and World leaders), on 23 October 1989:

Contracting Company	Buildings implemented	Area m ²
Al Farouk	The Main Gate	250
	The Main Hospital (50 beds)	5,000
	Women's Union HQ	840
	Ba'ath Party HQ	1,500
	Nursery school	1,650
	Primary school (12 classrooms)	1,350
	Poular Army HQ	2,100
Al Rashid	Fire Station	1,560
	Civil Defence Centre	2,300
	Cheif Administrative Officer Building	3,300
	Trade Unions HQ	1,250
	Shopping Centre	2,700
	Three primary schools X 12 cl.	1,500
	Sport Stadium (4000 spectators)	
Al Mutasim	Primary school (12 classrooms)	1,350
	Festivel Square	20,000
	Fao Monument	1,200
	17 houses for Government officials (250 m ² each).	4,250
Al Tariq	10 houses for Government officials (250 m ² each).	2,500
	Secondary school (12 classrooms)	1,500
	Court of Justice	2,500
	Cultural and Social Club	4,000

Table 6.2 The volume of reconstruction carried out by each contractor.

The Ministry of Transport and Communications was charged with the task of installing a telephone network, an electronic exchange and connecting Basrah and Fao with a microwave communications system. While the Ministry of Industry and Military Manufacturing supplied the construction site with temporary power supply and later on supplied the city with its electricity network. Finally, the Ministry of Agriculture and Irrigation excavated 17 rivers totalling 50km in length.

By taking over the individual properties in Fao, the Iraqi government ensured that any future urban reconstruction was freed from land speculation. This approach might be one of the issues towards a successful post-war reconstruction, if it is seen as a means of rationalising the land use, in order to create an environment favourable for daily life and production. Alternatively, it will reinforce the authorised central planning while not only underestimating, but actively threatening the people's role. Here the centralised approach was focused on new construction instead of upgrading and development.

6.6. IRAQ'S RECONSTRUCTION FOLLOWING THE 1991 WAR.

It would be incomplete to write about reconstruction in Iraq without, at least mentioning the last war; its effects and the rebuilding that followed. In order to do so the author conducted a field visit to Baghdad in April-May 1991. Once again despite the comprehensive international media coverage of the war, destruction and reconstruction were given a very low profile, and in Iraq itself, by the time the Allied forces left the country, Iraq's misery was forgotten, as was even that of the Kurds.

Whatever one's political views of the war in the Gulf, it is virtually impossible to remain unmoved by the scenes of destruction and human suffering, brought about as a consequence of that conflict and its aftermath. One side of this painful scenario is taking place in Iraq, a suffering that is no longer page one news.

During 39 days of the relentless bombardment of Baghdad and many other Iraqi cities, civilian life was for a time totally paralysed. What has been known as the 'heaviest air bombardment in history' brought a new dimension to the art of destruction. Today it is possible to destroy settlements without having to cope with, or even justify, the images of death and destruction. Despite the intense media coverage, those conducting the war made it seem as if it were "...made up of televised sound effects and images only barely improved on those that 50p could buy on a computer games' machine" (The Guardian, 21 January 1991).

Although the initial intention of this Section was to provide an integral picture of the impact of war destruction, in terms of human casualties, physical environment, disruption of communications and consumer goods' supplies as well as economic losses, the nature of the war and the political instability that was still surrounding it, at the time when this Section was written, made the task very difficult. In fact, the author has reached the conclusion that it may be impossible to provide a full picture of the final and long term results of the war, simply because the consequences are the cumulative effect of all the damage inflicted on the above mentioned sectors and because the final result of a war on any nation, critically depends on the interdependency of many individual actions, some of which may not be immediately obvious. For example, one of the side effects of the psychological impact of war may be a reduction in man power, which in its turn would prolong the economic recovery process. Equally important is the side effect from having a considerable percentage of handicapped people in the remaining population. Thus, this analysis is an attempt to quantify the scale of damage in the country in rough percentage terms, rather than

precise figures. Nevertheless, some figures are included as they were given by the Iraqi authorities, during the author's visit to Baghdad.

The further complication one faces when researching the effects of war is that some effects can be explored in much more detail and more easily than others: as an example, the damage to buildings and the numbers of dead and injured, can be assessed quantitatively. Thus figures produced by the authorities have tended to dwell on these outward and visible signs. However, the author feels that psychological, social, economic and political damage are equally and possibly more important in the long run, although much less easy to calculate.

Those who conducted the 1991 war understood exactly how the nature of the city is a complex of interrelated physical and social functions. More and more the city is becoming a highly complicated network of many relationships between individuals, groups, and physical parts. In other words, a living relationship between families, communities and the other functions of housing, markets, transportation, working places, cultural activities, and food supplies. During a war, one or more of the above relationships will be affected, and in most cases all of them, bringing disruption to the entire function of the city. And this is exactly what happened in Baghdad, Basrah and many other Iraqi cities, where the housing sector was relatively undamaged, while the services and infrastructure were devastated.

Today, the use of high-technology warfare that allows pin-point bombing accuracy, means that it is possible to select and destroy one or more of the above components, while keeping the rest 'physically' untouched and yet still paralyse a whole city.

6.6.1. The scale of the damage.

Crossing the border from Jordan to Iraq (April 1991), the first signs of damage are seen on the motorway connecting the Al-Rutba border point with Baghdad, which was once considered as one of the best transportation routes in the Middle East. In Baghdad, the signs of destruction are everywhere, with the bombed public and administrative buildings as the most obvious. The Ministry of Local Government, the National Assembly, the Prime Minister's Office, the Presidential Palaces, the Interior Ministry, the Ba'ath Party Head Quarters, the Air Force and Army commands, and many other targets within and around Baghdad have all been devastated. It is also the case with some residential areas, where 'smart' bombs have failed to reach their targets, as well as with a number of strategic bridges.

The destruction of residential areas, hospitals, schools and manufacturing is much higher in towns and regions outside Baghdad, where they suffered not only from the Allied bombardment, but also from the looting and vandalism carried out by the rebels and later on from the confrontation between them and the governmental forces.

The human and social cost of the war. Even before the controversy over the degree of physical destruction erupted, a fiercer controversy ensued (and rightly) over the human cost, particularly to civilians. This cost took the form of direct casualties; death and injuries, displaced people and refugees in the southern and northern parts of the country, and others suffering indirectly in other cities and regions because of the refugees in their region. It is very difficult to arrive at a reasonably accurate figure for the dead, the wounded and the homeless, because one has to accommodate three sets of figures: one provided by the international agencies (UN, Red Crescent, etc.), whose role was very small in assessing damage in Iraq in comparison with Kuwait; another by the Iraqi sources, who have tended to exaggerate the civilian casualties while keeping the military casualties low; and a third by the Allied forces, who were keen on keeping not only the number of their casualties low, but also that of the Iraqis, especially the civilians, in an attempt to give the image of a 'just' war, and to avoid any division in public opinion and support. However, estimates of Iraqi dead range from 50,000 to 100,000, while 200 Allied soldiers were reported killed. At the height of the crisis Iran hosted 1,200,000 Kurdish refugees, while Turkey hosted a further 500,000 (Stanton, 1991)³⁵. There was a time when the mortality rate amongst the refugees was estimated at 600 a day (as reported by Medecins Sans Frontieres).

It has been claimed by Iraqi sources that hundreds of residential areas all over the country were bombed, either directly, or indirectly because of their close position to targeted buildings. Moreover, 20 hospitals, (ranging from 250-400 beds each) were damaged, as well as civil defence centres and civilian shelters. The offensive that outraged public opinion in the West was 'Al-Amiria' shelter, in which hundreds of people died, and the other site known to the author as the 'Al-Shab' shelter in Baghdad. Furthermore, health and educational systems and facilities were severely disrupted.

³⁵ Stanton, P. (1991) *Intervention following war - a case history: A promise to a Kurdish Child*, paper presented at the Third International York Workshop on Settlement Reconstruction Post-war, 22-24 July 1991, IoAAS, UK.

Beside casualties, destruction has been most widespread in the infrastructure and industry sectors. The following is an assessment of the damage revealed for the first time by the Iraqi authorities, and observed by the author during his visit to Iraq.

Electrical power sector: Within the first few days of the bombardment, the pre-war Iraqi electrical generating capacity of 8585 Mega Watts was reduced by 91%. Altogether 32 thermal, 45 gas, and 18 hydro-electric power generating plants were totally destroyed. In addition, a number of transmission sub-stations, high tension and mobile stations, as well as a considerable section of power transmission lines, were also damaged.

Although the initial cost for the reconstruction of power stations and other electricity services was put at US\$ 3 billion, the real cost is much higher because of the consequent damage caused to other sectors dependent on electricity, of which the most devastating were the cuts in water supplies, irrigation systems, sewage disposal as well as the disruption caused to hospitals, industries, traffic and residential areas.

Oil Sector: The economic embargo caused the termination of Iraqi crude oil exports and its byproducts, and subsequently the national income from that sector. Due to the bombardment, the sector suffered 100% damage to the oil wells, refineries, transport lines and storage. The largest of these refineries was 'Al-Dawra' near Baghdad. It remains very difficult to estimate the cost of the losses suffered by this sector.

Communication and Transport Sectors: These installations were targeted throughout the country; 50% of the pre-war communications capacity of telephones, telex, fax and satellite services were annihilated. Total destruction was inflicted on 14 telephone-exchanges with the capacity of 210,000 telephone lines, the biggest of which was the 'Al-Mamun' exchange, and the Office building of the Central Post, Telegraph and Telephone Administration, designed by Rifat Chadirji in 1971. Another 13 telephone-exchanges with a capacity of 140,000 lines were partially damaged. The two ground-satellite stations were totally ruined, as were the national and international microwave networks.

The damage to the railways included 50% of the railway network of 1,200 km, which was made inoperable; within the first few days 15 railway stations and 17 railway bridges were destroyed by bombing.

Other installations such as ports and civil airports came to a stand still, firstly because of the economic embargo and secondly, from the direct damage they

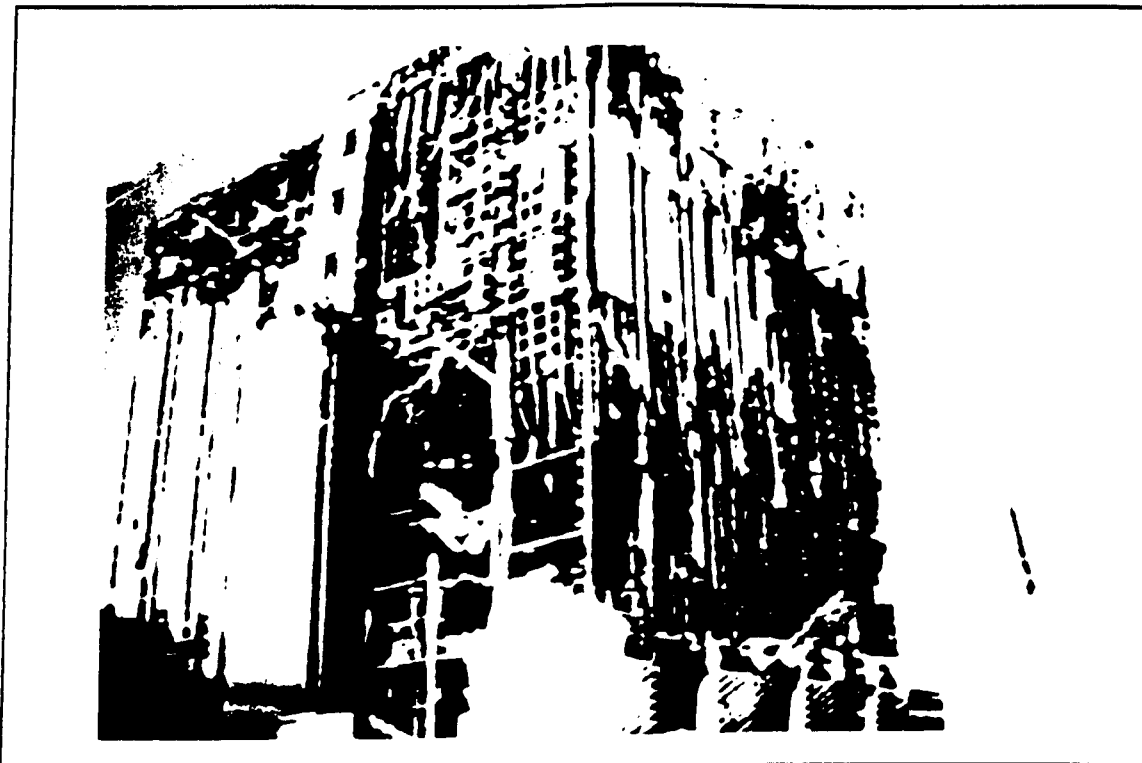


Figure [6-10] 'Al-Mamun' exchange, one of 14 telephone-exchanges bombed.
[Source: The author, 1991]

suffered when Baghdad and Basrah were attacked from the air. Saddam International Airport, in Baghdad, and the recently opened International Airport in Basrah, were damaged, while Al-Muthana National airport was damaged beyond repair. Also, 30 sea-port platforms were damaged and 30% of their equipment was lost. Moreover, a considerable number of ships, oil tankers and river boats were destroyed.

The bombing of 124 bridges paralysed land transport and its alternative routes during the war; including 78 steel or concrete permanent bridges, 26 Pontoon bridges, 18 railway bridges and two flood regulating bridges. Although most of these were in the southern part of Iraq, three of Baghdad's 9 bridges were bombed, the most significant of which were the Al-Moalaq (the suspension bridge) and the Al-Jumhuria bridges, connecting the busiest parts of the Iraqi capital. Leading to Al-Tahrir Square, which is considered the heart of Baghdad, Al-Jumhuria bridge was given priority for reconstruction. The preliminary estimates of the total losses in the transport and communication sector was put at US\$ 4 billion.

The Industrial Sector: beside the losses inflicted on both public and private manufacturing capacity due to the damage of life lines and infrastructure, 30% of the industrial sector's capacity was lost by direct bombing. The petro-chemical, phosphate, aluminium and cable industries were 100% damaged, cement 45%,

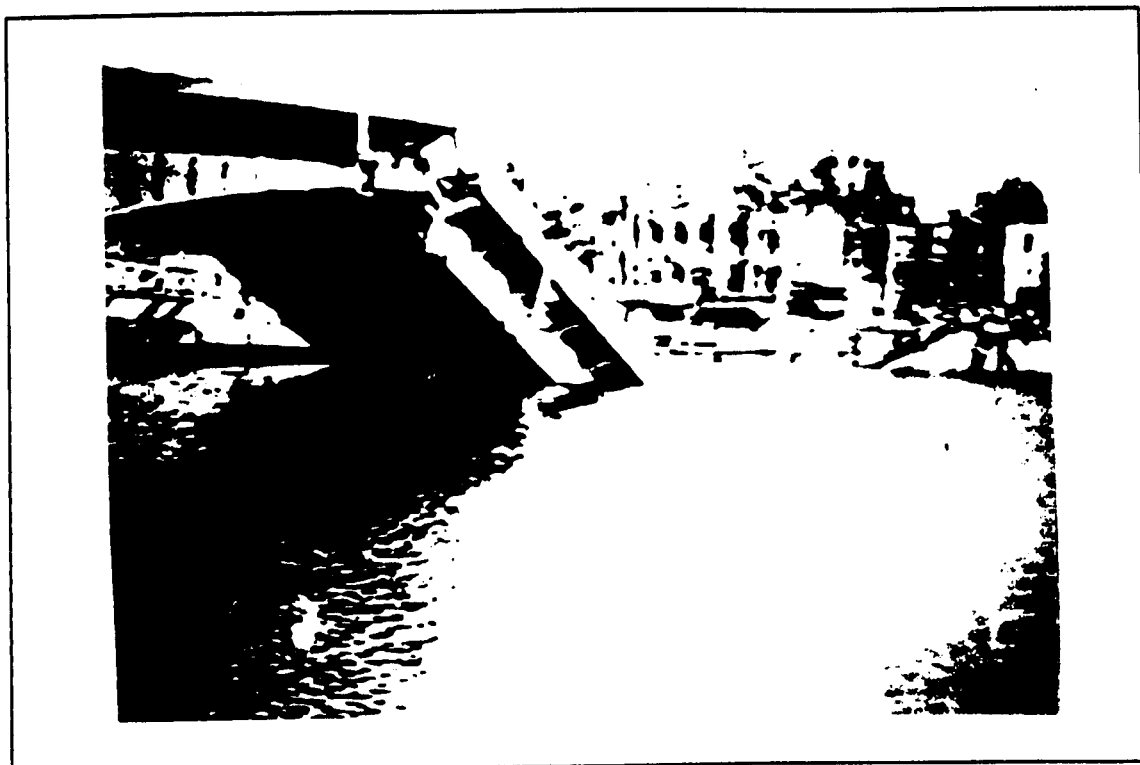


Figure [6-11] 'Al-Jumhuria' bridge, well known for being bombed on TV screens.
[Source: The author, 1991]

besides a number of food and textile industries. Until now no figure has been given for the loss in the industrial sector because of its complex interrelationship with other sectors. The construction sector, particularly needed after the war, had been already stretched to the maximum during the reconstruction effort following the earlier eight-year war with Iran, and was further incapacitated.

Cultural losses: Unsupported claims published in the West, stating that historical sites were used as 'antiquities shield', by placing radars and anti-aircraft installations and rocket launchers within the borders of these sites or nearby. Thus air attacks were conducted against some sites, especially Babylon. The exact nature of damage has not yet been disclosed. However, the Baghdad Museum, which is across the street from the Baghdad telecommunications centre, and close to the city's domestic airport (Al-Muthana) as well as near to the Presidential Palace, was slightly damaged³⁶. The author visited the Museum, where the librarian claimed that the museum authorities have removed small objects, records and the museum library to safekeeping, as they were expecting the telecommunication centre to be targeted. What they could not move were some massive artifacts such as the Assyrian lions

³⁶ The other three complexes were targeted and destroyed beyond repair.

that were brought from a palace in Sargon and a temple facade from 300 BC. Although all the antiquities that were difficult to remove were sand bagged, some have suffered damage.

Environmental losses: An interesting examination of the possible effects of the war on the geosystems of southern Iraq was presented in a paper by Drs. Koff and Chesnokova³⁷ at the *Third International York Workshop*. On the basis of interpretations of a number of Soviet and American cosmic photographs, the authors have determined that in Lower Mesopotamia and the Southern Desert of Iraq a range of genetic types of landscape were vulnerable. It was claimed that as a result of war activities in the Persian Gulf, sharp deteriorations in the environment occurred. A schematic classification of war impacts was presented, including those either due to direct destruction, such as military traffic tracks, trenches, bombing, etc. or due to 'intoxication'. The 'intoxication' was classified into physical contamination, such as radiation fields, thermal radiation, fires, electromagnetic, and chemical contamination resulting from fires, gas, explosives and outflows of oil and other toxic materials. Additionally, it was also suggested that the bombing of Iraq caused land movements and aggravated the possibility of earthquakes in the Southern States of the Soviet Union.

The analysis of the prerequisites of potential deterioration of landscapes shows that war activities can result in rather large-scale desertification, regional migration of contaminants, degradation of cultivated landscapes, with the consequent decrease in productivity, in flooding of depressions, regression of pastures, and contamination of waters. The lack of fuel supplies forced people to cut trees and use them for cooking and heating, thus causing an environmental loss that may never be replaced. Finally the disruption of the infrastructure, the cutting off of drinking water supplies and sewage disposal caused the spread of epidemics including typhoid, cholera and dysentery.

6.6.2. Planning for reconstruction.

During the war, on the 30 January 1991, a 'Reconstruction Supreme Committee' was established. This Committee consisted of key personnel representing all the service ministries. The Committee enjoyed a wide authority,

³⁷ Both from the USSR Academy of Sciences, Institute of Lithosphere, Moscow.

enabling it to take and implement quick decisions to handle emergencies, such as constructing alternative bridges, and so on.

Three weeks after the cease-fire the reconstruction process started by the announcement that the whole Cabinet was to form the new Reconstruction Government because of the scale of the task and the economic embargo. This was followed by assessment of the damage, in which each ministry surveyed its own sector, and at the same time estimated their own undamaged resources (material, human and technical). According to these assessments reconstruction plans were then defined. Priority was given to restoring essential public services and infrastructure, not only because they were the most damaged, but they also form the backbone of daily life and any reconstruction in terms of a return to normal life, must be subject to the revival of these services.

The short-term, emergency phase of reconstruction was delineated as being three months, starting from April 1991: the task during this period was to resupply the basic services: electricity, water, fuel and transport. However, the Iraqi Reconstruction Supreme Committee took an exceptional step outside the conventional reconstruction approach of emergency, recovery and actual reconstruction³⁸, when they announced that the emergency stage was to be followed by a re-evaluation of the 1990-95 Development Plan projects, in order for it to fit within the new reconstruction priorities. Each ministry would then provide a preliminary timetable and list of resources to fit its new 'balanced' development and reconstruction plan projects for 1991 and 1992.

Under the international trade embargo, the lack of material resources and imported technology made the task more difficult. However, it seemed a considerable part of what was planned for had been achieved during the first three months, basically, by depending totally on the use of local resources and capabilities; also by employing principles of motivation and competition between the different ministries. These principles, which had been used before in the reconstruction of Basrah and Fao (1989), and claimed to be positive, could also be very wasteful.

Power generating units allocated for emergencies, supplied part of the ordinary power, and were used for pumping drinking water, operating sewage systems and health services. Although the reconstruction plan aimed at restoring 50% of the

³⁸ The validity of this approach is currently under question since in some circumstances, it can lead to a waste of time and resources.

energy capacity by the end of 1991, 35% had already been restored. Restoring the rest of the capacity would be impossible under the current trade embargo, because of the need for new plant, equipment and spare parts.

Following the cease-fire, undamaged oil emergency reserves were used to provide fuel for basic use; this was accompanied by a quota-rationing system of fuel and petrol for the citizens. Still, fuel supplies were in short supply until May 1991, and by then, the restored part of Al-Dawra refinery managed to meet the local fuel requirements. It is hoped that by the end of 1991 the oil sector will be partly capable of being exported³⁹.

The reconstruction plan aims at restoring 50% of the national transport and communication sector by the end of 1991. However, according to Iraqi sources, 40% of the national telephone network, post and telex has already been restored.

Part of the Baghdad - Basrah railway line has been brought back into public service. Although the International Airport in Baghdad is said to be ready to operate, it does not, because of the blockade imposed on Iraq. Moreover, the plan aimed at repairing 67% of the damaged bridges during 1991, and the rest during 1992, so far, 26 bridges have been restored, or provided as temporary bridges.

Approximately 15 hospitals are under repair and in need of being reequipped (250-400 beds each), as are 8 telephone exchange buildings. Meanwhile 5 radio and television transmission stations have been completed.

Under the current circumstances Iraq has had to develop reconstruction policies that depend on maximising the use of locally available resources. In terms of labour, skills and organisation there seem to be few obstacles. The intention so far was to depend entirely on local architectural and engineering consultants. Nevertheless, the type of damage inflicted on the highly technical infrastructure and industry, made the task almost impossible without some imported technology and material.

Finally, the fact that it was a war aimed at the country's political and economic structure, with the kind of losses and consequences it brought about, meant that almost certainly reconstruction will be centralised, as in the case of Kuwait. Although centralised decision-making might be needed in order to develop effective policies, the author feels that the implementation of these policies should be decentralised. The local government should provide opportunities for the salvaging of local

³⁹ Today (January 1993) the Iraqi oil sector is fully capable of being exported, still under the international trade embargo Iraq is not allowed to export its oil. However, oil is being sold to Turkey for a very low price and exchanged with Jordan for food and medicine.

economies. Decentralisation could be one way to help this come about. Similar social and cultural mistakes were made in the reconstruction of Fao city in 1989; lessons must be learnt, the people's rights must be met from resources that belong to the whole nation and their needs are real and great. This time it is not sufficient to rebuild ghost towns in record time for propaganda purposes. A possible indication of some sort of decentralised decision-making may be seen in the recent dismantling of the Ministry of Local Government, where all regional planning and development decisions used to be taken.

6.7. ANALYSIS OF FINDINGS FROM THE RECONSTRUCTION CAMPAIGNS.

Based on the previous Sections, this one examines the findings of the field visits. It attempts to highlight some of the successes and failures of the reconstruction campaigns of Basrah and Fao. It also investigates if there has been a change in attitude towards reconstruction following the Allied Iraqi war (1991). In order to accomplish this, the *11 Underlying Principles for Reconstruction after War*, derived by participants at the Second York Workshop on Settlement Reconstruction, held in May 1989 (edited by Davis, 1989b) are used as a general framework to evaluate the Iraqi experience. It is also seen as an opportunity to review the Principles in order to develop our own reconstruction recommendations (Chapter 10).

The main outcome of the Second York Workshop on Settlement Reconstruction after War, held in York, 16-18 May 1989, has been the introduction of a set of 11 Principles directed to authorities responsible for the reconstruction of towns and cities devastated by war. The Principles embodied 63 Guidelines. A draft of these was produced by the participants including the author and a final version was edited by Dr. Ian Davis, Director of the Disaster Management Centre at Oxford Brookes University. This effort resulted from an attempt to fill a gap and to produce practical advice on the nature and the priorities of reconstruction after war.

Naturally, it was felt that because of the wide range of countries involved in war, and because of the different types of wars, some of these guidelines were bound to be less relevant to some situations. Thus, they were produced in the hope that "...officials will be cautious in the way they make use of this material, since local needs will always have to be assessed in accordance with their own unique characteristics". (Davis, 1989b:6).

The Guidelines had the following aims, (Davis, 1989b:7):

1. To provide a framework for the reconstruction planning process.

2. To stimulate a range of actions that go beyond the conventional wisdom, or the obvious immediate needs of damage clearance and new planning and building construction.
3. To encourage local officials to produce their own guidelines or recovery plan, that adapt these issues in the light of prevailing conditions in a given area.

The prime *focus* of these Principles was on the physical planning and the rebuilding of urban settlements devastated by war in developing countries. The same principle is the focus of this Chapter, as it deals with the reconstruction of the cities of Basrah and Fao. Thus, this Section will start by introducing the 11 Principles and then examining them in the light of the Iraqi experience. It concludes with a number of observations of the success or other wise of the Iraqi reconstruction effort and on the content of the Principles. The 11 Principles are:

1. It is vital to maximise locally available resources.
2. Effective reconstruction will only occur when it is comprehensive in its scope.
3. The timing of actions is critical.
4. Do not wait for political and economic reform.
5. There are limited opportunities to reform the design of buildings and settlement patterns in reconstruction.
6. It is vital to preserve the cultural heritage in reconstruction.
7. It is essential to introduce safety measures in reconstruction.
8. It may be possible to adapt sections of the war economy to reconstruction.
9. The needs of all handicapped people must be catered for.
10. Reconstruction should be regarded as therapy.
11. Knowledge needs to be documented and disseminated.

We shall now attempt to relate these Principles to the specific context of the Iraqi reconstruction effort. (It is important that the reader should have read the full text of the 11 Principles, see Appendix 1).

Principle 1: *It is vital to maximise locally available resources.*

Based on the assumption that for an exhausted post-war economy to recover and to reduce the costs of imported goods and services, the country should maximise the use of locally available resources. These resources include skilled labour; building materials; institutions and leadership.

However, reading through the Guidelines one becomes confused over a number of issues. Firstly, the context in which the words 'local resources' are employed. Do they mean immediate local resources? or regional? or even national 'local' resources? Secondly, does the principle of 'maximising', imply compulsory exploitation? Thirdly, *the relationship between the scale of war and that of reconstruction*, indicates that "Normally the State wages war, but the affected communities are often left to recover

and in some instances rebuild on their own. Therefore the character and scale of war needs to be met with a matching character and scale of reconstruction". (Davis, 1989b:11). Although this recommendation is generally valid, in the sense that it emphasises the responsibility of the State, it allows officials to assume that they have to rebuild in the same manner in which they conducted the war, i.e. from the centre.

In what is normally a strong centralised planning system, such as in Iraq, *local* is certainly understood as national, and such widely cast Guideline could be interpreted as an invitation for a full-scale central government reconstruction. In our review of the reconstruction of Fao and Basrah, we found that one of the aims of the reconstruction campaign was to emphasise the strength of the country by depending on local skills and resources. Nevertheless, the employment of national 'local' resources organised from the Centre did not always allow local i.e. district economies to recover through the participation of the local people.

This leads us to the other important issue discussed within this Principle: the issue of *Centralisation, top-down management and the local community involvement*.

Where it argues that "Whilst the centre will have a key role to fulfil in reconstruction planning, it is important to note the dangers of over-centralisation of power and decision-making" (Davis, 1989b:10). By now it is obvious that Basrah and Fao are true cases of reconstruction by *Central Government*. Even from the beginning, four military divisions were used to clear the city of rubble, a step which can probably be considered as exceptional in its thoroughness.⁴⁰ In addition, reconstruction plans were drawn up in Baghdad. Similarly, when it came to implementation, skills, resources and materials were brought in from the centre and Ministries executed the work, using imported labour (mostly Egyptians).

In Iraq, faced with the problem of rebuilding their shattered cities, planners have a chance to learn from other nations' experiences. It is evident that no matter how well intentioned the plan, as long as it is exclusively the 'authorised' version, there will be clashes between those who believe in it and the masses who know little or nothing about it. Consequently, the plan and its execution will come into conflict with democracy. In our view, there are many lessons to be learned from the momentous events taking place in the world outside. In Gorbachov's USSR, with its pursuit of 'glasnost' and 'perestroika', freedom and restructuring, President Gorbachov has admitted that to build without the active participation of the people is bad economics.

⁴⁰ Warsaw may be another exception.

Today, Mr Yuri Murzin, Chief of the Architectural Department at the Central Scientific Research and Design Institute in Moscow says "... for decades we have been ignoring people's opinion and forcing our ideal dreams on them, and for decades we have been faced with continuous failures"⁴¹.

Thus, the issue of *public participation* becomes very critical. Within this Principle, public participation is recommended as a 'tool' to maximise local resources. However, in the case of Basrah and Fao there has been no participation of the local people in the rebuilding process, nor in the decision-making. The professional attitude has been "...we are dealing only with empty sites and rubble". (Adel Said, city planner). A great emphasis in the Principle is placed upon the role of women, identified as "...a decisive factor in the mobilisation of local resources for reconstruction". (Davis, 1989b:13). It is true that women traditionally played an important role in the provision and maintenance of housing in many countries, and that their role would be further emphasised due to the war. Still, citing the role of women in construction as a general guideline undermines a number of local cultures, which does not see the role of women through the same perspective as that of the Guidelines.

Another aspect of maximising local resources in reconstruction concerns *building materials, skills and techniques*, which concerns the level of skills, as well as what type of technology, that should be used in reconstruction. Accordingly, it is a relief to discover that prefabrication systems were not widely used in Al-Fao (they were only used in the Festival Square). However, some housing apartment blocks in Basrah were constructed with pre-cast concrete panel systems. Are they repeating the mistakes of the Fifties, Sixties and Seventies?. A careful look at previous similar projects built in Basrah makes it quite clear that such building materials and techniques are not appropriate either to the local environment or to the social and cultural values of its people. Nevertheless, in the reconstruction of Fao as a symbol of the government's glory advanced and 'impressive' construction technologies were used, such as inflatable structures (Adnan Mosque).

Another important factor that should be considered, especially with such rapid reconstruction that must have affected building quality, is the repair and maintenance factor. It is strongly believed that by the time Al-Fao becomes an inhabited city, all of the previously mentioned buildings will start to need maintenance. Actually, some

⁴¹ From a personal discussion with the author during a meeting in Sofia, November 1989.

signs of deterioration are visible now. We should be aware of the fact that, reconstruction and repair work in many developing, war devastated countries occupies a considerable space in their development plans. Yet at the same time their reconstruction is challenged by additional factors, including continuous population growth, political instability, internal strife, natural disasters, along with the continuous challenge to improve living and working conditions.

Principle 2: *Effective reconstruction will only occur when it is comprehensive in its scope.*

"The planning process will need to be wide-ranging, covering such issues as: Immediate post-war planning activities; the assessment of needs and damage; the planning process; private and public roles in reconstruction; implementation of reconstruction and long-term planning considerations". (Davis, 1989b:14). The Iraqi experience was far from being comprehensive in terms of planning and implementation. What has so far been achieved is more a kin to *reconstruction on a project basis*. Following the war with Iran there has been no *public emergency action programme* to return settlements to normality as quickly as possible.

This principle calls for a comprehensive assessment of needs and damage, based on a full appraisal of the affected population and a survey of the physical damage sustained in buildings and infrastructure, prior to the planning and implementation of any reconstruction programme. Following the war, each Ministry was responsible for the assessment of damage inflicted on its own sector. Thus, this exercise was limited to publicly-owned buildings, infrastructure and industries. Private properties and residential areas were not covered in the exercise. Interesting enough, the same approach was again implemented following the 1991 war.

In terms of *planning process* this principle indicates that there has to be an *overall and flexible* planning approach, which can make use of *military* as well as civilian skills and expertise. Certainly, the planning for Fao was far from being integral, in fact it was a publicity hype in support of the Government that took no consideration of the social and economic future of the city. To make it even easier to implement, issues of land ownership were eliminated by the government taking over the whole city.

However, *Long Term Planning Considerations*, were given more thought during the preparation for the reconstruction of Basrah. Commenting on the reconstruction

planning in Iraq in general, Dr. Talal Muhammad⁴² said that, "You can not say there is a certain policy to follow, but we have thought of different policies for different areas in Iraq according to the different economic, technical and security considerations". He also implied that they are at the stage of looking for a wide ranging framework of policies and plans which will be followed by more detailed and specialised studies.

Dr. Muhammad's claim was supported by Mozafar Al-Yamori⁴³, when he said that, "...a decision was taken in August 1988 to limit the size of Basrah to the existing city's boundary and only to develop new zones within this as and when needed". This decision resulted from a study conducted by the Urban and Regional Planning Team at the Ministry of Local Government, 'The Basic Design of Basrah the City, 1985', as part of the process of reconsidering the original development plan already done by Llewelyn-Davies Planning Office (1973); which ensured that the study was updated in harmony with the emerging political and economic situation. This is an important point which is often forgotten: the conflict interrupted and severely retarded pre-war development plans and projects. Thus it is essential for reconstruction to "... pick up the pieces of such discarded plans and may incorporate those which remain relevant into reconstruction plans". (Davis, 1989b:21).

The decentralisation policy in terms of the built settlements was also emphasised by the Mayor of Basrah, Mr. Abdel-Wahed Al-Qarnawi:

"A general decentralisation policy is to be pursued within the coming five years, a new satellite town (Saddam'iat al-Basrah) is to be built 90km north-west of Basrah city. Another four satellite settlements are to be constructed around the Al-Fao city, each of 1000 housing units⁴⁴".

Hamid Turki spoke about the priority of rebuilding the industrial sector. While bearing in mind the pursuit of a policy to decentralise in the southern region, the plan will emphasise the role of existing cities such as Al-Fao, Qurna and Zubair and create new secure cities, such as Saddam'iat Al-Basrah to the north-west of Basrah City.

⁴² Chairman of the Centre of Advanced Urban and Regional Planning Studies, at the University of Baghdad.

⁴³ A Senior planner at the Ministry of Local Government, Baghdad. He proposed the structural plan of the new city of Al-Fao, which was selected by the Al-Fao Reconstruction Committee to be carried out in the near future.

⁴⁴ This was also mentioned in a statement given by Mr Adnan Salman, The Minister of Local Government, on 20 October 1988, to AL-Jomhoria Iraqi newspaper.

Finally, we ought to emphasise the importance of Shatt-al-Basrah (Shatt-al-Basrah is the new canal, in place of Shatt-al-Arab, to connect the Euphrates river to the Arab Gulf, just next to the Kuwaiti border. It will also contribute to the doubtful benefit of reclaiming the Marsh lands).

The author believes that the Iraqis had the right priorities, for *implementation* of reconstruction for Basrah: rubble-clearing was followed by replanning and rebuilding the infrastructure; streets, bridges, water supply, electricity, net-phones and opening and clearing rivers. This campaign lasted for 4 months and encouraged the city's inhabitants to return, rebuild or repair their houses and restart their pre war life. However, Fao was different, perhaps because of the scale of devastation and the previously mentioned moral, economic and political reasons.

Finally, the use of the military to reduce the time to clear the city, helped to deny the participation of the people. A factor that has often been said to be of some importance to the recovery of morale.

Principle 3: *The timing of actions is critical.*

This principle clearly states that "There are critical timing considerations in reconstruction that relate to the priority or sequence of required actions". (Davis, 1989b:22). When to reconstruct? In the Iraqi case reconstruction started, it seems only, after the cease fire. There seems to have been no planning for reconstruction during the war. In January 1989, the author met Mr. Adel Said, Chief Architect at the Department of Local and Regional Planning in the Ministry of Local Government, Baghdad, who claimed, "You can not say that we are pursuing a certain time-planned policy of reconstruction at the national or regional level, but we do deal with each case separately according to the scale of damage. That is because it was very difficult to think or operate reconstruction during the war, especially when the site is indefensible, like the city of Halabja, ... since the war did not come to an end, we are living only a cease-fire and as long as there is no peace agreement, we can not start rebuilding, at least not in the border sites". His claim represented the attitude at that time (January 1989), which dramatically changed since. For political reasons, when no lasting peace was forthcoming, the plans for Fao were made ready in 45 days and the reconstruction took 114 days. This may come to be seen as a mistaken intervention. Such haste resulted in the following negative results:

1. Construction and maintenance operations else where in Iraq were frozen to allow the construction power of the Ministries of Local Government, Housing

and Construction, Irrigation and Agriculture, Transport and Communication to meet the dead line.

2. Very high labour costs, caused by competition between the different Ministries to attract man power, particularly from abroad.
3. For the same reasons building materials, plant and equipment were at a premium.
4. Confusion between the different authorities caused a huge waste of building materials.
5. Consequently, it was very difficult to control the supply and storage of these materials.
6. Ministries were obliged to provide extra equipment and vehicles, to replace broken ones, because there was no time to repair them. This doubled the cost along with the need to use expensive and advanced building materials and techniques, instead of conventional ones, in order to finish the work on time.

This Principle recommends relating the timing of reconstruction to when people have returned to their locality. It also recommends offering incentives for families to return. In the case of Basrah this is what actually happened. The campaign began six months after the cease-fire, which allowed time for people to return.

The last issue explored in this principle concerned phases of shelter reconstruction (tents or temporary shelter, prefabrication and permanent) and rapid reconstruction. In both Basrah and Fao tents and prefabricated houses were avoided. Limited public housing was provided during and after the war, mostly for government officials and military officers.

However, during the 1991 war, thinking about reconstruction started before the bombardment (16 January 1991). Mitigating measures were taken including the removal of equipment from telephone exchanges and power stations. This time the Supreme Committee for Reconstruction was re-established *during* the war. Damage assessments and reconstruction priorities were established immediately after the cease-fire.

Principle 4: *Do not wait for political and economic reforms.*

This principle can be summarised in the following sentences of Otto Koewnigsberger: "Waiting for - or linking resettlement with major economic or political reforms, such as legislative changes in land tenure, taxation or local democracy means losing the impetus for change which exists in the immediate post-disaster period". This principle is structured in a very confusing way, in that it reviews the different areas that need adjustment before starting reconstruction, while currently recommending not to wait for change to happen. It considers legislation and continues to include expropriation; compensation; agencies to manage

reconstruction; efficiency versus equity; cash resources, and ends up discussing economic factors.

Apparently, the Iraqi Government agreed with this principle, in the sense that it did not wait for change to occur, neither did it encourage any attempt to develop post-war legislation, administration, etc. In fact, it is obvious that they do not expect change to happen. Whatever legislation was employed before the war will no doubt continue to be in use after the war.

Nevertheless, some measures regarding compensation were approved. It was reported by the 'Guardian' (August 15, 1989) that in Basrah, "Compensation of about 1,000 Dinar per family [\$2,800 at the official rate] is being paid to cover the cost of repairing houses, replacing furniture and dead animals". In the same article it was claimed that "... thousands of poor people were given free parcels of land on which to build homes".

Principle 5: *There are limited opportunities to reform the design of buildings and settlement patterns in reconstruction.*

Unique opportunities for reform will arise due to war damage, nevertheless the central planners should be cautious about 1) rushing into settlement relocation and 2) causing utopian expectations.

In terms of settlement relocation, the Iraqis luckily decided to rebuild Fao on the same site, more as a political symbol of victory than for social consideration. In other cases such as Halabja in the north of Iraq, decision was taken to relocate the city to a more secure site. Nevertheless, the inhabitants of Fao had to leave their homes for more than 4 years, and then return to a city that no longer belonged to them, reflects the same insensitive social and cultural aspects of relocation policies. (More about this issue will be explored when dealing with the Yemeni case-study in Chapter 7). Some of these issues have to do with social discontinuity; loss of existing investments in settlements and land ownership.

The Iraqi government's heavy handed approach to urban reconstruction of Fao may have avoided land speculation. It unfortunately reinforced centralised planning and denied the people any role.

The reconstruction of Basrah and Fao raises the issue of pathological monumentalism in architecture and town planning. In Basrah, in a green park on the bank of the corniche facing the Shatt-al-Arab waterway, stands 99 lifelike bronze sculptures on stone platforms, of officers and commanders who fell in the battles of



Figure [6-12] A view of the lifelike bronze sculptures pointing to Iran.
 [Source: The author, 1989]

Basrah (49 platforms on land and 50 in water). "This was a priority project in the frenzied post-war rush to rebuild virtually from scratch the pulverised cities of Basrah and Fao. Made from real family snapshots by a collective of Iraqi sculptors, they depict those heroes in a variety of forms of dress, in combat gear or without. Only one thing is common to all: every man's gaze is sternly fixed on the Iranian shore across the Shatt, and each has an arm accusingly stretched out pointing in the same direction". (Al-Khalil, 1991:29).

Obviously, with the rebuilding of Fao, Iraq followed in the steps of some other so called Socialist countries; planning by decree, assumed needs and resources and denial of the participation of the users. This strategy failed in Europe as it will surely fail in Iraq.

Principle 6: *It is vital to preserve the cultural heritage in reconstruction.*

This principle argues that in order to "...re-establish the community's identity and provide cultural continuity, it is imperative to preserve or rebuild selected damaged or destroyed cultural landmarks". (Davis, 1989b:28). Again, this principle is argued the point of view of the community, while the government's concern is only with economic and political aspects of conservation, often only with physical

structures. Therefore, one feels the need to balance this with cultural aspects that go beyond built structures.

"The conservation of the traditional areas is a very important issue, the government is giving it its careful attention. But at the same time it proved to be very expensive and without any economical yield". With these words Abdel-Wahed Al-Qamawi, the Mayor of Basrah, in answer to the author's question about the priority of conservation. As for the conservation policies that would be applied during the reconstruction phase, Namir Zenal⁴⁵ said that:

"The government is no longer ready to spend the amount of money that it used to do in the past. Conservation of architectural heritage is still considered a political commitment, but the post-war economic situation does not allow running large scale conservation policies. Nevertheless, there is a strong desire to reflect the Islamic and Arabic identity in the newly designed areas".

The fact that the traditional areas of Basrah have suffered a great devastation due to the war, did not trigger any governmental interest in their conservation. On the contrary, it has been seen as an opportunity for reforming the traditional areas and 'modernising' them.

The traditional areas are mainly within the Central Corridor, which includes the Al-Ashar area on Shatt-al-Arab side and Old Basrah, especially on both sides of Al-Ashar water way. Ibad Sami⁴⁶ emphasised what was mentioned in the Llewelyn-Davies Report (1973):

"The blight in Basrah started long ago before the war, because of different factors. It was characterised by the deterioration of the physical conditions, obsolescence, substandard buildings, high incidence of vacancy and stagnation of economic activity. All these factors impair values and prevent the normal development of property".

In 1978 the Ministry of Tourism began restoring five houses and this process is still not finished. Another house on the south bank of Al-Ashar Creek was restored in 1972 and is used as a museum. At that time the houses needed minor repairs.

⁴⁵ Chairman of the Regional and Urban Planning Department, in the Ministry of Local Government, Baghdad.

⁴⁶ Resident architect at the conservation site in Old Basrah, Ministry of Culture and Information.

In the Al-Ashar traditional area at the river side, according to Hamid Turki⁴⁷, a new development scheme will begin in the near future. The whole area is now government property and is badly damaged in some places. The government has already decided to conserve 20 traditional structures out of hundreds and to replace the rest with new modern structures, in order to enhance the value of the land in that location, since Al-Ashar is considered the best commercial spot in Basrah City.

On the other hand, with more than 6,000 Iraqi sites listed in official records of antiquities, Iraq has always given special attention to the archaeological sites. The most recent example has been the controversial reconstruction of the ancient site of Babylon, which was carried out during the war with Iran and cost the Iraqi budget millions of dollars.

The second part of this argument is concerned with preserving monuments and remains of buildings as a memorial of war. This concept was implemented in Fao, where the only surviving structure (a mosque) was preserved in its state of damage, surrounded by a round-about. It is important to make it clear that the aim should not be to preserve buildings as dead memorials, but rather to have a 'culturally oriented' approach for reconstruction. In which, whatever survived of buildings with cultural value, could be rebuilt to the previous appearance if necessary, and even used as a source of inspiration for the newly designed settlement.

Principle 7: *It is essential to introduce safety measures in reconstruction.*

When considering this principle, one can sense the influence which the studies of natural disasters have had on the development of these Principles. This is not to say that this principle is not relevant. It is important to note that mitigation in the case of natural disasters is part of a cycle of events, which is not necessarily, always, the case in war. It seems important to distinguish mitigation during war from that after war. Normally, following war only few countries would have reason to continue feeling threatened. These countries, such as Iraq, Jordan, Lebanon, and Israel would continue to provide for and consider the threat of a future war in their settlement planning and housing design.

The author, accompanied by Dr. Fu'ad Al-Mu'amin, visited Baghdad in 1989 and saw the nuclear shelter (above the ground) at the Technical University. Dr. Fu'ad Al-Mu'amin claimed that it can provide a safe shelter for 40% of the students

⁴⁷ The Head of the Planning Division at the Governorate of Basrah.

and staff in case of nuclear attack. He also mentioned that there is one in every University or College in Baghdad. Two years later, a similar shelter (Al-Amiria) was destroyed during the American bombardment of Baghdad in January 1991, with a specially designed bomb. This experience reinforces the view that "...apart from some elements of dispersal planning and the overall location of settlements in particularly vulnerable border situations, there is not a great deal that can be done to plan a city against attack from modern weapon systems". (Zargar, 1989).

In Basrah, underground shelters were provided for the public in the main open areas in Old Basrah Market and in Suq Al-Ashar. Massive concrete barriers were placed in the streets and around the main public places during the war. Basrah was surrounded with very strong fortifications as well as an advanced anti-aircraft missile net. All of these measures were provided during the war. Following the end of the war, Mr. Al-Qamawi claimed:

"Some housing projects on the way to the new airport of Basrah, were constructed with individual air-raid shelters, as well as some community underground shelters part of which were designed as nuclear shelters".

While in Fao mitigation was not an issue at all, despite the fact that Fao is located in one of the most threatened zones. That may be because it was never meant to be inhabited! This principle also calls for the incorporation of safety measures against natural hazards and fire.

In short, it seems more sensible to invest in non structural safety measures: civil defence planning, social preparedness and to try and reduce social and cultural vulnerability (in the case of civil war) as well as economic and political ones.

Principle 8: *It may be possible to adapt sections of the war economy to reconstruction.*

It is argued that the technology as well as the production capability of the 'war economy' can be adapted into one that could produce essential building or infrastructure components needed in reconstruction. Two direct benefits can be achieved in such a case: 1) badly needed building materials and components and; 2) avoiding unemployment. This is of course, if the end of the war meant the closure of the military industry. To our mind, this Principle is too idealistic. For developing countries such as Iraq and Iran, who have invested so much in their military industry during the war, it is very difficult to suddenly transfer their industry. What is more likely to happen is that, such countries will follow the lead of the developed nations

and expand their industries to be able to export their products to the rest of the Third World. In fact, this has been the Iraqi strategy since the end of its war with Iran. Iraq held its First International Arms Fair in October 1989, where it announced its production capability and identified its marketing opportunities. Iraqi officials argue that investing in arms industry although in the short-term diverts what would normally have been available for reconstruction to defence, would generate in the long run hard currency that is badly needed as well as regional political influence.

Nevertheless, and as we explored in the previous sections the Iraqi Ministry of Industry and Military Industrialization played an essential role in the reconstruction campaigns of Basrah and Fao, where it supplied electricity generating units, medium and high voltage networks and street lighting networks in a rather efficient way.

However, it is important to mention that following the Iraqi retreat from Kuwait in February 1991, and its acceptance of the United Nations resolutions, the Security Council refused to allow Iraq to adapt its military manufacturing capabilities to civilian use. Furthermore, it insisted that all factories have to be demolished, a process that is still going on until today (July 1992).

Principle 9: *The needs for handicapped people must be catered for.*

This principle calls for special attention during rebuilding to satisfy the specific needs of those who have become mentally or physically disabled due to the war, and also the need for rehabilitation programmes that eventually would allow the disabled people to function as normally as the disability may allow. This principle is highly acknowledged in Iraq, partly because most of the visibly disabled are ex-service men, and caring for the disabled is seen as a political commitment towards those who defended the nation. It has been claimed that during 1989-1990, 25 Technical Training Institutions have been altered to make them accessible for the disabled (Ghazala, 1989)⁴⁸. Still, more effort is needed in providing care, treatment and training for the disabled as well as working opportunities. Additional facilities must also accommodate those suffering from post-war psychological trauma.

Principle 10: *Reconstruction should be regarded as therapy.*

This principle illustrates that "It is vital to recognise the therapeutic need to closely involve war survivors in rebuilding activities wherever this is possible. They

⁴⁸ Physical disability is the most common followed by hearing disability.

should be regarded as active participants in the planning and implementation of reconstruction rather than being mere spectators of other's actions". (Davis, 1989b:33). This issue relates directly to the issue of 'public participation', which has been discussed as part of *Principle 1*, and will be explored in more detail in Chapter 9 of this dissertation. However, it became evident that the authorities and the planners (in the case of both Basrah and Fao) were not aware of the role that participation can play in the therapeutic readjustment of the affected communities. Even if they were aware, the high speed in which they were required to reconstruct made it impossible to involve the people in any degree.

To support this Principle, the Guidelines quote George Atkinson to have said "Too often it happens, especially in poorer countries, that large numbers of able-bodied men stand idle, living on relief, while outsiders get busy on reconstruction. Not only is such a happening demoralising to the able-bodied, but it wastes much needed resources". (in Davis, 1989b:33).

Principle 11: *Knowledge needs to be documented and disseminated.*

This principle calls for action in three areas: 1) Education, training and public awareness. 2) Evaluation of reconstruction and dissemination of knowledge. 3) The documentation of survival and coping abilities.

In terms of *education, training and public awareness* at the different issues of post-war reconstruction, Iraq has done very little and reconstruction has always been a predominantly governmental concern; an exclusive issue for the government's officials and professionals. There appears to be little or no public knowledge about the research into post-war reconstruction. There is no published literature about post-war reconstruction plans. The impression given is that the government's attitude to research into reconstruction is to consider that it is private. The author believes that more research should be done on developing manpower resources, building materials supplies and techniques, private sector investment and the general refurbishment of the built environment, due to the trauma of the war and its economic, social and demographic consequences.

Even in institutions of higher education, the fact that there has been a number of wars and urgent needs for reconstruction has hardly affected the education and training programmes offered. In 1989, Dr. Al-Bayati⁴⁹ claimed that from the five

⁴⁹ Professor at the Department of Architecture at the University of Baghdad.

centres of post-graduate planning studies, in Iraq, there is not one student who is involved in the subject of post-war reconstruction. This failure is mainly due to the lack of encouragement as well as lack of information. The author asked Ms. Nasreen Ghazala, an architect, from the Council of Technical Institutes, Ministry of Higher Education & Scientific Research, Baghdad, about the role of the architectural and planning students, both under-graduate and post-graduate, in the process of reconstruction⁵⁰. She claimed that:

"We have enough experienced planners, to conduct the reconstruction process, thus there is no need to bother the architectural students with the problems and constraints of post-war reconstruction".

Obviously, there are a lot of obstacles facing any researcher in this field. The most important of which, after lack of encouragement, is the lack of information due to governmental secrecy concerning anything that has to do with the subject. As it is illustrated, during the three field visits to Iraq, it was very difficult to obtain any maps. In order to get them, one has to address a request to the Military Survey Unit and this procedure will take at least three weeks, but they are unlikely to agree to give away maps or aerial views because of security. It is almost as if the government has something to hide; that decisions about reconstruction like those about the war, are only the province of officials under orders from their political masters. More open encouragement and support should be given to the young researchers, because the first step in solving any problem is to admit its existence and then search for a solution.

Iran, contrary to the Iraqi attitude, has published a vast amount of information and data that has enabled its researchers to proceed with their studies and to develop the policies and programmes of reconstruction, concerned with physical, social and economic issues. Having said that, a change can be detected in the Iraqi Government's attitude following the 1991 war, when it announced its agreement on the establishment of a Post-war Reconstruction Study Centre at the University of

⁵⁰ This question was addressed to her at the Second York Workshop, on Settlement Reconstruction after War, 16-18 May 1989. At the Institute of Advanced Architectural Studies, University of York.

Baghdad, which will undertake research and documentation on the subject. (Al-Zubaidi, 1991)⁵¹. It is still to be seen whether this is a 'genuine' approach.

Evaluation of reconstruction and dissemination of knowledge has recently been taken seriously following the reconstruction campaigns of Basrah and Fao. The evaluation studies that have been carried out and announced during the First International Symposium catered only for efficiency as it is typically understood by a central government, in terms of figures and quantities, rather than qualities and people's reaction to the reconstructed environment. The same symposium has been seen as a tool to disseminate the Iraqi experience as evaluated by the Iraqi officials. Nevertheless, these evaluations provided a number of publications by the Ministry of Culture and Information the document the reconstruction process. (see bibliography). However, nothing has been done on the documentation of damage, and on research.

Finally, in relation to the last action area of this Principle (i.e. documentation of survival and coping abilities), it is very difficult to imagine the government (any government) giving a priority, whatsoever to the such recording. No matter how valuable the insight on the way individuals and communities coped or survived the war, it seems to be an area of pure academic interest and anthropological excitement. In fact, the author wonders whether this Guideline should be omitted from the Principle.

6.8. SUMMARY AND CONCLUSION.

In this Chapter we have reviewed the scale and type of damage suffered by the cities of Basrah and Fao during the Iraq-Iran war (1980-1988) and by Baghdad during the Allied bombardment in January/February 1991. This was followed by an examination of the different reconstruction policies and processes. We concluded by an evaluation of the Iraqi reconstruction experience, using the Reconstruction Principles prepared by participants at the Second York Workshop as a reference. At the same time this Chapter was seen as an opportunity to review the Principles themselves. The conclusions from this Chapter will be grouped under two headings.

- a. *Observations concerning Iraqi centralised reconstruction; and*
- b. *Observations concerning the formate and the content of the Guidelines.*

⁵¹ In a letter addressed to the author, 29 November 1991. Mr Al-Zubaidi is the General Director of the IDRISI Centre for Engineering Consultancy in Baghdad.

6.8.1. Observations concerning post-war reconstruction in Iraq.

- i. The absence of a *national reconstruction strategy* following the Iran-Iraq war was the main handicap for the reconstruction effort, resulting in limited reconstruction campaigns being carried out in two or three cities, mostly serving political aims.
- ii. The closest the Government has been to establish a national strategy was after the 1991 Allied bombardment, in which:
 - Power was given to a Supreme Committee to take and implement urgent decisions needed to remove bottle necks on a national scale.
 - An attempt was made to readjust pre-war development (reconstruction) policies, rather than drawing new ones.
 - National damage assessment was carried out in which each ministry surveyed its own sector, and at the same time estimated their own undamaged resources.
 - Action priorities were drawn.
- iii. The Iraqi case study highlighted the extent to which reconstruction after war can be constrained by international alliances and relations as well as by the continuation of war.
- iv. This case study showed how reconstruction can be used politically and how communities can be manipulated. Reconstruction was far from being comprehensive to tackle social, economic issues. Instead it was purely physical and symbolic.
- v. The urgent need for an internationally respected philosophy of reconstruction is one of the main conclusions to come out of our study of reconstruction in Iraq. Such philosophy should define the State's responsibility and the rights of the people.
- vi. The reconstruction campaigns of Basrah and Fao did not have any realistic appreciation of the dynamics of reconstruction. Plans were drawn up in Baghdad, they lacked flexibility and did not allow for feedback.
- vii. The result was total alienation of the local population, their real needs and ambitions were never understood.
- Viii. During eight years of war, thinking of and planning for reconstruction was discouraged, mainly because the government did not want to admit damage and destruction.
 - The issues of war-damage and reconstruction were, and probably still are considered highly political and no doubt controversial and can only be addressed and discussed by Iraqi officials.
 - Consequently missing the chance of involving the public in discussions over the form and priorities of reconstruction and of having ready plans

for implementation following the cease fire, thus delaying the return of the displaced people.

- ix. In Fao no attempt was made to achieve a balance, between retaining some of the cities features and modernising it. The city was totally cleared out by the army; people were not allowed to salvage their belongings, and a totally new, unrecognisable city was built.
- x. The rural settlements surrounding the cities of Basrah and Fao were ignored in reconstruction, an attitude that did not appreciate the fragile link between rural and urban centres.
- xi. The rebuilding of Basrah and Fao is an extreme example of reconstruction by central government. This approach has been basically a reflection of the pre-war planning pattern further reinforced by eight of war and military rule.
- xii. The organisational pattern of the planning and implementation machinery followed closely what has been identified in Chapter 3 as Model 5. However, in this case planning decisions were made by the Ministry of Local Government. The task of implementation was shared between different ministries. Although not establishing a specialised ministry for reconstruction, seemed to be a sensible decision, the Iraqi experience lacked co-ordination.
- xiii. However, the response following the 1991 war was totally different, partly because the Ministry of Local Government was bombed and all the records were lost. Although a Reconstruction Supreme Committee was established, the whole Cabinet was announced as a Reconstruction Government and each ministry was ordered to plan and implement its own reconstruction programmes.
- xiv. The 'local' construction industry was not given the chance to develop itself due to ministries stepping in to implement the reconstruction plans.
- xv. Following its war with Iran, Iraq set aside hundreds of millions of dollars for reconstruction that were readily available. This meant that importing machinery, labour and building materials was not an obstacle to achieve reconstruction in 90 days, and we saw the result of that: wastage, top-down approaches, etc. While following the allied bombing in 1991, the lack of financial resources and the trade embargo meant that the Iraqis had to depend totally on their local labour and building materials, thus debris were carefully cleared and recycled.
- xvi. The Iraqi experience was characterised for its overplayed compensations. At the very beginning of the war compensation was given according to the scale of damage, especially in important urban centres such as Baghdad and Basrah. As the war spread and the damage extended it became more and more difficult to handle such system of compensation, thus a standard payment was made, and not to all families.
 - This method proved to have its own shortcomings due to inflation and lack of building materials. Very few people invested their money in reconstruction.

- The provision of land in rural areas proved to be the most successful way of compensation.

6.8.2. Observations on the Reconstruction Principles.

In this Chapter we have commented on the content of each Principle separately highlighting its value and its shortcomings. However, the following general observations can be made:

- i. Obviously there is a case for having a set of reconstruction Guidelines. However it might be more appropriate to have them written in the form of 'recommendations', as 'guidelines' imply that if they were followed they would produce good results, something that is not certain.
- ii. Somehow, there is a need to distance reconstruction recommendations after natural disasters from those after war.
- iii. Any recommendations have to be based on a certain morality. In the case of war, this has to be the eventual benefit of the war suffering people. Thus the guidelines should have the courage to spell out this fact. One way of doing that could be by relating the recommendations to already established international human rights and settlement declarations.
- iv. It is important to understand how much of these recommendations are for the sake of the people and how much for the sake of research development.
- v. In general, the set of Principles are too idealistic, specially when it comes to considering reconstruction politics.
- vi. There is a need for a summarised version of these recommendations to be widely disseminated.
- vii. In some aspects of reconstruction, caution should be practised when it comes to across-cultural generalisations. For instance, the role of women and people participation in reconstruction.
- viii. There is a need for such Guidelines to be tested in the field and in different countries, in order to highlight those issues that are relevant across-countries.



In this Chapter we have examined aspects of decision-making and implementation of reconstruction at a national policy level, based on a short term evaluation of the reconstruction of the cities of Basrah and Fao. In the following Chapter (7) we will examine beside the reconstruction policy the detailed process of implementation and we will evaluate the reconstruction programmes in Dhamar, Yemen, based on feedback by the local inhabitants.

CHAPTER SEVEN

REBUILDING AND RESETTLEMENT, 9 YEARS LATER. A CASESTUDY OF THE CONTRACTOR-BUILT RECONSTRUCTION IN YEMEN, FOLLOWING THE 1982 DHAMAR EARTHQUAKE.

7.1. INTRODUCTION.

This study is based on a recent examination of the three different revival and reconstruction approaches carried out by the Yemeni Government following the 1982 Dhamar earthquake. They were Repair, Contractor-built resettlement and Self-help reconstruction¹. In each programme, it was claimed, so called earthquake resistant construction techniques were introduced. However, 9 years later, the author found tens of settlements and thousands of houses were standing abandoned. The local people it seems are still practising traditional building techniques that make them vulnerable to the next earthquake.

The field visit, conducted in November 1991, covered 55 settlements out of 500, the smallest of which comprised 1 reconstructed house and the biggest 405 houses. The Self-help approach, though it seemed the most acceptable, still had shortcomings; only 1000 houses were constructed (more about this approach in Chapter 9). The Repair programme proved impossible to implement on a wide scale. Of 18,000 cracked houses only 1,000 in the city of Dhamar itself were repaired. The extreme differences between the Contractor-built settlements and the traditional lifestyles have severely tested each community's ability to adapt. Many have rejected the new housing, some have resettled after altering the house and the settlement layout. A few have accepted the settlements as they are and given up their traditional lifestyle.

By concentrating on the Contractor-built programme in which more than 11,000 houses were constructed, this Chapter attempts to identify the reasons behind the relative success of some reconstructed settlements and the severe failure of others. It concludes by listing a number of reconstruction issues in which misjudgments and unrealistic assumptions were made.

¹ With the help of the Dutch government, EEC and the UNDP.

7.2. WHY DHAMAR?

The Yemen study is one of a number of cases designed to help formulate a 'set of guidelines for the planning and management of reconstruction programmes in the Middle East'. Though our main interest lies in the field of rebuilding human settlements after wars, the Dhamar post-earthquake reconstruction programme was selected firstly, as it is the only programme of that scale (needed nowadays in post-war rebuilding in Iran and Iraq), in the region. Secondly, previous studies have shown many similarities between reconstruction after wars and disasters, particularly after earthquakes².

"Whilst knowledge from flood and high wind situations is relevant, it is apparent that the extent of building damage is much smaller from these hazards than in the case of earthquakes. Therefore, there is a primary point of similarity between war and hazard damage related to the seismic context". (Davis, 1986:44).

Thirdly, because it is another case, where, despite the special Yemeni and even Dhamari cultural context, the post-disaster policy decisions have been similar to other international situations, (in the stages of emergency, rehabilitation and reconstruction). In particular, concerning those decisions taken by the central government and the international relief agencies³.

Encouraged by a number of experts in the field; Ian Davis, Fred Cuny, Yasmen Aysan, Andrew Coburn, Jolyon Leslie, Akbar Zargar, etc., the author decided to look into the experience of Yemen following the Dhamar earthquake in December 1982. Nine years after the earthquake it is possible to examine some of the long-term effects of policies and management models. The idea of such evaluation was encouraged by the fact that suddenly, everybody in the field seemed to have lost interest in the Yemen reconstruction experience, despite the fact that at the time it was considered as a leading example in the field of reconstruction and rehabilitation. As was emphasised in F. Cuny's review of the 1980's achievements in the field of reconstruction after disasters, (during the international conference 'Disasters and the Small Dwelling, 2-6 September 1990'), when he said of the Yemen experience. "An experience that proved that the NGO's can work together and that building

² One of the recent studies was carried out by Dr. Akbar Zarger at the Institute of Advanced Architectural Studies, University of York, on the reconstruction of war-damaged rural areas of Iran.

³ A range of examples supporting this argument can be found in Anderson & Woodrow (1989) *Rising from the Ashes*, UNESCO.

settlements is not a static issue". (Cuny, 1990)⁴.

Keeping in mind that, "No disaster is a unique event of which no lesson can be learned" (Michel Lechat, 1990⁵) this study sets out to support the main hypothesis of this dissertation that 'Settlement reconstruction should be an integral part of a nation wide development,...., reconstruction that takes the form of a series of centralised projects (infrastructure, housing and public buildings) is unlikely to be efficient nor culturally sensitive'.

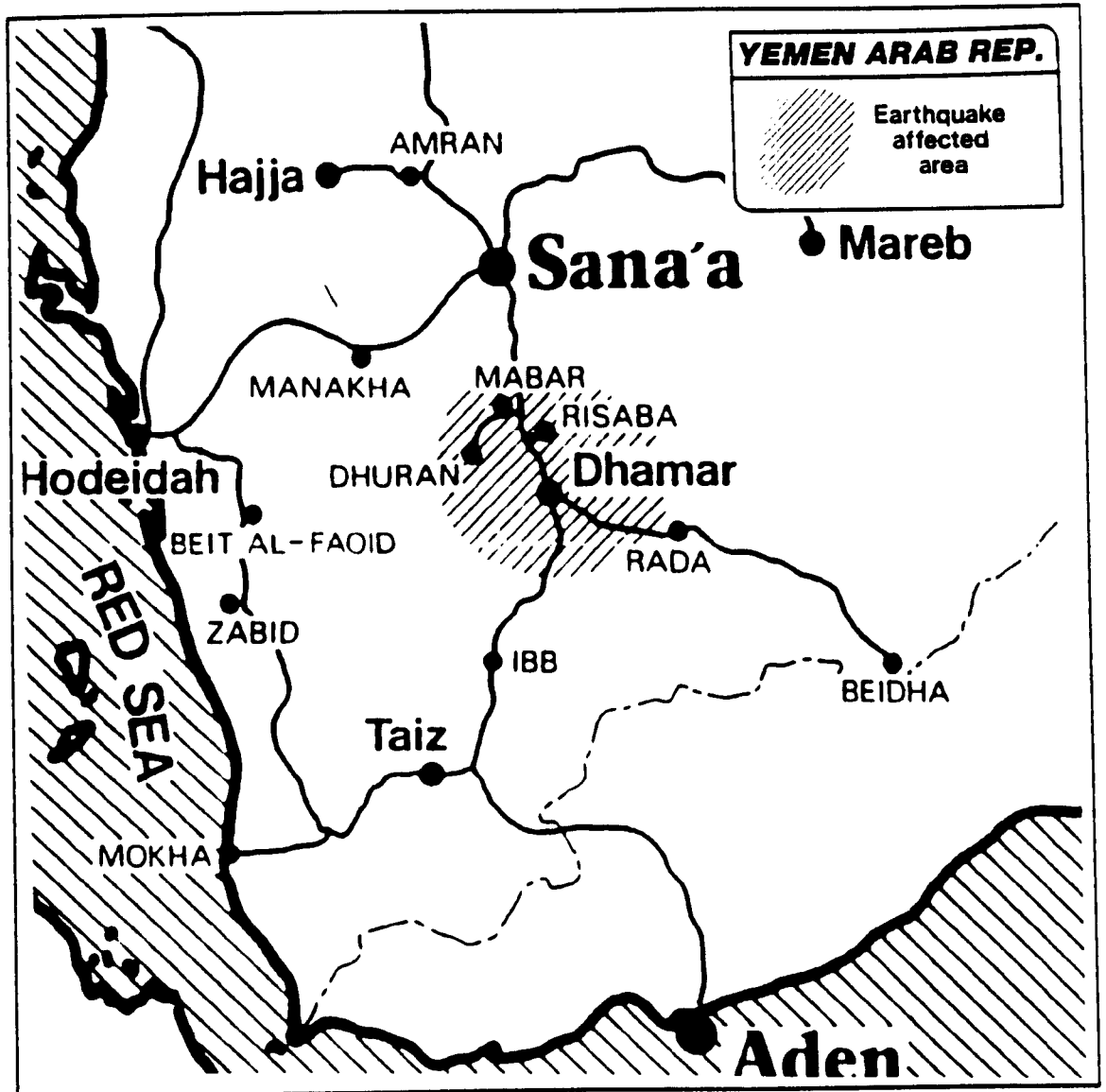


Figure [7-1] The location of Dhamar city in relation to the capital Sana'a.

⁴ Personal note.

⁵ Paper presented at the international conference 'Disasters and the Small Dwellings', held at the Disaster Management Centre, Oxford, 2-6 September 1990.

7.3. AIM & OBJECTIVES OF THE DHAMAR STUDY.

The *aim* of this exercise is to investigate how people affected by a disaster and subsequently by a massive programme of rehabilitation, responded to extreme and unfamiliar circumstances after nine years, thus concentrating on the long-term implications of re-housing, by highlighting the successes and failures due to policy shortcomings. This research aims to promote the following hypothesis:

The assumed efficiency of centralised project-based reconstruction tends to deny the importance of the culturally sensitive approach to reconstruction, built on the direct involvement of the local people.

Achieving the above aim will help the author to draw principles from the reconstruction experience in Yemen, that could be generalised and applied in similar situations, noticeably those of rebuilding after wars.

In order to measure some of the long-term physical and socio-cultural implications, the main challenge was to understand and identify the implications of some of the policy decisions that were taken at the different stages of emergency, recovery and reconstruction. Thus, this Chapter starts by exploring the policies affecting repairs, temporary housing, relocation, resettlement, housing reconstruction and local economic recovery. Then, it investigates the different mitigation measures (both structural and non-structural), to see if such measures have become part of the local 'disaster culture' or if they have been forgotten and neglected.

The Dhamar reconstruction study contains the following main Sections:

- 7.4. A presentation of the research methods and field work conducted between the 9th and the 24th of November 1991.
- 7.5. A brief description of the Dhamari social, economic, architectural and cultural context, including a review of the 1982 earthquake; its scale, the damage caused and some general results, by reviewing other experts' documentation of the incident.
- 7.6. Listing the different emergency and reconstruction policy-decisions and approaches taken by the Yemeni government and the different relief agencies that have been involved.
- 7.7. A Discussion of the field work findings in relation to the implications of the reconstruction policies, focusing on the physical, economic, socio-cultural and attitudinal factors that might have affected the acceptance or otherwise of the reconstructed settlements.
- 7.8. Conclusion, listing a number of recommendations concerning methods of intervention, models of management and general reconstruction policies.

7.4. CONDUCTING THE FIELD WORK.

The research methodology for this casestudy followed the general research and data collection methods applied in the development of this dissertation and discussed earlier in Chapter 4 based on the conventional three stages of:

- a. Review of existing knowledge on the subject.
- b. Conducting a field study and data collection.
- c. Analysis and documentation of findings.

Prior to the field visit comprehensive research, interviews and discussions with experts and literature review was conducted in order to expand the author's knowledge on the context, as well as to prepare the ground for the field visit. The review of existing knowledge on the Dhamar casestudy was described earlier in Chapter 4 where it was given as an illustrative example, thus this Section will not discuss it again.

The field work in Yemen was conducted between the 9th and the 23rd of November 1991, with three main objectives in mind:

- 1- To find out how far the programmes' initial objectives have been satisfied, in terms of quantity and quality. Particularly the contractor built and repair schemes, as the self-help project is the only well documented and publicised part of the Yemeni experience along side the training programme⁶. Also, how far those programmes have been accepted by the users, and how successful they were and why.
- 2- To measure some of the physical and socio-cultural implications of the different reconstruction schemes carried out by the Government and other international organisations. (For instance, the way people reacted by modifying or extending their houses. In the social context, their effect, for instance on the traditional family structure, the existing network of responsibilities and leadership, etc.).
- 3- To examine the technical aspects of building improvements that have been introduced, and their effect on the local building tradition. (In other words, to find out if such techniques have become part of daily practice, or if they have been restricted just to those projects built by the Government).

The field work started in Sana'a, where it was necessary to establish contacts in order to be able to obtain the Executive Office's co-operation and support when

⁶ Although there were more houses listed as in need of repair than of reconstruction, all the professional attention seems to have been given to the new houses. One reason for that might be the fact that rebuilding has always been more interesting for the politician and the professional and easier to manage and supervise.

in Dhamar. In Dhamar the field work took mainly the form of predetermined visits to a number of selected samples (villages and towns), representing the different approaches of reconstruction that have been carried out; *building new settlements by contractors, self-help approaches and damage repair.*

7.4.1. In Sana'a: paving the way.

a. Meetings with officials.

Due to the strong *informal and formal political* character of the reconstruction programme it would have been a waste of time and resources to suddenly turn up in Dhamar and to try and collect data. One of the early decisions of this study was to understand and respect the local political and social structure and to try and operate within it. Meeting officials was one of the basic methods used, not only to collect information and to have an insight into the situation, but more importantly to pave the way for the coming field work in Dhamar. A few hours following arrival in Sana'a the author conducted the first official meeting with Mr. Mohamed Al-Ashwal, Deputy Minister, Ministry of Housing. Although Mr Al-Ashwal showed sympathy and co-operation this meeting was a very frustrating beginning. The Supreme Council for Reconstruction in Sana'a to which his letter of recommendation was addressed, turned out to have been abolished a few years back.

My second meeting was with Mr. Ahmed Obaid, Information and Public Relations Manager of the Executive Office of Reconstruction. After much hesitation, he finally agreed to meet me in a local pharmacy in the evening, where he had to go for some medicine for his sick father. His eventual co-operation came as a result of pressure put on him by Mr. Humadi, an influential figure in Yemen and the uncle of my friend Abdel-Majid Hadad⁷. Nevertheless, we managed to have a constructive discussion on why I was there and what I was trying to achieve from my visit. He also gave me a general idea concerning the nature of the Reconstruction Project. As a direct result of this meeting came my meeting the next day with the Minister Mr. Mohammed Jaghman, a member of the Supreme Council for the Reconstruction of Earthquake Affected Areas (SCREAA) and for the last 5 years the General Manager of the Executive Office for Reconstruction in Dhamar. Mr Jaghman, who by chance recognised a member of my family, showed complete understanding and support for

⁷ Abdel-Majid Hadad is a DPhil biology student at the University of York who was my only contact on arrival to Yemen. I am most grateful for his help and hospitality. I also acknowledge the help of his supervisor in York Dr. R. Ormond.

my research, by offering the facilities of the Executive Office, including transport and accommodation in Dhamar.

In short, all the above mentioned meetings were crucial to eventually 'open the doors' of the Executive Office and its filing cabinets for my investigations. The provision of an essential four-wheel-drive vehicle, a companion and a driver was as a direct result of meeting Mr. Jaghman.

b. Diplomacy and Luck.

Behaving diplomatically by observing the local etiquette and customs, enables the researcher not only to integrate himself but also to learn more about local customs, values and beliefs. Diplomacy, as employed in the Yemeni visit includes everything from understanding local culture and behaving accordingly, to adopting local dress and joining the men chewing 'qatt'; the local substitute for alcohol. These are good occasions to question and listen. As are invitations to eat and drink endless cups of coffee, all ways of bridging the gap between researcher and community.

There was the usual element of good luck added to some diplomacy, without it this field visit would have been extremely difficult to implement. Also, no one has control over his or her luck, thus it is difficult to account for it in the research procedure, however it is important that researchers are aware of this positive component when they experience it.

7.4.2. In Dhamar: visiting the settlements.

The objective of the visits was to measure the degree of success or otherwise of the Contractor-built Reconstruction Programmes, conducted by the Central Government and that of the Self-help Programme, and to identify the reasons behind any failures or successes. The intention was not to carry out a comprehensive study of the rural and urban settlements in the Dhamar region.

The fact that the Executive Office for Reconstruction had no information at all concerning which settlements are inhabited and which are not, as most of them were never visited by officials after the completion of the contractors work, meant that the field visits had to be extended to cover the largest possible number of settlements. Consequently, one had to introduce a method that would make it possible to gather information on a wide front, in a short period, with the limited resources available. The initial finding of a considerable gap between the number of successes and failures in the reconstructed settlements (some settlements were found totally

uninhabited, while others were 100% inhabited) supported the need for more visits as opposed to an in-depth examination of individual locations (as I did before, in the case of Fao & Basrah cities, Iraq). In this respect, the writings of Robert Chambers, particularly his book, *Rural Development: Putting the Last First* (1983) influenced the author to a great extent. Trying to gather the greatest amount of information covering the widest area in the shortest time, one was always in danger of falling into the trap of "rural development tourism" as identified by Chambers (1983:10-23). Having his six biases in mind, the author tried to counter them as much as possible. The six sets of biases identified by Chambers are: (1) spatial: urban, tarmac and roadside; (2) project: visiting only successful projects; (3) personal bias; (4) dry season; (5) diplomatic: politeness and timidity and (9) professional.

a. *The Selection of Settlements.*

In order to decide which settlements to visit, the author started with the help of the Executive Office for Reconstruction (EOR) engineers in Dhamar by grouping the affected settlements into three, according to the different approaches pursued. In the process of selection an attempt was made to counter two of the biases identified above, namely, *spatial* and *project*. We listed a number of settlements to be visited in the coming two weeks, to achieve a balance view between urban and rural, small and big and easily accessible and inaccessible. [see Table 1 for list of the visited settlements and Figure 1 for settlements' distribution]. On the other hand, also included were places recommended to the author by Jolyon Leslie, as being worth visiting to have a clearer insight into the effects of the different reconstruction programmes, when he wrote:

"As far as field work in Yemen is concerned, ...particularly rewarding might be visits to Al Juma'a, to the west of Dhamar near Jebel as Sharq, and the Magrib Ans area, around Bani Mawalad where I spent a good deal of time. The villages directly to the west of Dhamar on the plain show self-built reconstruction at its best, while those like Risabah on the road to Sana'a show how dependent a high-profile reconstruction programme can make people. Dawran Ans might also be worth a visit".⁸

The main handicap of such a selection approach was the presumption by the EOR professionals that they totally understood my research needs, and thus tried to

⁸ From a personal letter addressed to the author in November 1990.

select only those locations which *they* believed conformed to those needs. Thus recommending mainly settlements with easy access from the road and insisting that they "...all look the same". This difficulty was partially overcome by having more than one person present during the site selection meetings; including a building supervisor (Abu' Ahmed), who later on acted as a guide and the driver (Al-Raqas), who had a better knowledge of the real conditions of the settlements. Although they sounded very confident, talking about the settlements they reconstructed, it came as a shock, later on, to learn of the great number of uninhabited houses and that in some cases families were sharing their houses with their animals.

However, although the initial intention was to visit 20 Contractor-built and 5 Self-help settlements, with the unexpected co-operation of the Executive Office⁹ in Yemen, it was actually possible to visit 40 Contractor-built and 15 Self-help settlements. In most cases the reconstructed settlements, as well as the original sites were visited. In each settlement samples of inhabited houses built by contractors or by the people were surveyed. Systematic observation and semi-structured interviews were the main methods of investigation. However, two particular settlements were studied in great detail (San'a and Tinin).

b. Measuring the degree of acceptance.

Since starting this exercise, the author has attempted to identify the criteria by which to judge whether a 'rebuilt settlement' has been successful or not. The *extent of transformation* achieved 2-5 years later, seemed to be the most sensible way of measuring the success or otherwise of any reconstructed village or town. Thus, a decision was made to look into physical transformation (growth and change) as an indicator of people's acceptance or not of the houses provided by the Government, either by contractor-built or self-help methods. It has been established that "The degree of success and acceptance of the new settlement should be judged by the extent to which the settlement has become a self-reliant village in its own right or a viable partner with its original village" (Coburn, et al, 1984:52), although there are obvious doubts on the degree to which a settlement could be self-reliant.

⁹ When I planned my visit I was not counting on much co-operation from the EOR, because they never answered any of my letters addressed to them over a period of 14 months.

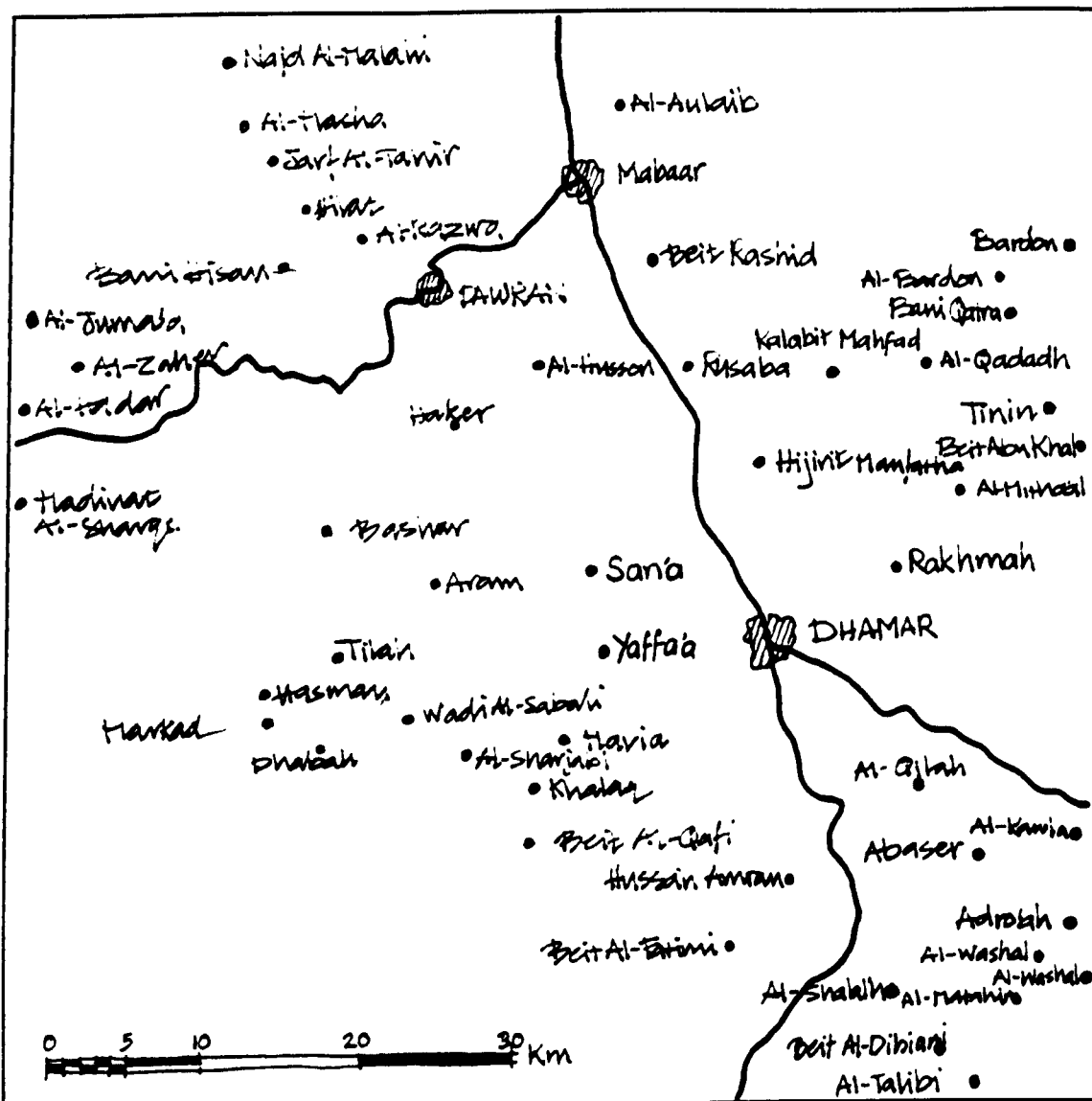


Figure [7-2] Settlements visited, November 1991.

The growth and change in the new settlements involve various indicators. Some of these indicators are physical and observable, others are less obvious. However, these observable factors may not themselves be deterministic in deciding whether a settlement has been accepted or not; social factors and attitudes may also be involved. Such social values and attitudes can be explored through interviewing and mixing with the local community. This may be more revealing particularly when the author shares their language, as well as a great part of their traditions and values.

The following are some of the observable indicators into the 'degree of acceptance' according to the priority in which they were observed and recorded, during the visit to each settlement:

On settlement scale:

- **Occupation:** The number of occupied reconstructed houses in comparison to the total number of reconstructed houses provided by government.
- **Growth:** The emerging of new houses built by the people on the resettlement site.
- **Community facilities:** The use and maintenance of the local community facilities provided by the government (school, clinic, mosque, etc..)

On individual house scale:

- **Modification:** Any modification or extension to the 'new' housing.
- **Maintenance:** The degree of maintenance and state of repair.
- **Investment:** The commitment of investment in the enclosures of the plot and tree planting, etc.

Using these features it was possible to grade the villages into three degrees of acceptance: Class A, thriving villages with the majority of houses occupied (more than 66%), well maintained, with community facilities in use. Class B being villages with an average number of houses occupied (20-50%), with some gardens and extensions. Class C having very few houses occupied (less than 20%), in a poor state of repair, few gardens or extensions. Class D new settlements largely abandoned.

In order not to limit our judgement exclusively to buildings as one form of development, a more comprehensive list that examines some of the social values, attitudes and traditions, as well as other forms of physical improvement, has been developed and observed in the field. By adopting this method of classifying the villages according to the degree of their acceptance and or rejection, one can later on highlight some of the factors that influenced that acceptance; a very important conclusion, if we are to formulate a framework within which reconstruction policies can be reviewed, not only in Yemen, but else where in the Middle East.

c. *Observations.*

In order to make the observations more systematic, the author developed a check list, based on an appropriate framework within the overall context. This framework proved to be of great value in the field, where it made it possible to register and analyze some rather complex real situations that were not fully conceived

before. It also provided a straight forward system for exploring the factors that are critical to the planning and design strategies and implementation of reconstruction programmes. While its value within the theoretical research work lies in highlighting the crucial factors that have influenced the acceptance or otherwise of the settlements, as well as, in illustrating the different relationships among such factors.

In designing the framework, categories of factors that might affect the level of people's acceptance of the provided settlements were set out, along with a suggestion on which order they should be considered in. The categories had to be comprehensive enough to cover all the important variables, but at the same time few enough, that they are easily managed and observed by the author, within the limited time allowed for the field visit.

Thus in every settlement visited the following issues were observed:

1. The original state of housing as it was provided by the Government between December 1983 and December 1989; the topography; the number of houses; the percentage of the population they housed; the relocation distance from the existing village; the relocation distance from the agricultural land; distance from a main road; the supply of services.
2. Today's situation as was found during the field visit in November 1991, at least 2 years after the completion of the reconstruction programme; the number of houses that were occupied in the new settlement and the degree of acceptance. (The way in which the degree of acceptance has been reached is explained in the following Section).
3. Some of the factors that we believe might have affected the degree of acceptance. (These factors are also discussed in the following sections).
4. Survey of a representative sample of the occupied houses, to register the way in which the new houses and settlements were modified to suit the real needs of the people.

d. Semi-structured interviews.

In accordance with the overall methodology of this dissertation, the semi-structured interview technique was considered appropriate in Dhamar, as it allows more flexibility to gather qualitative information on a wide front, in a short time, with the limited resources available. The author's decision to exclude the use of the structured questionnaire is for two main reasons; firstly, because the scope of this study and its position within the author's doctorate research did not allow an extended period in the field. Secondly, and equally important, was the advise of

Jolyon Leslie¹⁰, who recommended not to use structured questionnaires as a means of collecting information, when he wrote to the author:

"I would caution somewhat on the use of structured questionnaires in the Yemeni context, having abandoned our own neat format during the evaluation. The people to talk to will be builders themselves, who are formed into an unofficial guild in Dhamar... *My biggest lesson from the work in Yemen was that unstructured discussion was the best means of communicating ideas or getting useful information*". (emphasis added).

The questions and conversations carried out during the interviews were structured to give an insight what the physical, social and attitudinal factors are that led to the acceptance or refusal of each reconstructed settlement. Thus the interviews involved sitting, asking and listening.

This method had many advantages for the author as an outsider. On the other hand it had its own shortcomings and limitations. Besides the limitations of *language, suspicion, fear and expectation*, that have been discussed earlier in Chapter 4, the Dhamar casestudy displayed some unique limitations of collecting information using semi-structured interviews. These were mainly to do with limitations of time and my travelling companions.

1. Limitations of time.

In the current study, the limitations of time presented an obstacle that was only possible to overcome through designing a particular visiting technique, which depended on driving, early in the morning, as far as possible on the paved road and then driving back through the different settlements. Due to the limited resources available to the author, it was only possible to spend 16 days in Yemen, two of which were needed to establish contacts in Sana'a, with the rest in the Dhamar region.

The limitations of time became obvious after my first field visit to the study area; it had the following shortcomings. Firstly, being accompanied by two members of the EOR staff meant that we had to make our visits within the official working hours, from 08:00 to 13:00. It would have been virtually impossible to visit any of the remote settlements, such as (Tinin) as it takes at least three hours to reach there. Secondly, it took at least an hour to get hold of the driver, to arrange for a

¹⁰ Jolyon Leslie, was the architect of Oxfam's Building Education Project in Dhamar. He spent at least 5 years in Yemen, during which he conducted a number of studies and evaluation reports.

companion (a specialised engineer in this case) and to get an allocation of petrol for the vehicle. Thirdly, by the time we set off, the driver and the engineer announced that it was time for breakfast, (according to the habits of a Yemeni Government employee). As Dhamar is considered the only place where one can have a decent meal, our departure from the town did not effectively start till 10:00. By mid-day my companions were hinting that the working day for them finished at 13:00 and thus we should have to return. It seemed unreasonable to expect them to spend time outside official working hours, particularly when they made it clear they were not paid overtime. On that first day it was only possible to visit three settlements nearby Dhamar.

Later on after developing a special friendship with Abu' Ahmed (building supervisor) and Al-Raqas (driver) it was possible to spend more time in the field. We made special arrangements to set off at 07:00 in the morning with our supplies of food and water. We would try and spend the limited day-light hours visiting as many settlements as possible in areas that are hardly accessible, thus returning to Dhamar after sunset using the paved roads. The author soon learned that chewing 'qatt' in the afternoon, while driving back, provided some compensation for their willingness to spend all day out on the road.¹¹

ii. My travelling companions.

It was found that accompanied by a building supervisor (Abu-Ahmed), a local Dhamari, the visits and the subsequent interviews progressed in a particularly relaxed and informal way. From asking permission to enter the house, to thanking the family and saying goodbye Abu-Ahmed had his own way, which for my taste appeared to be a little bit rough and impolite. While accompanied by an official or an engineer from the Executive Office, it was found that the recipients of the new houses generally reported some satisfaction. Some of them went to the extreme of claiming that the W.C. and the kitchen were in use as intended in the original design, although they were obviously not. Others would show their gratitude to the Government and the President for their help and would try to make sure that the official or the engineer had their names. Often while seeing us off they would try and arrange a meeting with the same official in Dhamar. Moreover, the engineer seemed to find it difficult to

¹¹ I am most grateful to both of them for their patience and understanding. Following our first few visits they surprisingly shared my concerns and showed genuine enthusiasm. In many cases we did not arrive back in Dhamar till 9pm and set off again next morning at 7am.

actually approach a house to obtain permission to visit it. It is well known among Yemenies that the Dhamari people are tough and that it is difficult to communicate with them in a relaxed manner.

iii. Offering lifts to the locals.

It is appropriate to end this Section by mentioning another method that came by chance but proved useful, it was to offer lifts to people travelling from one settlement to the other. In such a harsh environment offering a lift is as honourable as offering a glass of water. We often had to sit in the Jeep, in some cases for hours, doing and saying nothing. Thus by offering people a ride one had the chance of actually talking to the locals in a very natural way, some of whom turned out to be living in the reconstructed houses, or were offered the houses and refused to move into them. Thus some genuine insights were obtained and the journeys were made more enjoyable.

7.5. THE AFFECTED AREAS.

On the 13th December 1982, at 12:12 noon local time, Dhamar Province and some adjacent areas were struck by an earthquake of 5.8 on the Richter scale and for about 45 seconds. The epicentre was located approximately 15 km north of Dhamar city, about 15 km south-east of the town Maabar and about 2 km west of the village of Rissaba. A series of after-shocks resulted in many houses, that were cracked during the main shock, falling down. Furthermore, Matthews (1984:63) referred to a second earthquake with a magnitude of 4.0 and about 3 minutes in duration, at 02:53 on the 30th December 1982. His claim is based on a damage-assessment report prepared by P. Schurink & H. Rekveldt (1983). However, other sources have referred to the same event as more of a big tremor.

The 1982 earthquake was largely unexpected because there was no substantial geological or even historical data available to predict such an event. Internationally, the area was mistakenly not identified with major earthquakes. "However, recent research indicates that there have been major earthquakes in North Yemen in this century, which escaped attention due to Yemen's isolation¹², and more recently because of the Second World War" (Aysan, 1983). DHV Consulting Engineers

¹² Until the death of Imam Ahmed in 1962 North Yemen was closed to the world under his rule. His death was followed by a republican revolution. However, it was not until the end of the civil war between royalist and the republicans in 1970 that North Yemen opened its gates to international commerce.

(1985a:3), claimed that "...available statistics indicate that a major earthquake occurs in the Yemen Arab Republic at least once every 20 years". Their document 'Dhamar Aided Self-help Reconstruction Project' (1985a), includes a map showing the location and dates of the major registered earthquakes in 1965, 1962, 1941, 1909, 1895 and 1875. Apparently, the main source on which all researchers seem to have based their arguments, concerning the seismic history of Yemen, is a two-page article written by N.N. Ambraseys & C.P. Melville, entitled '*Seismicity of Yemen*' and published in *Nature*, 303, 1983 (pp.321-323). In their article, they referred to a number of earthquakes in Yemen as far back as 742 A.C., which destroyed the famous dam of Marib.

It is crucially important to understand the geographical and architectural background of the affected areas, which largely contributed to the *type of fallure* of the traditional houses. Also, it is important to digest the local social and economic context, in order to assess changes in the cultural life due to the aid received and the subsequent resettlement and rebuilding.

7.5.1. Dhamar: The Province.

The District capital Dhamar city is located 100 km south of Sana'a the Capital. The Province's approximate population is 470,000 covering some 4,000 sq. km. It encompasses parts of the Western and Central Highlands, which comprise several highland plains surrounded by mountainous regions. Administratively, the Province is divided into Districts, seven were considerably affected by the earthquake: Dhamar, Dhawran, Jahran, Al-Hadaa, Ans, Maghrab Ans and Jabel al-Sharq.

a. *Geography and climate.*

The geographical location of the affected area is approximately where the Western Higlands meet the Central Highlands. There are three micro-geographic zones within the affected areas: the Western Highlands with steep mountains and crop growing terraces, the higher Central Higlands with drier volcanic plateaus and some agriculture and the Northern Plains. Most of the settlements are at altitudes between 2,500m and 3,000m, where the temperature can drop, particularly in November and December, below -4C°. The diurnal temperature range of this area is about 25 degrees to a maximum 20C°. This explains the need for heavy structures to store the daytime heat for release at night. Summer is wet and winter quite dry.

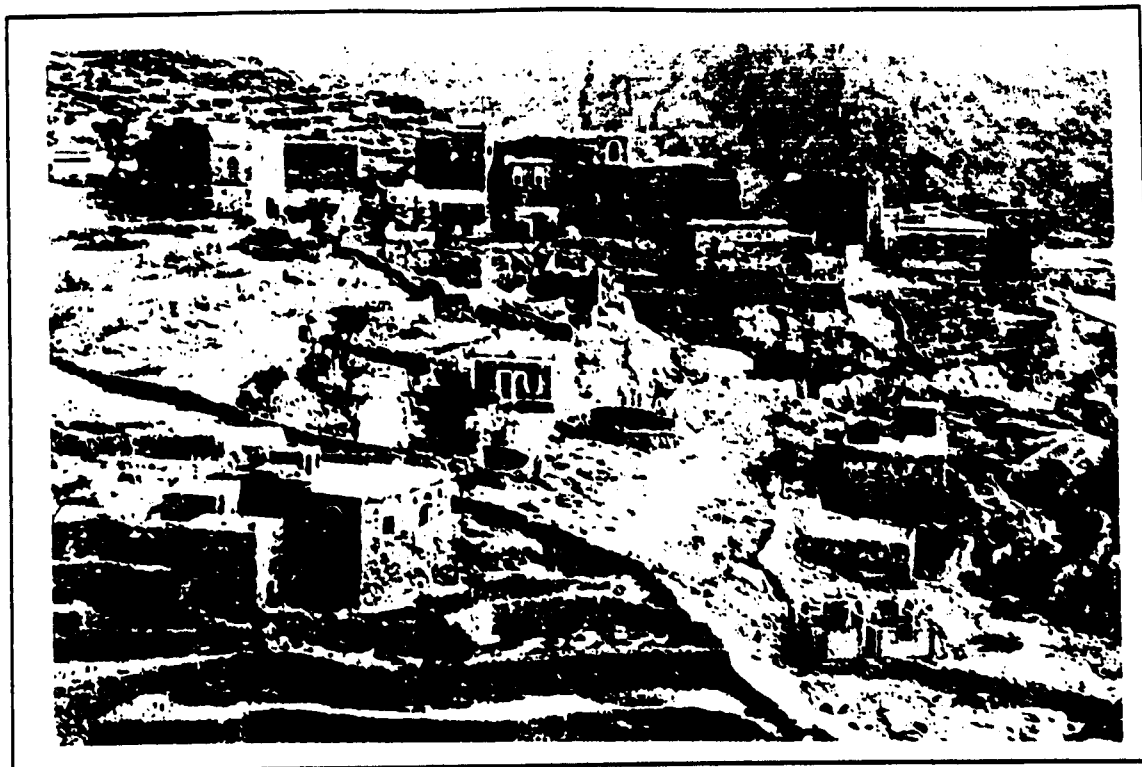


Figure [7-3] A typical Dhamari village, clustered on the crest of a hill.
[Source: The author, 1991]

b. Settlements and their architecture.

The earthquake devastated traditional villages and towns, many of which are inaccessible (as in the recent Iranian earthquake, June 1990). For defensive reasons, traditional Yemeni villages are often clustered on the crest of hills, leaving the valleys for agriculture, on which their economy depends.

The size of settlements varies; a typical village comprising 20 to 30 clustered houses, some with 300 houses, a typical town would have over 400 houses. The main building material is stone, either with a dressed face, roughly-coursed or used as rubble in mud mortar. However mud bricks, both, fired and sun-dried are used in some places. The use of local timber for roofing has restricted the dimensions of the habitable spaces to about 3.5 meters span.

"The traditional highland home is a defensive structure, allowing for all domestic activity within its' massive stone walls". (Leslie, 1987:83). The most common house type within the villages takes the form of a two to three storey family dwelling, with the ground floor reserved for crops storage and animals. The upper rooms are grouped around a central staircase. The same room can be used for eating, sleeping or chewing qatt, at different times of the day. Reflecting the social structure, a Dhamari dwelling is built in an additive process to house an extended family, as the

need arises and depending on the availability of labour and cash. Thus the ground floor is often built of massive roughly coursed stone, while the upper walls are of smaller dressed stone.

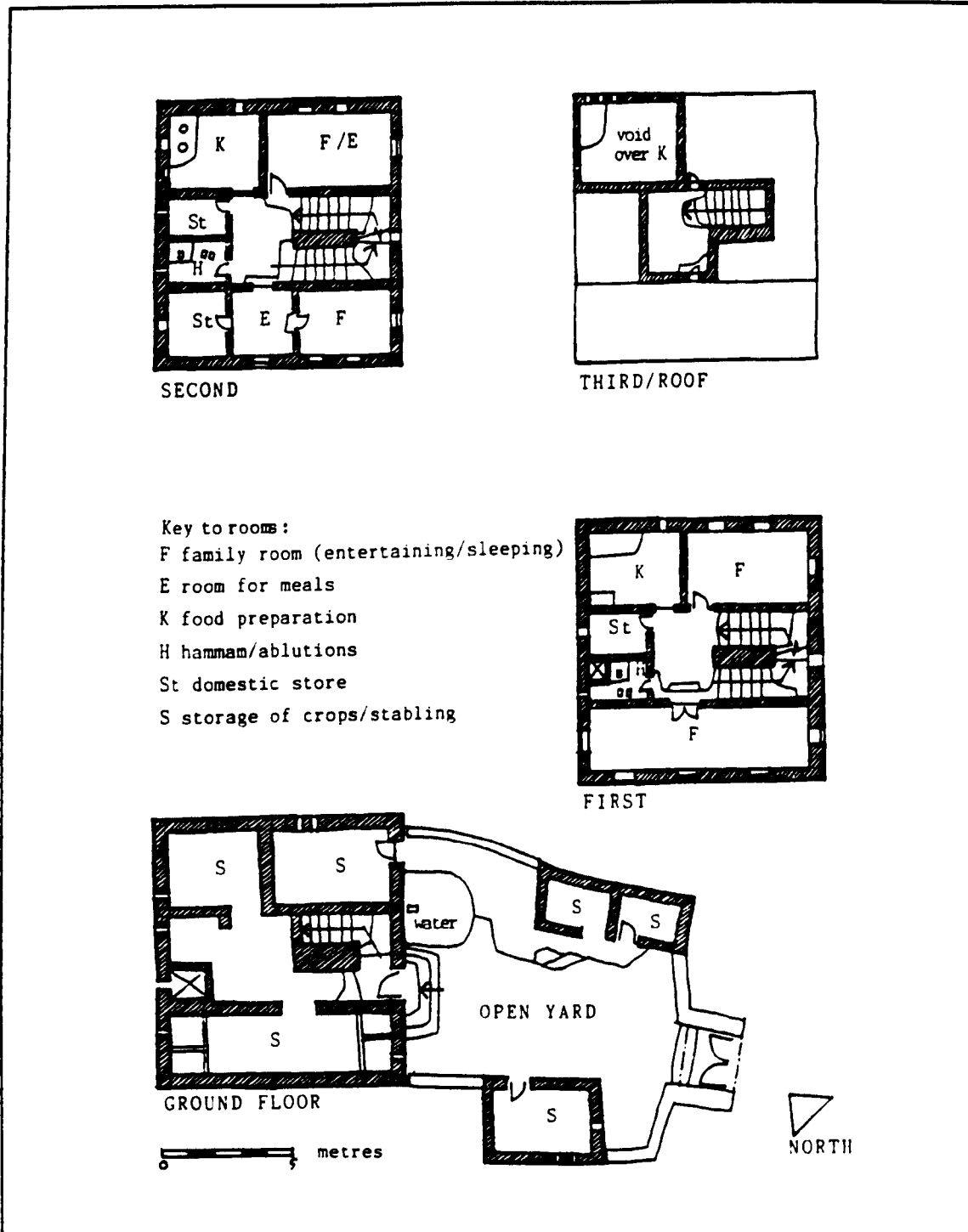


Figure [7-4] Plan of a highland house, Jebel al-Shirq.
 [Source: Leslie, 1987:86]

c. *Population: culture, kinship and values.*

Dhamari culture is very much evident to the extent that it makes Dhamari people distinct from any other Yemeni people. Apart from the special Arabic dialect, they have their own informal laws, and customs. Coming from a different society which shares some of their values it was possible to perceive these differences, but the real challenge was to understand them and agree with them. This is something that seems to have been totally ignored not only by the Central Government but also by the intervening international groups. Within the Dhamari population itself, there is a major distinction between rural and urban societies and between those who inhabit the Western Highlands and the Eastern Highlands. The latter are considered tougher and more closed societies, in which the tribal structure is still very much in evidence and leads to continuing tribal wars.

Additional clues as to the nature of Dhamari culture can be found in their buildings and the way they use them. "The house is often a significant indicator of the ways in which spaces are respected and utilised within a building: the degree of privacy or security that the dwelling affords, the numbers of people that occupy it, their domestic relationship and responsibilities to each other, and so on" (Aysan & Oliver 1987:10).

Understanding the local *Kinship* is essential for a better understanding of the cultural context. In Dhamar, the extended family is the dominant social structure within the affected area; grandparents, grandchildren and unmarried brothers and sisters are expected to live under one roof along with the "biological unit" of a male and female pair and their children. Such a household would be a part of a larger kin-group (All'a) that might be divided between several settlements. The tribe (Qabila or Ashira) is the largest group within this social hierarchy, comprising many such kin-groups, and usually having control over a well-defined territory. Each settlement has its own 'wise' man (Aqel) who enjoys everyone's respect, while the tribe is led by the 'Sheik', who represents the power and the centre of decision-making within the tribe. Rules concerning territory, land ownership, tenure and inheritance are very specific to the region.

"Values are the beliefs, the attitudes and the expectations of conduct by which a society lives" (Aysan & Oliver 1987:10). In Dhamar there are a number of values that are known and observed within the community even though they do not exist in a legal or formal way. They relate to matters of responsibility, propriety, privacy, politeness, respect and behaviour. Although these values may seem irrelevant for the

reconstruction project, it is these attitudes that gave each community its particular character and lie behind the failure of a number of reconstruction projects. Many of these values, of course, owe their existence to Islam; questions of inheritance, strong family relations, the role of women, and so on.

d. Local economy.

Economically, the affected areas are largely dependent on agriculture. However in some of the settlements, which are higher and drier, agriculture is limited to a subsistence level. The topography makes it difficult to introduce mechanisation. "The commonly grown agricultural products like grains, millet, maize, fruits, vegetables, sorghum and qatt are locally consumed and only a small proportion is marketed. Consequently, [in these areas] very little cash is generated from agriculture". (Aysan, 1983:53). Livestock too plays an important role in the household economy. The other source of cash since the late 1960's, after a long period of Yemen isolation, is the migration to the oil-rich countries of the male labour force. This reached its peak in the late 70's and early 80's. Aysan (1983:53), claimed that "...on average one [person] in each household is working abroad". In some settlements such as 'Tinini', there was a time when only women, old people and children were left in the village. Recently, as a result of the August 1990 Gulf Crisis, this situation was reversed, with hundreds of thousands of workers being forced to return to Yemen, due to its unclear political stand in the crisis. There was a general belief within the Gulf States that Yemen might be supporting Iraq in its annexation of Kuwait. Thus, those who were working in Saudi Arabia and the other Gulf countries were sent home for national security reasons. By the time the field visit was conducted it was estimated that one million Yemeni workers had returned, putting an intolerable burden on the Yemeni economy, which was already in a deep recession and now accompanied by the termination of all financial and development aid that used to be offered by the Western and Arab States. Some of this aid was part of the original reconstruction programme, which has now been brought to a halt.

7.5.2. The scale of damage.

Although the earthquake could be classified as moderate, it caused extensive

damage over a vast area, mainly because of the vulnerable condition of the houses¹³. The first figures issued by the Government showed that the total number of affected settlements was 1176. The number of destroyed houses was estimated at 25,045. While those with notable cracks was 18,458. In total there were 78 schools, 651 mosques and 82 water projects destroyed. Finally, the total affected population was about 354,000 (SCREAA, 1983:2). It is worth noting that those losses were estimated in a survey that was completed in January 1983, and did not include losses from subsequent tremors¹⁴. Nevertheless, those figures were the ones adopted by the Government and upon which the relief and reconstruction programmes were planned.

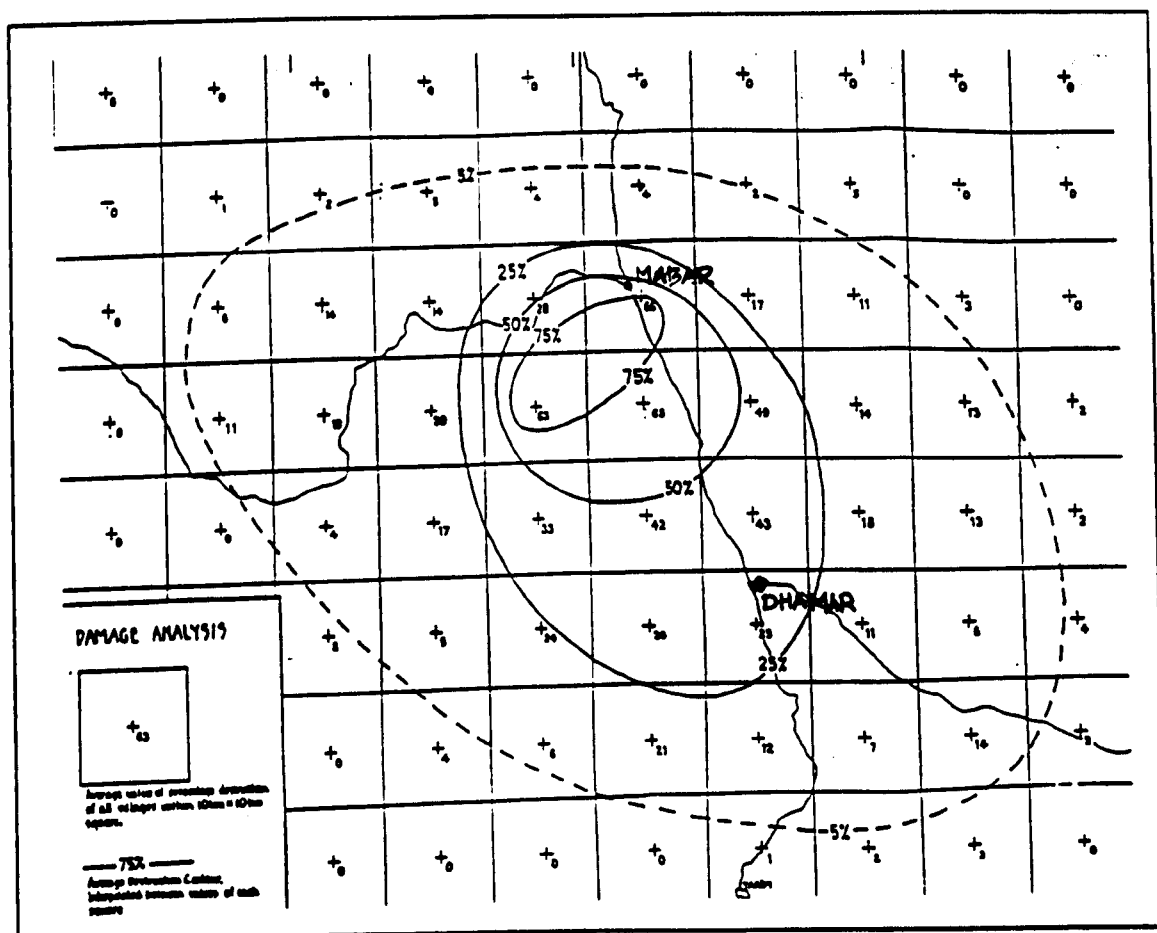


Figure [7-5] Damage analysis.
[Source: Coburn & Leslie, 1985]

¹³ This observation brings to light the on going discussion on vulnerability issues, as to whether natural disasters are nothing more than man-made disasters triggered by the forces of nature.

¹⁴ Usually tremors will result in the destruction of some of the cracked buildings, also they might damage some of the surviving ones.

In any other disaster situation it is very much the case that a researcher might be faced with different estimates from different resources, some of which are slightly exaggerated and some of which are under estimated, particularly, when each organisation conducts their own separate survey¹⁵. In the case of Yemen, the sources available to the author, more or less, agree on the scale of damage. The similarities in their assessment might be due to the fact that they all based their studies on the above Governmental assessment. For instance, Schurink & Reveldt (1983), were quoted in Matthews (1983), to claim that: "Some 1150 villages and settlements in an area of about 4000 km² around Dhamar were destroyed in the disaster. About 1500 people are said to have died,... It has been estimated that at least 300,000 people were left homeless; 42,000 houses became uninhabitable, of which 15,000 were completely wrecked. In addition, mosques, schools, water supply facilities, wells and government buildings were destroyed". Other sources, such as Coburn & Leslie (1985:2), claimed that the earthquake caused extensive damage over 6000 km², destroyed 25,000 houses and damaged 18,000 others. While Aysan (1983), reported that around 15,000 houses were destroyed and 2,000 people were killed and many more were left injured and homeless.

Piepenburg (1983) in his damage estimation claimed that, "...some 1,300 villages had been affected, with some of the settlements being completely destroyed. 2,800 lives were lost and 300,000 people were made homeless". The same commentator also claimed that the Yemeni Prime Minister at the time valued the total damage at US\$ 2 billion; a figure as high as one third of the total investment allocated to the (1982-87) five year Yemeni Development Plan.

From the above mentioned figures, we can see that, in general, all the damage estimates almost coincided with the Supreme Council of Reconstruction claim of 1987 that, "The damage and losses due to the earthquake were very large in relation to the strength of the shock. About 2,000 people were killed and another 2,000 were injured. Some 40,000 houses were affected, of which 50% have to be considered as totally destroyed. The value of the lost and damaged property is estimated at about US\$ 2 billion" (SCREAA, 1987:47).

However the most comprehensive estimate was given in a recent document

¹⁵ This is an important issue. In natural disasters, governments tend to exaggerate their losses in hope of more aid. However, after wars such estimates would be considered highly political, based on the belief that they affect the public morale, thus they maybe kept to a minimum.

published by the EOR¹⁶, which claims that altogether 2,500 people died and another 4,800 were injured. 25,045 houses were destroyed (46.1% of the total number of houses in the area) and another 18,458 were seriously cracked, most of which beyond repair (33.9% of the total number). Adding the two figures shows that 80.0% of the total number of houses within the affected area became uninhabitable. In this document there was also an adjustment to the figures given in previous documents concerning other losses. In addition, it was revealed that 131 water projects were damaged and a considerable loss was inflicted on the animal husbandry sector, where 587 cows, 1,646 sheep, 23 camels and 122 donkeys were killed. It is important to note that people never received compensation for such losses, which are very important for a rural community. Only a few water projects were reestablished.

7.5.3. Types and causes of damage incurred by the buildings.

Many damage assessment reports were produced after the earthquake¹⁷. They all concluded that although damage was variable, it largely depended on siting, age of the building, quality and type of construction as well as the state of maintenance. Of course, the interaction of two or more of the above reasons was common.

In terms of siting, those traditional settlements located on steep hills and hill-tops (originally for the purpose of defence and security)¹⁸ suffered the most damage. This fact was established when observers such as Aysan (1983), recorded that in the very same settlement, houses built on the plains surrounded by steep hills were less affected. Apparently, it was long before this earthquake that people had started building outside their traditional settlements.

As we all know, it is more convenient for public and private relief agencies and organisations to provide their emergency shelters on the lower, flatter lands rather than the higher, hilly ones. Those factors, combined with the professional judgement concerning the vulnerability of such hilly sites, made it almost certain that many newly selected housing sites were to be located in flat areas. On the other hand, the

¹⁶ Obaid, Ahmed (1990) *The December 1982 Earthquake, the Relief and Reconstruction Programmes*, the Executive Office for Reconstruction.

¹⁷ For more detail see attached bibliography.

¹⁸ Yemen has a rich history of tribal conflicts and wars, which led to the development of such defensive settlements. A summarised research on Yemen's tribal history can be found in the work of Harvard School of Architecture (1983), published in *Development and Urban Metamorphosis Vol. II, Yemen Background Papers*.

continuous local need of flat land for agriculture, as well as the long established traditions of living on hill-tops certainly suggests the opposite.

Quality and type of traditional construction influenced the degree and type of damage incurred by the buildings. Most of the traditional structures within the affected areas are built of stone masonry. However, as Coburn & Hughes (1983) reported, in a few places adobe buildings and stone masonry were found in the same damaged village. They also found that, the usually older stone masonry construction, appeared to have suffered greater damage than similar adobe brick construction. Overall, the different damage assessment reports on the Dhamar earthquake concluded with five main types of damage, summarised in the Coburn & Hughes (1983) report as being:

- a. Corner failure; the separation of the corner from both walls, usually as a diagonal wedge. (observed in 46% of collapsed, 35% of uncollapsed buildings).
- b. External wall to wall separation; a vertical separation between two bonded walls. (62% of collapsed, 71% of uncollapsed).
- c. Skin splitting; the separation and bulging of the two leaves of a wall. (58% of collapsed, 21% of uncollapsed). Aysan (1983), claimed that this type of failure occurred in what she considered relatively new houses, where the techniques of cutting the imported stone in pyramidal shapes and laying them as a facing material with thin joints resulted in the separation and the collapse of inner skin.
- d. Mid-wall damage; vertical or diagonal cracking leading to failure usually at eaves level. (32% of collapsed, 14% of uncollapsed).
- e. Internal wall to wall separation, and wall to floor separation. (observed in 100% of uncollapsed buildings).

Furthermore, the traditional Yemeni life-style has tended to the extension of buildings as the need arose and the finance permitted, with very little, if any, consideration of the bonding between the old and the new parts.

Such observations had important implications for different preventative, life-saving measures introduced into the newly reconstructed buildings and settlements. It was important to see what implications these observations had had on the repair schemes. Most governments it seems in this situation prefer to rebuild than repair. While repairs represent a greater challenge, particularly if preventative methods are to be incorporated and if one is dealing with damaged settlements that are of architectural value. Rebuilding is more politically impressive and constructionally more manageable, though perhaps less economic. What it shows

is that natural disasters are often seen by governments as opportunities to receive large quantities of overseas aid and by individuals to receive a new house, rather than carrying out repairs, using local labour, professionals and materials. It has to be said that donor Governments likewise want to see 'symbols' of their generosity.

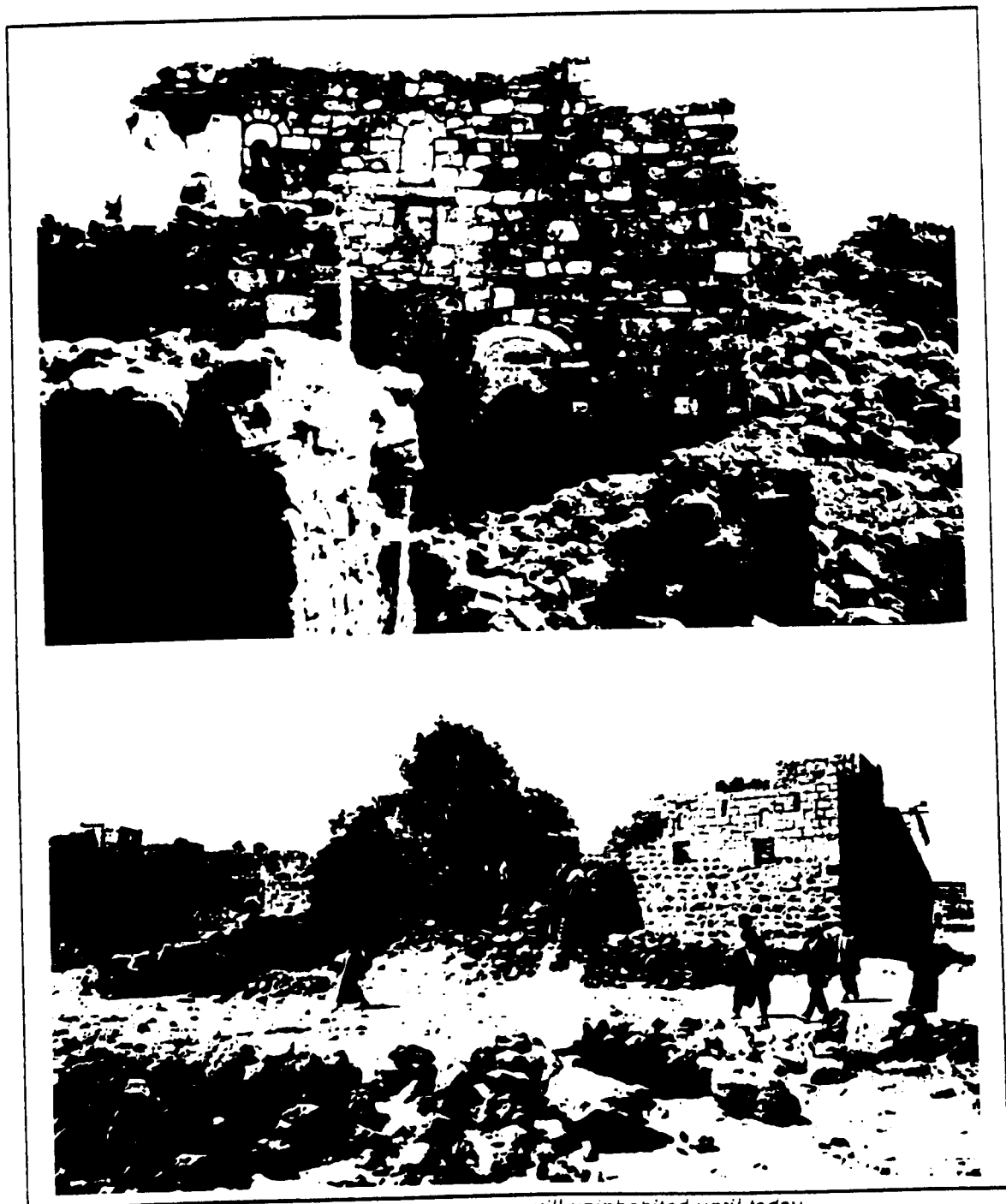


Figure (7-6) Some of the damaged settlements are still uninhabited until today.
(Source: The author, 1991)

In terms of the **age of the building** it has been proved that it is not necessarily the sole cause of failure. Different field surveys have shown that if a traditional building has been maintained properly it can withstand an even greater shock. "The benefit of sound construction, no matter how old the building, and of careful, skilled maintenance, is everywhere evident in those buildings which survived unscathed throughout the earthquake region" (Lewcock, 1983:6). Apparently, traditional Yemeni construction recognised the need for certain construction principles in order to withstand earth-shocks. Such details are evident in many surviving buildings. It is just in recent decades that, "...builders have become skimpy and careless; building materials and mortars are often poor, foundations weak, wooden ring beams are inadequate and often are not properly joined, and roof beams are of poor quality and too short, with bearing over only a short distance into the walls" (Lewcock, 1983:6).

Nevertheless, it seems too simplistic that it was only the carelessness of the builders that led to such disastrous consequences. It also has to do with economic pressures that must have led both the householders and their builders to cut costs by excluding some of the traditional reinforcement details. For instance timber was often used in the walls to strengthen and stabilise stone work; in recent years this practice has been abandoned.

In conclusion, from reviewing the scale of the earthquake in relation to the damage it caused and by referring the different types of damage to the different vulnerabilities demonstrated by the settlements in terms of siting, construction techniques or lack of maintenance, it is clear that the area represented a fragile physical environment, even before the earthquake. Thus, the author wonders if the Dhamar earthquake of itself, was nothing more than a 'natural hazard' that triggered a 'man-based disaster'.

7.6. THE EMERGENCY & RELIEF STAGE.

"The Government reacted quickly, mobilising the entire army to provide immediate relief. Foreign aid in *finance, tents and foodstuffs*, especially from neighbouring Arab countries, began to pour in and continued to do so by daily flights to Sana'a's airport. European relief agencies flew in medical teams from Holland, technical assistant from Germany and a search party with trained dogs from Switzerland" (Piepenburg, 1983)¹⁹.

¹⁹ The use of trained dogs has been criticised in a culture where dogs are considered unclean.

Following the disaster, a general State of Emergency was announced in the country, followed by a typical official response, in which a variety of resources were mobilised through Public Works, Social Services and Health Ministries. In addition, the military was involved in re-establishing communications, search and rescue operations and damage clearance. An early intervention was carried out by members of the nearby PLO base.

It is worth noting the organisational pattern of 'disaster management' that was adopted by the Yemeni Government. Some documents referred to an Emergency Council consisting of high government officials and representatives of foreign aid organisations, that was quickly established for the co-ordination of the relief effort. (see Piepenburg, 1983). This Council was headed by the Army Chief of Staff, with a number of Relief Committees, each operating within an administrative district. A Relief Committee comprised members of the Co-ordinating Council of Local Development Associations, the Dhamar Governorate, the Central Planning Organisation and other Yemeni institutions, together with representatives from foreign missions, bilateral and multilateral aid agencies and non-governmental organisations. (see Coburn & Leslie, 1985:2).

However, the organisational pattern was much clearer after the establishment (by Presidential decree) of the 'Supreme Council for Reconstruction of the Earthquake Affected Areas' (SCREAA). This council consisted of the Vice President, the Prime Minister, ministers in various fields of technical and humanitarian services, the chairman of the Central Planning Organisation and the governor of Dhamar Province.

The grass-roots relief work was carried out by the District Relief Committees, with its headquarters in Dhamar city. "These committees were responsible for receiving the relief supplies from Sana'a airport and other ports in Y.A.R., transporting them to Dhamar city and distributing them to the districts and villages" (SCREAA, 1983:3). Naturally the initial preoccupation of the local authorities was with the overwhelming medical care needs, which drove them immediately to send an appeal to all friendly countries asking for help. Besides the food and blankets, tents were the main form of temporary shelter for the estimated 300,000 homeless. Some observers, such as Coburn and Leslie (1985:2), claimed that "A sizeable number of people left the affected area to seek accommodation elsewhere". Taking refuge with relatives and neighbours, whose houses survived the earthquake was another way of meeting the immediate need for shelter. Self-build emergency shelters started to

appear as early as January 1983, using timber frame and corrugated iron sheets.

There is no reference as to when the state of emergency ended and the Relief Programme started. Nevertheless, a Supreme Council Report written in June 1983 referred to the programme as still being in existence. The same report justified the continuity of the programme as being due to "...the continuous occurrence of tremors". Furthermore, as part of their effort to ensure the continuity of the Relief Programme, the Yemeni Government established a Relief Office in June 1983. (SCREAA, 1983).

In their 'Reconstruction Programme' document (1983:1) the SCREAA referred to the Relief Programme when they wrote:

"The Relief Programme includes distributing tents, food, clothes and cooking utensils because a great number of families lost these things and were not able to return to their normal living patterns without this assistance".

In terms of how the aid was distributed it is important to note the role played by the Yemeni Local Development Associations (LDAs). The LDA is an elected body according to administrative districts, with a representative member per 500 people; some kind of a town council. Special attention was drawn to the (LDAs) in Aysan's conference paper (1983:54), when she stated that:

"The LDA, as a pre-established association had an important role in the assessment of damage, distribution of aid and later in the organisation of education programmes".

The same author also claimed that because of the tribal structure of the society in Dhamar, where the first loyalties are to the tribe rather than to the State, "...the LDA as a local organisation played an important intermediary role after the earthquake" (Aysan, 1983:54).

There has been some criticism of the way emergency aid was handled. Jolyon Leslie in his presentation at the 'Second York Workshop on Settlement Reconstruction After War, 1989' provided a clear insight into some of the shortcomings that occurred during the Emergency Period; in some isolated villages it took days and weeks for the aid to arrive, by which time the local people had already organised their own water supply, cooking facilities and even shelter. This demonstrates the fact that local communities are not as helpless as is so often assumed. The same author also criticised the use of sniffer dogs to look for corpses, in a society that considers dogs as being unclean. This, he claimed made the local people angry because they felt as if the dogs had defiled their dead. He talked about prefabricated clinics that had

been distributed to some mountain villages that lacked even clean water supplies, as the original water wells were blocked by the earthquake, and in some cases those clinics had no medical staff to run them. Other observers, such as Aysan (1990) criticised the way in which local structures of power and influence had been neglected in some cases. She gave an example, when a relief agency ignored the Sheik during the distribution of plastic sheeting to cover tents, and went on distributing them to all the families. As one would have expected, none used their sheet until they obtained approval from the Sheik. Some sources such as Leslie (1986; 1989) and Coburn & Leslie (1985), recorded the occurrence of a well established phenomenon that has been witnessed in many post-disaster situations all over the world; the raising of peoples expectations, through exaggerated official promises, on the media, of assistance. It has been claimed that such political propaganda has led in some cases to the long term dependency of people on the government, and government on external aid, particularly concerning re-housing and reconstruction. Immediately, "such issues came to be seen in many of the worst damaged villages as a government responsibility". (Coburn & Leslie, 1985:2). Thus the people who received such promises have done nothing to rehouse themselves, consequently, "Some fifteen months after the earthquake it was estimated that four out of ten villagers in the affected area were still living in some form of temporary shelter", such as tents. (Leslie, 1989). During the field visit (November 1991) it was found that a considerable number of emergency shelters were still in use, even some tents. But today they are mostly used as kitchens, for storage, or animal shelters, etc. It is interesting to see how the newly introduced corrugated iron has been accepted as a cheap building material. In other cases the corrugated iron has been recycled for extending and adapting the government provided houses. The fact that only tents were provided and that people managed to build their own emergency shelter shows their resourcefulness²⁰.

7.7. REPAIR AND RECONSTRUCTION.

"The aim of the reconstruction project is to remove all the features that have resulted from the disaster and to compensate the affected citizens for all their losses, including housing, public services and agricultural losses". (SCREAA).

²⁰ Plastic sheets were provided, at a later stage, to water-proof the tents which were supplied by Saudi Arabia.

Theoretically, tackling the reconstruction problem started with the establishment of the *Supreme Council for Reconstruction* and its *Executive Office*, in January 1983. Thus creating a fairly conventional top-down model of reconstruction management, based on creating a new body to tackle the problem, as against reinforcing the existing ones. The Council's responsibilities included establishing policies and priorities, while the Executive Office for Reconstruction (EOR) was responsible for making studies, designs, cost estimates, preparing tender documents and supervision. (SCREAA, 1983:4). In their first reconstruction document of June 1983, the Supreme Council summarised the tasks of the Executive Office as follows:

1. Collecting all technical and geological studies concerning the affected areas.
2. Conducting studies, research and designs for the affected areas.
3. Preparing the designs, cost estimates and time schedules for reconstruction.
4. Preparing tender documents, advertising, analyzing and evaluating them.
5. Supervising the execution of contracts.
6. Making proposals for repair works and supervising them.
7. Preparing educational programmes concerning the houses to be built up through self-help and supervising their construction.
8. Making informational programmes for people in the affected areas to build houses in a safer way.

The EOR consisted of seven main units: Design, Supervision, Public Relations, Finance and Administration, Repair and Building Education, Self-help, and the Seismological Unit. All headed by the Executive Director, who is a member of the Supreme Council for Reconstruction.

The EOR enjoyed full independence from other government departments, both in terms of finance and administration. Thus, financial aid coming from donor governments and international bodies went directly to its own budget. This independence had one intention, to reduce the inevitable bureaucratic procedures through which every stage of reconstruction would normally have to go. Unfortunately this aim was never realised when it came to implementation. The EOR's budget became so big that it could 'compete' with that of any ministry. As a consequence ministries started to withdraw their responsibilities towards the affected areas, and in the cases where they did not, their projects overlapped with those of the EOR, because of lack of co-ordination. For instance, the Ministry of Education and the EOR built two schools in the same village.

7.7.1. Studies and proposals for reconstruction.

The Yemeni earthquake drew considerable international attention. This might have been due to Yemen's moderate political stand at the time²¹. Also Yemen was enjoying world wide attention directed towards its traditional architecture and the need to conserve its heritage. It is interesting to notice that within a month of the earthquake, a number of technical specialists teams from all over the world, were flown into the area to conduct studies on damage to buildings and to suggest ways of rebuilding. Those teams were generally unsolicited by the Yemeni Government. The authors' bibliography contains most of these studies²². None of these reports it seems were made available to the EOR, they were all commissioned by international organisations for their own ends. The same has to be said about the Evaluation Reports that were carried out in the course of implementation.

Almost all these studies recommended self-build as being the most suitable approach for reconstruction, in order to incorporate long-term development within short-term relief. They also highlighted the importance of using predominantly traditional building techniques and architectural forms. Equally, they all agreed on the importance of introducing steel reinforcement into the reconstructed houses, in order to make them less vulnerable to future earthquakes.

For a clear idea of their recommendations, it is worth quoting the recommendation of one of those reports; Coburn & Hughes (1983) submitted to the British Government's Overseas Development Administration (ODA). They recommended that "The burden of reconstruction and repair should lie chiefly with the householder himself, and construction to any suggested standards will inevitably be his own choice and responsibility... Administrative influence on improving building construction in these rural areas should be concentrated on aiding, recommending, and informing the householder about methods to improve his own house and raising the consciousness of people to the possibility of future earthquakes".

The same report concluded that the best approach for reconstruction might be achieved by three main measures: Firstly, making money available to the householders, each related to a minimum level of building work estimated to be

²¹ This is another issue that needs more discussion in detail; the effect of local policies as well as international relations on the aid received by a certain government, particularly in the case of war destruction.

²² Piche & Sirvain for UNCHS (Habitat); Allard & Godefory for Architects sans Frontieres; Arya et al for Rorkee University, India; Coburn & Hughes for the Overseas Development Association, U.K.; Copenhagen for USAID, U.S.A., and finally Aysan for the Oxford based Centre for Disaster Management.

required on his house. Secondly, by implementing a large scale information and instruction campaign to the villages throughout the affected area. Finally, and in order to encourage the householder to incorporate strengthening measures into the construction of his house, the report suggested that the Government should restrict prices of strong and durable building materials, particularly, cement, timber and steel.

In the above report there is no mention of public services and infrastructure and whose responsibility they are. Although those recommendations could have been the right approach they fell short of being feasible, by putting all the burden on the householder. How do they expect the householder to get access to building materials and construction information without the infrastructure, such as roads and water supplies being repaired.

Nevertheless, the Yemeni Central Planning Organisation commissioned its own joint mission of the World Bank, the Arab Fund (AFESD), the Kuwait Fund (KFAED) and OAPEC, to conduct a study of the damage and reconstruction options. The mission completed its recommendations in March 1983, three months after the disaster. Their report wisely dismissed the option of official provision of temporary shelter, in favour of immediate permanent reconstruction. This recommendation was accepted by the Yemeni Government, who later acted accordingly. Four main reasons were given for this decision; "Firstly, the winter in the devastated areas is quite severe, particularly in November and December and there are not only people to be cared for, but animals to be sheltered from exposure to extreme cold. Second, as the people are used to living in substantial masonry buildings, with their many advantages, they are likely to want to begin rebuilding in the traditional style very soon. Third, the masonry houses, properly designed and built, are likely to provide substantially safer shelter in the event of another earthquake shock than the temporary shelters. Finally, the considerable expenditure on the temporary shelters would be ultimately wasted, as the inhabitants would be unlikely to want to live in them for long, and it is difficult to see what practical purpose they would afterwards be made to serve nor are the materials likely to be recoverable". (Lewcock, 1983).

Their alternative as a medium-term shelter solution to replace approximately 25,000 destroyed houses, was to provide permanent shelters "..in the form of Government funded minimal 'core' units to be built by the villagers themselves with technical assistance. These basic units would form the first stage of homes that would be extended by the owner over a longer period". (Coburn & Leslie, 1985:2). This recommendation was also approved by the Yemeni Government, but this time

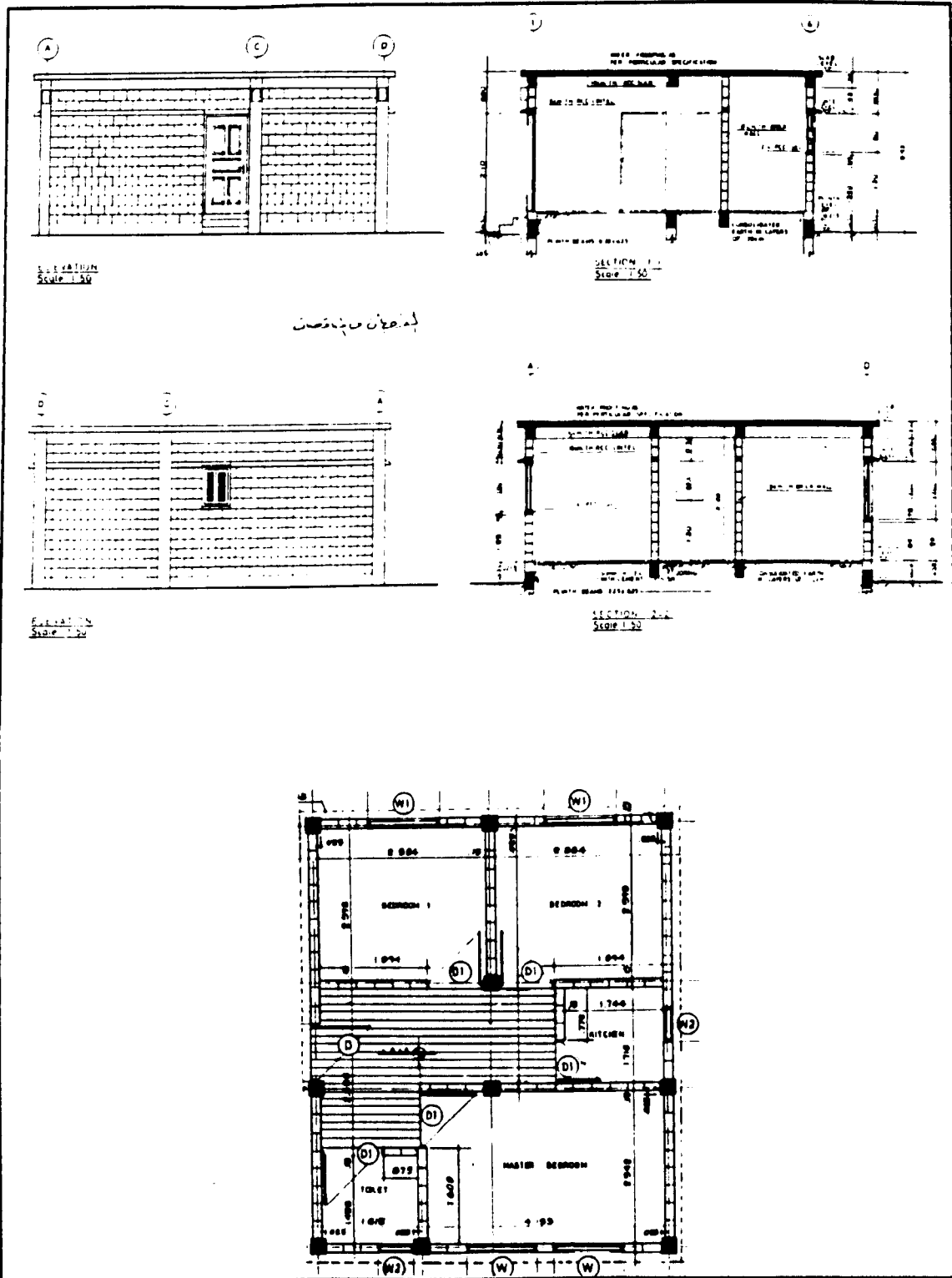
with some adjustment. Firstly, the 'core' unit in the initial report consisted of two rooms, to which the Government added a third one, on the basis that the average family size in the affected area was between six and seven. Secondly, while accepting the self-help approach as a means of reconstruction, the Government excluded from this approach all the settlements with more than 75% damage or more than 25 dwellings destroyed. This meant that 127 settlements; about 13,000 houses were to be built by the 'tender method', carried out by foreign and local contractors. Leaving the balance of 12,000 destroyed houses to be built with the 'self-help' approach, amongst 1052 villages. (SCREAA, 1983). However, "The final list released later in 1984, shows the contractor programme to have grown to 305 separate villages, with approximately the same number of houses to be constructed as originally estimated". (Coburn & Leslie, 1985:5).

The Supreme Council's decision to pursue an open international contracting system in villages with a large number of destroyed houses, was based on the claim that there was insufficient labour available for the villagers to rebuild by their own efforts. The EOR selected the new sites of those villages, based on technical and geological criteria, surveyed them and prepared their tender documents²³. The designs of the houses were also prepared by them "The units were planned to be a reinforced concrete frame of columns, beams and slabs, with external and internal walls made of cement blocks. Alternatively stone, bricks, precast or cast in-situ materials are acceptable if they meet the requirements of price and time schedule" (SCREAA, 1983:7).

Although the first intention was to adapt the conventional use of local construction methods and materials, and adopt simple building techniques that could be imitated later on by the local people, in the event, a range of different methods were used from conventional to prefabricated concrete units. Despite the SCREAA decision "...not to accept frame prefab buildings" (SCREAA, 1983:7), some sources, such as the Swiss Disaster Relief Unit and the Ministry of Health of Yemen Arab Republic (1984, pp. 13-14) referred to the use of the prefabrication method, and as expected "The construction of the prefab houses has been, astonishingly, consistently rejected... The bid was based however on a standard type and allowed unfortunately

²³ It might be worth doing a limited research into the open contracting system. According to Ed Cooney, recently the efficiency of such system has been questioned in the United Kingdom. One wonders how effective it has been in a country like Yemen, particularly, as most of the contractors that entered the tender were either big local contractors in cooperation with foreign ones, or were totally foreign contractors.

scarcely any freedom of design".



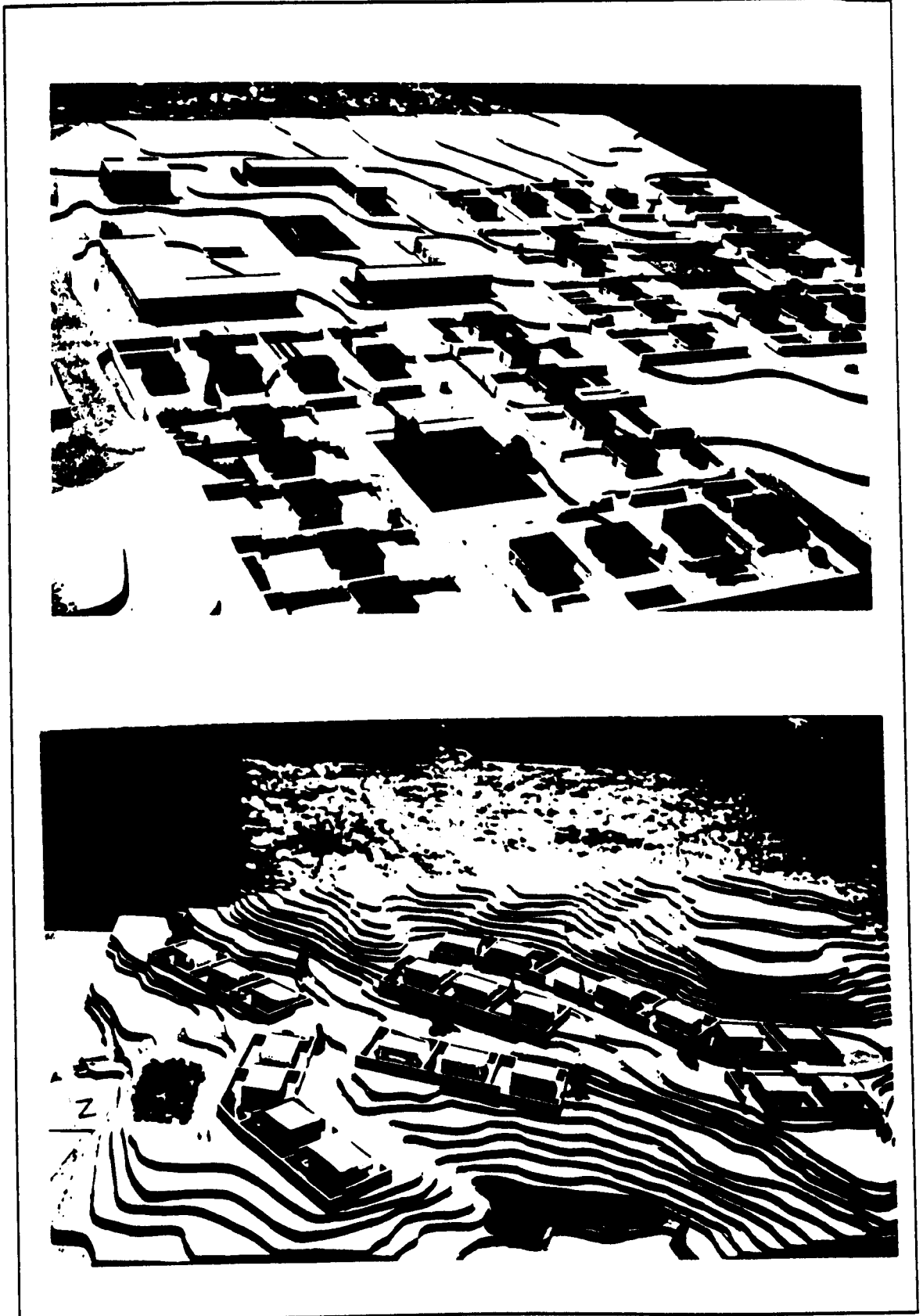


Figure [7-8] The new settlements layout introduced by the planners for flat and hilly sites.
[Source: The author, November 1991]

In conclusion, three approaches of reconstruction were pursued by the Yemeni

Government. First, the erection of new houses by both local and foreign contractors, starting in June 1984 for completion 18 months later. Second, the setting up of Self-help programmes, this was due to start after the Tender programme was under way, and be completed by December 1985. The Dutch government as well as the UNCHS & UNDP set up their own limited programmes of aided self-help. The third approach was to repair the remainder of the damaged buildings by December 1985. Target figures for each of the three approaches were given after the disaster, by the Public Relations Manager of the Supreme Council for Reconstruction, who was quoted in Piepenburg (1983) to claim, that the first approach would provide 15,000 housing units, while the second approach would benefit 1,000 villages and the last approach would contribute to all the repairable houses within the affected area.

Side by side with the above reconstruction schemes, a Building Education Programme was set up by Oxfam and other relief organisations in co-operation with the Yemeni Government, to train local builders on how to build reinforced buildings. This programme has demonstrated some success and has evoked mixed feelings. Within the scope of our concern, such a programme might give us more ideas on how to develop a 'small-contractor training programme' in the context of building after wars in the Middle East. This should consist of small component manufacture based on strengthening local materials, good employment practices, skill development and small business management.

7.7.2. The progress of the reconstruction programmes.

Trying to follow and register the progress of the reconstruction campaign six years after its due completion date (December 1985) would have been difficult if we had had to depend on the literature, particularly as there were few sources referring to the completed projects. However, some of the sources available were written in 1985, 1987 and 1989 in which some reference was made to the output of the reconstruction until then. For instance, commenting on the progress of the Government schemes of reconstruction, Coburn & Leslie (1985) expressed their fears that the Government gave more emphasis to the Tender (contractor-built) approach, rather than the Self-help or Repair approaches, they wrote:

"It is clear from the SCR proposals that greater emphasis was to be put on the contractor-built programme than on the use of local resources and labour to rebuild the earthquake damage. To give priority in reconstruction to those villages with the most severe damage was understandable, and this strategy resulted in the repair and self-help components being relegated to a subsequent phase, if they were to be built at all".

According to the Supreme Council's reconstruction programme, the repair programme was supposed to last two years from the end of 1983 to December 1985, and cover 17,000 houses. (see SCREAA, 1983). Surprisingly enough, Coburn & Leslie 1985, reported that up to October 1985, only some 300 homes and public buildings in the city of Dhamar were repaired, at an average cost of 23,000 YR. per house. They went further to claim that at that time "Work has not begun on the repair of the estimated 18,000 cracked homes in villages". During the author's visit to Yemen it was found that only 2,216 houses (1,000 stone construction and 1,216 mud brick) had been repaired, all of which were in Dhamar city. In most cases people carried out the repair of their houses themselves. Many of those who had waited for Government help, had to abandon their houses a few years later as the damage extended.

Concerning the Self-help programme, in their reconstruction programme the SCR implied that all the destroyed houses that were not included in the contractor-built programme would benefit from the Self-help programme, this meant 10,000-12,000 houses. In the event only 1,229 houses were built in this programme. A recent publication by DHV Consulting Engineers (1989) revealed that, within the 'Dhamar Aided Self-help Reconstruction Project', 1000 (earthquake-resistant) housing units were completed. This project was funded by the Netherlands Government, the Commission of European Communities, USAID and the Yemeni Government. It covered the Magreb Ans region to the west of Dhamar, and was completed in August 1988²⁴.

Another self-help project has been established in the Dawran Ans region. It was referred to by Coburn & Leslie 1985. This project was supported by the United Nations Development Programme (UNDP), in Co-operation with SCREAA. It was set to build 280 earthquake-resistant houses, with the recipients meeting a proportion of

²⁴ Note that the original completion date fixed by the SCREAA in their reconstruction programme was December 1985.

the cost. Furthermore, in his letter to the author, Jolyon Leslie, October 1990, wrote":

"I would emphasize that the bulk of reconstruction after the earthquake was done without any projects or assistance. People used the best means at their disposal to build some form of shelter immediately, which involved a significant change in technology in some cases (corrugated iron, for example). They were also afraid of the vulnerability of traditional building, while being aware of its environmental advantages".

In short, we can see that the Yemeni Government has placed a greater emphasis on the Contractor-built programme, rather than on the Repair or even Self-help programmes. This was done despite the professional advice to the contrary from almost all the reconstruction studies including that commissioned by the Government itself. However, the author was surprised to see that in one of the most recent documents written by the Executive Office of the SCREAA, in September 1986²⁵, great emphasis was laid on both; the Repair and the Self-help approaches. In their 25-page paper there is only one paragraph in which they refer to the Contractor-built programme, in which they have listed the different numbers of villages and houses allocated to different contractors. It was even more disappointing to find no mention of the progress or the achievement of the contractor-built reconstruction.

7.8. FIELD WORK ANALYSIS AND FINDINGS.

This section discusses the findings of the field visit concerning the Contractor-built programme. The aim is to reach conclusions concerning the *efficiency* of the programme and its *cultural sensitivity* and their complex interrelation in support of the main hypothesis of this dissertation.

7.8.1. Efficiency in reconstruction.

Efficiency is widely understood to mean "producing effectively and with the least waste of effort, resources and time". For the Supreme Council for Reconstruction and its Executive Office, efficiency merely meant good management

²⁵ SCREAA (1987), *Reconstruction of earthquake affected areas in the Yemen Arab Republic*. A paper presented at the Middle East and Mediterranean Regional Conference on Earthen and Low-strength Masonry Buildings in Seismic Areas. Held at the Middle East Technical University, Ankara, Turkey, August 31 - September 6, 1986.

of construction projects, resources, time and physical product (in this case houses). They denied the 'functional' dimension of the term efficiency. Thus, for them reconstruction was all about material statistics, standard contracts and the production of houses. But, this is clearly not the end, only the means to the end; those houses have to function effectively, both in the short and long term.

Even if we accept that 'efficiency' is only about production, it is clear that the reconstruction projects were not efficient, for the following reasons:

- a. The initially intended number of reconstructed houses was never realised,
- b. time limits were never met, and
- c. reconstruction budgets were invariably exceeded.

On the 1st May 1983, SCREAA announced that 25,000 houses and 17,000 cracked houses would be built and repaired respectively; nine years later only 10,299 units and 1,652 houses were built and repaired. Thus of the contractor-built programme only 41% was realised and only 10% of the repair programme. Furthermore, contracts were not signed till the 28th March 1984, (15 months after the earthquake). Contractors were given three months to prepare themselves and to bring their equipment and labour and 18 months to complete the contracts. Only a few settlements were completed by November 1987, other settlements were completed in 1989, some are still not finished. Thus the emergency shelter programme was actually realised 5 to 7 years after the earthquake. Contracts that were supposed to finish in 18 months took 3 to 5 years to complete. The following are some of the reasons for the delays:

- The mountainous area of Dhamar Province has extremely bad roads and tracks; only four-wheel drive vehicles with a maximum load of 1000kgs can be used to transport building materials. Many roads had to be improved or even opened to accommodate heavy contractors equipment and transportation. Following the rainy season some villages were inaccessible.
- Contractors do not appear to have understood the nature of the work and the difficulties facing them; their main aim was to get a contract. A number of contractors could not finish what they had started. In fact one of them (an Italian construction company) fled the country leaving behind all its equipment and employees.
- The great number of construction sites, 447 in total were spread over a huge area and this made supervision very difficult and expensive²⁶. This

²⁶ For instance, it cost \$40,000 to introduce a communication system between engineers in the field and the EOR.

was despite the fact that an attempt was made to reduce the number of sites by gathering a number of villages into one site.

- The selection of beneficiaries, both in terms of settlements and individuals, proved to be a prolonged process, particularly as it was carried out by the EOR, who lacked the staff with the social and cultural knowledge of the area. For instance, the tribal differences over new construction locations led to a number of armed conflicts.
- The EOR was newly established with no existing experience in large-scale housing projects. It was the first time in Yemen that a housing construction programme of that scale had been commissioned. Lack of co-ordination between the EOR and other ministries meant that everything had to go through protracted bureaucratic procedures²⁷.
- The contract time of 18 months was unrealistic, particularly for the foreign contractors who had to establish themselves in Yemen. Even local contractors had to import equipment that could match the needed speed in reconstruction. In fact the conception of time is a cultural expression in Yemen and it is different from any where else. Moreover, the lack of building materials in the local market for the 17 competing contractors was one of the main reasons for delay.

7.8.2. Aid and finance.

The reconstruction project was certainly not efficient in terms of cost and finance. The cost per house more than doubled over the period of reconstruction, from 68,000 YR per unit (\$15,100) to 150,000 YR (\$34,000). The terms of the contract stipulated that local contractors were to be paid 50% in local currency and 50% in US Dollars, while foreign contractors were to be paid 40% in local currency and 60% in US Dollars. However, the Yemeni Riyal was devaluing from 4.72 YR per 1 US\$ in 1984 to 12.02 YR per 1 US\$ by 1990²⁸, with drastic effects on the completion of the contracts.

The other sad chapter in this story has to do with the aid received by Yemen from different donor countries. For instance the USAID contribution to the reconstruction programme was in the form of tons of grain worth \$70,000,000. The Yemeni Government signed a loan guarantee for this amount. The income from selling the grain in Yemen was in turn intended to pay for the house building

²⁷ For instance in some contracts walls were specified to be build of red brick, but the national factory could not cope with the demand. The management structure and the operating procedures of the EOR, meant that 4 months were wasted before the specification allowing the use of concrete blocks instead of red bricks could be changed.

²⁸ Of course this is the official Central Bank rate, in November 1991, the black market price was 30 YR per 1\$.

programme. In effect the Yemeni Government had to organise to receive, distribute and market the grain, at the same time as trying to maintain the value of the Yemeni Riyal to pay the contractors. By 1990 this so called aid had so far cost the Yemeni Government 800,000,000 YR (almost \$66 million at official rates in 1990), and they are still paying back the loan²⁹.

A similar story was repeated with the Dutch and EEC donors. However, the Arab donors (Saudi Arabia, Kuwait and Abu Dhabi) were willing to finance a number of reconstruction sites, on condition that each had its own independent mini Executive Office, who selected the contractors, supervised the construction and paid them directly. One of the Italian contractors collected the first few payments, completed a few houses and fled the country, leaving behind imported equipment and local and Sri-lankan employees.

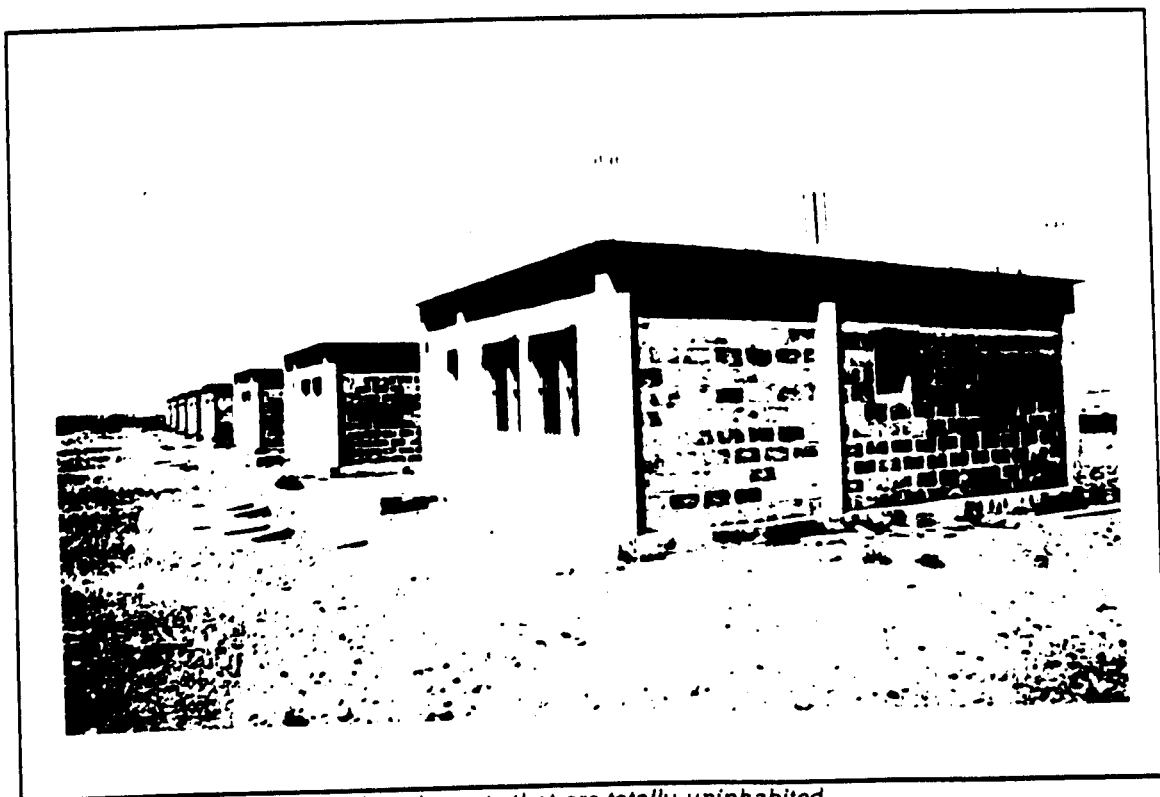


Figure [7-9] Yaffa'a, one of 10 settlements that are totally uninhabited.
[Source: The author, November 1991]

7.8.3. Reconstruction and the local culture.

The fact that efficient production and assumed urgency were given prominence meant that the cultural dimension of reconstruction was overlooked, which in many

²⁹ From an interview with the Finance Manager of the EOR.

cases led to a total rejection of the new settlements by the local people. We believe that the 'degree of acceptance' is a good indicator of the success or failure of the reconstruction project. So we investigated 40 settlements and plotted the percentage of occupation in each. Below is a list of the researched settlements along with the percentage of occupation in each newly reconstructed settlement as of November 1991.

Settlement	% of Occupation	Settlement	% of Occupation
<u>Northern Plains</u>		<u>Dhamar area</u>	
Al-Aulaib	68.4%	Dhamar Al-Qare	71.4%
Al-Husson	100.0%	East Dhamar	92.2%
Beit Rashid	85.0%	Al-Qilah	14.2%
Hijirit Manfatha	100.0%	Rakhmah (1)	23.8%
Rusaba	92.5%	Rakhmah (2)	25.0%
<u>Central Highlands</u>		<u>Western Highlands</u>	
Abasser	03.3%	Al-Sharjabi	uninhabited
Adro'ah	83.6%	Beit Al-Fatimi	66.6%
Al-Kawla	70.0%	Beit Al-Qaif	67.7%
Al-Mahnasha	uninhabited	Dawran	88.8%
Al-Matahen	33.0%	Hussain Amran	07.6%
Al-Mithaal	uninhabited	Khalaq	87.5%
Al-Qadadh	09.8%	Maria	09.0%
Al-Shalalah	50.0%	San'a	45.8%
Al-Talibi	09.0%	Wasita	91.5%
Al-Washal	uninhabited	Yaffa'a	uninhabited
Aram	uninhabited		
Bani Qatra	22.2%		
Bardon	07.4%		
Bashar	uninhabited		
Beit Abu Khalabah	uninhabited		
Beit Al-Dibiani	20.0%		
Haker	uninhabited		
Jarif Midrass	uninhabited		
Kalabit Mahfad	32.7%		
Tinin	06.4%		

Table 7.1. Settlements with the percentage of occupation of the newly reconstructed houses, in November, 1991.

Hundreds of settlements were relocated following the earthquake. It was not an immediate relocation as there was no provision of temporary housing. But in the long run all the Contractor built reconstruction could be considered relocated settlements, either partially or totally on new sites. In general where the destructive impact of the earthquake was considerable (more than 25 houses), new houses were rebuilt to house the affected families on new sites, from within one to two Kms distance (eg. San'a, Rakhmah, etc.) up to four Kms (eg. Al-Sharjabi, Bardon). In villages where the destruction was partial, and limited to a small group of houses, reconstruction took place within the original settlement (eg. Al-Matahin) or within one Km distance (eg. Beit Rashid, Al-Shalalah). In relation to the resettlement and relocation three issues were found to be of a great significant to the success of the new settlements: Site selection, land ownership and proximity to the main road.

a. Site Selection.

Five teams from the EOR were responsible for the selection of new sites. Each team consisted of an architect, a civil engineer and two geological engineers. The initial criteria for the selection was based on the site's geological safety, and on its being out of any flood zone, trying to avoid agricultural land. Special attention was paid to ensuring that the site could be extended in the future.

b. Land ownership.

In practice, the relocation policy was difficult and expensive to implement because of clashes with the private owners of the land. In a few cases the newly selected sites were already the collective property of a village. In other cases land belonged to the Government, but the majority of new settlements were on private agricultural land. Conflicts arose between tribes and villages over the ownership of the land (in one case resulting in an armed conflict between *Bani Hujaija and Al-Nasarah* tribes). The new locations were often too far from the old settlements (eg. in the case of *Al-Sharjabi*). When the land was in private ownership the owner was to be compensated by both the State and the individuals benefiting from the new houses, later the Government announced it would not compensate any private land owner. At the same time, the beneficiaries started to recognise the kind of houses they were to be offered, and became reluctant to move in. Moreover, the idea that they had to pay the owner of the land or donate an equal piece of their own agricultural land (in accordance with the tribal rule 'Tian be Tian' or earth for earth)

as compensation, totally put them off moving. Thus in a number of cases, the owners of the land ended up with tens of unoccupied concrete houses in the middle of their land (eg. *Al-Talibi* village, etc.)³⁰. Or, as in the case of Tinin, with a number of small scattered agricultural plots that were no longer economic to farm.

From the beginning it seems strange that individuals would have allowed the building of these houses to take place on their land, though all of them signed contracts with the EOR. Eventually it became clear that they signed the contracts under pressure from the Sheik, as well as the community, and as a social obligation towards their village. The leaders of the tribes in turn were threatened by the Government, that if they did not agree to the new site location they would be deprived of the benefits of the reconstruction project. The village of 'Jarf Al-Tahir' was one of those where the people did not agree to the new site and they subsequently lost the 40 houses they were due to have replaced.

c. Proximity to the main Road.

The proximity of the selected sites to the main road was a major feature of the criteria used, in cases where roads existed prior to the earthquake. But as many of the affected areas were not very accessible, most contractors had to open their own roads to reach them. Although all the newly opened roads were in a bad state, the locals feel that the road was one of the few benefits they had from the reconstruction project.

7.8.4. Factors affecting the degree of acceptance.

By analyzing the data collected during the field visit, one can derive some general factors that have affected the degree of people's acceptance. In order to make the factors more manageable they are grouped under three main categories. The first one constitutes all the *physical and economic* factors. The second, includes all the *social and organisational* ones. Finally, all the factors that are believed to have played a certain role and do not belong to any of the categories mentioned above were grouped together under *attitudinal factors*. The following table classifies the settlements according to the level of acceptance into Class A, B and C. With Class A being thriving settlements with the majority of houses occupied; B,

³⁰ In this case the owner never signed the contract, it was his brother who did on his behalf. Having to come back from Saudi Arabia where he used to work before the War he broke into one of the houses (11 of which are standing empty) and he is safeguarding his land.

settlements with average number of houses occupied and C, settlements that are largely abandoned.

Class A		Class B		Class C	
Beit Al-Fatimi	66.6%	Beit Al-Dibiani	20.0%	Al-Sharjabi	00.0%
Beit Al-Qaifi	67.7%	Bani Qatran	22.2%	Al-Washal	00.0%
Al-Aulaib	68.4%	Rakhmah (1)	23.8%	Aram	00.0%
Al-Kawla	70.0%	Rakhmah (2)	25.0%	Jarif Midrass	00.0%
Dhamar Al-Qaren	71.4%	Kalabit Mahfad	32.7%	Bashar	00.0%
Adro'ah	83.6%	Al-Matahen	33.0%	Beit Abu Khalabah	00.0%
Beit Rashid	85.0%	San'a	45.8%	Haker	00.0%
Khalaq	87.5%	Al-Shalalah	50.0%	Al-Mahnasha	00.0%
Dawran	88.8%			Yaffa'a	00.0%
Wasita	91.5%			Al-Mithaal	00.0%
East Dhamar	92.2%			Abasser	03.3%
Rusaba	92.5%			Tinin	06.4%
Hijirit Manfatha	100.0%			Bardon	07.4%
Al-Husson	100.0%			Hussain Amran	07.6%
				Al-Qadadh	09.8%
				Maria	09.0%
				Al-Talibi	09.0%
				Al-Qilah	14.2%

- Class A:** Thriving settlements with the majority of houses occupied (more than 66%) and well maintained, and the community facilities are in use.
- Class B:** Settlements with average number of houses occupied occupation (25-50%) with some gardens and extensions.
- Class C:** Settlements that are largely abandoned (less that 20% occupied).

Table 7.2 *Classifying the settlements according to the level of acceptance.*

a. Physical and economic factors.

The physical factors were mostly registered by observation, however attention to some of them was drawn by the locals. It was one of these factors or a combination of them that led to the acceptance or refusal of a settlement. The factors to be considered are in relation to the *siting of the reconstructed settlements, the topography of the new site, and the provision of services.* To start with, the distance from the old settlement seems to be a major physical determinant. Our findings show that the closer the new settlements were to the old ones the greater the chances of acceptance. The success of the settlement may not be because of its obvious benefits, but because it is possible to sustain its relation with the old one. In most cases the new settlements were not thought of, by their inhabitants, as their

permanent home, as they fell short of the advantages that were offered by the original village.

In other cases it was found that new settlements within an acceptable distance, were actually competing with the old ones, since they were neither close enough to merge with the original village, nor far enough away to establish a new centre. A related factor is the proportion of the settlements which were relocated and reconstructed. Inhabitants of settlements which were totally destroyed and where the majority of the community were rehoused, appear to be more committed to the development of their new settlements.

The topography of the new site in relation to the old was a strong factor for the success of the new settlement. Villagers were more tolerant in accepting new settlements if their geographical characteristics were similar to the old ones, even if they were a greater distance away (eg. Beit Al-Fatimi). Those traditionally on hill tops, sloping sites or hill sides that were relocated in flat plains were mostly rejected, except in the cases near main-road sites. As was to be expected, those who built their own new houses, tended to locate them just outside the destroyed settlements despite the warning of vulnerability. Government reconstruction projects using foreign contractors were almost all on flat land. Siting settlements in valley floors or flat plains mostly meant on agricultural land, something that was difficult for the Yemeni villagers to tolerate.

Another physical factor that was observed to have had a marked effect on the acceptance of the new settlements was, conversely, their distance from the agricultural land. This was a direct relationship to the economic abilities of the settlement. There was obviously no re-distribution of agricultural land not affected by the earthquake, in spite of hundreds of water wells and irrigation canals being damaged. However, part of the Government reconstruction project was to drill and reopen some wells and provide them with electrical water-pumps. This action was most appreciated by the recipients.

The provision of services, both in the form of infrastructure and public buildings, was included in the Second Stage of reconstruction, not started until 1989 (61 schools, 45 mosques and 17 medical centres). Some reconstructed settlements were eventually provided with a rough road, while others were placed close to a main road. But water and electricity supplies only reached the urban areas and main-roadside settlements.

The relocation of villages closer to main roads and the provision of services and

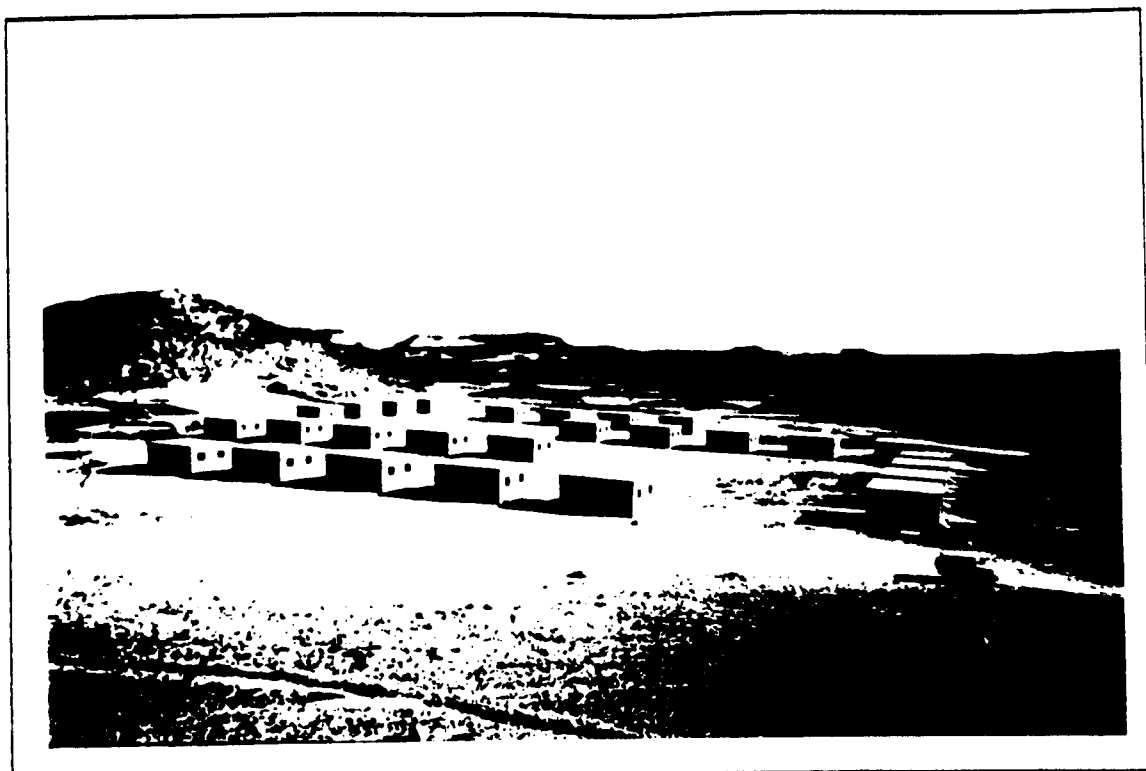


Figure [7-10] Looking from the traditional village of Tinin onto the newly built one.

infrastructure have had a detectable impact on the economic and social structure of the settlements. Proximity to the main road meant better access to urban markets. It also meant that employment opportunities in cities became greater, people started to give up their agricultural land in exchange for joining the service sector. For instance, in Al-Kawla village almost 83% of the reconstructed houses were found inhabited. The entire life of the village is rapidly being transformed to an urban one. Families that used to own a piece of agricultural land, today, own a Pick-up Jeep. Men are working as labourers, guards and drivers. At this stage it is difficult to judge whether this is a good economic indicator or not. Probably it is not in terms of national food production. But for the villagers this marginal step towards urbanisation is considered a good achievement.

Of course, while reading this, one should keep in mind that the last few years have been the hardest ever in terms of the poor local economy and agriculture. The last three rainy seasons were not as wet as usual, and the Gulf War left thousands of young men without jobs. On the other hand the unification with South Yemen created new working opportunities particularly in the transport sector, of which the Dhamar region benefited the most, as it is located half way between Sana'a and Aden.

Finally, although the poor design of the new housing units played an important role in the communities' refusal to live in the new settlements, it was not as crucial

as the above mentioned physical factors or as the forthcoming social ones were.

b. Social and organisational factors.

Determining the social factors proved to be the most difficult. Person to person interviews played a crucial role. As we have mentioned previously, the interviews were wide enough to include, beside the users', the views of all those who were, and still are actively involved in shaping the built environment; local builders, traditional craftsmen, teachers, local politicians, sheiks, contractors, and the professionals who worked on the settlement plans and housing designs at the Executive Office of the SCREAA.

The fact that it took at least five to six years to complete the early reconstructed settlements meant that no single case was found, where the whole community of a village or a town had moved to the new settlement as a social 'unit'. Communities did split up and were largely encouraged to do so by the State provided settlements, particularly in cases where the destruction was not 100%, but still large enough to require building a new settlement. Communities that were unwilling to split up abandoned the new settlements, particularly when they did not offer any advantages over the old. This was due to the fact that, when part of the village that suffered damage was rehoused, a split within the village community was caused. This split was deeper and more difficult to cope with when the minority had been rehoused, and were reluctant to invest in developing their new site.

Settlements such as the villages of *Khalek* and *Adroa'a* and the towns of *Rusaba* and *Dawran*, which suffered total devastation, show today, the characteristics of a thriving relocated settlement, the whole community having been rehoused. Still, even in those settlements the rich and the influential families did not wait for the realisation of the reconstruction project and built their own (stone) houses on the outskirts of the old settlements. While those who could not afford to rebuild and were blinded by the State's promises, had to tolerate living in self-constructed temporary shelters, until they were eventually allocated new homes. Today, the division between those who have and have not is greater than ever, and is expressed even physically, with the elite families living on the hill tops overlooking the rest of the community.

The social split can also be observed at the family level. It has been said that Yemeni communities have been going through a very rapid social change since the revolution of 1962. One face of this change is the movement towards the nuclear



Figure [7-11] Dawran an example of a thriving reconstructed town, this is due to the total relocation of the traditional community from the devastated town.

family away from the traditional extended one. There is no doubt that this change has been accelerated by the disaster and the following reconstruction, notably in the way in which the new houses were allocated. Today it is possible to find some newly married couples living in their government provided houses. People seem to have become less tolerant concerning family disagreements. Today, if a son differs with his father then he and his family will be asked to move to the new house. Similarly, in a number of cases elderly people were found living on their own, a practice that would have been totally unacceptable a few years ago.

Inexplicably, when the EOR conducted its damage assessment survey in 1983, the number of damaged houses was registered, along with the name of the head of each family, regardless of the obvious fact that they were mostly extended families. The social pattern of life was not respected or even considered in the allocation. For instance, families and their relations were not grouped together, either within a cluster or around a communal space according to their kinship and traditions.

The head of each destroyed house was allocated a new one. Families, unwilling to split up and with no option except to be rehoused, suffered severe overcrowding in one house, while other houses belonging to those who refused them stood empty. The fact that the houses were not allocated as soon as they were completed, meant

that people had to wait until the whole village or settlement was completed, thus depriving them from carrying out adjustments on the house and planting their gardens. In a number of cases it was reported that the internal door keys were almost always mixed up and rooms had to be broken into.

The complexity of the existing patterns of ownership, is another factor that has contributed to the failure of many settlements. Ownership problems did not arise only within the same settlement but also between different tribes over land, which made the acquisition of land a difficult task. In the case where government owned land was available nearby the destroyed settlements, there was no problem (eg. the town of Rusaba). But, in cases where land was not available, existing patterns of ownership, particularly in very rural areas, proved to be highly complicated, and often led to considerable delays in the process of rebuilding.

The local social structure could be traced from the family-ties up to the formal and informal political structure of the whole village. The tribal structure is extremely evident in the Dhamar region, and the latest political events seem to have strengthened it, along with the reconstruction project itself³¹. A number of reconstruction projects were brought to a halt because of tribal wars that are still continuing. Tribes in the far Eastern areas of Dhamar region would ask for 'modern' houses, even though their own were not as damaged as those in the Central areas. A considerable number of incidents of threatened officials and contractors, and the occupation of building sites were reported. Finally, it became necessary for the EOR to have its own Police force.

These observations were supported by J. Leslie (1990) when we discussed the informal political systems through which people get things done. He said: "... the Yemen case also showed how customary power, in terms of land access to resources, tribal influence, etc. was reinforced rather than diminished by the earthquake. The very slow process of official reconstruction gave all those with influence time to make sure that they stayed on top". Security, was another factor overlooked by State officials. This played a significant role in the refusal to move to a number of the settlements; in *Tinin* it was given as the main reason. Located between the two rebelling tribes: *Bani Hujalja* and *Al-Nasarah*, meant that any attack carried out from either side would pass through the *Tinin valley*, where the new reconstruction was

³¹ Following the unification and the introduction of a multi-party system the tribal structure gained back its power.

located. To prove their point to the authors, the inhabitants aimed their guns at one of the houses to show that bullets could penetrate the concrete blocks. For them this was not as safe as the traditionally built stone houses!

The importance of security was also observed in the added window bars and steel shutters. Almost every inhabited house visited had altered its openings in this way. Furthermore, in many cases where it was affordable, the wooden front-doors were replaced by steel ones, bought from Dhamar city.

c. Attitudinal factors.

A quote from Coburn's report on the Bingol earthquake in Turkey suggests that, "The degree of development of the resettlement village is a combination of physical factors, controllable by the planners, with the ability of the villagers to help themselves recover" (Coburn, et al, 1984:53), emphasised the importance of considering such attitudinal aspects. There appeared to have been no physical or social reasons for a certain community to refuse a rebuilt settlement, they just refused for reasons that had to do with preferences, beliefs and may be lack of motivation to move. The last could easily be observed in the case of Dhamar, particularly with the long delay of the construction.

It could also be observed in the case of some old damaged settlements, where despite the fact that they were not forced by the authorities to abandon them, they did so simply because they believed that living in those settlements would bring bad luck. For them, the stones as well had been cursed and consequently were not used in rebuilding. Some people would rebuild for themselves on the outskirts of the original settlements. A few cases were found where people rebuilt the same house salvaging some of the materials. Besides being a sign of bad luck it was found expensive to clear the old site and to reuse its building material. Furthermore, the ruined sites were left unattended for years in anticipation of a State built, today they are inhabited by snakes and dangerous insects.

The fact that the newly built houses and settlements were safer and could withstand future earthquakes does not necessarily mean anything to some locals. For them the 1982 earthquake was a test of their will from *Allah*, and if God wishes to do so again, nothing could protect them, even living in fortified hill-top settlements.

7.8.5. Local response to the house design.

In the Contractor-built programme as well as the Self-help programme a prototype house layout was produced by the Executive Office and was later adopted for all types of contract. The single storey 48m² design consisted of three rooms, a kitchen and WC. (see attached drawings). This unit was repeated in its thousands by the different contractors on different sites, using the same technology of framed reinforced concrete. The differentiation in materials was only found in some settlements, where red brick was used instead of the standard concrete blocks.

The actual people concerned were never consulted on their requirements or expected to participate at any stage of the reconstruction. No effort was made to study, register or understand their traditional life styles, building types, technologies and materials. The damage assessment teams collected only statistical data on the number of houses destroyed, number of occupants and number of storeys of each house, etc.

Consequently, there was no difference between the plan layouts for the villages from those for the towns, inspite of the obvious variations. There was also no differentiation according to family size or the space requirements for various types of economic activity. Modern facilities, such as WCs and kitchens suitable for urban families were incorporated in all the reconstructed houses. Yet piped water to the houses only occurred in a few of the towns and never in the villages. The same could be said about domestic electricity supply.

A few years after the reconstruction, and judging by the inhabited houses, it is interesting to notice the difference between the intended policy, its implementation and the way people have reacted and the consequences for them. In general, houses that were found inhabited had been substantially altered, extended or changed in some way, or in a number of cases used for functions other than accommodation (storage or animal byres). Although the degree of extension and alteration varies from one settlement to another and depends on the economic status of the inhabitants, it was a general rule that at least a kitchen (Dima) would be added outside the house. The kitchen provided inside the house was found in use only in towns and only where people had access to bottled gas supplies. In most cases, particularly in towns, where the houses were used for accommodation, extra rooms and in some cases shops were added, which indicates the need for more space.

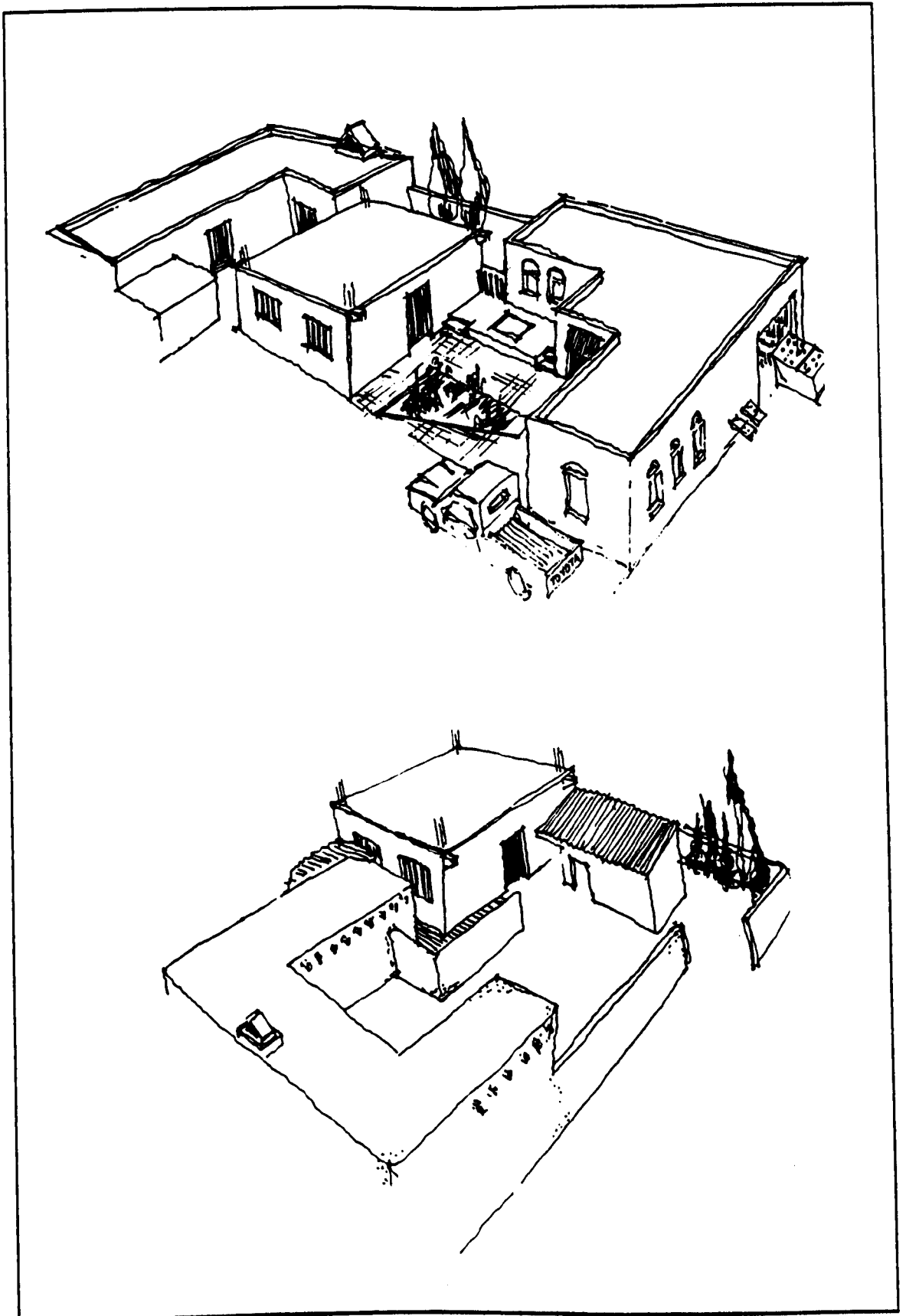


Figure [7-12] An urban and a rural examples of the different ways in which people have altered the prototype house.
[Source: The author, November 1991]

From the Government's point of view they were supplying *emergency houses* in the form of a 3-room core-house that was able to be extended by its inhabitants in the future. For the inhabitants part, they were promised a house to 'replace their lost one'. For them a house meant a 'home', similar to the one they previously owned if not even better: 'more modern'. It was a shock for them to discover that these, 'match boxes' (as they put it) were to replace their lost homes.

Furthermore, the field study revealed that out of 2,646 reconstructed houses visited only 1,727 were inhabited, 955 of which were in towns. A comparison of the State provided units with the traditional house-type, revealed that the former had no relation whatsoever to the latter, either in form or the materials used or the use to which buildings had been put for centuries past. This was particularly marked in the rural settlements.

The initial reconstruction programme anticipated that the Core Unit could be extended. In this context two assumptions were made: 1) People will extend their houses vertically, in accordance with the Yemeni tradition, and might also add few rooms attached to the ground floor; 2) the extended building will be of reinforced concrete. Thus provision was made to enable the house to extend in the front and to add an extra storey. The reinforcing steel of the columns and beams was left protruding to allow people to tie in their extensions, in the hope that an earthquake resistant house will eventually be constructed. So far this has not been realised. During the field visit only two houses out of the 2,646 visited were found to have been extended vertically. In one case (in the village of Tinin) the owners; two brothers had combined their two adjacent houses into one. They built a staircase in the middle and built two storeys on top of the government provided houses. In the other case, the local community agreed to allocate the house to the local clinic and the weekly visiting doctor was the one who added a first floor and a side-staircase.

People were reluctant to extend their houses vertically for two reasons. Firstly, staircases were not provided or even planned for by the Government. And for the inhabitants they were too expensive to build. Secondly, because they had no 'visual trust' or faith in the strength of the concrete structure. Although they were convinced that a single storey concrete-block house could withstand earth shocks, it was difficult to convince them that a 20cm-thick wall could carry a second floor.

In terms of horizontal extensions, only a few houses were found where people had added rooms to the provided unit as initially intended, and there were no cases where the extension had been tied in to the structure of the unit. This was because

people perceived the front of their house as the 'modern elevation', that should not be touched, after all it is where the main entrance was located.

Finally, concrete extensions were found only in towns and semi-towns, but never in villages. And in all cases the new buildings were not tied to the structure of the provided unit. Thus all the new extensions are as vulnerable as the traditional buildings, if not more.

7.9. Summary and conclusion.

The contractor built housing programme in Yemen is another case that demonstrates how the issue of post-disaster reconstruction is not just a simple matter of constructing reinforced houses. Our research questions the value of delivering thousands of earthquake-resistant houses that do not correspond to the local socio-cultural and economic reality. These houses have not served their intended purpose; to shelter people as quickly as possible and to reduce their future vulnerability. The reconstructed settlements suffer from a number of misjudgments and unrealistic assumptions that were made at both policy and implementation levels. In defence it has to be said that governments, such as the Yemen, have very little leverage in these situations and have to be satisfied with what they are offered - no matter how inappropriate.

The incorporation of mitigation measures has to be faced in a realistic manner in the following ways:

1. *Needs assessment*, that reflects the real needs of the people, their priorities and expectations, rather than the 'assumed ones' by distant professionals and foreign intervenors. Put at its best, the needs assessment process in Dhamar, suffered from a lack of understanding and familiarity with the local socio-cultural, economic and physical conditions, thus programme definitions were based on purely quantitative data. Also, the manipulation of this data, to suit the needs of the donors instead of the victims resulted in over-simplified lists of villages and numbers of houses.
2. *Estimation and allocation of resources* should include central as well as regional and local ones, including the people's own abilities to reconstruct their dwellings.
3. *Realistic appreciation of differences between urban and rural*. In Dhamar, there has been no appreciation of the different needs of rural and urban (or semi urban) communities. The same prototype house and settlement layout were used in both villages and towns.
4. *The assumed efficiency* of employing big contractors is nothing more than a

myth. In Dhamar, the initially intended number of houses were never realised; time limits were never met, what was intended as an emergency shelter programme took 3 to 5 years to complete; and finally, the reconstruction budgets were invariably exceeded.

5. *Realistic standards of safety*, mean there will always be a certain degree of risk attached to building in earthquake zones. Safety standards should be based on available, affordable and culturally acceptable measures. Removing settlements from hill-tops to valleys on the basis of geologists and engineers' reports is just not good enough.
6. *Organisational demands and responsibilities* must be based on local experience; newly-established emergency bodies should co-ordinate existing implementing bodies, not the setting up of another one.
7. *Realistic appreciation of the dynamics of reconstruction*. Rebuilding settlements and mitigation should be seen as a complex, multidimensional process. Thus policies have to be flexible enough to accept alteration and adjustment based on continuous genuine feed back from the field.
8. Plans for reconstruction must be made taking account of the real nature of foreign aid and intervention.



Our examination of the detailed process of reconstruction following a natural disaster in this Chapter and that of reconstruction following war in Chapter 6 support the argument that reconstruction after war is considerably different from reconstruction following natural disasters.

CHAPTER EIGHT

CIVIL UNREST SHAPING THE BUILT ENVIRONMENT IN NORTHERN IRELAND; THE CASE OF BELFAST.

8.1. INTRODUCTION.

"In Belfast, what is being reflected in bricks, mortar and concrete is a bitterly divided society. More and more the city is taking the form of two communities at war with each other". Cowan (1982).

This Chapter examines the effects of civil unrest on the urban environment, taking the city of Belfast in Northern Ireland as a case-study. It explores the continuous destruction, reconstruction and development that has been taking place from the eruption of the worst conflicts in the late 1960's until today.

The author visited Belfast between the 4-11 March 1990, where he interviewed a number of officials, professionals and local people as well as visiting a number of the State Departments. Within the context of Northern Ireland, the 'troubles' are mainly displayed in the form of both 'illustrative' and 'destructive' terrorism, without going into the conventional methods of warfare and street fighting, which we have witnessed in a number of civil wars and conflicts in the Middle East. Still, the Belfast study helped the development of this dissertation in a number of ways. Besides developing the author's own abilities to investigate and research in a totally alien context, it helped derive some lessons that have added to the general context of examining post-war reconstruction, particularly where religious or social divisions exist.

8.2. WHY BELFAST?

Northern Ireland, with the conflicts it is living through, seemed to be an ideal case-study in which political, economic, social and sectarian dimensions are joined together, forming a force that has been shaping the built environment and directing its architecture for the last few decades. Belfast itself was selected as a case-study

from which some conclusions and policy practices can be derived for a number of reasons:

- Belfast is an example of a deeply divided community, to the extent that it has been considered as being 'essentially a place apart' (Boyce, 1991:13): a place where politics are based on confrontation between entrenched religious communities, a characteristic that exists in many Middle Eastern countries. (eg. Lebanon, Iraq and Afghanistan).
- Furthermore, the continuous violence in Belfast sets it apart from not only the rest of the British Isles, but from the whole of Western Europe. Northern Ireland then provides an ideal arena to examine a number of issues that have to do with war time reconstruction, including the extent of the State involvement and the role of the general public in what is supposedly a democratic society.
- Over the last 25 years Belfast has become an example where simultaneous *reconstruction and development* take place, and where "...major inputs into the planning process include the security forces, politicians and most importantly the people themselves" (Dawson, 1984:1).
- Belfast serves as an example that needs to be explored in order to understand how such civil disturbances can actually affect planning and architecture and to what extent?
- Finally, Belfast was selected in an attempt to answer the question: ... how is it possible to implement housing and planning policies in such a 'divided community', where, the 'sectarian' division increases the complexity of change and the intensity of conflict? A conflict that "... is not about economic issues but about non-bargainable issues of religion and nationality" (Rose, 1971, quoted in Hunter 1982; Singleton, 1985).

8.3. AIMS AND OBJECTIVES.

The *aim* of this study is to investigate how long-term civil unrest can become a 'war-culture' and can affect the urban environment in a number of ways, besides direct damage and destruction. This study sets out to examine the following issues:

- The importance of achieving a balance in reconstruction between the realistic expectations of the inhabitants and the State's short and long-term political needs.
- To show that civil unrest can have a much greater impact on the urban environment than the immediate damage and destruction caused by terrorist bombing.

This Chapter is divided into six sections. The following Section outlines the methods used to gather relevant information. The second Section gives some background information necessary for general understanding of the 'troubles' in Northern Ireland. The following two Sections are concerned with the setting, history

and architectural background of Belfast, as a case study. The fifth Section contains the major findings of the study, in terms of the impact of the 'troubles' on planning and architecture, residential segregation, urban design, anti-terrorist defences and reconstruction compensation. The final Section serves as a summary and seeks to draw some conclusions from this case.

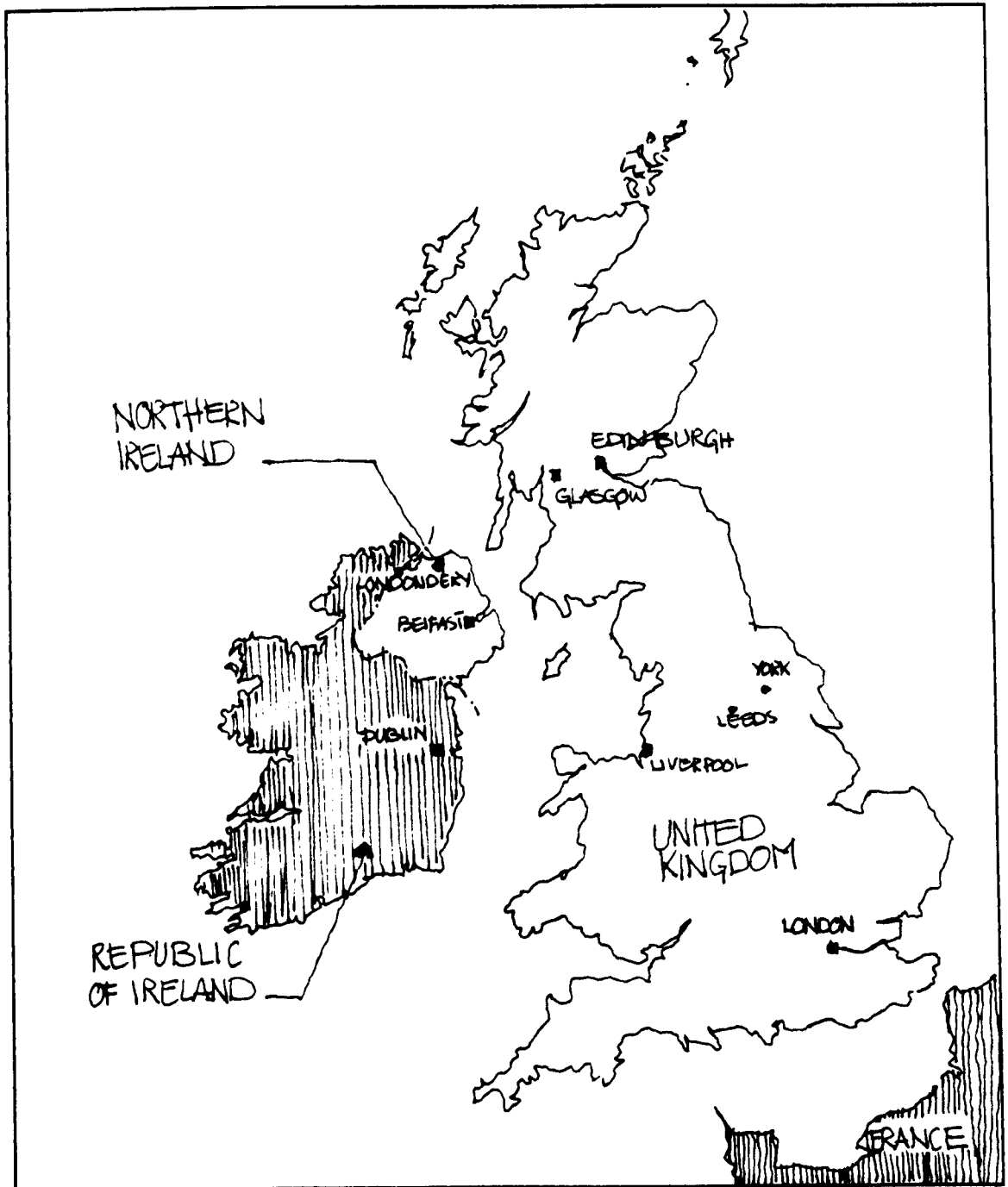


Figure (8-1) The location of Belfast within the British Isles.

8.4. METHODOLOGY.

The research methodology for this case-study followed the general methodology applied in the development of this dissertation and discussed earlier in Chapter 4, based on the conventional three stages of:

- a. Review of existing knowledge on the subject.
- b. Conducting a field study and data collection.
- c. Analysis and documentation of findings.

Prior to the field visit, comprehensive *research, interviews and discussions with experts and review of literature* were conducted in order to expand the author's knowledge on the context of the issues, as well as to prepare the ground for each field visit.

Since the late 1960's, hundreds of academic and journalistic texts have been produced on the Northern Ireland 'problem', to the extent that it has been termed the 'Factory of Books' (Cox, 1989, in Cunningham 1991). Paradoxically, academic papers, articles and books specifically concerned with the effect of the troubles on the urban environment and architecture, as well as on the dilemma of reconstruction planning and development are rare. The most relevant references were found in the writings of Boal (1969; 1970; 1972; 1978); Boal & Douglas (1982); Cowan (1982); Singleton (1984;1985) and Stollard (1980; 1989). However, a number of unpublished papers and dissertations were also consulted, most of the unpublished references were obtained at the Library of Queen's University and at the Linen Hall Library, during the visit to Belfast, where the author was permitted access to the 'Political Collection', which contains unique material on the 'troubles' in Northern Ireland.

The field study to Belfast was carried out in March 1990¹. The investigation was based on meetings with officials and key informants, observations and finally conducting semi-structured interviews with a wide variety of people. This latter technique proved useful for a number of reasons. Firstly, because the author's knowledge concerning the subject was not comprehensive, it was important to encourage discursive answers. A wider range of information could be covered, particularly in cases where the interviewee was aware of issues which had not occurred to the author. Secondly, it was felt that interviewees would talk more freely than if confronted with a list of written questions. Finally, this technique helped to

¹ Accommodation and travel expenses were paid by Third World / One World Studies at the Institute of Advanced Architectural Studies, University of York, to whom I am grateful.

obtain a sense of the underlying thoughts and critical beliefs of the interviewees. Additionally, the interviews were conducted with the use of tape recorder when ever it was appropriate.

The interviews themselves can be classified as follows: Those with academics, civic authorities (DoE, NIHE), consultant architects and members of the public. Starting with the academics, Dr. Paul Stollard at Queen's University, was particularly helpful in suggesting methodology and establishing contacts. Dr. Dale Singleton, also from Queen's provided me with a comprehensive and up to date bibliography on literature dealing with the effects of the 'troubles' on planning and architecture in Northern Ireland.

The Department of the Environment (DoE), the Northern Ireland Housing Executive (NIHE) and the Northern Ireland Office are the three civic authorities contacted. At the DoE, David Nesbitt architect and Jerry Hilliard engineer, both in the team responsible for the bomb-damaged repairs and building fortifications were interviewed. Through them the author was made aware of the general security problems, especially concerning the design of court houses and police stations. Also Richard Oram an architect from the Department of Historical Buildings and Monuments at the DoE, was a great help in establishing contacts for me to meet, as well as the insights he provided about aspects of conservation in Northern Ireland.

From the NIHE, Mr. Robert Strang, Assistant Director of the Development & Planning Department, Architect Kyle Alexander and Planner Farouk were interviewed. They explained how the Executive evolved between 1969-1971 and the housing problems facing them in a divided community, as well as future plans. In addition, Ms. Judy Hewitt from the Northern Ireland Office, Department of Criminal Compensation gave the author a comprehensive description of government compensation levels and procedures.

All these interviews were remarkable for their recognition of the difficult situation that had to be dealt with no matter how bad things became. On the other hand, Mr. Cecil Dunbar from the Royal Society of Ulster Architects, tried to convince the author that the situation in Belfast was as normal as any where else in Britain. He thought it would have been more useful to study the situation in Beirut. The author had the impression that, such people had either adjusted to abnormality, so that they could no longer distinguish between that and normality. Or perhaps they were deliberately trying to ignore the problems as a means of surviving in a difficult climate. C.G. Andrews, another architect from the Royal Society explored the

problem from the point of view of the private architectural practice. Finally, we were able to meet a number of local people in both Protestant and Catholic areas of Belfast, as well as at the University.

First-hand observations took the form of systematically walking or driving with some of the interviewees around the inner city areas with a large scale map and a camera, noting and photographing features like barriers, bricked-up buildings, wall murals, etc. By this means the author was able to familiarise himself with those areas and features and as a result developed the 'classification of barriers' at the 'interface lines', recorded in the Fifth Section.

In Belfast, some people would insist that the terms 'Nationalist' and 'Loyalist' should be used rather than 'Catholic' and 'Protestant'. They support their argument with the view that the conflict is not based on religious conviction as much as it is based on cultural, national and political dimensions. The author agrees with that point of view, but at the same time one should not dismiss the historical religious dimension of the conflict, thus in this Chapter, it was decided to use the terms Nationalist / Loyalist or Catholic / Protestant interchangeably where ever it is appropriate.

Methodological observations.

It is important to conclude this section by registering three observations:

- The difficulties for the author in writing about Northern Ireland were mainly generated from a feeling of being a 'total outsider', who seemingly found it difficult to integrate with the local population. A condition that in itself was helpful in developing an understanding of the issues.
- It became evident that in such circumstances of fear, distrust, resentment and contempt, the inquiring outsider might be given a certain amount of biased misinformation, even at the professional level.
- This field work, conducted at an early stage, had a great influence on the development of this dissertation. It provided an opportunity to research into a culturally alien environment, where the author had to develop his methodology and investigative abilities.

8.5. THE HISTORICAL BACKGROUND OF THE 'CIVIL WAR' IN NORTHERN IRELAND: TWO COMMUNITIES IN CONFLICT.

In order to understand the effect of the civil war on planning and architecture, it is important to be aware of the conflict's history and the philosophical ideology behind the three parties involved: the British (the army and administration); the

Northern Irish Protestants (the Loyalists); and the Irish Catholics (the Nationalists). This section can not be more than an introduction to the Northern Ireland 'problem' and any one who wishes a more comprehensive account of the history of Ulster or Ireland will have no difficulty in finding suitable references. Books by Elliott & Hickie (1971); Rose (1971); O'Brien (1972) and Boyce (1991) are recommended. Conor Cruisa O'Brien's book *States of Ireland* and Brian Faulkner's *Memories of a Statesman* are particularly relevant.

To begin then, it is helpful to know something about the political and administrative framework in Northern Ireland. Both the Irish Republic and the United Kingdom constitute the 'British Isles'. The U.K. is governed directly from 'Westminster'. It contains both Great Britain and Northern Ireland, which is administered by a Secretary of State and the Northern Ireland Office. Thus Northern Ireland is directly governed from 'Westminster' but on a separate basis from the rest of the UK. In 'Westminster' Great Britain (England, Wales and Scotland) are represented by 632 MPs, while Northern Ireland is represented by 18 MPs. Of these 18 members, 3 represent the Social Democratic Labour Party (SDLP), which is a Catholic party; 7 members represent the Official Unionists (OUP); and another 7 represent the Democratic Unionists, both parties are Protestant. Finally, one member represents the 'Sinn Fein' (SF) Catholic (Nationalist) Party². In the absence of effective local government, Northern Ireland is administered by centrally controlled departments, such as Health & Social Services, Agriculture, Commerce and the most important department with respect to reconstruction; the Department of the Environment (DoE). This department has control over land use planning, roads, conservation, water and sewage³.

The main problem of Ireland is that it literally has two minorities, with all the friction, threat and fear that that might create. In Ireland, as a whole, the Protestants are a minority, but in the six counties of Northern Ireland (Antrim, Londonderry⁴, Tyrone, Fermanagh, Armagh and Down) the Catholics only form one third of the

² 'Sinn Fein': means literally 'Ourselves Alone', a Nationalist political party that is believed to represent the political voice of the IRA. There are many claims that this party is not supported by the Catholic Church in anyway.

³ This information was obtained from an interview with Dr. Paul Stollard, and from reviewing the work of Dawson (1984).

⁴ As it is known by the Protestant and the British Government, while the Catholics know it as Derry.

population⁵. The 'double minority model', first put forward by Jackson (1971) on the basis of the decisive vote of 1921, and has been investigated by a number of authors, for example Douglas and Boal (1982:3-4) and Stollard (1989). When reading the history of the North of Ireland one comes across two different interpretations of the conflict. Ruane and Todd (1991:27) summarised these interpretations when they wrote:

"Those who take the first -the 'cultural'- approach see the source of the conflict in the abnormality of Northern Irish political culture: in the expectations, values, norms and attitudes of the two communities. Those who take the second -the 'structural'- approach see the source of the conflict in the abnormality of the institutional and structural context, in the way that context locks the two communities in conflict".

Whatever the source of conflict is, Northern Ireland's community is generally divided into two; those who favour a continuation of the Union with Britain and are known as the Loyalists (in general they are Protestant), and those who generally aspire to an independent 'United Ireland' and Home Rule. Stollard (1980:11) claimed that "... the terms Catholic and Protestant refer to totally different cultures and not just religious conviction, this difference is far stronger than any class division and forms the basis of work, education, entertainment, as well as politics". Thus the communities moved apart socially and became more spatially segregated, particularly after periods of rioting in 1911 and in 1926 and in earlier years of 1832, 1835, 1852, 1864, 1872, 1880, 1884, 1886, 1898 and 1901. Thus, violence became a characteristic of the North of Ireland.⁶

Despite the fact that "Ulster people are quick to point out, quite rightly, that the violence is confined to certain, almost predictable areas, and directly affects the everyday existence of but few people"⁷ (Boyce, 1991:16), the 'war' in the Province is continuing and it is principally about a conflict of nationalities and the challenge

⁵ According to a 1992 estimate Catholics constitute 43% of the six counties. (Ed Cooney, December 1992).

⁶ For more details on these riots see, Jones 1956; Baker 1973; Boal & Murray 1977 and Stewart 1977.

⁷ The term 'Ulster' is traditionally used to describe the nine counties of one of the historic 'Provinces' in Ireland; Antrim, Down, Armagh, Derry, Tyrone, Fermanagh, Donegal, Monaghan and Cavan. Today, Ulster is incorrectly used to refer to Northern Ireland, that was founded in 1921 and comprises the first six counties in this list. (Boal & Douglas, 1982:ix). It has been ensured that the terms 'Ulster' and 'Northern Ireland' are used in their strict sense except where a 'looser' usage occurs in quotations from the work of other authors.

it poses to the legitimacy of the Northern Ireland State. One of the elements of the 'war' is the battle for space or territory at both a 'micro' level within one city in terms of houses and neighbourhoods, and on a 'macro' level for the whole of Northern Ireland. However, the 'war' also poses a latent threat to the legitimacy of the constitution of the Irish Republic, which asserts the territorial and national unity of Ireland and is rejected by the 'Loyalists'.

At a very simplified level, the conflict can be said to be at least 800 years old from when the Protestants settlers, both English and Scottish started to establish their settlements and neighbourhoods in Northern Ireland. Although, the O'Neil Catholic faction rising of 1641 against the planters resulted in a Protestant massacre, still the "...most important of all was the Battle of the Boyne in 1690" (Darby, 1976:4). In that battle William of Orange gained a great victory against the Catholics, a victory that is still celebrated by the Protestants every year, and is marked on hundreds of walls in their territories⁸. Some commentators claim that the history of the Boyne was virtually rewritten in the 19th century, to become a symbol of Protestant ascendancy.

However, "... having established an exclusively Protestant legislature in 1692, a comprehensive series of coercive Acts against Catholics were implemented during the 1690's and after. Catholics were excluded from the armed forces, the judiciary and the legal profession as well as from parliament; they were forbidden to carry arms or to own a horse worth more than £5; all their bishops and regular clergy were banished in 1697,.. Catholics were forbidden to hold long leases on land, to buy land from a Protestant, and were forced to divide their property equally among their children, unless the eldest conformed to the Anglican faith; they were prohibited from conducting schools, or from sending their children to be educated abroad" (Darby, 1976:4).

Still, it was not until the early 18th century that the comprehensiveness of the plantation in Ulster started to appear, as well as the natural process of migration from Scotland and England. Darby (1976:3), writes about two characteristics that distinguished the Irish plantations: "...the fact that comprehensive attempts were made to attract, not only British gentry, but colonists of all classes and also the fact that the colonists were Protestant and represented a culture entirely alien to Ulster".

⁸ In fact the year 1990 marked the 300th anniversary of the Boyne battle and many celebrations and marches took place to emphasise this victory.

No matter how simple this statement makes the situation look, one fact is certain: these plantations meant the introduction of a foreign community that spoke and worshipped differently and apart. "The presence in Ulster of an unusually large number of Protestants, and especially Presbyterians, helped give that area its special characteristic distinctiveness at least in Ireland, but not so distinctive in a wider British context". (Boyce, 1991:19). Most importantly, this community had close commercial, cultural and political ties with Britain. This meant that with the impact of the industrialisation of the regions of the British Isles in the nineteenth century, Ulster was pushed into economic and political prominence, thus adding an economic edge to the religious argument. These factors served to create further economic differences between Ulster and the rest of Ireland and between Catholic and Protestant within Ulster. Furthermore, "Changes in the British economy in the nineteenth century encouraged the rise of Belfast as the economic centre of Ireland; and the decline of Dublin again had an important local impact, in that it encouraged the idea of a second capital with its future vitally resting on the bosom of the British political and economic system". (Boyce, 1991:21).

During the nineteenth century the greater prosperity of the North, its economic structure and even its physical appearance, increased its alienation from the rest of Ireland. In the Twentieth Century, "The increasingly militant Irish nationalism, evidenced by Sinn Fein's capture of seventy-three seats in the general election of 1918 and the parallel militancy of Unionist opposition to Home Rule, symbolised by the signing of the Solemn League and Covenant in 1912, had made an all-Ireland settlement increasingly untenable". (Gunningham, 1991:1). Furthermore, in 1920 the Government of Ireland Act was passed by the British Parliament, it established two States in Ireland, one for the six counties known as Stormont, and the other for the remainder of Ireland. "Each was to have its own parliament to deal with domestic matters; each was to have representatives at Westminster; and a Council of Ireland was to deal with matters of common interest. In fact the terms only came into operation in Northern Ireland and the Council never met" (Darby 1976:9).

But, why had these six counties been selected to create Northern Ireland rather than the traditional nine counties of Ulster? Some sources, suggested that the straightforward reason was that the traditional nine counties held 900,000 Protestants, most of whom supported the British connection and 700,000 Catholics, most of whom wanted to end it. In the six selected counties the religious breakdown was 820,000 Protestants and 430,00 Catholics. Thus the Unionist would be the greater

majority. (Darby, 1976).

Under the Local Government (Stormont) which lasted until 1969 many events of discrimination against Catholics were recorded, in public housing, property, education and even in public employment. Darby (1976), went further to claim that, "The most serious general allegation in this field was that the government operated a policy of deliberate discrimination against part of the Province (counties Derry and Fermanagh in particular), creating conditions which encouraged [Catholic] emigration to counter the higher Catholic birth rate in these areas".

The 'troubles' of the last twenty five years are simply an extension of this historical conflict, continuing along the path of violence. "The first important event in the current conflict occurred on 5 October 1968, when a demonstration calling for electoral reform and an end to discrimination against Catholics was broken up by the Royal Ulster Constabulary, RUC (mainly Protestant)" (Stollard 1980:12). Before that, Darby (1976) wrote; "In August 1968 the Catholic Lower Falls area (in Belfast) was invaded by a hostile mob, seven people were killed, and more than 3,000 lost their homes". The August 1968 events introduced a new element and thus a different dimension to the Northern Ireland question. Then, on 4 January 1969 another march sponsored by the Northern Ireland Civil Rights Association (NICRA) was attacked at the Burntollet Bridge by 'Loyalist' extremists, who were beyond the control of the RUC.

According to the Sunday Times Insight Team (1972:76); "The first Catholic inspired explosions in the recent history of Ulster came around 10:20 pm. on the 20 April 1969, when the first of eleven petrol bombs burst in Belfast sub-post offices". As Stollard (1980:12) claimed, the Irish Republican Army (IRA) did not enter the scene until after the sectarian rioting of 12-14 August of the same year, following the annual Protestant 'Apprentice Boys' march round the walls of Londonderry. Then the RUC became alarmed and reacted with firearms and this led to the intervention of the Army to protect the Catholics. Since then the so called 'terrorist' activity has grown, ".. what started as street rioting has developed over the years, with the involvement of the Irish Republican Army (IRA), into a mixture of civil and guerilla war". (Murray, 1982:309).

As a result, on the 14 August 1969 the British Government sent its army into Derry and the next day to Belfast, in an attempt to protect the Catholic areas against further attacks. At that time the soldiers were received rapturously by the Catholics.

"August 1971 saw the introduction of internment⁹, but this only increased terrorism and following 'Bloody Sunday' on 30 January 1972, when thirteen Catholic demonstrators were shot during a riot, a return to direct rule became a necessity, so conceding the IRA's initial objective" (Stollard 1980:13). Since then, the violence took the form of shooting and bombing as well as lesser forms of violence, such as groups of youths stoning army patrols or other youths, became almost daily events.

Possibly, the worst attack launched by the IRA was the indiscriminate bombings in the centre of Belfast on 21 July 1972, when nineteen bombs destroyed shops, bus stations and offices killing nine people. In that year loyalist terrorism became organised and increasingly active in the Ulster Defence Association. The full strength of the Ulster Defence Association (UDA) was seen during the Ulster (Protestant) Workers Strike 1974¹⁰. It is said that the Ulster Volunteer Force (UVF) carried out the bombings and with other Protestant extremist groups had been responsible for the majority of sectarian murders. Jenkins (1979) wrote in the Guardian, 25 July; "After ten years, the 'troubles' have now become a professional war ... fought almost exclusively between experienced terrorists, better organised, equipped and disciplined and an Army itself increasingly experienced in the business of anti-terrorism".

In 1985, the Anglo-Irish Agreement was signed between Britain and the Republic of Ireland which "... gave to the Republic the right and responsibility to act as spokes party for the nationalist community in Northern Ireland. The pace of reforms has, however, been much slower than was initially anticipated". (Ruane & Todd, 1991:38). Still, the military role of both sides escalated. McAuley, 1991:63) claimed that, "Concerned initially with the growing political support for Sinn Fein and, more recently, with the Anglo-Irish Agreement, there has been increased pressure for the UDA to adopt a more military role... The Ulster Defence Force (UDF) came into existence as a 'reserve army' to be used in a 'domesday situation'". The same author also stated that "The UDA's current military campaign against republicans has been carried out by Ulster Freedom Fighters (UFF)".

8.6. BELFAST, IT'S SETTING & DEVELOPMENT.

In the north-east of Ireland a broad river valley (Lagan) runs north-east along

⁹ The act of detaining or confining of terrorism suspects without trial.

¹⁰ The strike lasted between 15-29 May 1974, and had far reaching effects on the daily life of Belfast and the whole of Northern Ireland. This is incidentally the only strike that has brought down a government in the history of the United Kingdom. (For more detail see McAuley, 1991:51-53).

the line of the southern uplands boundary and meets the Irish Sea in Belfast Lough. To its east and south-east, rounded hills rise to 180 metres; to the west and north-west it is surrounded by steep hills, which on average rise to 360 metres. This Irish setting saw the development of a British settlement, its steep valley sides provided a suitable site to contain the city of Belfast. (Boal & Royle, 1986:191).

It was not until 1603 that a substantial settlement began to develop. The area on the Antrim side was granted to Sir Arthur Chichester as part of the Ulster Plantation Plan (Down was excluded from the plantation). Chichester laid out a defended settlement which later developed as a market and port, and took up the manufacture of local linen. By the mid 19th Century there were about 28 flax mills in Belfast. Moreover, iron, chemical and glass works were founded to serve the textile trade, at the same time the linen industry further stimulated engineering in the area.

Although, wooden and then iron ship building did not become a major industry until the late 19th Century, these had long been associated with Belfast's port, but on a much smaller scale. By the turn of the century this industry provided the largest share of employment. "In 1914 the two 'shipbuilding' yards produced 250,000 tons of ships and employed 29,000 men. Thousands more jobs were provided in industries ancillary to shipbuilding, such as rope works and engineering" (Boal & Royle, 1986:195). "By the second half of the 19th Century Belfast had the fastest growth rate of any town in the British Isles and it became the third largest port after London and Liverpool" (Stollard 1980:19). From a population of around 20,000 in 1800 Belfast reached 87,000 in 1851. (Boal & Royle, 1986:195). In 1901 it had a population of 349,180.

The emergence of Belfast as a preeminent red-brick Victorian city created housing and social problems. Boal & Royle (1986) quoted O'Hanlon (1853) claiming that by the 1850's overcrowding and disease occurred as the population squeezed into Belfast's 'entries and courts', where land lords exercised strict planning controls, and mill owners had housing erected, often of poor quality. Consequently, small, cramped terraces or 'kitchen' dwellings became synonymous with Belfast's growth. Still, an expansion of housing in the built up areas was not possible until the break-up of the landlord's estates (mainly of mills and manufacturing industries).

By the 20th Century Belfast had become the chief port of Ulster Province, the major market town and central place, the chief resort of entertainment and culture, and from 1921 was the capital city of Northern Ireland. This prosperity led the city

to become a magnet for migration. "Mainly rural Catholics immigrated in the first decades of the nineteenth century, but later many Protestants from Antrim and Down came, strengthening the Protestants' population from 67% in 1861 to 76% in 1901" (Boal & Royle, 1986:199). Today, Belfast is home to approximately 500,000 people; one third of the Province's total population of 1.5 million, of whom 300,000 live within the municipal boundary¹¹.

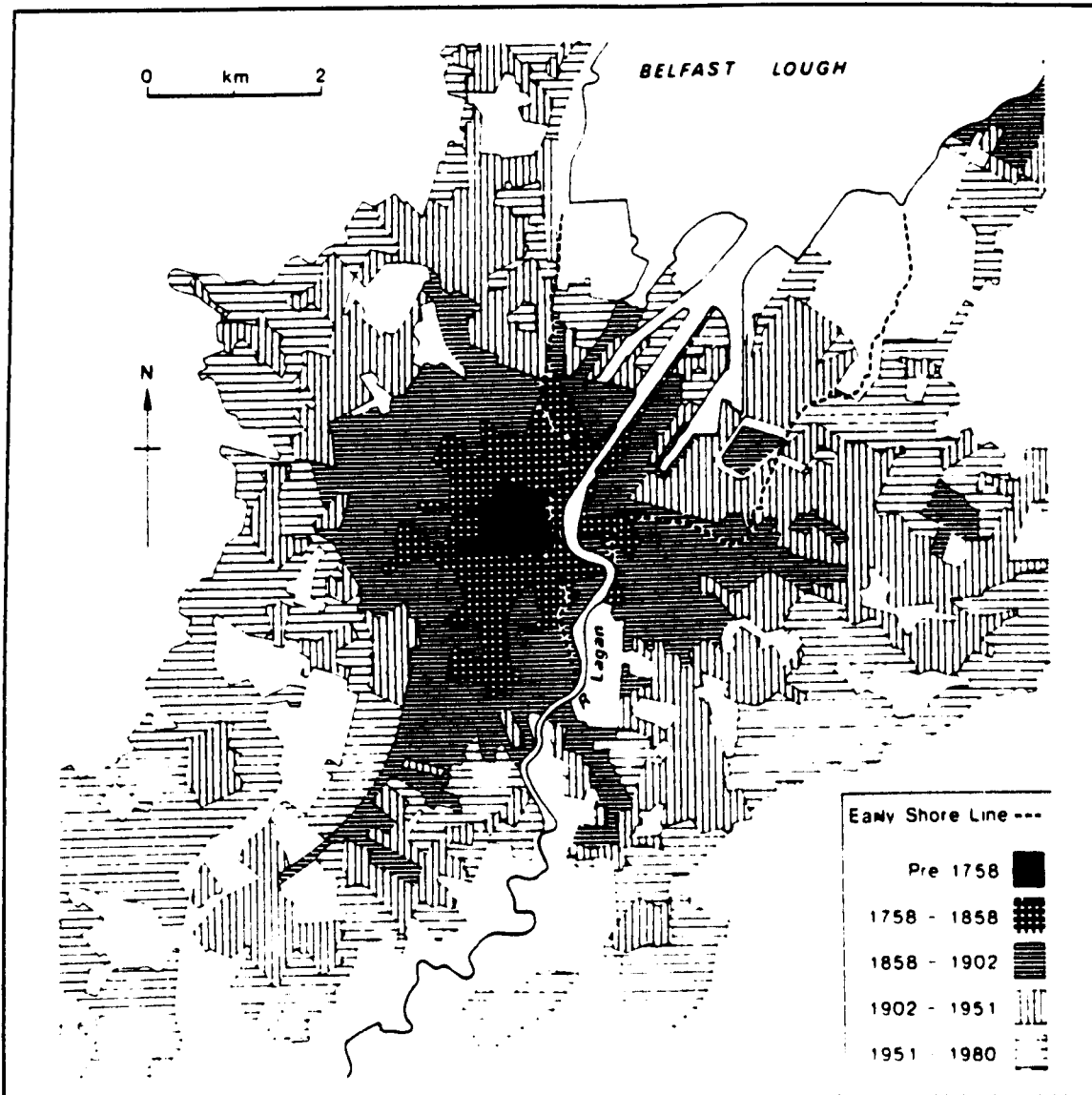


Figure [8-2] Belfast growth 1758-1980.
[Source: Boal & Royle, 1986:196]

¹¹ Northern Ireland Housing Executive (1990) *Housing Renewal Strategy, Belfast, Review and Future Policy*, Belfast.

8.7. BELFAST; ITS ARCHITECTURAL AND PLANNING BACKGROUND.

There has always been a strong link between Belfast's architecture and the political situation in Northern Ireland as a whole. Stollard (1989) supports this claim when writing:

"In Ireland planning has always been highly political, because 'planning equals territory'. The origins of the present 'troubles' lies in the planned plantations in the seventeenth century".

To start with, very little remains of the Romanesque and Gothic styles. The plantations of the Protestants from England and Scotland, which were concentrated in Ulster, brought strong foreign strains into the local building style. Also over time, "...repeated destruction and internal strife resulted in widespread damage, while rebuilding produced some curiously mixed styles" (Dixon, 1975:vi). Northern Ireland's First Regional plan was implemented in 1609, when the Government of London promoted a plan for building 23 New Towns in Ulster and settled them with families from England and Scotland. The enlargement of the Irish port of Derry and its renaming as Londonderry is considered the most important of these New Towns. The city still retains the 17th Century street pattern and walls and it is still a centre of religious conflict.

Brickwork construction was established only in the 17th and 18th Centuries, and mainly in the Lagan valley, when the Georgian style was used in many public buildings, after the introduction of railways, brick became more widely used and was very often brought from England. Before that and according to Stollard (1980), the development of architecture in Northern Ireland was hindered by the lack of good stone, for with a few exceptions, all local stone was either too hard for detailed carving or too soft for durable building.

As the First World War came to an end the economy slumped and one quarter of all workers lacked employment throughout the 1920's. This economic situation was clearly reflected in Belfast's architecture and development, particularly in its housing sector. Thus in 1919, two years before Ireland was partitioned, Westminster legislation placed an increased responsibility for the direct provision of housing on local authorities throughout Britain and Ireland. From 1921 Northern Ireland became a partially self governing region of the United Kingdom. At that time, the local Ministry of Home Affairs, responsible for the provision of housing, was preoccupied by security matters.

Singleton (1984:6) points out that between the two World Wars, (between

1919-1939) "...the level of subsidy for public sector housing was lower in Northern Ireland than in Britain, and ... greater reliance was placed upon private builders than local authority provision in the Province". Thus, in an attempt to overcome the housing problem, "Northern Ireland imported the British scheme of granting a subsidy to private builders to reduce prices. The policy of building Council houses for rent was imported less wholeheartedly" (Boal & Royle 1986:201). But the private sector could not cope with the great demand, although it built 82% of the housing stock at that time.

The Second World War had three main impacts on development in Belfast. Firstly, unemployment decreased greatly from the disastrous levels of the 1930's due to the flourishing of aircraft manufacture. Secondly, in April and May 1941 the city suffered from heavy German bombing raids, which caused considerable damage to the ship building industry and the housing stock. Strang (1985) claimed that, in those raids about 3,200 houses were destroyed and at least 53,000 were damaged. "At that time Belfast was the least protected city in the United Kingdom, perhaps because of its greater distance from the German airfields on mainland Europe" (Boal & Royle, 1986:202). What followed was the Housing Act of 1945, which set up the Northern Ireland Housing Trust as a development agency, with power to provide housing throughout the Province to supplement the efforts of the existing authorities.

The third and main impact was the establishment of the Planning Commission which issued a series of reports between 1944-45. These reports included many major themes that were to dominate planning for the following quarter of a century: "...a need to control haphazard suburban growth, co-ordination of transport, decentralisation of industry, decanting of population from inner areas of the city and the protection of open spaces" (Boal & Royle, 1986:202). Still, "Progress in tackling Belfast's housing problem during this period was particularly disappointing. The majority of Belfast's housing was privately rented and rent control legislation meant that landlords had little incentive to improve their property" (Singleton, 1984:7).

However, the first Belfast Regional Plan, prepared by Sir Robert Matthew was published in 1964, following Northern Ireland's major regional survey that took place in 1963. The prime objective of the Plan was "...to a modest extent, simultaneously to de-magnetise the Centre, and re-invigorate the many attractive small towns in the region" (Matthew 1964:18), in other words; limitation and growth at the same time. Limitation was to be achieved by the imposition of a stop-line round the Belfast urban area. While growth was to be redirected to a number of 'centres of development'

elsewhere in the region. Thus, the establishment of a new city, Craigavon, based on the two towns of Lurgan and Portadown came to life. But, "...the Matthew new towns, almost overnight, ceased to represent any significant source of housing relief to the inner city... By and large people preferred the problems they knew however extreme their nature, than a venture into new and relatively remote locations whose economic, social and 'political' futures are largely unknown" (Strang, 1985:2). "This regional plan also led to a measured discrimination against the rural Catholic areas in the west" (Stollard, 1980:23), where, according to Hendrey (1974:79), the policy was "... that scattered housing in the countryside should be discouraged and Local Authority housing added where ever possible to existing settlements".

Planning in the 1960's was dominated by urban motorway schemes and proposals for public housing that would have developed 15-20% of the units as high-rise blocks. Stollard (1980) suggests that during the early 1960's three projects were copied from English proposals, which were really inapplicable in Northern Ireland. These were the motorway network; the new-town concept i.e. 'Craigavon' and the suggestion for a second university (the New University of Ulster, NUI). The university proposal is particularly interesting, as it may have been planned for political rather than educational reasons. The university is sited in the strongly Protestant town of Coleraine, whereas Londonderry would have been a more suitable choice, for as well as being the second largest city, it already had a University College linked with University College in Dublin. The location issue of the NUI has been thoroughly discussed elsewhere. (see Osborne & Singleton, 1982:167-178).

Singleton (1985) indicated that following the report of a Review Body (Macrory, 1970) many major services including planning in Northern Ireland were taken away from local control and centralised at Belfast. In 1969 the Stormont and Westminster Government jointly agreed to take housing out of the hands of local authorities altogether, and the Northern Ireland Housing Executive was set up as the sole housing agency for the Province, replacing no less than 63 former authorities. Before that and under the 'Stormont' Government, "...the appointed local bodies had very comprehensive powers and assumed municipal powers as well. Thus, discrimination reached its highest level" (Strang, 1990).

In short, the most significant development that took place because of the 'troubles' in terms of administration and political processes can be summarised in three points:

- The creation of a central housing authority, the Northern Ireland Housing

Executive, with a major concern for the allocation of houses rather than their cost.

- "In March 1972 the Northern Ireland Parliament at Stormont was prorogued and its powers were transferred to Ministries of State appointed by the Westminster Government". (Osborne & Singleton, 1982:178).
- The removal of planning powers from the former local councils. A central planning authority was established, headed by a Minister of State. Nevertheless, 26 new District Councils were created to replace the former local authorities, "..but they were endowed with few powers". (Osborne & Singleton, 1982:178).

8.8. RESIDENTIAL SEGREGATION IN BELFAST.

"A don't like Cathliks an'Prodesans mixin' thegithir. No good ivver comes o' the like o' that".
St. John Ervine, quoted by Dawson (1984)

Today, the main feature to be noticed in Northern Ireland is the residential segregation of Roman Catholics and Protestants, a segregation that Jones (1960) suggested has been a characteristic of Belfast from its inception as a city. Singleton (1985) agrees with Boal (1982), by claiming that there is no evidence of long term decline in segregation levels in Northern Ireland as a whole and in Belfast in particular. In fact the contrary seems to be the case especially during periods of violent conflict. Today, the Province is clearly divided between Catholic and Protestant territories. Another commentator, Stollard (1989), placed more emphasis on this fact, by claiming that "..the security forces are provided with detailed 'tribal' maps which denote Catholic streets and villages in green and Protestant ones in orange". Such sharp segregation had a great impact on housing policies as well as on architectural detail. On the other hand, other commentators including Richard Oram would claim that such segregation exists only within the working class.

However, keeping in mind that in Ulster 'planning equals territory', one can see that "... every public housing policy decision which has a 'locational' component is minutely scrutinised by sections of both communities to ensure that its 'territorial' interests are not threatened" (Singleton, 1985:306). Thus, the effect of segregation on public sector housing has been mainly in the field of planning and urban design. This has led to the fact that; "The organisational and administrative structure within which housing and planning policies are formulated and implemented in Northern Ireland, takes a very different form from that in the rest of the United Kingdom" (Singleton, 1985:309).

In order to review the effect of such segregation policies on architecture, it is important to understand more about ethnic groups and residential segregation in general and then relate our knowledge to the specific case of Belfast. The next Section examines these issues.

This Section is based on reviewing some studies focusing on the social behaviour of ethnic groups in general. Although, some may disagree with the use of the term 'ethnic' in the context of Northern Ireland, on the basis that Northern Ireland has two distinct communities and not a basic population with 'ethnic' groups within that base¹². However, in our view, both communities in Northern Ireland display many features of ethnicity, as it is widely understood.

Ethnic residential segregation is a very common characteristic of cities, but it differs from one city to the other in terms of its scale and nature and from one country to another, of course. Duncan & Lieberman (1959) found from a study carried out in Chicago, that ethnic residential segregation is inversely related to assimilation; the process of absorbing and incorporating. Thus one ought to explore the relationship between two main elements; ethnic groups and the degree of assimilation, in order to analyze the spatial and physical forms of residential segregation.

First, some definition must be given to the term 'ethnic group'. As cited by Boal (1978:57), Cohen (1974) provides a very broadly based statement that an ethnic group can be operationally defined as, a collective of people who share some pattern of normative behaviour and who form a part of a larger population, interacting with people from other collectivities within the framework of a social system. Gordon (1964:27) takes the term ethnic group to mean "Any group which is defined or set off by race, religion or national origin or some combination of these categories". He claims that all these categories have a common social-psychological referent, in that they serve to create a sense of belonging to a certain group. Thus, the basis for ethnic categorisation can be racial, religious or national origin and the categorisation can be employed both by the group itself and by the larger social matrix of which it is a part. Hence, "...it seems reasonable to claim that Protestants and Roman Catholics do indeed form two ethnic groups". (Boal, 1982:249).

One should always keep in mind that, ethnic status is not necessarily a function of minority status, frequently majorities may display many of the features of ethnicity;

¹² A comment made by Dr. Paul Stollard after reviewing this paper in July 1990.

this is certainly true of the Protestant majority in Belfast. In this instance, perhaps, one should not talk of the Catholics being segregated from the Protestants, but of mutual segregation achieved simultaneously by both groups.

Although for some, **assimilation** is considered to be an inevitable process that only requires sufficient time, Cohen (1974) goes so far as to claim that in many situations the reverse can occur. In this instance, a group adjusts to the new situation by recognising its own traditional customs or by developing new customs to enhance its distinctiveness within the contemporary situation.

Assimilation is inversely related to the degree by which groups establish their own institutions, meaning that, "... those ethnic minorities with the highest degree of institutional completeness display the highest levels of residential segregation" (Driedger & Church 1974 as quoted in Boal 1978). In fact, any ethnic group, and that is particularly true in the working class areas of Belfast, usually succeeds in creating and maintaining a comprehensive set of **ethnic institutions**; religious, educational, political, recreational, etc. It is believed that through these institutions an ethnic group retains its members, preventing them having contact with the rest of the community or at least making such contact unnecessary.

In terms of **spatial and physical segregation**, ethnic residential clusters in cities seem to be basically conservative in nature. Gradually, and under the pressure of social or political unrest they might become even defensive in function. Conflict situations between ethnic groups in cities would lead people to feel threatened. Such perceived threats may materialise in the form of physical violence as in the case of Belfast, or may remain as psychological threats. Still, Boal (1972) claimed that "The ethnic residential cluster emerges as a complex mechanism for providing defence, for preserving culture and indeed for launching attacks on the 'host' society. The existence of the group itself within a clearly defined area enables an organised defence to be developed".

The long history of communal conflict in Belfast illustrates time and again the importance of the ethnic cluster as a defensive arrangement. For instance during the 1971 riots, isolated households have withdrawn into the heartland of their groups and that group in turn, has been effectively able to defend its own segregated area (Boyd, 1969; Northern Ireland Community Relations Commission Research Unit, 1971). A report on disturbances in Northern Ireland in 1969 notes that "...the two communities ..fell apart into their respective 'ghettos', where at least they had a sensation of security". However, the ethnic community grouping, as a defensive structure, can

become counterproductive under certain circumstances. For instance, the concentration of Jews in the medieval 'ghettos' meant that they could more readily be controlled. This last concept I believe has been used by the British administration in Northern Ireland. A comprehensive justification of my view is demonstrated later on in this Chapter.

In terms of psychological aspects, Kramer (1970) indicates that the ethnic 'minority' community may be the only place in which its members feel at ease. According to her, they opt for ethnic enclosure in an alien world, finding it a 'haven of refuge' in unfriendly surroundings. Furthermore, and especially when we are speaking about working-class ethnic groupings, slums provide an environment of relatively 'low pressure' for social adaptation and change. In Belfast, it seems to me that beside the ethnic factors, social class does affect the degree of segregation; it tends to be higher within the working-class, who are concentrated in the traditionally poorer areas of the city centre.

Moreover, spatial concentration of an ethnic group can provide it with a 'base for action', in the struggle of its members with society in general. This struggle might take a peaceful political form or may become violent. In terms of political action, spatial concentration may enable the group to elect its own representatives, who can then attempt to fight their group's battles in the political arena. Such areas also provide potential bases for urban insurrection or guerrilla warfare. Certain areas in Belfast have functioned in this way from time to time: rioters and members of insurrectionary groups 'disappear' into such areas, protected by the silence of the inhabitants, a silence based on either sympathy or intimidation.

In conclusion, such spatial ethnic concentrations display all the basic features associated with a territory: "They provide a source of identity, they are characterised by substantial degrees of exclusiveness and they act to compartmentalise activity spatially" (Boal, 1969). The patterns of the Roman Catholics and the Protestants in Belfast provide a classic example of the basically sectoral, religious and even national nature of ethnic areas for the growing non-assimilating groups, where their institutional completeness is quite high.

In Northern Ireland as a whole, the sectarian geography can be simply represented by saying that the main Catholic areas are in the south and the south-east of the Province, particularly County Fermanagh and South Armagh (nearest the border with the Republic). While, "...most towns of any size in NI are still predominantly Loyalist" (Oram, July 1990). If one is to exclude the modern housing

estates in some of the major towns within the south of the Province, then most of the historic urban boundaries are strongly Loyalist, such as Armagh and Enniskillen. The strongly Protestant areas are in the north and north-east, particularly County Antrim.

In Belfast, the area to the east of the river Lagan is strongly Protestant (except the Short Strand district), while in the west the Catholics control the Falls, Ballymurphy, Andersons Town and the Old Markets Area, with the Protestants controlling the Shankill, New Lodge and other areas. (Stollard, 1980:21). More comprehensive demographic studies of Northern Ireland's spatial frameworks and community relations can be found in the work J. Neville Douglas (1982).

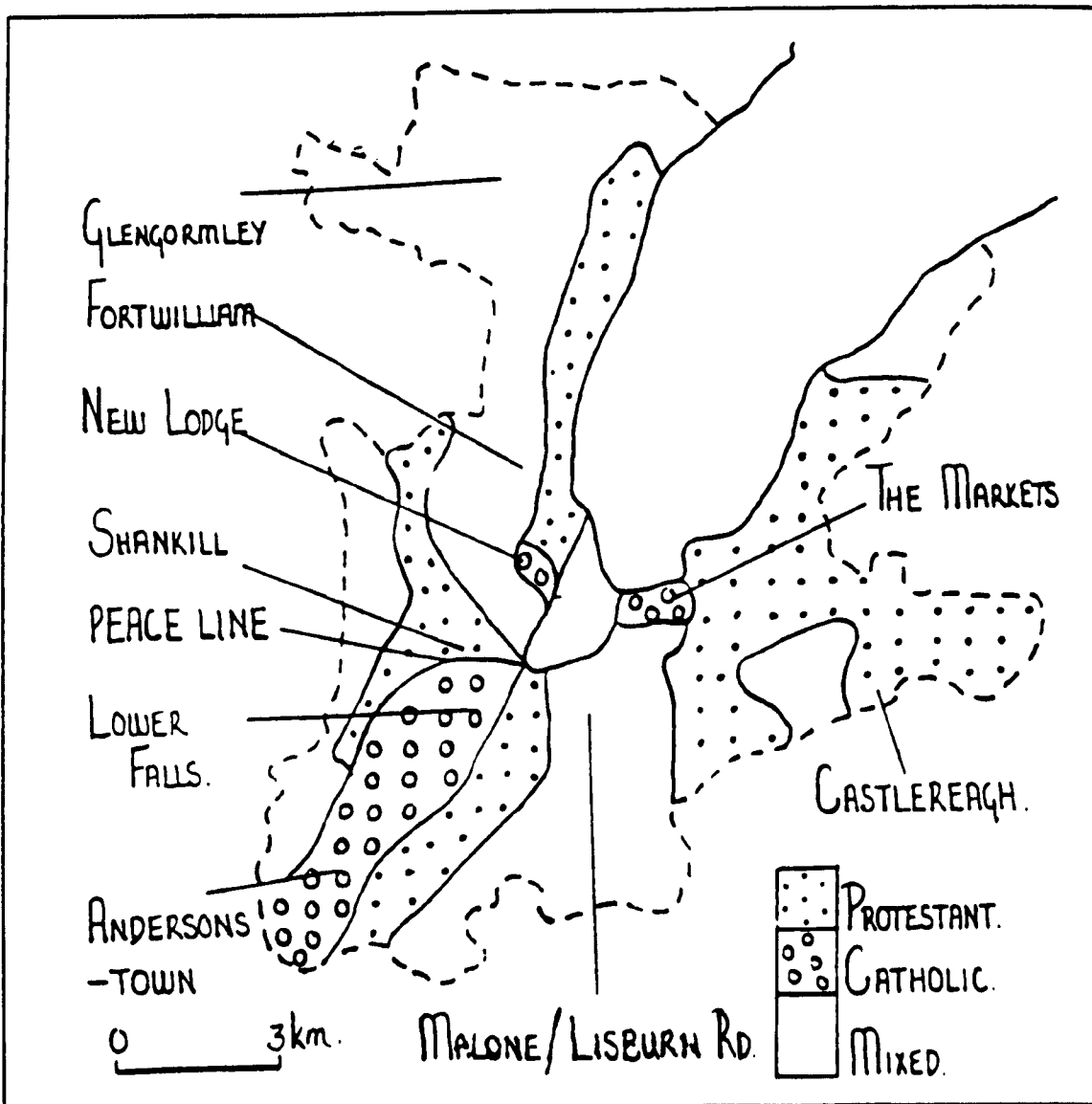


Figure (8-3) The sectarian geography of Belfast.
[Source: The Housing Executive, Belfast]

8.9. THE IMPACT OF THE 'TROUBLES' ON ARCHITECTURE & PLANNING.

'The troubles' have influenced all five of the major building types, domestic, industrial, commercial, governmental and recreational in different terms and scales. "The impact of the conflict on the building stock has been dramatic and it is not simply a matter of a few isolated bomb damaged buildings. During the worst years of the troubles (1972-73) 14,000 dwellings were affected by a total of 284 explosions". (Stollard, 1989). It was reported that, between 1969 and 1976, more than 25,000 houses were destroyed or damaged by explosions in the city (Strang, 1985:2). Still, during the last few years, the domestic sector has suffered least attack and therefore been least affected. Nevertheless, the security element has been strongly reflected in the design of private houses over the last twenty years, especially those designed for politicians, where 'safety' glass, steel shutters and entry phones can be found.

Today the 'terrorist attacks' cause the greatest share of damage, even more than the sectarian violence between people in the streets. Keeping in mind that, "They attack specific buildings with some ulterior motive in mind. When this ulterior motive is known and when this is combined with the ideological character of the insurgent campaign, a certain type of building will be more likely to experience attack than others" (Mallon, 1972:12). 'Emotive' buildings such as police stations (called barracks in Ireland), law courts, government offices and railway stations are obvious targets, but when the psychological and economic nature of terrorism is also considered, all buildings are seen to be at risk. Entertainment and gathering places such as cinemas, pubs, hotels, etc. have become victims as well. The industrial sector has also suffered many destructive attacks, thus the security factor has had some effect on the design of industrial buildings. In this case the design has been altered mainly to minimise the effect of an attack, simply because the cost of replacement for many industrial buildings is not high enough to justify expensive security measures.

Murray (1982:320) classified the 'terrorist attacks' into three categories according to the type of target:

1. Classical guerilla warfare: attacks on the security forces, on central and local government personnel and installations, and on the infrastructure of the State (public, transport, utilities, communications, etc.).
2. Economic guerilla warfare: attacks on economic targets, such as, commercial and office buildings, industrial premises, etc.

3. Sectarian conflict: attacks on private houses, schools, public halls, clubs and other buildings or locations identified with one ethnic group.

8.9.1. The effect of the 'troubles' on the urban environment.

Wandering around in the Belfast city centre, one can see and feel immediately the effect of the troubles on both its physical appearance and on its people's urban life. The most obvious effect is the closure of the town centre not only to traffic, but also to pedestrians after a certain hour at night; consequently the centre is not inhabited. During the day, as a pedestrian, one has to pass metal fences and security gates, which certainly contradict normal urban life. Such measures were introduced to reduce the number of car bombs being driven into commercial and administrative areas. Nevertheless, this enforced pedestrianisation was taken as an opportunity to develop pedestrian precincts, especially in areas where shops are commercially strong enough to attract customers. This has led to the improvement of the street furniture and resulted in some successful examples, such as Fountain Street.



Figure (8-4) Going into Belfast's city centre one has to pass metal fences and security gates.
[Sources: The author, 1990]

The fact that commercial retailing buildings have been badly hit in an attempt to cause economic decline, has led to a number of changes in shop and office design, which have certainly affected the visual quality of the city centre. A main feature common today in shop design is the use of strong roller shutters, which at night

prevent access to any entrances or set backs on the facade. In many of the big shops the facades have no set backs, where bombs could be left and the main door is permanently manned. David Nesbitt revealed that, "It is important to avoid locating offices, especially governmental offices, over shops due to the possibility of bombs being placed in the shops". This actually happened at the Dial House and many others, such as Newry and Downpatrick.

Other physical effects of the troubles on architectural design can be traced in some of the recreational buildings, particularly hotels and bars. Stollard (1980) claimed that, "These are prime targets for attack as they are always associated with one or another section of the community". He also gave examples such as the IRA Drinking Club in the Old Markets area, Rose and Crown Bar on the Ormeau Road and the Black Swan Hotel on the Lisburn Road. In all of these examples and many more, concrete walled enclosures around the main entrance have been built to give blast protection and to prevent direct entry or vision. Canopies are avoided and if they exist already then they are covered with a steeply sloping roof, to prevent anything being lodged on them. Windows are kept to a minimum and have a mesh covering to prevent anything being thrown through, in some cases buildings have no ground floor windows. Around the pavement, concrete blocks, planting pots or just concrete filled oil drums have been used to keep car bombs away from the walls of buildings. Such measures are generally applied with little consideration being paid to the appearance of the building. However, more suitable methods have been used recently, such as at the complex of Omagh Courthouse.

The other main effect on Belfast's urban life has occurred in its demographic patterns, as a result of the major population movements that took place between 1969 and 1973. It was reported that during this short period about 60,000 people in Belfast were forced to move from their mixed areas to safer sectarian ones. Also, it was reported that, ".80% of those forced to move house were Catholics, although only 26% of the city population were Catholic" (Stollard, 1989). In general, the Protestants tended to move to 'safe' estates on the outskirts of the city, while Catholics moved back into their already crowded and overpopulated areas, because they felt unsafe in new suburban estates where they were in a religious minority. These movements "...have led [in the mid 1970's] to a housing surplus in Protestant areas and a severe shortage in Catholic areas" (Stollard 1980:42).

The Protestants, mainly the young people who left their homes, were able to expand to new and better properties on the outskirts, leaving behind the elderly

people. While young Catholics with greater potential fertility, and thus a potentially bigger population (especially, considering that, the Catholic church does not allow the use of contraceptives), moved into their traditional heartlands, creating overcrowding. However, the Protestants "...saw no reason to embark upon major housing schemes to provide additional homes for Catholics and attempted to block any new development. They were particularly angered by proposals for developments in areas which were traditionally part of their territory, and which could affect both politically and perhaps strategically the security of their existing housing stock" (Stollard, 1989).

Although discrimination in housing allocation has always been a feature in Belfast, Stollard (1980:43) claimed that: "Until the early 1970's housing policy was unaffected by the troubles and 'mixed estates' were still being built". After the burning of 30 out of the first 46 completed houses of the Farringdon Gardens in 1971, it was realised that any new developments would be bound to become Catholic / Nationalist or Protestant / Loyalist, depending on their siting. Robert Strang from the NIHE, revealed, "...for the last 15 years we have been pursuing policies of 'separate development'. One has to be pragmatic, we could not force the issue of Catholics and Protestants living together, simply because they do not want to. For instance if we announce 20 houses for Catholics in a Protestant area, they will not feel safe and no matter how badly they needed the houses they will not move in and the houses will remain unoccupied"¹³.

In these terms, "The Poleglass housing scheme became the most celebrated of the attempts to provide additional housing (effectively for Catholics) on the western edge of the city. This original plan (1974) was for some 4000 dwellings to house 18,000 people. After much opposition planning permission was given (1978) for half of the development, but the protest continued. Construction did not start until 1980 and the full 2000 units were only completed in 1988" (Stollard, 1989). A comprehensive investigation into the political process and behaviour behind the Poleglass housing scheme can be found in the writings of Osborne & Singleton (1982); Singleton (1984;1985).

Still, we should bear in mind that up till now we have been talking about social public housing, while in the private sector such degrees of division do not exist.

¹³ According to a personal interview with Mr Strang; Assistant Director of the Development & Planning Department, at the Northern Ireland Housing Executive.

Perhaps because people buying their own house tend to be from the 'economically' higher middle class. Thus, they tend to be more 'bourgeois', they have more in common with each other and less at risk, for they are more concerned for their property values and getting their children a good education, than the working-class and the 'no-class': mainly homeless and unemployed.

8.9.2. Housing estates layout.

Although the effect of the troubles on public sector housing has been mainly in the field of planning and policy making, many efforts have been made with urban design and housing layout.

In recent years, housing layout in Belfast can be distinguished by the planning use of the cul-de-sac, where pedestrians and vehicles can be observed, to help to give greater security to the residents, as outlined in the 'defensible space' theory of Oscar Newman.¹⁴ (Stollard 1980:26). Dawson (1984), suggests that, the theory behind a 'defensible space', can be seen as an effort on the part of the planners, to counter criticism made at the time about schemes like the Divis and Shankill flats¹⁵. In such schemes planners were accused of importing British planning and thus, not making an effort to cater for the needs of the people of that city.

In an attempt to manipulate space to achieve social ends, the American planner Oscar Newman (1972), defined 'defensible space', as providing an environment totally under the control of its residents. According to him this aim can be achieved by the provision of a range of mechanisms: real and symbolic barriers, strongly defined areas of influence and improved opportunities of surveillance. Still, some of these plans, when applied in Belfast, such as on the Poleglass Estate, proved unacceptable as there were inadequate escape routes in the event of attack, thus the 'defensible space' became a 'potential' trap. At this point it is important to note that "Newman's work has been widely criticized on two main counts. Firstly, because of the concentration on architectural determinism, with too little attention paid to factors other than design. Secondly, on the methodological inadequacies of his research".

¹⁴ Newman, Oscar (1973), *Defensible Space*, Architectural Press, London.

¹⁵ The Divis scheme, is a concrete high rise housing complex built in the 60's, forming a Catholic ghetto in the lower Falls section of Belfast, while the Shankill is a similar scheme intended for the Protestants.

(Stollard, 1991:17)¹⁶.

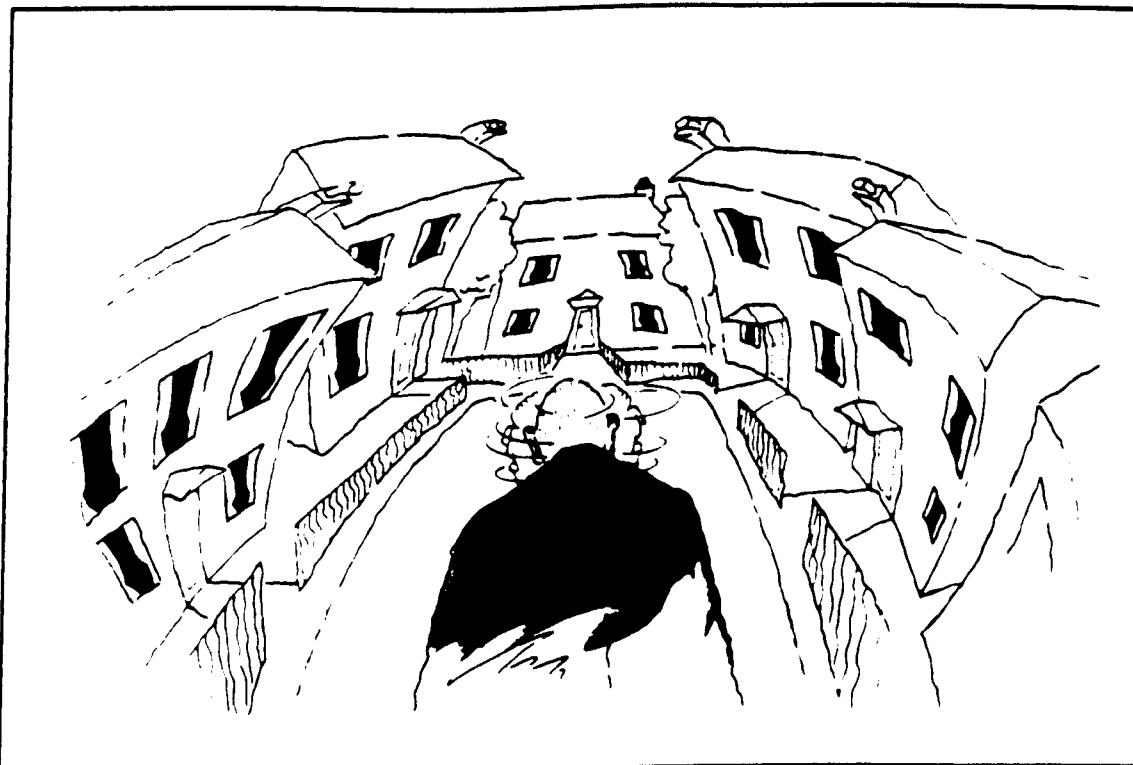


Figure [8-5] Cul-de-sac can deter.
[Source: Stollard, 1991:67]

To give a clearer idea about the trends in housing layout in Belfast, the Short Strand development area was chosen as a case study. The author visited the area accompanied by the architect K. Alexander from the NIHE, who also provided the author with layout plans of the new development. An older layout plan of the area, before the changes took place, can be found in Dawson (1984: fig.5).

By producing a Negative/Positive space study of the new development, it became evident that a system of space hierarchy has been introduced, ranging from public, semi public to private space. Aimed at minimising the through-flow, new bending, semi-public roads were introduced to replace the previous ones, along with an extensive use of the cul-de-sac. Moreover, the semi-public space is divided up into blocks or semi-courtyards, that are either defined by the site design itself (buildings) or by the positioning of shrubs, fences, etc. The concept of semi-private space is believed to play two main sociological functions. Firstly, it increases the

¹⁶ For more details see: Warren & Stollard (1988), *Safe as Houses: a working paper reviewing the importance of housing design and layout in achieving security*. Institute of Advanced Architectural Studies, University of York, U.K. Also, Stollard et al (1989), *Safer Neighbourhoods; re-designing housing developments to reduce crime and enhance community safety*. Institute of Advanced Architectural Studies and the Safe Neighbourhoods Advisory Service.

feeling of neighbourliness and responsibility for the space, by decreasing the functional and physical distance between neighbours. Secondly, it symbolically discourages a potentially dangerous outsider from entering the semi-private space. (Dawson, 1984). Though shrubs can also act as cover for an attacker.

Other measures were also introduced to ensure a 'defensible space', for instance, pedestrian entrances are defined by archways, differential surfacing and bollards. The symbolic barrier serves to define the pedestrian path as 'semi-public'. Similarly, semi-private space, existing between the houses, is defined by differential surfacing and occasionally archways. In the original plans the private space of individual houses was to be defined by differential surfacing, but it was found that this was not enough and therefore, real barriers of boundary walls were introduced. Moreover, Dawson (1984:30) claimed that, "...windows and lights are positioned on houses to enable the residents to observe the more public area of this environment". This claim coincides with the author's observations when he entered the neighbourhood. The inhabitants do not only observe you, but, they try to ensure that you are aware of being observed.

The other feature to be noticed in public housing layouts is the use of physical barriers: 'peace lines' which divide the two communities' estates. Nevertheless, such barriers; walls, corrugated iron fences, etc. can be demolished in a day. Thus they are not really permanent, unlike the designed housing layouts that create a whole new urban environment, planned from the outset - in the name of 'redevelopment' - with sectarianism in mind.

Furthermore, after looking carefully at many of the recent housing redevelopment layouts that have been adopted by the Housing Executive in Belfast, as a replacement to the Victorian terraces, one wonders if the layouts have in fact been introduced because of the Government's need to control the two communities within their estates. Such suspicions can be supported by the fact, that there are less renewal and conservation schemes of the traditional housing areas in the centre of Belfast, than redevelopment. That is, most of the schemes depend on large-scale clearance, where the pre-existing maze of terrace streets have been replaced by well defined spaces, with controlled entrances. In some cases, security gates and high surrounding walls were erected to try to ensure full control over the estates, in case of riots. If such security dimensions are generated out of an overall genuine social need, then the author wholly accepts the need to create 'safe neighbourhoods', as a feature of planning. But, the alarming issue, that attracted the author's attention, is

the degree to which the security forces are involved in planning issues in Belfast. Endorsing this observation, Beresford (1982) claimed that:

"There is evidence to suggest that new housing developments in Catholic areas are being designed with the security forces operational requirements in mind".

The same commentator suggested that the Poleglass development was an extraordinary instance, where a series of pedestrian paths linking cul-de-sacs, were designed to facilitate the movement of army vehicles. He went further to claim that the 10 feet wide paths have been designed to road specifications, with deep foundations to support heavy vehicles. This claim, also, coincides with Dawson's (1984:11) opinion:

"With the continuation of civil unrest in the city, the authorities are taking advantage of the inner-city redevelopment programme to replace the socially unacceptable peacelines by architecturally designed barriers. Although aesthetically pleasing, the devices employed by the architect and the town planner are more permanent and therefore represent perhaps the ultimate in hard territory".

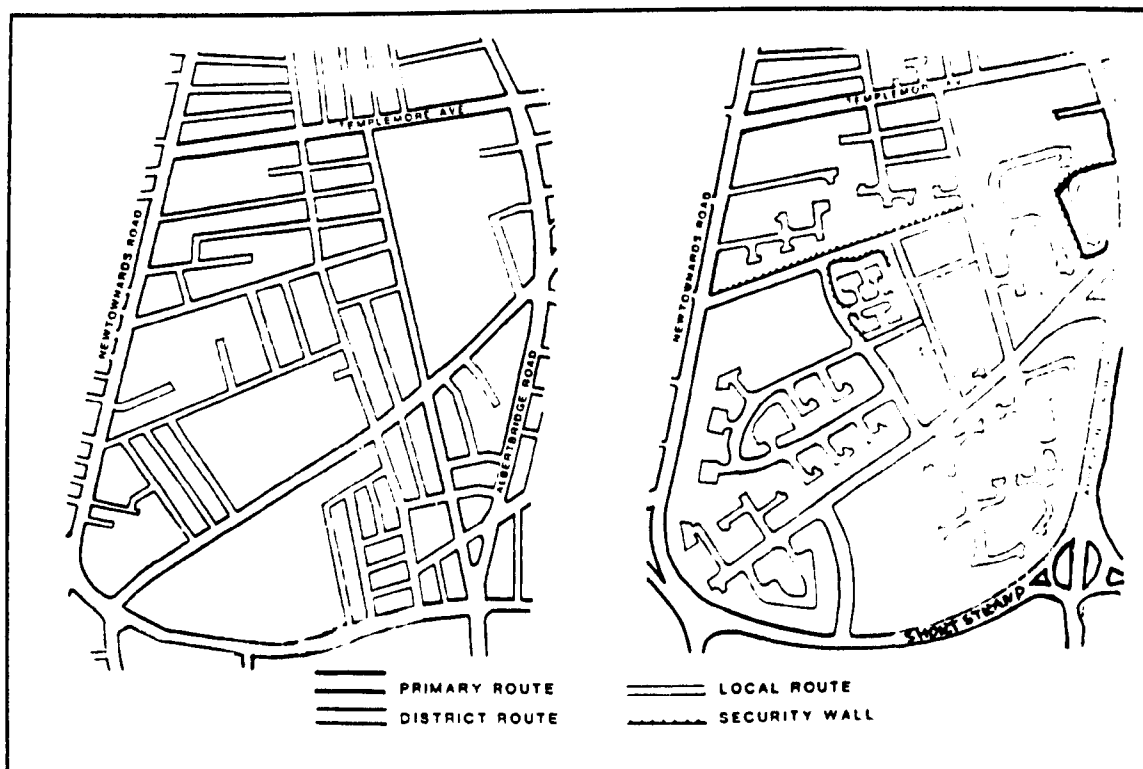


Figure 8-6) A view from the Short Strand development, where the pre-existing maze of terrace streets has been replaced by well defined spaces, with controlled entrances. [Source: *The Housing Executive*, 1990]

In this respect, the involvement of the security forces in the physical planning of Belfast has always been a subject of considerable controversy. Such involvement

became more evident after an article was published in the 'Guardian', 13 March 1982. The writer of this article claimed that he had documentary evidence, which consisted of a series of letters leaked from within the DoE, showing that the security forces had insisted on the removal of a row of houses from a planned development in the Ardoyne, a Catholic area known for its acute housing need. Commentators, like Singleton (1985:311) and Cowan (1982) believed that, the security forces felt that this row of houses, that were located directly opposite the Protestant Woodvale area, presented a security threat. Moreover, another commentator, Dawson (1984:12) claimed that the same evidence had been made available to him and he claimed the existence of the 'Security Committee on Housing', a body where the security forces meet with the Belfast Development Office. This Committee has the power of veto over any proposal which may pose a threat to security: usually a housing development at the Protestant-Catholic interface. Dawson (1984) further stressed that "...the Housing Executive plays no part in the Security Committee, a fact that has resulted in some costly mistakes in the past". My own investigations support this last claim, and a detailed description of security decision-making is given at the end of this Section.

8.9.3. The 'Peace Lines'.

"It seems inexpressibly degrading that in a city of the British Isles, neighbours have to be kept apart by tangles of barbed wire, sheets of tin, brick walls, concrete barriers and piles of burnt-out cars". Murphy (1978), quoted by Dawson (1984).

The major civil unrest or 'troubles', which began in the late 1960's, led to the intervention of the British army in the summer of 1969. Following this an attempt was made to keep the two communities apart following serious disturbances, by creating 'peace lines' consisting of high corrugated iron fences. Singleton (1985), commenting on this point, emphasised that makeshift barricades had been erected by the local population in 'flashpoint' areas, even before the involvement of the army, to stake out the boundaries between the two communities. Today, what started as 'temporary barriers' have become permanent walls, in other words a 'sectarian counterpart' of the recently demolished Berlin Wall¹⁷.

The legacy of social division in Belfast has today left the city with some 13 'flashpoint' locations or 'interfaces', where the rival communities live in close

¹⁷ The demolishing of Berlin Wall was started in November 1989.

proximity to one another. They are locations where conflict does frequently occur and all of these locations lie within the Housing Executive's public housing estates. "Such walls and barriers are still being sought by rival communities as a prerequisite for their future stability"¹⁸.

According to an undated report "Coping with Conflict", prepared by the Housing Executive, as well as interviews with planners in the Executive, these locations are:

1. Alliance Avenue, Ardoyne.
2. Ainsworth Avenue / Springfield Road.
3. Bryson Street, Short Strand.
4. Cluan Place, Short Strand.
5. Crumlin Road / Ardoyne.
6. Cupar Street.
7. Duncairn Gardens / Hallidays Road.
8. Elingrove street.
9. Lower Newtownards Road, Short Strand.
10. Manor street.
11. Roden Street.
12. Springmartin Road / Springfield Road.
13. Suffolk, Stewartstown Road.

For the purpose of this Chapter, we will only discuss five cases that the author has visited and managed to collect more detailed information about. These locations are:

- a. Suffolk, Stewartstown Road.
- b. Crumlin Road / Ardoyne.
- c. Manor Street.
- d. Lower Newtownards Road and Cluan Place.
- e. Ainsworth / Springfield Road.

At each of Belfast's interface locations, the extent and severity of inter-community conflict has resulted in physical barriers of varying types being erected. In an attempt to try and reduce the risk of friction between the two communities several design solutions have been reached. Recently the Executive has attempted to incorporate elements which are more visually attractive. Those solutions can be broadly categorised into four:

a. Concrete and brick peace-line walls.

These are the more conventional and now permanent 'peace-line' walls that reflect the deeply entrenched nature of Belfast society. They are visible in several

¹⁸ According to an interview with Mr. Robert Strang from the NIHE.

areas. Concrete or brick walls are features at: Bryson Street, Cluan Place, Cupar Street, Duncairn Gardens and Elmgrove Street. Such walls vary in height from 8 to 20 feet (eg. Cupar Street). "The existing wall at four of these locations has subsequently been raised in height by an additional steel palisade structure" (Strang, 1985).

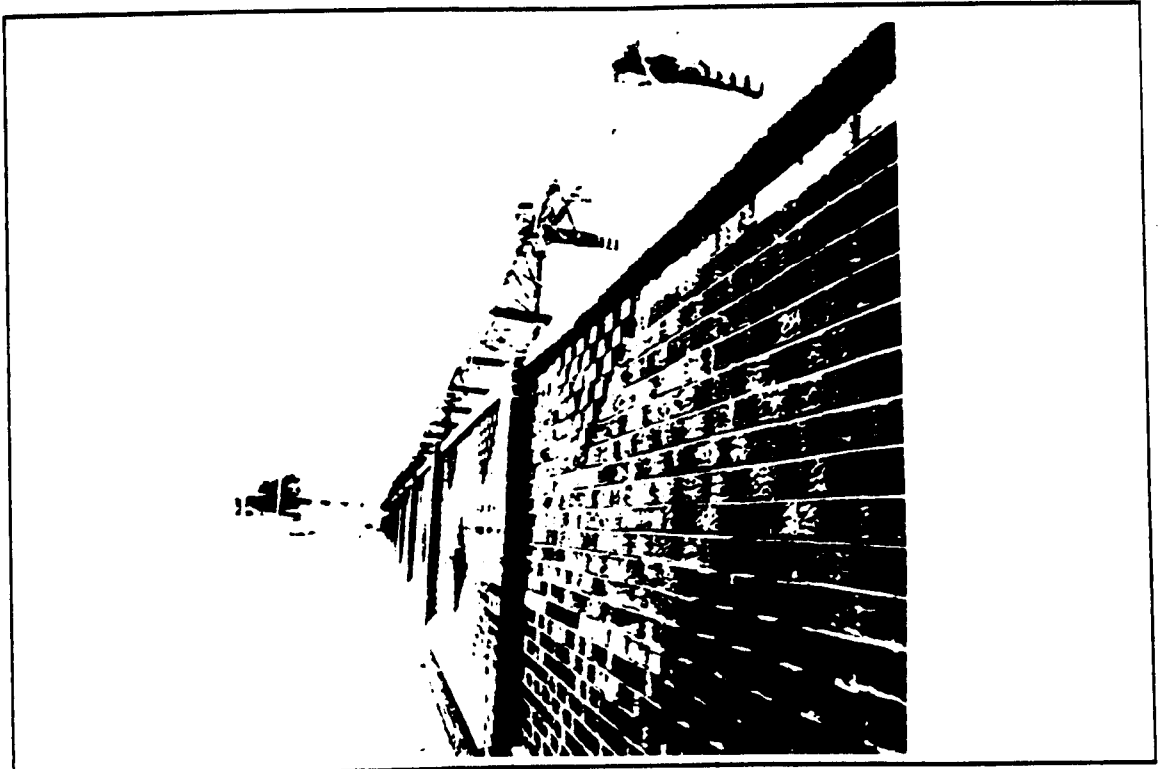


Figure [8-7] The brick 'peace-line' wall in Cluan Place.
[Source: The author, 1990]

b. The CGI fence.

High corrugated galvanised iron fences and steel palisades apart from eliminating visual contact, provide a visually stark reminder of the enmity between the divided communities. They have to be high to discourage missiles being thrown. But they do not stop mortar bombs. They have been adopted as barriers in the following locations: Ainsworth Avenue (Springfield Road), Alliance Avenue (Ardoyne), Crumlin Road (Ardoyne side), Duncairn Gardens (Hallidays Road), Manor Street, Springmartin Road, Springfield Road, Suffolk (Stewartstown Road).

c. Environmental barriers.

The use of environmental barriers consisting of lower and ornately patterned red brick walls, railings and planted areas were recently introduced, as an alternative to

the stark and glaring image of the conventional CGI barriers. These environmental barriers are currently a feature at: Crumlin Road (Ardoyne) and Lower Newtownards Road.



Figure [8-8] The environmental barrier at the Lower Newtownards Road.
[Source: The author, 1990]

d. 'Buffer' Zones.

In a number of areas, the two communities have also been separated by 'buffer' zones of 'alternative land uses', other than residential housing comprising either vacant land, areas of sheltered housing or areas of industrial land-use. Major roadways have also been used to form buffers. Lacy (1974:12) claimed that,

"In Northern Ireland the use of roads was also seen as a means of defence. They were used to physically divide the city into sectors, each of which was then occupied by each of the main national groups, thereby acting as barriers segregating potentially hostile societies".

Such 'buffer' zones are currently a feature at the following locations: Roaden Street, where the West link motorway helps to form a central buffer with Catholic West Belfast; Springmartin Road / Springfield Road, where a voluntary environmental project (Farset City Farm) and a special school help to form a barrier between the Springmartin and Moyard Estates; Albertbridge Road, where an Environmental

Improvement Scheme, a dual carriageway, and two sheltered housing complexes are used to separate Nationalist and Loyalist housing developments at Short Strand and Woodstock Road.

Nevertheless, the Housing Executive reveals in its undated report *Coping with Conflict* that, "None of these approaches has arguably proved entirely satisfactory. In many areas, the so-called 'peace-lines' are in fact a contradiction in terms. They are in many instances characterised not by peace and harmony between neighbours, but by conflict, tension, damage to property and continuing instability". However, it seems that, by building barriers between communities the Executive is unwittingly accentuating the divisions in local society.

What are the circumstances in which barriers must be provided and on whose advice are they undertaken? To answer this question it is important to keep in mind, that in such a divided community housing renewal means maintaining one's territory, beside being a social need. Thus, any plans or proposals for housing renewal are closely scrutinised by residents, along with their political representatives and a sophisticated process of consultation has evolved. Architect K. Alexander from the Housing Executive in Belfast, emphasised that, "...immediately after announcing any public Housing Renewal Area, the area will take one colour or another". In other words, it has to be either entirely Protestant or Catholic, despite it having been mixed before.

This process of consultation is also applied to Community Associations who are widely encouraged to take part in discussions regarding lay-out, house-type and phasing of redevelopment schemes. Under such circumstances, particularly when either community wishes to continue living close to, but separate from a rival one, security issues naturally arise. "These risks are assessed not by the Housing Executive, but by other Statutory Agencies. Three agencies exist for this specific purpose: the Belfast Development Office of the Department of the Environment; the Northern Ireland Office and its relevant security personnel; finally, Civil Representative Officers who provide a liaison service between the Executive and the security forces" (*Coping with Conflict*).

Thus, these agencies and their representatives advise the Housing Executive on any security issues likely to arise from housing plans. Even more, they assess whether walls or other physical barriers are required, as part of a new development to be implemented by the Executive, in order to reduce the risk of inter-community conflict. Still, Singleton (1985:310), quoted Cowan (1982), claiming that, "There is

evidence that the proper role of planners has been usurped by the security forces, to an extent which greatly exceeds the needs of security". Contrary to this opinion, in his revision to this paper, Oram (July, 1990) wrote:

"The professional planners are represented on all the decision making panels. Where they had a positive proposal to make, their view is considered with at least equal value to that of the security forces".

Oram goes on to suggest that, today there is a serious and positive attempt not to make security a major issue in decision-making: a view shared by the security forces. However, necessary security must be achieved; the question is to whose satisfaction?

Alternatively, after major incidents in the past, where lives have been lost, the Northern Ireland Office has undertaken to provide barriers in places such as Cupar Street and Manor Street. It is important to note that physical barriers of any form result in additional public expense. This cost is covered either by the Northern Ireland Office or the Belfast Development Office. It is estimated, however, that since the start of the troubles in 1969, the provision of 'interface' barriers or 'peace lines' in Belfast has cost the government a very considerable amount of money.

8.9.4. Individual case studies on the 'Peace Lines'.

a. *Suffolk Estate / Stewartstown.*

The Suffolk Estate was built by the Northern Ireland Housing Trust during the late 1950s and early 1960s. Today it comprises 524 dwellings in houses, flats and maisonettes, in a mix of high and low rise blocks, made of concrete frame with brick infill. The Estate's main problem is a direct consequence of the changing sectarian geography of West Belfast since 1969. Suffolk represents an isolated (yet long established) Protestant estate surrounded by Nationalist housing. According to a report presented by the Executive *'Coping with Conflict: Violence and Urban Renewal In Belfast'*, this estate has a high level of empty properties and transfer applications.

The principal interface is at Stewartstown Road where the estate adjoins the Nationalist Lenadoon area. A secondary interface also occurs at Oranmore Drive, in the estate close to Loyalist-occupied private housing. Both interfaces consist of high solid steel fences. Furthermore, at the main Stewartstown Road interface, an entire terrace of nine dwellings is uninhabited except for a Housing Executive sub-office. This area of conflict has also had an adverse effect upon adjacent

commercial premises.

A comprehensive planning study of the estate has recommended that the Stewartstown Road frontage should be developed for commercial, community services, or specialist housing uses. At the Oranmore Drive interface, the provision of a more environmentally acceptable barrier has been recommended.

b. Crumlin Road.

This interface runs along the main Crumlin Road frontage between Flax Street and the Holy Cross Church. It is along this line that the road separates the Ardoyne (Catholic) and Woodvale (Protestant) areas. Recently, a housing development has been completed on both sides of the road. The 'peace line' here takes the form of an environmental barrier consisting of walls and dense planting, separating the new houses from the road. Also, some of the houses have been set back from the main road frontage. Finally, "...a large corrugated iron fence adjoins the environmental barrier and shields a vacant site,... where 13 dwellings were withdrawn on the basis of security advice" (Coping with Conflict)¹⁹.

Another part of the development to the south side of the Crumlin Road has also been set back from the road frontage and screened by an environmental barrier. Still, this continues to be an unsettled and volatile interface. Several dwellings on either side of the Crumlin Road are even now being protected with window grilles.

c. Cluan Place (Short Strand).

"Cluan Place is on the periphery of the nationalist Short Strand area where sectarian conflict has flared on several occasions over the years". (Strang, 1990). In order to minimise the opportunities for conflict, different measures were taken. These measures were illustrate in the Executive's report *Coping with Conflict* as follows:

At Cluan Place, strong pressure from adjoining Protestant residents and their political representatives led to Ministerial agreement in 1982 for a 3.5 meters high wall to separate the two communities. Following further incidents, the height of the wall was twice raised at the request of residents. The wall has been raised by the use of an additional framework supporting CGI sheets. This work was completed in April

¹⁹ Earlier, we have discussed the role played by the Security Forces and the Army in determining the new housing developments layouts.

1986 and K. Alexander claims that the area has been relatively peaceful since then.

An alternative approach to interface housing has been achieved at Albertbridge Road, between the junction of Mountpottinger Road and the Albertbridge, where Catholic occupied housing at Short Strand faces Protestant housing within the Lower Woodstock. A 'zone of neutrality' was provided to separate both residential developments. This zone consists of a major dual-carriageway at Albertbridge road, two sheltered housing developments, a church, dense planting close to dwellings on the Short Strand side and an environmental improvement scheme at the junction of Albertbridge Road and Mountpottinger Road²⁰. This zone is to be extended by the interposition of a private housing development at the Mount.

This alternative was possible because considerable space was available for development purposes. The Lower Woodstock Road was also re-routed as part of the redevelopment process.

d. Lower Newtownards Road.

The Housing Executive reported that, "...the isolated nationalist community in Short Strand has also given rise to two further interface locations nearby" (Coping with Conflict). These are at Bryson Street where the boundary with the Tower Street Housing Action Area is marked by a security wall, and at Lower Newtownards Road where, walls, landscaping and specially designed railings delineate the interface. New housing has been constructed at this later location, which has been a traditional flashpoint at the times of the Orange Order parades. The primary objective was to retain the existing community within its traditional territorial boundaries. Thus, bungalows (one storey houses) were built, instead of the traditional two storey houses facing the street, with minimum openings: all in an attempt to avoid direct contact between Nationalists living in those houses and Loyalists marching along this street every year. Additionally, single storey buildings (obviously) do not allow firearms to be used from higher floors, a necessary measure as the development is very close to the UDA Head Quarters.

²⁰ Consisting of lower and ornately patterned red brick walls, railings and planted areas.

e. Manor Street.

This interface gained notoriety in the summer of 1986 when major inter-community strife took place, resulting in serious damage to around 50 new properties. This area is one of the best examples of how redevelopment schemes can unfortunately lead to greater segregation between the two communities. Before redevelopment this area was traditionally a mixed one. In fact, it has been said, that it even continued to be mixed, for a period of time after the completion of redevelopment schemes, until the summer of 1986, when a major inter-community conflict took place resulting in serious damage to around 50 new properties. This event not only ended the mixed housing area, but more importantly resulted in the erection of a 'peace line': a high corrugated iron fence separates adjoining houses along the interface to the east and west of Manor Street. Furthermore, "The street itself is now permanently closed by a steel fence. The area of most acute friction continues to be Roe Street / Avonbeg Court where most of the empty properties are located" (Coping with Conflict).

According to Robert Strang, the significant number of vacant properties and the continuing sectarian incidents within the Manor Street area, makes it Belfast's most difficult to manage interface location.

In conclusion, "A high level of new housing investment in this area over recent years has been jeopardised by continuing instability. As a result the area has become blighted. This blight has extended to a vacant site to the south of Roe Street which was to be sold for private sector development. However the site has been returned to Housing Executive ownership and it is unlikely that private development will be undertaken for some time" (Coping with Conflict).

8.9.5. Wall paintings and graffiti.

Wall graffiti has always been an expressive type of art that responds immediately to the social, economic and political circumstances of a certain nation, city or locality and demonstrates strong feelings with bold messages. This is often particularly true in the case of war or civil strife. However, one should distinguish between 'official' graffiti and the popular wall graffiti. Usually, the official graffiti aims to support the State, the Party or even the militia's political stand on the war. The popular type of graffiti is usually done with less artistic sensitivity, but with a more striking message representing people's suffering.

This remarkable phenomenon could be found in its most sophisticated type of

political propaganda in Belfast, particularly in the inner city. These wall murals have the effect of clearly identifying an area as being Catholic or Protestant, although it should be remembered that the sentiments expressed are not necessarily those of all of the people living in the area. In this context, Gallagher & Hanratty (1989:100) claimed that:

"Periodically under attack from the IRA, passively resented by one third of its citizens, outnumbered by a Catholic majority in the whole of the island the majority population of this new Protestant state of Ulster laboured to project a sense of separate culture and identity. The introverted imagery of past myths became the territorial justifications of the present. Thus William of Orange, the red, white and blue of the Union Jack and the red hand of Ulster became the mainstay of separatist Ulster identity and wall painting the outward expression of an inward insecurity".



Figure [8-9] Wall graffiti has the effect of clearly identifying the area.
[Source: The author, 1990]

Equally, the Republicans (mostly Catholics) created their own graffiti which incorporates symbols of the Celtic culture and Catholic suffering. The Republican graffiti even went as far as associating the IRA with other international revolutionary movements, such as the Palestinian Liberation Organisation (PLO) and the African National Congress (ANC). Such wall paintings reflect attempts to gain respectability through internationalisation of the Northern Ireland conflict on the part of the IRA.

The international significance of the conflict goes back to the William of Orange campaign, and in particular the Battle of the Boyne. These expressions support the claims of some observers that "...it is obviously a fatal misconception to believe that the 'troubles' are totally contained within Northern Ireland". (Oram, July 1990)²¹.

8.9.6. ANTI-TERRORIST DEFENCES.

Although any type of building might be a target for terrorist attack, some buildings such as court houses, police barracks, governmental offices, post offices, telephone exchanges and some industrial buildings offer a greater threat as obvious targets. Newly designed buildings, have been subjected to comprehensive security considerations beginning even from the site selection stage. This is especially the case with those buildings specially constructed for the 'security forces' (very often combined with army barracks, especially in rural locations) and police stations. In general, newly built buildings have been surrounded by reinforced concrete and wire fences erected as high as possible to repel thrown bombs. Windows have been kept to a minimum and are of laminated 'bullet resisting' glass, with steel ventilating grills. Previously, buildings incorporated certain specific 'anti-terrorist' defences, despite the fact that in many cases those defences contradict the visual and architectural values of the buildings, particularly those of historical interest.

Police barracks are the most obvious and advanced examples of anti-terrorist defences, even more than the army barracks themselves, because of the intensity of attacks they have been subjected to during the last few decades. These barracks are located in urban areas, which makes them even easier to attack and, moreover, they incorporate personnel sleeping accommodation, which is a favourite target.

The design philosophy for defence depends on understanding the nature of the weapons and the means of attack available to the terrorist. Jerry Hilliard²², pointed out that in Northern Ireland the biggest threat is the 'Vehicle Bomb'. Such a bomb can vary in weight from 100-2000 lbs. of explosives. The other main threat is the 'Mortar Bomb', a very dangerous weapon that often contains at least 45 lbs. of home made explosives. These are considered the main single threats, and protection of buildings from these is the major priority. These two types of bombs are considered

²¹ For more details on the issue of wall graffiti, see Gallagher & Hanratty (1989) *The War on the Walls*, in *Ulster Folklife*, Vol.35, 1989.

²² Jerry Hilliard, senior engineer, responsible for the design of 'anti-terrorist' defences, at the Department of the Environment, Belfast.

dangerous not only because of the scale of damage they produce but also because they act differently in each attack depending on their weight and location, which makes countering them almost impossible.



Figure [8-10] The extra defences added to a Police barracks at Downpatrick.
[Source: Oram, 1992]

Nail and petrol bombs are other weapons, but they are used most directly against the civilian population rather than buildings. However, their main threat is that they are produced locally. Moreover, direct shooting represents a high percentage of the threat to life; the use of small arms, machine guns and the latest weapon; the heavy machine gun. Fortunately the latter cannot easily be used in urban areas because it is too large to be hidden; it tends to be used in the country side. More recently, semtex (plastic) explosives and a home made version of the RBG7 rocket are becoming favourite weapons.

Years of experience in Northern Ireland and elsewhere made it evident that, no matter how comprehensive the design against terrorist attack is, it is almost impossible to prevent damage, simply because the designer can not easily predict the nature of the attack and the scale of damage associated with it. Nevertheless, design can certainly minimise the effect of such attacks. In cases where the newly designed building's value does not justify expensive precautions, simple defences can be incorporated. Those include security fences, "The bringing up of all cable runs

inside the building, lockable manhole covers, sunken oil tanks with a remote filling point outside the building and an escape door at the rear (of buildings)", and in some cases a 'blow off roof'²³.

In cases where the newly designed building is of great importance, such as court houses and police stations, and at the same time likely to represent an obvious target, every precaution possible will be taken which means spending a great deal of money.

In such cases the first problem facing the designer would be site selection; it is of vital importance to have a site that is not overlooked, in order to avoid direct targeting. This concept, for instance, has resulted in newly designed court houses being built outside the urban centres. Thus, what once used to be a big feature in the civic heart of a town, today, becomes a citadel on the outskirts. David Nesbitt, an Architect at the Department of Environment, while designing a new court house, comments on this point by saying:

"It is not easy to find a site that is not over looked and at the same time within easy travelling distance from the city centre. In some cases even if you managed to find one, the neighbouring properties are likely to become a major problem... we recall a case where the search has been going on for ten years".

Court houses that already exist, whether they have been under attack and restored or not, are all surrounded by high walls and fences, in order not to be seen. Thus, in many cases a listed building that cost a fortune to keep, can not 'contribute' at all to its urban setting. Architect Oram from the DoE, Conservation Department, claimed that recent policy is otherwise. Enniskillen and Omagh Courthouses were given by him as examples that have been built in less obvious ways, and appear to the untrained eye to be 'normal'.

In the design of some buildings, particularly those related directly to the public, architects will try to make the defences as inconspicuous as possible in order not to detract from the character of the building. An instance is the Enniskillen Telephone Exchange in which, according to Stollard (1980), the ground floor has brickwork facing to a 300mm concrete wall in order to give protection against blast, but

²³ Stollard (1980), claimed that there is an increasing use of such roofs in single story buildings, where the roof is designed to lift off in the event of internal explosion. The design of the fixing details deliberately includes weak bolts which shear so that the roof lifts uniformly and then drops back into place. In such designs there is a need to provide a ring beam at eaves level to hold the walls together when the roof lifts.

maintaining an acceptable appearance. Yet in other cases it is psychologically important to make the building look obviously strong in order to prevent it from being attacked. This philosophy clashes with the determination of many people not to be beaten by the terrorists, but rather to carry on with their lives as normal. Such people would argue that "...any building whose appearance had been markedly dictated by security needs represents an admission of defeat" (Stollard, 1980). They also would claim that if a building is too ostentatiously defensive it would only serve as a challenge to the terrorist. In a similar way Stollard (1980:35) cited Mr. Ralph Brown, Official Unionist Chairman of Dungannon Town Council, criticising the closure of town centres by claiming that, "...it would allow the IRA to think they had won again".

After selecting an appropriate site the next step would be to ensure that through the architectural design, a bomb will not be able to enter the building. Internal bombs are the most dangerous simply because a small internal blast is subjected to multiple reflections which magnify its pressure at least by 5 to 6 times, thus causing greater damage. This is the reason why underground parking where bombs might be hidden is no longer used in Northern Ireland. Stollard (1980) puts stress on this point by saying:

"Car parks should never be designed beneath a building as they provide the ideal location for a car bomb, as in the case of the Northern Ireland Housing Executive where one was placed directly beneath them".

In short, "To start with, you must keep the bomb out of the building and as far away as possible" (Jerry Hilliard). Thus to keep a clear stand off, at least 12-15 meters from the boundaries (perimeter) is very important. "You can not design a building directly on the foot path and at the same time expect it to resist a car-bomb; even if you provide a huge section of reinforced concrete walls, still a considerable amount of damage will take place" (Jerry Hilliard).

If a sufficient recession has been provided and a wall which a vehicle cannot pass, has been erected, then it is even possible to build a normal building; otherwise more money will be needed to reinforce the walls of the building itself, in order to withstand the very high pressures. It is self evident that any blast spreads out with an equal pressure that decreases with the distance from the centre. This fact can be demonstrated by a graph of the pressure caused by a bomb in relation to the distance from the building. From the graph one can see that maximum pressure exists at the shortest stand off point, where the graph climbs steeply. The lowest pressure, is

when the blast reaches furthest from its centre.

After providing a sufficient set back, a security fence surrounding the site plays a crucial role. This security fence might be built in different forms and of different materials: wood, corrugated iron, chain-link or palisade fencing, etc. Such fences can be used first to prevent visual observation, a need mainly for high security buildings. Fences can also be designed to prevent 'projectile' attacks in the three main forms: sniping, rocket and mortar attack. This kind of defence can be helped when the building has been completely screened from view.

Sniping is the hardest threat to counter because of the nature of the attack, which is usually carried out by a single terrorist. It is very difficult to prevent a bullet from penetrating structures, keeping in mind that, "A high velocity rifle will fire a bullet capable of penetrating a single skin of brickwork, and if it hits at the correct angle, a normal cavity wall" (Stollard, 1980:51). Thus the main objective of the fence would be to prevent observation.

Rocket attack and particularly using the RBG7's, have been recently introduced and used in Northern Ireland²⁴. Defensive screens can be used around the building to protect it by detonating the rocket before it reaches the target. In the case of mortar bombs, the main concept behind the fence is that, the higher the fence, the shorter the distance any object thrown over it will go. The other application would be through the use of a blast wall around the site. In this case the stiffness of the wall is very important, because it will absorb some of the blast energy. But what is more important is that it should reflect and thus turn the blast. That will help to create a safe shelter area right behind the wall. In short, a blast wall can only protect a short distance behind it, depending on its height and stiffness.

"Security lighting is also important at this first line of defence and this should be designed to illuminate the surroundings while leaving the building in darkness. In this way a potential terrorist has no cover, while his target remains hidden" (Stollard, 1980). The current security illumination technology depends on infra-red and ultra-violet rays that can act in place of the eye.

The next defensive step is the building itself. The majority of the attacks have been by planting bombs; placed either in cars driven up to the building, or left in unattended cars, suitcases or bags. They were either internal bombs or external ones

²⁴ According to a personal interview with Mr. Jerry Hilliard, Senior Engineer at the DoE, responsible for anti-terrorist defences.

left as near as possible. The main threat of a bomb is not only from its direct blast, but more so from the magnified pressure reflected off the surrounding surfaces. Thus, in the case of an external bomb, the orientation of the building can play an important role. It is maybe helpful to have the narrowest elevation facing the street from where the main threat lies.

The blast can be reflected off the ground creating a reduced pressure area followed by a magnified one. In this case the height of the building plays an important role in the scale of damage. If it is a single storey building then it stands a good chance of being in the (negative) reduced pressure zone, thus possibly able to survive the blast. Otherwise, the higher storeys are the most likely to suffer. This reasoning applies only to buildings far enough away from the bomb blast.

The other factor is in terms of the shape of the building itself. It is essential to have a plan shape that does not 'collect' blast. A U shaped plan is a very good example where the blast will certainly be collected in the void and magnified causing greater damage. A rectangular shape will suffer less, particularly if its elevation was designed to be as smooth as possible. "If you build your building with flush walls, every thing dead flush; the doors, windows, walls, no eaves or overhangs and no recessed openings, then the blast will be more easily reflected off the facade. But if you build a building incorporating modern trends such as feature columns, a big overhang on the roof or deeply recessed windows, you tend to prevent the blast from more easily being reflected", (Jerry Hilliard) and doing more damage. Thus the ideal building might have a circular plan with no angles or niches to catch a blast. Although a building can be designed in a way to incorporate structural defences, creating a bomb-proof building is practically impossible. But some types of damage can be minimised, and more importantly, the repair costs can be kept as low as possible. For instance, the services and all important functions should be concentrated in the core or basement, then the scale of damage would be reduced. More expensive measures incorporating the use of moving facades are also possible. This defence can be taken one step further by the provision of a separate structure for the core, so that in case of an attack, the perimeter can completely collapse without endangering the core. In short there are two sorts of damage: a) damage to fabric and b) to operational aspects of a building. The facades may be damaged but buildings could continue to be used.

Load bearing walls are one of the most vulnerable structures to blast, particularly those of brickwork with timber floors and roof. Although, such

construction is normally stable under vertical loading it does not easily resist horizontal forces generated by blast. Jerry Hilliard indicated that framed buildings are much stronger and stand a better chance of survival, as well as being more easily repaired. Stollard (1980), claimed that a monolithic framed structure is almost impossible to demolish. In the framed structure the continuity is provided by the linked three dimensional horizontal and vertical members. Still, as Jerry Hilliard pointed out, the use of large precast floor units proved to be a great danger in an explosion, as they tend to lift and drop without breaking up.

In the case of external exploded bombs it is important to restrict the blast waves to the outside of the building to prevent greater internal damage. Windows of ordinary glass will allow such waves to enter the building, be trapped and magnified. This situation can be helped by the use of laminated or polycarbonate glass. Plastic film on the glass can help the inhabitants to protect themselves from shattered fragments. In these ways it is possible to restrict the area of damage suffered by the building.

However, bombs placed inside are the most damaging to humans and fabric. The blast from these will be at least 5-6 times stronger than similar bombs placed outside a building, because shock waves from the blast are contained inside, creating greater impact. One way of reducing the effect of an internal bomb is to provide a means to 'vent' any explosion, such as with 'blow-out roofs or wall panels'. These are all the more necessary, as one can no longer depend on the assumption that the glass in the window will destruct first, particularly if it is 'safety' glass. Such glass has much stronger glass/frame joints or even frame/wall joints. Still, "In the design of blow-out or safety panels there is also the problem of balancing the designed weakness of the panel against the strength needed to resist accidental damage and wind pressure". (Stollard: 1980).

So far we have mentioned mainly physical defences which are aimed at deterring or preventing attack, but many buildings are also using their very style as a psychological defence. Stollard (1980) suggested that the new Central Station was an example of this concept in a number of ways; firstly "...the approach to the entrance is concealed by a number of walls so that one can enter into an unobserved area and once inside the building, the large waiting areas with little opportunity for concealment would make the terrorist uneasy and insecure". In other examples dark colours with small windows or simple repetitive units have been used to give an impression of strength and to convey a feeling of security.

David Nesbitt, senior architect at the DoE supported the psychological view of defence, when he said that in some cases we do add bullet resisting glass windows to buildings, while their walls are actually too 'soft' to resist blast. Other measures are also important and can help minimise the risk of terrorist attacks, such as, permanent security staff, inside control on external gates, and the use of advanced monitoring and surveillance equipment.

8.10. THE EFFECT OF THE 'CONFLICT' ON THE CONSTRUCTION INDUSTRY.

Having considered the effects on architectural design and planning, we must also consider the effect of all the strife on the construction industry, as this is equally important in helping determine the future built environment.

Although there are a fair number of contracting firms in the Province besides some Scottish, English and Eire companies, it is often difficult to find an appropriate contractor ready to undertake construction in troubled areas. Robert Strang (1985:3), Assistant Director of Development-Planning in NIHE, wrote that in the early 1970's "...contractors refused to tender in the most troubled areas, particularly in West Belfast. Many building sites were easy targets for theft and vandalism, skilled workers were in short supply, further aggravated by a curiously sectarian bias in certain key trades, and workmen generally were, understandably, reluctant to go into 'difficult' areas". Certainly, contractors are generally still reluctant to get involved in any government project. While the author was interviewing Mr. Nesbitt from the DoE, a letter arrived from a contractor working on the repairing of a bomb-damaged court house, in which he informed the DoE about his intention to give up the work, no reason was given. Perhaps he had been threatened.

As stated above, within the labour force itself, there are strong sectarian divisions and often skilled workmen are unwilling through fear to work outside their own 'safe' areas, even when they are unemployed. Recently a brick-layer was killed by a sniper while working on the roof of the High Court of Belfast. Nevertheless, in big projects taking place in neutral areas, both Catholic and Protestant workers will work together, despite the pressure to which both might be subjected by the paramilitary groups.

Those paramilitary organisations also subject pressure on the contractors themselves, requiring them to pay protection insurance money. "They will come to the contractor, especially if he was involved in a government project or in a project that benefits the other community, and threaten him that something nasty might

happen to his building site or to him, unless he pays a certain amount of money as protection" (C.G. Andrews)²⁵.

Such pressure makes it very difficult and costly to conduct any development projects in the traditional hard line areas of the two communities. Robert Strang raised the point that, "...in the Executive we had to accept the fact that part of the cost of the development is going to those paramilitary organisations, despite the fact that prosecutions have been taking place, and many people have been sent to prison". They pay the contractor extra expenses, which he in his turn pays out in protection, or for hiring security firms.

8.11. RECONSTRUCTION COMPENSATION.

Compensation for rebuilding bomb-damaged buildings is available from the Criminal Damage Branch, which is part of the Northern Ireland Office (NIO), as set out in the Criminal Damage Compensation (Northern Ireland) Order 1977. Compensation is payable when damage is caused to property as a result of a criminal act (terrorist attack). It is based on the cost of repairs to, or the replacement of the damaged property if the cost of the damage is more than £100, and it is caused by a terrorist organisation.

Provided that damage has been caused, one may also be compensated for consequential loss, for instance loss of profits in the case of retail shops. Compensation always takes the form of a certain amount of money that has been agreed on between the Applicant and the NIO. The latter does not have any input into conducting the reconstruction, (for instance they do not select the contractor, instead it is up to the applicant to chose his own).

However, compensation is given with certain restrictions. Firstly, "Payment will only be made after work has started on rebuilding, this has prevented many businesses from being able to rebuild" (Stollard 1980:31). Secondly, the idea of criminal compensation is to reinstate the property to its prior condition before the damage: "Compensation will not be paid for stolen property unless it was recovered in a damaged condition, stolen or destroyed cash, jewellery, including watches, except where it formed the stock of a business or had been kept on business premises for repair, auction etc" (NIO, Criminal Damage Branch leaflets).

The amount of compensation is also reduced if the building is in any way

²⁵ According to a personal interview with architect C.G. Andrews.

'improved' by the reconstruction, Judy Hewitt, from the Criminal Compensation Department, tackled this point by saying:

"We do not pay them to improve their properties, that is the idea of what we call 'betterment', which is deducted; you consider whether after a scheme, a building is better than it was before, say it has been improved or they had decided to take the opportunity to refurbish a building. Then there is an element deducted for that to make sure that they are only compensated to the state they were in before the damage occurred. That is the theory behind it".

Regarding the matter of historical buildings, Architect Richard Oram from the Department of Historical Buildings and Monuments at the DoE, wrote to the author saying, "The fact is that Historic Buildings and Conservation Areas grants are available to aid the 'betterment' issue and are administered in collaboration with NIO on a regular bases. Which, I would go as far as saying is very efficiently organised!! Whereby all owners of damaged property are informed by letter of the potential grant aid on an elemental basis". On the other hand, Cornforth (1978:122) criticising the betterment clause, wrote: "[it is].. clearly inappropriate when dealing with listed or traditional buildings" (Cornforth, 1978:122), especially if we consider the fact that compensation is being assessed in respect of market value rather than cost of repair. "Naturally most people want to repair their buildings and go back into business as soon as possible. But within Conservation Areas and particularly the more important ones like Queen's [the Queen's University area of Belfast] it must be faced that there are likely to be extra costs of restoration, simply because of the position of the building and the need for correct details" (Cornforth, 1978:122).

Judy Hewitt, emphasising the existing shortages in the compensation regulations regarding Listed Buildings, described the situation of a pub, a listed building that was damaged beyond repair and had to be demolished. In the Department's view the pub was not really worth the cost of rebuilding to its previous appearance, "... after all its no longer a Listed Building. That is only one example of quite a number of similar situations"²⁶. This example was justified by Oram (July, 1990) as being a case in which damage was so severe that only a minimal amount of historic fabric remained. The same commentator revealed that, generally the Conservation Department operates a 60/40 role, i.e., if 60% of the historic fabric is destroyed no extra grant is offered. However, at the same time he claimed that this

²⁶ According to an interview with the author in Belfast 5 March 1990.

is not absolute and depends on the historical importance of the building in question.

The Criminal Compensation Department deals with all aspects of claims concerned with issues of compensation. It is therefore important for them to know if another body, for example the Historical Monuments and Buildings Branch (DoE), will provide some sort of financial aid, when dealing with buildings of historical interest. It is considered an offence punishable by a fine or imprisonment or both, to fail without reasonable cause to notify the Secretary of State of any sum recovered for a loss under any other statutory provision or common law. This also applies to deliberately attempting to obtain compensation by deception. Obviously the financial criteria must be worked out so that the applicant will not be able to claim compensation from more than one source.

Should they fail to reach an agreement on the amount of compensation, which often happens in the first round, the applicant has the right to complain. The negotiations will then continue between the Department's loss adjusters and the applicant's lawyer. They will be expected to come to an agreed figure and settle the case on that basis. Otherwise, if it does not get settled by this 'informal' procedure, the applicant has the right to appeal to the County Court within 6 months from the date he receives the Notice of Determination.

8.12. SUMMARY AND CONCLUSION.

What began at the beginning of the 17th century as a modest settlement on the steep valley sides of River Lagan in the north-east of Ireland, is now Belfast; the principal urban centre of the Province and the capital city of the 1921 established Northern Ireland. Today, the city has an urban population of around 500,000 people, of whom approximately 300,000 live within the municipal boundary.

Historically Belfast is a city characterised by its divided community. Its divided social fabric is very clear and physically well defined in many places. Belfast's social pattern has been influenced by centuries of community grouping, often associated with places of work, worship or social amenity. This fact, added to the city's acknowledged religious and political differences between its two main communities; the Nationalists (mainly Catholics) and the Loyalists (mainly Protestants), gives urban renewal, planning and housing proposals increased complexity, that does not exist anywhere else in the United Kingdom.

Before the author became personally involved in the Northern Ireland situation, the whole issue was nothing more than journalist's reports in the newspapers. At that

time it very much reminded me of the Palestinian question, where in my understanding it was a very clear case of struggle towards liberation. But, certainly I was mistaken, it turned out not to be as simple as I had thought. It is not only a conflict between two groups, but there is a third group involved and that is the British Government and its army. The Northern Ireland community is not just made up of Nationalist and Loyalist terrorists, but rather the vast majority from both communities who want to live a normal peaceful life without violence. The terrorist attacks are conducted by very small numbers of activists from both communities, who are supported by what can be called 'non-active terrorists'. As Oram (July, 1990) explained, "These are people who belong to terrorist oriented groups, parties and clubs all of which give money and active sympathy to terrorist activities". The army entered the scene in the late Sixties to play the role of policeman; today it is seen as an instrument in the hands of the British Government, who rules direct from Westminster, to help control both communities.

As a result of this study it is clear that the Government, in its drive to contain the situation, promotes planning policies that are based on short term solutions. For instance, the provision of public housing (usually combined with subsidies), leisure centres and other social benefits, in the hope that such an approach will 'legitimise' the State in the eyes of the vast majority of the citizens. The fact that the housing in the Province, over the last decade, was not affected as it was elsewhere in Britain supports this claim²⁷.

Another decision not to impose the Community Charge or 'Poll Tax' on Northern Ireland is part of such approach. At the same time it is trying to hold down unemployment. But the community as a whole is paying the price of a lower standard of living with fewer opportunities for economic growth²⁸. This government's policies only seem to intensify the segregation issues, which in turn make it more difficult to achieve a long term political solution. The underlying socio-economic problems of the Province have long been established. Under the Labour administration 1974-79, three main economic problems confronted the Northern

²⁷ In his paper dated 1985, Robert Strang from the NIHE, talking about the Executive's achievements, indicated that, "There can be little doubt that without the measure of support received over the last decade [from the central government], the city would almost certainly have experienced a scale of social and economic collapse beyond all reasonable hope of recovery" (Strang, 1985:8).

²⁸ Strang (1985:7), claimed that unemployment remains high even by the standards which now prevail throughout the U.K.; about one-third of all households in the Province are in the receipt of Housing Benefit; average income per person is some 30% below the U.K.

Ireland economy: "...the erosion of manufacturing jobs, the collapse of inward investment and the poor prospects for public-sector job creation when the government was trying to limit public expenditure". (Cunningham, 1991:125). Later, under the Conservative administration 1979-88, "...the changes in economic policy were of emphasis rather than a qualitatively different policy". (Cunningham, 1991:159). Central government investments were directed towards supporting private capital in the service sector and new hi-tech industries. The regional manufacturing industries, which were potential large employers, did not benefit as much. Efforts to attract national and international investments are often hindered by the security factor of the Province. (For more details on this issue, the author recommends Cunningham's (1991) book *British Government Policy in Northern Ireland 1969-89: Its Nature and Execution*, as an essential reading).

In conclusion, the Northern Ireland question has very strong economic, social and religious dimensions; when these are combined with terrorism, they can create the political solution that in the end has to prevail. The holding operation that has to take place while the politicians refuse to compromise, is certainly evident in the built environment of Belfast. Our conclusions will concentrate on lessons that could be helpful to urban designers and planners, in clarifying their role in balancing normal social / environmental needs, with the constraints of sectarian violence and maintenance of law and order, within a divided community.

The role of the professional is to anticipate and influence this metamorphosis in a positive and active way using the particular tools at their command (which includes 'concessions' in some contexts), with a view to making a contribution to long term social and environmental harmony. We believe that such an insight can help in evaluating and understanding the contribution and strength of approach to architectural and planning decisions. We all must be conscious that our responsibility as architects and planners has a unique role in such situations, because as our designed environment takes shape, it starts limiting, directing and even shaping the lives of those who use our buildings and open spaces. Thus, we should not employ our professional abilities to enhance existing social or sectarian divisions, but rather to enhance better understanding and assimilation between communities.

Based on these beliefs the conclusions of this Chapter have been categorised into a number of themes that serve the overall objectives of this dissertation, in the general context of post-war reconstruction:

Theme 1: The effects of war and civil strife could go beyond physical damage to influence planning and the built environment in the long term and thus to affect the socio-cultural structure of a particular society.

This study tried to demonstrate how the effects of continuous 'strife' in Belfast could go beyond physical damage, to affect the entire socio-cultural, political and administrative structures of the society. We examined the spatial and physical residential segregation in Belfast between the Catholics and the Protestants and highlighted the different aspects involved in dealing with ethnic groups. We also investigated the long-term effects on architecture and the urban environment, which varied from control of access to a particular area, to actually erecting physical barriers (the peace lines). The troubles have also affected the layout of public housing estates, emphasising the idea of defensible space. The built environment is being used to promote propaganda of a sectarian war-sub-culture.

Theme 2: Centralisation verses local decision making.

A view has been formed on how the conflict between the two communities and the continuous 'war' has left Northern Ireland with a unique planning situation, in comparison with other British regions, both in terms of policy making and implementation. As we saw in the Second section of this paper, Northern Ireland has no effective local government, it is administered by centrally controlled departments, one of which is the Department of the Environment. This department has control over land use planning, roads, conservation, water and sewage. Singleton (1985:309) supported this view, when he wrote:

"Unlike the rest of the U.K., extensive use is made of largely unelected Boards to administer housing and planning policies in the province".

Today, public housing in Northern Ireland is also centralised. It was taken out of the hands of local authorities and other public agencies in the early 1970's, through the creation of a centralised housing authority (the Northern Ireland Housing Executive). One can trace many centralised planning and housing decisions with no difficulty at all. The 'Poleglass' housing scheme is one of the most obvious examples. In this case the *Direct Rule* government from Westminster was determined to implement the scheme which was seen as needed for the Nationalist minority, despite the Loyalist objection and determination to stop the scheme in whatever way possible. Eventually, the pace has been forced by the central power, but the Protestants' opposition managed to cut the project by half. Thus the original plan that

involved building 4,000 dwellings and other facilities to house up to 18,000 people, has been compromised to only 2,000 dwellings.

This example demonstrates two points. The first, that even in the U.K., the "fortress of the western democracy!", where the concept of decentralisation and local government has grown up, Northern Ireland's conflict made it almost impossible to decentralise planning decision-making. Although superficially many decisions seem to have been taken locally, those that directly touch the conflict are mostly centralised decisions. Northern Ireland's experience until 1969, showed that having a powerful local government in a similar situation of ethnic groups, did lead to discrimination against the minority. In fact, if the situation had remained unchanged and no central decision had been taken, it is very unlikely that even half of the intended Poleglass scheme would have been built.

Nevertheless, a step towards administrative decentralisation has been taken by the DoE and the NIHE as each of them created a new spatial framework, comprised of units known as Area Boards. Still, "Area Boards were composed predominantly of appointed individuals and not elected representatives; local interests were thus more easily controlled and professional administrators gained greater freedom in decision making". (Douglas, 1982). Conversely, the second point illustrated that although centralised decision-making in such a divided community proved to be more effective, one should not underestimate the community power and ignore the continuing threat of violence, which might shatter the community if individual objectives were not fulfilled.

Such conclusions might lead us to question the demand of many authors (Davis, 1986; 1988; 1989) for more powerful local government in post-war situations in the Middle East, particularly where such ethnic divisions exist. Certainly it implies that if we are to have decentralised planning bodies, then their overall structure should be formulated in a way that guarantees the rights of all communities. Of course, this guarantee is only possible if those communities are prepared to collaborate in the workings of the 'state' and not work only for its destruction.

Theme 3: Reconstruction and ethnic divisions.

The Fifth Section demonstrates that ethnic residential segregation is a very common characteristic of cities, and Belfast is not an exception. In Belfast, segregation has been a characteristic of its urban life since its inception. This highlights an important lesson: ethnic groups living together are not a 'reaction' as

much as a need. Consequently, we should deal with segregation as a psychological need that may be more basic than our physical planning policies. Thus we can not force ethnic mixing and subsequent assimilation; it can only be encouraged. The long history of communal conflict in Belfast stresses the fact that no matter how cohesive the degree of mixing between the two communities, when a riot starts both groups will instantly withdraw into the heartland of their communities. In fact we noted a similar situation in the Lebanon when the civil war broke out in the mid 1970's, when hundreds of thousands moved from the eastern part to the western sector of the city and vice-versa. (see Faouri, 1987). This conclusion highlights the importance of planning with a thorough understanding of the real psychological and cultural needs of the local communities, as well as their innate abilities.

Furthermore, the Seventh Section of this paper showed us how 'sectarianism' has a powerful influence, not only on decision and policy making but also on implementation. This influence could take the form of sectarian divisions within the labour force, which consequently affects the efficiency and production of, for instance the construction industry. Furthermore, paramilitary organisations in such divided communities could also subject pressure and even threaten the construction sector, and subsequently the economic structure and the political stability of the state as a whole.

Theme 4: Reconstruction and public participation.

The study of Belfast leads us to question the concept of popular participation as it is defined in the West, based on democracy:

"Popular participation in development should be broadly understood as the active involvement of people in the making and implementation of decisions at all levels and forms of political and socio-economic activities". (Lisk, 1988:15).

Apparently, in Belfast, the citizen's input is only considered at the execution and implementation level; that is public participation in planning and housing decisions are closest to what we might term as 'centrally controlled participation'. Moreover, the concept of participation is often implemented by those who are taking part by attending the local planning committees; those who can afford the time. Thus they are often either unemployed or retired people. It seems that such people are usually the hard liners of any community and they tend to represent a certain section of age and social class. Consequently, the people's main input is limited to demanding larger housing units or more segregated and better defended neighbourhoods. We

hold this view despite official claims of the importance and the extent of peoples participation. Robert Strang (1985:8) from the NIHE said, recommending methods of dealing with communities in conflict:

"As far as humanly possible carry the local communities with you in terms of information, effective consultation and decision making. In Belfast nothing can happen without local support".

However, it is important to note that in Belfast it was definitely 'the people' who caused the change in planning and housing policies and an end to high-rise housing, not through participation committees but instead by street confrontation.

Theme 5: Housing provision, a product or a process?

It might be appropriate to suggest in this context some changes in the way public housing is being provided in Northern Ireland and particularly in Belfast, where housing has largely been seen as a product that has to be delivered to both communities. We have declared previously our belief that the Government is trying to buy people's approval of its control, by providing them with high standard housing schemes. We have nothing against the quality of housing provided, although we have some doubts about the layouts, where, I think defensible schemes have been carried too far. Houses have been 'cheaply' rented mostly to unemployed people or families receiving housing benefit, which makes the process seem endless with no reasonable positive results²⁹.

There is an argument that says that the housing estates as places, have to belong to those who live in them. This 'sense of place' and people's 'sense of belonging' to it can only be engendered over time and with people's involvement in the process of reconstruction. This may encourage a stronger sense of responsibility, not only towards one's house but also towards the neighbourhood and consequently towards the whole city. Such a 'sense of responsibility' may help reduce the scale of conflict between different neighbourhoods, it may also decrease vandalism within a neighbourhood; a phenomenon that can be seen today in the middle-class privately owned housing estates.

This argument does not mean that we are not aware of the Executive's view point, that there is a need to maintain and even increase its housing stock to meet Belfast's great demand for housing. Nevertheless, if the above given reasons were

²⁹ In fact the face value rent is not cheap, but they are subsidised through government benefits of one sort or another.

combined with the well identified costs of managing and maintaining a public housing scheme, it would be very reasonable to extend the opportunities for private housing schemes. This could be achieved with higher subsidies provided by the government to help people in need. This is not easy and could only be achieved through encouragement, for, "...in NI there is no tradition of home ownership among the working class as there is increasingly in other parts of the U.K. People do not see it as a status symbol -a rung up the ladder- to own their homes. It seems that ownership is not a great incentive here, this may well be an inheritance from Gaelic co-ownership, which was accepted over much of the country until WW1" (Oram, July 1990).

However, credit must be given to the NIHE for their efforts in handling ethnic conflicts. Still, this study observed clearly that the Executive does not consider the issue of confrontation between the two communities as seriously as it should; immediately, from the planning state of any housing scheme. On the contrary, most of the time, such consideration occurs when the scheme has arrived at its detailed design stage (that is unless one side or the other of the divided community discover it before its official announcement). At such a late stage, when only limited options are available to the intended residents, the sole solution would seem to be a physical barrier or a 'peace line'. Afterwards, the total effort would be concentrated on creating 'environmentally acceptable' barriers, for which there is no question of the costs, that are usually paid either by the Northern Ireland Office or by the Belfast Development Office.

Credit must also be given to the NIHE because of the quality of housing schemes which were established in the 1970's and 1980's, which would be considered an exceptional effort if compared with the high rise housing schemes built in the 1960's, such as the Divis and Shankill flats. Most of today's built schemes are, in the main, 2 storey house types, each with its individual access and private open space. Most of the schemes are built of traditional materials and to the highest standards and specification. In short, concerns about territorial identity, security and building forms have merged to produce a form of housing scheme, particularly in the inner areas of the city, that are distinguished for their two storey terraces either grouped around courts or short through routes. Here in Belfast the emphasis has been on creating defensible areas.

Theme 6: Social and physical mitigation of war and civil strife.

In Belfast, we saw what had been started by the local population with temporary barricades at some 'flashpoints' areas, to become defined boundaries between Catholic and Protestant territories following the inter-community violence in August 1969. These were later replaced with more permanent corrugated iron structures by the British army. Moreover, when some of these areas have later been developed, the redesigned housing layouts further emphasised even more the existence of such divisions with the increasing application of 'defensible space' planning concepts. Also several of the early examples of 'security walls' or barricades have been strengthened and others have been built to heights in excess of 20 feet within the developments. Today such redevelopment, "...provide(s) dramatic physical evidence of the apparent permanence of a divided community" (Singleton, 1985:310), despite the great effort on behalf of the architects and the huge investments made by the government to make such barriers look as acceptable as possible.

During the last decade, the reaction of the authorities has changed from street confrontation by police, then the army, to temporary barricades and patrol lines, to permanent barricades in many different forms. Not just walls and gates, also gardens and trees, the alignment of streets and in three-dimensional gradients, hollows, banks, salients all positively pursued into the physical environment, some of it is positively imaginative.

Moreover, the Northern Ireland problem now seems to have entered a phase where the generating demands of civil rights, including equal employment opportunities, better housing conditions, have largely been met. This has brought an end to the large scale rioting of whole neighbourhoods, which characterised the 1970's and to some extent reduced the social vulnerability of entering into civil strife. Today, the war is fought more or less between paramilitary troops and the security forces. This war is made possible by an infrastructure of passive sympathy from a much larger group who provide safe houses, food, even weapons, and make the direct pursuit by the security forces very difficult, not only on a national level but on an international one as well.

The *anti-terrorist defences* Section of this Chapter showed how it is becoming more and more difficult to protect against bomb damage. Nevertheless, the Belfast experience showed that a number of defensive measures can be incorporated in the design of buildings and in the layout of housing estates to reduce the degree of damage caused by bombing. However, these measures have other generally

undesirable side-effects on the urban environment, particularly on its spatial and visual qualities.

Theme 7: Reconstruction Compensation.

The long-term continuation of the conflict in Northern Ireland and the fact that insurance companies do not cover bomb damage made it necessary to establish a bomb-damage compensation agency: the Criminal Damage Branch. There are a number of lessons that can be learnt from the Northern Ireland experience in this area:

- Compensation is given to landlords as well as businesses and factories, in order to repair or replace damage caused to properties by terrorist attack.
- There is not a fixed value of compensation, as it varies according to the degree of damage, a fixed minimum damage cost is necessary in order to qualify for compensation.
- Compensation is also given to opportunity loss or consequential loss, such as loss of profits in the case of retail shops. Thus the aim of compensation is not just to return the victims to their pre-damage status.
- Due to the fact that both war and *development* in Northern Ireland occur simultaneously, along with the availability of building materials, it was possible to award cash compensation, which additionally was more manageable.
- Payments are conditioned to the start of reconstruction and are paid in instalments.
- The amount of compensation is reduced if the building is in any way 'improved' by the reconstruction.

Of course such a model of compensation is only possible in situations similar to Belfast, where damage is very limited on a day-to-day basis, thus it is possible for the compensation department staff to meet the victims and to discuss with them the amount of compensation. Also such a model is appropriate in places where comprehensive records of the pre-damage state of buildings are available, and where people can produce certificates of their belongings and their income.

Theme 8: Reconstruction and Development can be used to achieve a balance between the realistic needs of the inhabitants and the State's immediate political needs.

Belfast is a clear case where *reconstruction* following its urban riots and terrorist bombing, as well as normal development, is planned to meet the State's immediate

needs of security, legitimacy and domination. But at the same time a great effort has been made to compensate people for their losses and to provide them with their housing needs. However, most of the short-term development projects in Belfast as well as the failure to attract external investment can, in some cases, be interpreted as a government bias towards meeting its own needs, rather than those of the local people. However, one should keep in mind the fact that the British policy is a 'holding operation' while a political solution is sought. Consequently, its expression in architecture, planning and construction, can make only a limited contribution to the outcome, whether in positive or negative manner.



The Belfast case study demonstrated the fact that conflicts are not restricted only to countries from the South, this continuing conflict in Europe offers a number of lessons in terms of reconstruction and post-war development. The coming Chapter (9) will highlight a significant issue that has arisen in all of the studied cases, and that is the role of the affected population in the process of settlement reconstruction.

CHAPTER NINE

THE ROLE OF THE STATE AND COMMUNITIES IN RECONSTRUCTION

9.1. INTRODUCTION.

By researching three different casestudies of reconstruction in Iraq, Yemen and Northern Ireland, a number of strategic issues that go beyond conventional practice in reconstruction became apparent. One of the most important of these issues is where the line should be drawn between the state's role and that of the community in reconstruction? Why and how? In other words, what is the practical extent of participation by a community devastated by war, that is acceptable to a post-war government, beneficial to the community and would encourage the international NGOs and agencies to help in the effort of reconstruction. Of course, this dissertation recognises the fact that there may not be 'a line' as such, thus it does not attempt to draw such line, but rather to highlight the participation issue in the hope of achieving effective integration of internal and external resources of both the State and Internationally.

Concerning 'social and psychological issues', the author wrote in November 1989 as part of his recommendations for the reconstruction of Fao and Basrah cities in Iraq: *"The participation of people needs to be regarded as a potential primary resource for reconstruction. Such participation can occur at varying levels and stages; clearing the rubble, local planning and decision-making, rebuilding homes and evaluating completed projects"* (Barakat, 1989f). In the same document the author went on to recommend that, "Disabled people should be given equal opportunities to participate 'normally' in the development of the country..., the role of women, which was already developed during the war, should be emphasized as a vital resource in reconstruction". These recommendations were given on the basis that "Such participation of the population will not only maximise the resources of skills and labour, but will also assist those who need work as a process of therapeutic readjustment. Such participation will also add local character and contribute a

national identity to the reconstructed settlements". (Barakat, 1989f).

These recommendations were adopted by the Iraqi Supreme Committee for Reconstruction, and were published in their 'glossy' document: *The International Seminar on the Reconstruction Campaigns of Basrah and Fao*. Still, people's input in the reconstruction of Fao was negligible. The author believes that Fao is a true case of 'reconstruction by central decree', where the whole city was seen as a single giant monumental project¹. Despite the officials' declarations concerning the importance of planning decentralisation and the government's commitment at a national-political level towards 'people participation', the breakneck speed of reconstruction of Fao denied any involvement of its people. Such rapid rebuilding forced Iraq to pursue planning by decree, assuming the needs and desires and ignoring the participation of the users.

This experience caused the author to rethink not only the form in which he delivered his recommendations but also the issue of people participation, and its validity in a post-war situation in the Middle East. The aim is to reach a conclusion on why would a State adopt a particular policy and advertise it, while when it comes to implementation, the whole policy is ignored. Are there any gaps in the theme of participation that makes it inapplicable? On the other hand, what makes the participation theory 'a must' in all governmental development policy documents but not in their application.

The deeper the issue of community participation is researched the more complex and controversial it is revealed to be. The fact that we are dealing with a highly political and centralised post-war context, suggests some doubts on the effectiveness of a participatory approach for reconstruction. While at the same time, the very context of all post-war activity raises a number of questions, the answers to which, the author suggests, lie entirely within a participatory approach to the task of reconstruction. For instance, there can be little doubt that it is needed as a process of therapeutic readjustment by the affected population. Also, it is difficult in the case of resettlement and relocation to solve any arising problems of land ownership without involving the public. Finally, the simple rebuilding of a city is highly unlikely to bring its life back without the full participation of its people.

This Chapter seeks to examine the concept of community participation and its overtones of democracy, within a Middle Eastern reality of a strongly centralised

¹ For more details on the reconstruction of Fao city see Chapter 6.

planning and reconstruction effort. It argues that if achieving democratic participation has proved to be difficult in normal development contexts, then it seems unlikely to be achieved following any kind of war or even civil conflict, particularly in that today's wars are mostly limited to countries where peoples's opinions are hardly taken into account. Nevertheless, when local communities are excluded from the process of rebuilding their own settlements, their participation is usually replaced by costly, utopian schemes decided upon by centralised governments and often realised through the involvement of large national and foreign contractors. (See the case studies of contractor-built reconstruction in Dhamar, Yemen and Fao, Iraq). Hence, to bring the governments down to earth, a degree of people involvement is needed in reconstruction, even if it is minimal (eg. the controlled type of participation in Belfast). Thus, the *aim* of this Chapter is to provide a better understanding of the positive linkages between a '*realistic*' involvement of the people and a successfully reconstructed settlement.

By involvement we do not necessarily mean full participation, as it is widely understood in small scale development programmes. Neither do we mean false participation (as we will later on see in examining the DASH project in Yemen). In our view people's involvement can be achieved through the Government developing a reconstruction planning approach that enjoys the following attributes: (1) realism; (2) sensitivity and (3) flexibility, and that it is locally based, while being part of wider regional and national strategies; an approach in which plans are constantly developed on the basis of genuine research and feedback in the field and not excessively from the Centre.

This author maintains that in order to achieve such an approach, there is a need to address two types of audience, who, beside local communities, are the main actors in reconstruction, in an attempt to influence their attitudes towards post-war people participation in reconstruction. These audiences are:

- a. *Central Governments.* The aim should be to persuade them of the importance of involving the people in the process of reconstruction. The arguments could be as follows;
 - i- In a post-war exhausted economy (and even in normal circumstances) it is impossible for the State to meet all the needs of the population. Eventually, many needs will be met by the people themselves. Hence, the role of the population in reconstruction might as well be part of a planned strategy.
 - ii- If a nation has been at war with another nation, the population has made many sacrifices, then it behoves the government and the leadership to

reward the population with change and change that meets the changed circumstances due to the war.

Thus there is a need to clarify the benefits behind participation and the fact that participation in reconstruction does not necessarily threaten their authority.

- b. *International Agencies and NGOs.* They need to appreciate the fact that they can not achieve much without the involvement of Central Government. They have to be realistic in their attitude towards demanding direct grass-roots involvement in reconstruction. They need to join efforts to help governments change their attitudes too.

Through evaluating the issue of participation in terms of its costs and benefits and by examining one of the most proclaimed cases of 'self-help' post-disaster reconstruction (that took place in Dhamar, Yemen), this Chapter concludes by formulating a conceptual understanding of the issue, based on a partnership between the State and the local communities. A partnership in which the State is required to be more responsible and accountable to the war-stricken population. Of course, we do not mean assuming responsibility over the planning and implementation of every detail, but rather by behaving in a sensitive, realistic and flexible way towards the concerned population.

9.2. THE DEVELOPMENT OF THE NOTION OF PARTICIPATION.

It seems ironic that one needs to research and advocate the theme of community participation in the Middle East, where until just a generation or so ago this was taken for granted in many respects. This is particularly true in rural areas and among the Bedouins, where co-operation and communal activities is a matter of survival. It is interesting to notice that they tackled their problems in a certain hierarchical order of priorities and social structure, starting from the scale of the single household family, through to the tribe, and up to and including the whole local community. In that sense national borders, as such, did not exist. It was community boundaries that defined the extent to which collective action would be taken. What many so-called 'experts' forget is, that, historically, most societies have a long tradition of popular participation at the local level, which they managed to maintain until it became one of the first casualties of 'colonisation' and, later on, 'modernisation' and other forms of top-down development (United Nations, 1975:32); coming under European imperial domination destroyed all that, as they were subjected to their absolute authority. Too many Middle Eastern communities became economic resources and wholly dependent on their rulers, who controlled the means

of production and the markets. That is when the story began. But, the bitter reality is that the nationalist and socialist movements that gained Independence for their countries, replaced the imperial control with a 'state-centralised' domination, in which the population was again to become dependent on the State. No one can deny the considerable improvements that have taken place in terms of economic progress, industrial development, health and education, but, also no one can turn a blind eye to the political corruption and indifference that accompanied so much government activity; elitism, intolerance, poor economic management and last but not least wars.

Proponents of community participation (who seem to be mostly NGOs, community workers and 'outsiders') are usually seen as being critical of State controlled social provision, arguing that it is "...bureaucratically administered, governed by impersonal regulations and routines and unresponsive to the problems and needs of individuals". (Midgley, 1986b:8). Thus participation is portrayed as the right alternative, which will "...not only humanize the bureaucracy, but strengthens the capacities of individuals and communities to mobilise and help themselves". (Midgley, 1986b:8). In their conventional attitude towards Governments, international NGOs have presented themselves, not only as being *non-governmental*, but also *anti-governmental*. Demonstrating examples of such attitudes are the feed-back reports by intervening NGOs during the recent plight of the Kurds². "There are, however, a number of cases where NGOs have worked closely and successfully with so called Southern governments". (Anderson & Woodrow, 1989:36).

To start with, it is important to know that a number of *studies* and authorities have explored the question of local people participating at the different levels of 'social development' (Midgley, 1986c), 'development planning' (Bungnicourt, 1982:57-78; Hakim, 1982:137-144), 'rural development' (Hall, 1986b:87-105), 'health and medical care' (Hollnsteiner, 1982:35-56; Hardiman, 1986:45-70) 'education' (Hall, 1986a:70-87), 'water and sanitation' (Drucker, 1985:2-5), 'low-income housing projects' and 'upgrading squatter settlements' (Abrams; 1964; Turner, 1966; 1972; Ospina, 1987; Hamdi, 1991) and so on. "In fact it is rare these days to find a document on development strategy or approaches, which does not refer to participation or suggest that the strategy under discussion is participatory in

² Talking about international aid agencies and NGOs, we should keep in mind that disaster aid is a major reason for their existence and that they all share the underlying belief that their help is wanted; the official response is often slow and inefficient; they can be uniquely suited to work with the poor; and they are meant to be politically neutral. (notes from Disaster Management Course, Oxford, 1990).

nature" (Oakley & Marsden, 1985:1). "Popularized by the United Nations and other official bodies, it now permeates the literature on the subject". (Midgley et al, 1986:vii).

Most of the references dealing with the notion of participation date the beginning of the concept back to the late 1960's and mid 1970's, when it started to be used in the context of new approaches to 'development administration' (eg. Gittell, 1980:29; Martin, 1988:vii). An earlier source of inspiration for contemporary community participation can be traced to the 1950s 'community development movement' (Midgley, 1986b:17). Other researchers would even date it as far back as the 1930's, when in America, the theme was introduced to fight unemployment and urban blight in inner city areas (Claude & Zamor, 1985; Lisk, 1988:vii). The 1970's witnessed the introduction of the participation concept into the developing countries, in an effort to replace new-housing development by 'upgrading' in cities, and to improve development policies in rural areas. The 1976 United Nations Vancouver conference marked a significant shift in policy towards participation, when it stated and for the first time:

"Public participation should be an indispensable element in human settlements, especially in planning strategies and in their formulation, implementation and management; it should influence all levels of government in the decision-making process to further the political, social and economic growth of human settlements".

The emergence of the notion of participation as an approach to development is well documented elsewhere (Midgley, 1986b:13-44; Ward 1982:1-16). However, the return to community participation was a much needed reaction to large scale centrally organised development schemes, which have so often left the human being, the family or the community with hardly anything to say about his or her own environment. A return that was to a large extent advocated by international NGOs.

Still, despite the richness in which the subject has been researched and documented, there are not many references on its application in reconstruction following disasters, and hardly any following war. The writings of, in particular, Ian Davis (1978; 1981) and Fred Cuny (1983; 1986) led to 'community participation' becoming a cornerstone in 'disaster management'. In fact, the community-based approach to the mitigation of natural disasters and emergency planning and reconstruction, became one of the key issues discussed at the International Conference: Disasters and the Small Dwelling, held in Oxford (2-6 September, 1990)

and constituted several items on the agenda of the United Nations' International Decade for Natural Disaster Reduction (IDNDR) (1990-2000). Few attempts can be found, in which the issue of participation has been examined within a post-war reconstruction context. (eg. Zargar, 1989b:300-350; Leslie, 1991; Barakat & Cockburn, 1991a:60-65).

"However contemporary writings on community participation are coloured with lofty sentiments and the difficulties of achieving effective community participation are not always recognized. Numerous controversies attending the idea of community participation are also neglected. Above all, the literature on the subject has not dealt adequately with the issue of the role of the state in community participation". (Midgley et al, 1986:vii). What is not being highlighted in those writings is the fact that genuine participation needs a degree of normality and political stability, within the community and the larger State.

It is important to emphasize that in our cross-cultural examination, it is the similarities between and among communities rather than the differences and the diversity of behaviour, that will contribute to greater understanding of the reconstruction process. Of course, this approach does not and should not underestimate the importance of understanding different cultures and operating within their limitations, when it comes to discussing specific cases of participation. Our cross-society generalisations are supported by recent 'disaster behaviour' research which concludes that, at the level of the individual and family response to risk; warning, emergency and recovery there is a striking continuity and similarity across societies and cultures. (Dynes, 1992:67-71). "On the other hand, cultural differences are most frequently revealed in terms of the organizational and political structures. Some societies are rich with community organizations which can deal with disaster; others are not. Some societies assume a helplessness and dependence on the Government; others do not. Some expect a diffuse and decentralized decision-making system; others reflect a centralized and direct governance". (Dynes, 1992:70).

The social organisation and the political issues it can generate seem to be the decisive element in whether to pursue a participatory approach to reconstruction or not and to what extent. Thus following war it is important to evaluate the community we are dealing with, as well as the particular State concerned.

9.3. DEFINING THE POST-WAR COMMUNITY.

To serve the objective of this Chapter, we are seeking a definition for the term community that does not exclude any part of a certain social group, not even the so called 'community elites' (as referred to in the writings of Hollnsteiner, 1982:39); more or less a combination of the two definitions given in the Collins Dictionary:

"Community, the people living in one locality, or a group of people having cultural, religious, or other characteristics in common". (Collins Dictionary).

In other words, "The word community denotes a social entity, organized in some fashion, however loose and informal, and with some sense of identity - not just the inhabitants of a locality" (White, 1982:18).

Authors writing about the issue of community participation take it for granted that the reader understands what they mean by community, while authorities considering the issue of participation "...do not seek to define the term formally and instead use it loosely to denote a socio-spatial entity" (Midgley, 1986b:24), that would serve their agendas. Practically in any context one needs to start employing the concept of participation by defining the community it is set to serve. Similarly, but theoretically, we will start by tackling the concept of participation by defining our community.

Having the population of war-devastated urban areas in mind, the author finds it difficult to relate directly to most of the advertised practices in community participation. Mainly because much contemporary literature on the issue is concerned with rural communities, and in particular the deprived and disadvantaged section of them, focusing on "... the lowest level of aggregation at which people organize for common effort" (United Nations, 1975:31). On the other hand the limited publications that deal with the notion of participation within an urban context, generally conceive the urban community as an urban slum or squatter settlement population. (Midgley, 1986b:25).

In a post-war context, dealing with the urban population, the rich would have suffered as much as the poor, if not even more. In fact it is almost certain that the amount of loss by the better off is greater than that inflicted on the poor, although the former might recover faster than the latter. Thus, we need to involve the whole community (that is, if we agree that a society can be divided into poor and elite). In short, in post-war reconstruction we need to involve all the sections of a certain society and on different levels, starting from "the lowest level of aggregation" as

defined by the United Nations (1975:31), growing to include local groups, officials and professionals. Thus we are not limiting our definition to that of the United Nations, in which it conceived community participation as taking place in small communities occupying squatter settlements (United Nations, 1976).

In his writings on community participation in the planning and design of urban housing Hamdi (1991:83-85) identifies four types of communities that one may deal with, emphasising that "The likelihood of success of most programs depends on a number of conditions that need to be understood", within each type of community.

The four types of communities are:

- ***Integrated or parochial:*** Neighbourhoods where people share a common view; there is social homogeneity; they speak a common language and may ethnically be related. Thus the likelihood of success is greater in such communities. On the other hand, there may be less need to introduce the concept.
- ***Diffuse:*** Applies to most new developments, whether of the site and service kind or public housing, where they start with *little* or *no* community structure. "Interventions are difficult here because initially it is not clear whose interests need to be served".
- ***Stepping-stone:*** People living in a place on a temporary basis. Thus they "... have no long-term commitment locally, and will probably move if dissatisfied rather than get involved".
- ***Transitory:*** Applies to neighbourhoods where communities are going through radical class or ethnic transformation, "...from black to white or from middle income to upper income,... There will be old-timers and newcomers, and their differences will be acute".

A *post-war community* could be any of the above mentioned types or a combination of more than one. It seems that professionals dealing with reconstruction have the opportunity of emphasising one type of community over another. For instance, by ignoring the original settlement and its previous population they will be dealing with a *diffuse community*, building new sites and waiting for people to move in and structure a community. Or by building a settlement for war refugees they will be investing in a *stepping-stone* situation. In post-war reconstruction professionals have the opportunity, that may not exist in a newly planned settlement, of actually dealing with an *Integrated*, more easily defined community. The survivors of a devastated settlement have a common concern and share the same traditions. It is most likely that the war has brought them closer to each other in a solidarity that strengthened their social entity.

Nevertheless, war-torn communities are with *special needs* and at the same time *special abilities*. The special needs would have emerged as a consequence of war:

- Psychological stress due to loss of relatives, living through the war or just as a reaction from the loss of home and property.
- In some cases unbalanced communities, either because of excessive male casualties that leave behind women and orphans, or simply because of migration leaving the poor and the weak. Also as a result of the increased number of disabled people.
- Ex-service men with exclusive military skills, in some cases for a considerable number of years.
- An extra-ordinary proportion of imported labour and immigrants.
- A community that might have mixed with refugees from other regions or countries.
- In most cases its a community full of fear and suspicion. They do not speak out easily.

All these needs put a question mark on the possibility of achieving genuine participation. On the other hand, it may be a community with a number of special abilities brought out perhaps by the war:

- The role of women would have been strengthened.
- Increased solidarity and a new found strength for coping socially.
- A community that shares! a common goal: to rebuild itself.
- Capability of adjusting to harsh conditions and an ability to survive against all the odds.

Of course the degree of needs and abilities differ from one war-torn community to another depending on the type of war and its effect (see Chapter 2). Consequently the role that could be played by participation differs.

9.4. DEFINING THE POST-WAR STATE.

Similarly in a country that has just emerged from war, the State will have special needs. In the Middle East, within the relatively short history of the 'state', its involvement has been rapid in all sectors of social development, education, health, housing, social security and many other public services. However, a war tends to increase the powers of the executive and administrative arms of the state, as well as

the police and military. They will no doubt have developed a totally dominating role in the prosecution of the war that embodies an even greater powers. Consequently, the power of the government that previously rested, as it often does on the support of the military, may well increase and be reflected in an ever increasing grip on the every day life of the citizen.

In the light of today's realities of centralisation and the fact that the State *"..dominates the lives and affairs of its citizens to an extent previously unknown"*, (Midgley et al, 1986:vii), it would be naive to argue that reconstruction can be approached without the involvement of the State, through the ruling Party structure. Although local communities can face some of the tasks of reconstruction, in addition to the serious problems of deprivation and poverty, still, they need the involvement of the State in particular areas. On the other hand, it seems to be equally naive to assume that immediately following a war, it would be possible to reestablish a more democratic relationship between a strengthened centralised dictatorial bureaucracy and the formal representatives and authorities.

Any State, emerging from a war has special responsibilities, such as:

- To its population who wants to return to 'normal' life as soon as possible.
- To resist pressures from the military to retain its newly gained power-base.
- To maintain its authority for national security reasons.
- To replenish its resources and finances, to pay military debts and to aid reconstruction.
- To overcome the fear and suspicion among minority groups, including refugees, and to ensure local political stability.

How can we expect from a ruling regime or party, suddenly to transfer all or even part of their power or authority to local communities or even to regional councils? Waging war, by definition, means a strengthening of the centralised authority. Many of today's wars take place in countries where peoples' opinions are hardly taken into account, indeed it often the case that the war started because one area wanted more autonomy. Thus in order to change attitudes at the top we need to:

1. Demonstrate the benefits that can be gained from encouraging participation in the reconstruction process.
2. Show how more willingness and creativity by involving the population can radically improve the rebuilt environment.

Participatory programmes do suggest a democratic process for reaching decisions in a more open political climate. (Hamdi, 1991:83). More democracy does not necessarily come about as a result of a war, this certainly applies to many countries in the Middle East and elsewhere, such as Northern Ireland as an example in Europe. What we hope to establish is that, the political implications of a local reconstruction project do not necessarily have to match the politics of the country; i.e. allowing the people to have a say about their environment does not necessarily mean a step towards allowing them more of a say at the national political level.

During the drive towards rapid modernisation in the Middle East, the governments and their architectural and building professionals have blindly imported Western models of planning and development that were fashionable at the time (at best or ten years or more out of date at worst). This required more effort in clarifying the objective and shaping the mechanism of centralised over-all planning. Today, there are widely spread beliefs among central governments that any involvement of the public in planning and decision-making, would tend to challenge and threaten the authority of our established institutions. Such beliefs were developed from the fear that, "...participation is opposed to centralised decision-making" (Bugnicourt, 1982:58), and that "...citizen participation is a categorical term for citizen power" (Arnstein, 1971:35), and may involve the redistribution of power away from the centre. That is not necessarily true, these assumptions are based on Western notions of participation, built upon decades of representative democratic evolution with all its obvious benefits and associated costs.

In conclusion, it seems that in a post-war context, governments are likely to discourage any real form of free participation for one or more of the following reasons:

1. Unwillingness on the part of the state, the government or the party to share power (insecurity, lack of trust, etc.).
2. Assumed urgency for provision of food and shelter and the restoration of normal life. A process that could be delayed considerably if people are continually having to be consulted.
3. Rushed and heroic political rhetoric to provide houses and to rebuild utopian dreams, in a victorious manner, "..all losses shall be replaced" type of statement.
4. Faith in the power of centralisation, as a means to modernisation through Western technology, and essential external aid and trade.

5. An elitism on the part of many professionals born of a sense of their superiority through receiving technical education.
6. Hidden political agendas and personal benefits from reconstruction by international tender.
7. Little or no philosophical sense of the moral responsibilities of government.

Thus our role should be to try and counter some of these reasons in areas where change is possible and feasible for reconstruction, such as changing attitudes at the intermediate level of State employed technically oriented professionals. In other words, 'development by education'.

9.5. PARTICIPATION AS A MEANS OF IMPROVING RECONSTRUCTION POLICIES.

A wide variety of interpretations and definitions are associated with the concept of 'popular participation' (see Arnstein, 1971:176; Moser, 1983:3; Whyte, 1983:6; Lisk, 1988:15-18, etc.). "This is not surprising since differences in cultural and socio-economic settings, stages of development and political structures and styles are bound to influence both the degree and the nature of popular participation in the development process" (Martin, 1988:ix).

Acknowledging the diversity in which the term 'popular participation' or 'community participation' has been understood and interpreted, this Chapter adapts the "working definition" given by White (1982), which in origin is derived from *Towards a typology of popular participation*, a World Bank publication, May 1987. He writes "...participation has three dimensions: the involvement of all those affected in decision making about *what* should be done and *how*; mass contribution ... to the *implementation* of the decisions; and *sharing in the benefits* of the programmes" (White 1982:17-18) [emphasis added]. Adding to this definition the component that was cited by Whyte (1983:6): "...involvement in the *evaluation and modification* of the programmes", one can derive four basic elements of popular involvement that ought to compose any participatory approach for reconstruction, in order to achieve clearly-defined objectives and targets of reconstruction. These elements include the involvement in *formulation, implementation, monitoring and evaluation* of the reconstruction programmes, in order to achieve the collective benefits (see Martin, 1988:vii). Put simply, our aim should be to develop reconstruction programmes that *evolve from incremental improvement based on field experience*, rather than imported

notions of development by management theories.

Dudley (1991a:8) concludes that, "Community participation and self-help may be seen either as a tool for carrying out a task or as a goal in itself,... In the literature, and from personal experience with the aid agencies and indigenous development organizations [NGO's], the three functions of goal, technical tool and political tool frequently appear to be confused". (Dudley, 1991a:8). In fact, our examination shows that for most NGOs 'participation' is seen as a goal and in some cases as a 'hidden political tool'. This position has been recently declared by Habitat International Coalition (HIC) and Enda Tiers Monde, when they concluded that:

"..[local participation is]..part of the process of strengthening community groups so that they are equipped to participate at higher levels when spaces are opened up". (Enda Tiers Monde & HIC, April 1992)³.

In this study we are advocating participation as a 'tool' or a 'means', rather than as a 'goal' or an 'end' in itself. Simply because this seems to be the most realistic approach in a post-war context in the Middle East for the present and foreseeable future. Moreover when talking of participation as a 'tool', we should make it clear that we are not aiming at participation as a political tool, but rather as a technical one that is badly needed following a war. Thus, we are simply saying that the local community is a valuable developmental resource.

9.6. BENEFITS AND LIMITATIONS FROM PARTICIPATION IN RECONSTRUCTION; FOR BOTH, LOCAL COMMUNITY AND THE STATE.

"Effective and operative partnerships begin with a discovery of *common interests* and subsequently with inducing a convergence of interests as a prelude to planning". (Hamdi 1991:81). Thus it is very important when advocating participation in reconstruction, to clarify the benefits and the limitations of such an approach, for both the local community and the State. In this Section we are concluding some of these issues, in an attempt to influence the States' policies, thus we are addressing the intermediate group of official professionals, that are sandwiched between central government policy makers, on the one hand and local communities, on the other. They are the conduit for the transmission of ideas and feedback between the powerful and the powerless.

³ Part of the declaration reached by a number of international NGOs meeting in Tunis, during the international conference *Environment, Poverty and the Right to the City*, 21-21 April, 1992.

This Section starts by highlighting a number of 'publicised' benefits and limitations of participation. These claims are evaluated in the light of the author's recent research, limited experience and developing judgement. To support some of these benefits as well as to expose, in an objective matter, some of the possible limitations of participatory reconstruction, this Section draws on the first hand experience of evaluating the Self-help Reconstruction Project in Dhamar (1982-1989).

9.6.1. 'Publicised' benefits of participation.

Arguing in favour of participation, White (1982:20-34) puts forward ten distinct reasons why community participation is needed in development. At the same time he acknowledges that "All of the reasons will not be found equally valid from every point of view, while some may be thought to apply in some situations and others in different ones, but they are not in general mutually exclusive, and taken together they make a strong argument" (White, 1982:20). The ten advantages are⁴:

1. *More can be accomplished.*

This advantage is based on the view that more will be accomplished if the energies of the people are harnessed. "It is a view which now lies at the heart of much development thinking, following disillusionment with older assumptions that development would flow from capital investment in 'modern' economic and social institutions". (White, 1982:21). This claim is particularly relevant to a post-war reconstruction context where resources both, financial and material are bound to be minimum and the only largely available resource is human (eg. Croatia 1991-92). But it should be remembered that most groups of people subscribe to leadership.

2. *Services can be provided at lower cost.*

The comparative cheapness of participatory approach is often advocated and the writings of White (1982) are no exception. This advantage is well publicised on the basis that "...if services can be provided at lower cost to each community, they can be provided to more communities altogether". (White, 1982:23). But the question really should be 'who is benefiting from the cost reduction?'. Would the savings made be released for realisation of more projects, or would they be used for other purposes? We have to keep in mind that cost reductions could only be partly achieved through adopting 'locally appropriate' organisational and technical solutions. Further savings might only be achieved by transferring the burden, in real resources terms, to the community. Thus accountability to the community is the key word that emerges.

3. *Participation has an intrinsic value for participants.*

This argument assumes that the active participation of the people in the processes which affect them can lead to their greater satisfaction in place of feeling

⁴ For more details concerning the ten benefits of participation see the writings of White (1981;1982).

alienated and powerless. This could be reflected in harmony and unity within the community, an important consideration for war-torn communities with their special social and psychological needs.

4. *Catalyst for further development efforts.*

This argument is based on the assumption that the establishment of an organisational framework for voluntary participation, as well as the enthusiasm generated by one success "...will provide both the means and the stimulus for further efforts to tackle other needs". (White, 1982:25). In the context of reconstruction two questions could be asked:

- (1) Could the reconstruction agency itself *continue* to provide the needed stimulation? Alternatively would the locally imposed / adopted organisational framework survive without the external agency into a post-reconstruction period?
- (2) Would the community be more or less inclined to participate in solving less pressing problems, having passed the most urgent stage of reconstruction.

5. *Participation leads to a sense of responsibility for the project.*

"It is thought that when people have taken an active part in the planning and/or implementation of a project, they will collectively consider the completed project as their own, have pride in it and a sense of responsibility for it, and therefore use it, do so responsibly and avoid damaging it, and do their best to maintain it". (White, 1982:26). This could be a significant advantage of participation as we saw in the casestudy of Belfast, however one should be aware that communities are not individuals and it could be misleading to generalise that a community can become responsible.

6. *Participation guarantees that a felt need is involved.*

This argument is based on the assumption that "Communities demonstrate their needs for the project and their willingness to support and use it once complete, by making the collective effort to organize and participate in construction, or by making a financial contribution". (White, 1982:26). In our view, it is important to consider the willingness of people to participate as nothing more than an indicator of need and not necessarily a guarantee of satisfaction by the final outcome of the project. Chapter Seven demonstrated how despite the fact that the Dhamari villagers made a contribution by providing land for reconstruction, they did not always accept the reconstructed settlements.

7. *Participation ensures things are done the right way.*

Based on the previous examination of reconstruction case-studies, we are inclined to agree with this argument, particularly when it comes to house design and settlement layout. However, one should not underestimate the value of professional knowledge. Local communities may not be aware of some planning, design or even economic issues that are essential for reconstruction. Thus, the issue here is not just the participation of the users, but also the imaginative approach by the professionals to extract the real needs and expectations of the users and to try and realise it, using the best of their professional knowledge.

8. *Use of indigenous knowledge and expertise.*

Through more participation this is more likely to be achieved by: (a) "...giving close attention to local expertise during the process of consultation in the planning

and design stage" (White, 1982:30); and (b) the use of indigenous techniques, building materials and the organisation of local labour. In our view, the use of indigenous knowledge and expertise has to be planned as an integral part of the reconstruction programme. It is not realistic to say that participation will lead to the use of local resources.

9. *Freedom from dependence on professionals.*

This is not always a realistic argument, based as it is on the claim that "...professionals in most developing countries enjoy a standard of living incomparably higher than that of the mass of the population. In this context, a radical approach to community participation envisages the prospect of freeing the mass of the population from dependence on a virtual monopoly of expertise controlled by professionals". How well can people be equipped to meet their own needs? What this Chapter is advocating is not 'no professionals' but 'different professionals'. This takes us back to our commitment to 'development through education', and in this case, re-educating professionals to be able to work *with* the people, rather than for the people in reconstruction.

10. *The development of consciousness.*

The aim of this argument is to use participation "To develop consciousness among the weaker sections concerning their situation, or at least their rights under existing laws". (White, 1982:33). This argument tends to perceive participation as a 'goal' or an end in itself, in contrast with the way we see participation as a 'tool' to achieve *what is likely* to be more successful reconstruction and not to lobby people against their governments. Having said that, we do accept the development of political and economic consciousness due to participation, but we do not call for it to be an *aim* of participation.

On the other hand, a number of 'publicised' limitations have been discussed during the last decade and have raised serious objections to the efficiency of participatory planning. These arguments have built on the fact that communities are not necessarily always 'integrated' and many of the States are not very democratic either. One of the related issues is the question of whether the average head of household is able or even wishes to participate in making decisions at regional or even local level. What contribution for instance, could an illiterate and tradition-bound lay people, in isolated communities or even in ethnically divided ones, possibly make to the analysis, projections and the input-decisions, which go into shaping an over-all reconstruction plan? Seen from this angle, the question could then be restated: Is it realistic to think of popular participation as anything more than peoples' 'co-operation' in carrying out activities and 'modifying behaviour', as considered necessary by the nation's experts? Or perhaps the original question should be reviewed to ask, whether a particular reconstruction plan is of any use to these people?

It has been claimed that local participation will lead to a 'wish list' rather than

a 'need list'. "Some say that participatory processes take too long, that people do not know what they really want even if asked, and even when they do know, ...they have neither the time, the commitment, nor the capability to be involved in decisions that can be very costly if they are wrong ones". (Hamdi, 1991:84).

Others would argue that the implementation of participation would increase the burden of management on already stretched planning systems. Or that it could be used to empower the rich and the elites to resist development programmes that do not serve their needs. Finally, it could be argued that community participation does not lead to any better recovery of costs and, in some cases, not even to greater satisfaction.

9.6.2. A participation story: the self-help reconstruction project in Dhamar.

This study is based on findings from the author's visit to the area, two years after the completion of the project in November 1991. Research and data collection methods employed in this study are discussed in Chapter 5 of this Dissertation. This section draws also on findings from an Impact Study carried out by the Institute of Housing Studies, Rotterdam, immediately after the completion of the project (see Dijkgraaf, 1989). The aims of this study are:

- ◆ To give an example of community participation in reconstruction, that took place within the reality of a centralised planning system and in the abnormal circumstances of post-disaster, highlighting the benefits and the limitations faced by such a programme.
- ◆ To try to reach some useful general conclusions, concerning the efficiency of participatory reconstruction and whether it was culturally more sensitive than reconstruction, as it were, by tender. (The contractor-built reconstruction is discussed in Chapter 7 of this dissertation).

The main lessons from this Section are centred around the following issues:

1. The scale of disaster and the pre-disaster planning reality, makes it very difficult to activate a genuine participation approach.
2. The intended role to be played by the international agencies and the reality of their aid. It seems that their interest was mostly in conducting a costly experiment in social engineering. Something a centralised state cannot usually afford.
3. The combination of the two issues above tended to limit the role of the so called participants to physical labour.

4. An important question for us would therefore be: Is it worth trying to pursue a participatory approach in post-war reconstruction or would it be more important to concentrate on changing the attitude of professionals to understand and encourage participation among the affected people, so that they both become more sensitive to the real needs and abilities of the people.

9.6.2.1. Formulation of self-help reconstruction Policy.

The 1982 earthquake in Dhamar, Yemen, struck at a time when participatory approaches for development, upgrading squatter settlements and self help housing were gaining momentum within international development agencies as an attractive 'new' theory. Almost all of the studies conducted by teams, from all over the world, following the earthquake recommended self-built, as being the most suitable approach for reconstruction in order to incorporate long-term development some how, within short-term relief. They also highlighted the importance of using predominantly traditional building techniques, materials and architectural forms. Equally, they all agreed on the importance of introducing some reinforcing construction methods to the new structures being built, to make them less vulnerable to future earthquakes.

At the very beginning the Government accepted self-help as an approach for reconstruction, for which it was supposed to provide financial inputs through the Co-operative and Agricultural Credit Bank (CACB) and guarantee the availability of steel and other imported building materials at a fixed price, through the Yemeni Foreign Trading Centre (YFTC). The decision was superficially acknowledged internationally and a number of aid and development organisations showed a willingness to help the Yemeni government implementing such a programme. But, as time passed and resources began to be put aside for reconstruction, implementation policies started to change.

The Government excluded from this approach all the settlements with more than 75% damage or more than 25 dwellings destroyed. This meant that 127 settlements; about 13,000 houses were to be built by the 'tender method', carried out by foreign and local contractors. Leaving the balance of 12,000 destroyed houses to be built with the 'self-help' approach, amongst 1052 villages. (SCREAA, 1983). However, "The final list released later in 1984, shows the contractor programme to have grown to 305 separate villages, with approximately the same number of houses to be constructed as originally estimated". (Coburn & Leslie, 1985:5). The Executive Office selected the new sites of those villages, based on technical and geological

criteria, surveyed them and prepared their tender documents. The Supreme Council's decision to pursue an open international contracting system in villages with a big number of destroyed houses, was based on the claim that there was insufficient labour available for the villagers to rebuild by their own efforts.

By November 1991, of the 12,000 houses only 1,100 were realised using self-help methods, of which 910 were part of the Dhamar Aided Self-help Project carried out by the DHV Consulting Engineers of Amersfoort, from the Netherlands, who initiated the idea, and were sponsored by:

- | | |
|--|-----------|
| ◆ The Kingdom of the Netherlands | Dfl. 8,5m |
| ◆ The European Economic Community | ECU. 2,5m |
| ◆ The Yemeni Government using the United States Agency for International Development (USAID) loan. | YR. 70,7m |

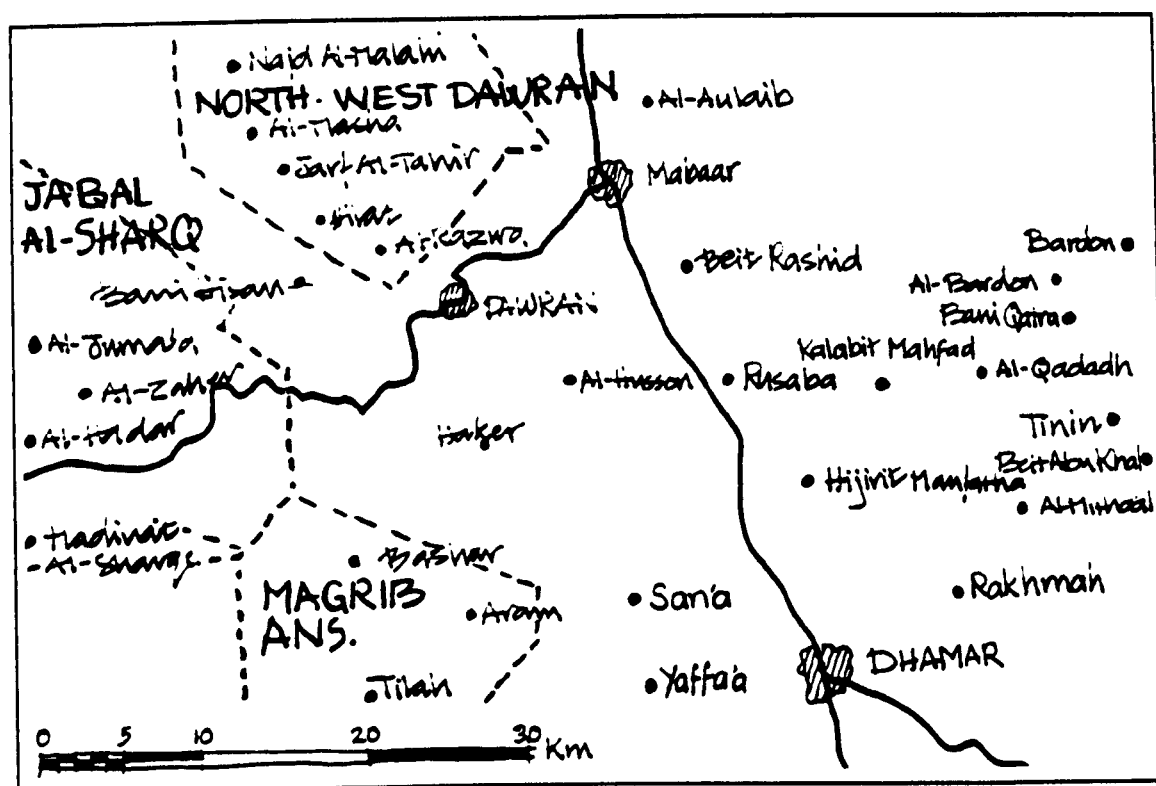


Figure [9-1] The Location of Magrib Ans and Jabal Al-Sharq where the DASH project was carried out. The UN sponsored self-help project was carried out in the area of North-West Dhawran.

The remaining 190 houses were realised by a UN sponsored self-help project in the area of North-West Dhawran. It took six years to build the 1,100 houses (October 1983 - August 1989), while it was anticipated to build the 12,000 houses in two years. Nevertheless the project has been highly publicised at national and international levels and over the last decade, has been considered an outstanding example of reconstruction achievement through community participation. The latest

of these acknowledgements came from the Swiss Disaster Relief Evaluation Mission, who conducted an evaluation study of the Dhamar reconstruction early 1992, as a contribution towards the reconstruction efforts following the Al Udein Earthquake, 140 km South of Dhamar, which occurred on 28 November 1991⁵. As we explore the Self-help project, we can not stop ourselves from wondering why this project has been given all this publicity and on what basis?

9.6.2.2. The implementation process of the DASH Project.

The Dhamar Aided Self-help project was carried out in Maghrib Ans and Jabal Al-Sharq districts of Dhamar Province. According to the Institute for Housing Studies, (which was assigned to monitor and evaluate the project) the project objectives were:

- Short-term: to provide shelter for the people affected by the earthquake in accordance with government policy.
- Long-term: to transfer knowledge about appropriate earthquake resistant building techniques.

Originally the project had three components through which the above mentioned objectives were to be realised:

- ◆ The construction of 1,000 houses.
- ◆ The training of local builders.
- ◆ Repair of damaged buildings.

During the course of implementation the emphasis was shifted from training to construction and the repair component was totally forgotten. The Project Office was established in Dhamar City and was staffed with a majority of Dutch experts, for whom a small 'paradise' was built for their accommodation⁶. A number of branch offices, called 'Building Advice Centres' were also established in Thilah, Dubah, Wathan, Madinat Al-Sharq and Al-Jumha. These centres were necessary because of difficult access to the mountainous area.

The project was divided into phases of nine months. Each was completed by an evaluation by the IHS mission and recommendations were made for the next

⁵ The author was in Dhamar when the earthquake took place in November 1991. The Swiss Disaster Relief Unit (SDR), decided to focus on the reconstruction efforts of Al Udein instead of making relief contribution. Thus the first step was to send an evaluation team to study the previous experience of Dhamar.

⁶ Interview with Yemeni experts and EOR staff showed the degree of contempt they had towards the Dutch staff who created their own quarter; imported everything including wine and even toilet paper; celebrated Christmas and had their girlfriends living with them, without any respect to the feelings of the locals.

phase. The initial step was to start by informing the Governor and Local Development Associations of the intentions of the self-help programme. This was followed by the selection of villages and informing the Sheiks and the villagers. Those benefiting from the programme were to be identified by the EOR, and were to be consulted on whether they preferred the Nagron system or the traditionally improved one. Meanwhile, the DASH team worked on approving the programme and its budget, making funds available for execution and management, and arranging to import building materials for a 100 Nagron and a 100 traditional but improved houses, through the Yemeni Foreign Trading Centre⁷.

This case study is presented to show that it is not enough to adopt a participatory development theory, the theory has to be adjusted to the local conditions and circumstance. In practice the DASH Project suffered from a number of limitations mainly because of the way it was implemented. The process went well beyond schedule, the initially envisaged two year period for the completion of the project became six. In an attempt to put the blame on the Yemeni Government instead of those who designed the project, Dijkgraaf (1989:12) claimed that the delay in the programme was "...a direct result of the lack of experience of the Executive Office for Reconstruction and the Yemeni government in large-sale housing projects in general and in self-help housing in particular". Delays in approval processes due to bureaucratic procedures, were often given as the main causes of delay. However the following limitations were apparent:

- i. *Management and finance:* The hard currency donated by the Dutch government and the EEC were used to directly pay the Dutch team and consultants. While purchasing building materials and issuing payments to the locals depended on the income generated from selling the USAID grain (to the value of \$70 million). Such a complicated path of fund supplies, caused a considerable delay, as it caused the progress of the project to be directly linked to the marketing of the grain. (This issue has been explored in more detail in Chapter 7).
- ii. *Productivity:* What was started as a laudable, if not over ambitious self-help programme, apparently capable of providing a greater number of houses than by the tender method, ended up as no much more than pilot project with less than 10% of the programme completed.
- iii. *Speed of construction:* Similar to the contractor-built programme, what was anticipated to take two years took six. In fact, by August 1989 only 40% of the houses were completed, 40% were partly finished and 20% were far from

⁷ The difference between the two construction systems is described later on.

completion.

- iv. *Building materials:* Providing stone, sand and water was not as easy a task as was portrayed by the Project team. At the same time cement, roof joists, plywood, etc. were often unavailable at the YFTC, and often had to be purchased by the DASH project from the local market at higher prices. As a result the participants found themselves trapped; faced by shortages of building materials, yet having signed the EOR contracts and borrowed the money to pay for them.
- v. *Access to the area:* The extremely bad condition of the roads in the area meant that only four-wheel drive vehicles, with a maximum load of 1,000 kg, could be used. However, a positive step was eventually taken by the Project when they hired local vehicles.

9.6.2.3. Findings from the field.

Based on findings from the field study this Section will group the shortcomings of the Project into five categories in relation to:

- I. House design and building materials.
- II. Selection of beneficiaries.
- III. Provision of sites and issues of land ownership.
- iv. Participants contribution.
- v. Cost and Finance.

I. House design and building materials.

The beneficiaries had no say whatsoever in the design of the house. Similar to the contractor-built ones the houses did not correspond with the size and type of individual families needs. The layout was predetermined by the Project experts, who produced a prototype house that was repeated everywhere (see Figure 9-3). It has been claimed that the idea behind this standardization was to "...construct a modern house within it a kitchen, bathroom and toilet, in order to 'educate' the population of Yemen... [also] through standardization a reduction in the construction cost could be obtained" (Dijkgraaf, 1989).

However, the houses were designed to accommodate a second floor that could be extended later on by the owner. In fact two slightly different layouts were introduced. One was that of the Dutch prefabricated house, the so-called 'Nagron' type, of which only 67 were built and the other was the so-called 'traditional improved' house. In the latter, the walls were built of rectangular local stone with cement mortar, replacing the traditional cut-face stone with earth mortar. An

Important element of this house was the 'U' shaped concrete blocks. These blocks were used to make the corners; door columns; and the horizontal tie-beams by introducing steel reinforcement into the blocks. Plywood was used for the flat roof, nailed on timber joists, both were imported. As was the plastic sheeting used to waterproof the roof, to which a layer of soil was added as protection and insulation. Wooden doors and windows were also imported.

The choice of materials for the 'Nagron' house was dictated by the system. The walls were constructed of galvanized wire-mesh frames assembled on site and filled with rubble and mortar. These were then plastered on both sides and the corrugated-metal sheeted roof was supported on the walls. Practically everything was imported from the Netherlands, including fittings, windows, doors, electrical fittings etc.

In their Impact Study (1989) the Institute of Housing Studies, based in Rotterdam, claimed that "The majority of the people questioned were content with the [house] design". (see Dijkgraaf, 1989). However, the field visit conducted by the author in November 1991 revealed the opposite. None of the 45 households visited seemed to be satisfied with the layout of the house and the size of the rooms. This became clear through observing the way in which people altered and extended the original houses. To alter a house in which the family invested money, land and labour must have been a difficult decision, that they would not have resolved to do unless they were highly dissatisfied. During interviews a number of critical remarks were made, some of which corresponded to the findings of the IHS Impact Study.

- Materials* Although natural stone was widely appreciated as a building material. "The concrete U-block was seen as the weakest part of the chain... This U-block with its reinforcement was still seen as a strange element in the construction of the house". (Dijkgraaf, 1989:20). This fact was observed in the field, as people have attempted to paint the concrete blocks.
- Size & layout* The size and layout of the reconstructed houses did not correspond to the needs of people or to their traditional way of living (two bedrooms of 6.25m² each and a bigger room of 10m²). They seem to have been accepted because of the exciting image of 'modernity' they were portrayed in. People complained of the lack of flexibility during the construction. Details had to be executed exactly as planned. For example, the number and size of openings, room size etc.
- Diwan* There has been no appreciation of the value of the Diwan as a social space. The size of the rooms was too small, none of the three



Figure (9-2) The Dutch precast house: Nagron
[Source: The author, November 1993]

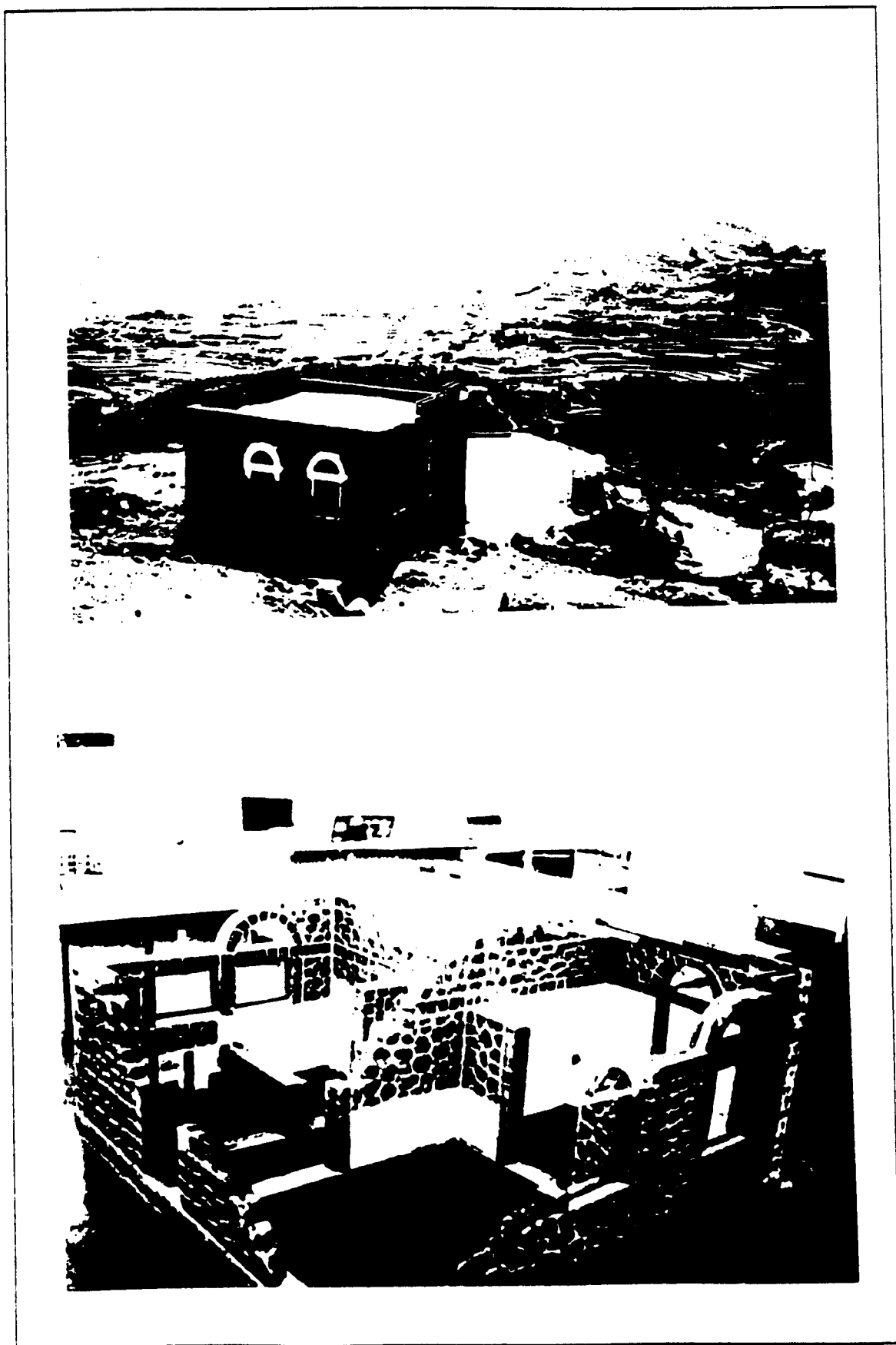


Figure 19-5 The traditional improved house with the U shaped concrete blocks.
[Source: The author. November 1993]

rooms can function as a proper 'Diwan', as a place to receiving guests. Nevertheless, those who used the largest room (10m²) as Diwan complained, that in order to enter one had to pass the so-called kitchen and toilet, facing the bedroom door. Privacy is a fundamental concept among these people. A number of houses have added a separate Diwan. In one case a 36m² Diwan had been built.

- Kitchen & toilet* Similar to the contractor-built houses, the kitchen and inside toilet provided were hardly ever used. People added their own kitchen (Dima) outside the house, in accordance with their tradition due to the fact that the use of wood (hatab) or animal dung as a fuel, produces a lot of smoke.
- Security* Many had changed the timber front door, specified by the project, for a steel one and added steel bars and shutters to the windows for security.
- Extensions* In general, the degree of extension and development of the Self-help houses was very limited when compared to those of the contractor-built houses. This is mainly because in the former case the owner has already invested all his savings in the construction, while in the latter the owner received the house free.

II. Selection of beneficiaries.

One of the main differences between house reconstruction by Tender and Self-help, is that the latter construction can not start unless a beneficiary has been identified and a contract signed. As the qualification criteria for either house were never made clear, there were delays in drawing up the list of respective beneficiaries. Those on the list were said to have been changed a number of times by the EOR Selection Committee, through pressure put on the Committee by local Sheiks and influential people. Even rumours of bribing came up during the implementation. (Dijkgraaf, 1989:16).

III. Provision of site and issues of land ownership.

The provision of the site was the responsibility of the family, in fact it is the only stage in which the beneficiary made a decision. The issue of land ownership was arranged by the community itself without interference from the project. The owner of the house was always the owner of the land. Thus the decision on the location was up to the owner. A new phenomenon appeared, in which people were selecting the new construction site close to their agricultural land or even on it. Although this

might have been seen by the locals as a good step towards improvement, a number of people later showed regret at having moved too far from their original settlement and community⁸. This shows how people's preferences can change over time and through experience.

The availability of land had not led to any delay in construction, unlike the case of reconstruction by Tender. In some cases families had to buy the land and the price they paid was not considered as part of the 1/3 contribution they had to make towards the cost of the house. Hence some families ended up paying more than others.

IV. Beneficiaries contribution.

Beside providing the land, it was the family's responsibility to provide stone, sand, gravel, water and unskilled labour, while the Project contributed the imported building materials, such as cement, windows, doors, steel, joists, plywood, plastic foil, etc. and payment for skilled labour. In this unrealistic notion of participation, the provision of building materials by the families was presented as an easy task, in which they could collect their own stone and carry water to the building site. In reality only 30% carried the water themselves and 10% carried the stone, but the most difficult was providing the sand, which was not available in the area. Moreover, the owner had to provide the builders with meals and 'qatt'. (Dijkgraaf, 1989:17).

V. Cost and finance.

The total cost of the house was estimated at YR 90,000. The contribution of the beneficiary amounted to YR 30,000⁹. The responsibilities of both parties were made clear in a contract signed between the EOR and the beneficiary. The contract consisted of four parts referring to the four building stages, foundations, ring-beam, joists and roof. In order to insure that the money was used to buy building materials for the construction of the house, the beneficiary received payment at the completion of each stage, which he in turn used to pay the mason. After which he was entitled

⁸ Traditionally, people lived in clustered settlements overlooking their agricultural land. They will travel in groups every morning to work on the land and return by sun set to their village.

⁹ The cost of the contractor build house ranged from YR 68,000 to YR 150,000. The beneficiary received it for free. Only YR 50 registration cost was to be paid and even this was cancelled at a later stage.

to collect building materials for the next stage and so on.

Roughly 1,000 houses would have cost the Project 60m YR. The Yemeni contribution through the USAID loan was more than 70m YR, which means that 70% of the total budget allocated for the project as contribution from the Dutch government and the EEC, was spent on administration and consultancy fees carried out by Dutch teams.¹⁰

The fact that each beneficiary had to contribute 1/3 of the cost, to participate physically as unskilled labour and to provide the land, meant that the poor, the weak and those who could not provide a piece of land did not benefit from the programme. This created social divisions. Furthermore, it was reported that less than 10% could afford the whole amount without obtaining a loan. "Jewels, guns and cows were sold, or were given as pawn to obtain the necessary finance... The average debt of families is YR 25,000. Quite often money was borrowed from various people in the village. Some of the families were quite worried about how to pay these debts in the near future". (Dijkgraaf, 1989:17).

9.6.2.4. Summary and conclusion.

The significance of the Self-help reconstruction project in Dhamar arises from the fact that it is the first governmental housing project in Yemen, and probably in the region, in which the intention was that people be involved and in the event they were to a certain extent. 1,280 earthquake resistant houses were built over a period of six years, using a mixture of local and imported building materials, 90% of which are inhabited today. The Dutch and EEC project realised 1000 of these houses while the rest were built by the UNDP. Lessons concluded from this case study can not be said to show much gain for Self-help over the Contractor built housing, either in respect of *efficiency* or *cultural sensitivity*. In general, the Dhamar Self-help reconstruction programme was not a great success; it suffered from a number of shortcomings because of the contradiction between the intention and the practice of such a participatory approach. As part of the greater reconstruction project, a special Division was established to administer the self-help programme, within the Executive Office for Reconstruction. Casting the self-help scheme in such a project based approach meant that the programme lost its flexibility and a great deal of its

¹⁰ From a personal discussion with the Finance Manager of the Executive Office for Reconstruction, Dhamar, November 1991.

advantages, for the sake of so-called productivity and quality control. Users participation was limited to implementing what had been decided upon and designed by professionals, seemingly with little or no insight into the local social, cultural and economic context, but with a great concern about the technical aspects of designing an earthquake resistant house. The result was standard designed houses regardless the different needs of families.

The project lacked sensitivity towards people's real needs. For example, if an initial study was conducted before carrying out the project, it would have been clear that neither the size of the rooms, nor the arrangement were culturally accepted. Finally, rigid decision making and bureaucratic implementation meant that the planned project could not be adjusted to findings from the field, despite the fact that professionals worked directly with the beneficiaries.

9.7. RECOMMENDATIONS: TOWARDS A PARTNERSHIP IN RECONSTRUCTION.

In this Chapter we have explored a number of advantages for employing the notion of participation in development. However, our examination of the self-help reconstruction programme in Yemen, demonstrated the fact that we should not be too idealistic about what can be achieved by popular participation in reconstruction. It is much more difficult to apply the notion of participation in a reconstruction context, particularly post war, than it is in small development projects. Still, it is not impossible to reach a pragmatic kind of participation we prefer to call 'involvement', that acts as a 'tool' to achieve proper reconstruction within the political, economic and social realities of a post-war community.

Our examination of reconstruction case-studies showed that there are a number of linkages between involving the local population and resolving issues that are exclusive to post-war reconstruction. This Section presents some of these linkages, in an attempt to persuade State professionals of the need for involving the people in reconstruction, at the same time it attempts to show that 'participation', as we see it, does not undermine the State's power.

9.7.1. Reconstruction issues that can be resolved by 'people's involvement'.

i. A controlled, but progressive action towards participatory democracy.

"Contrary to the opinion of those who believe that popular participation, by its very nature, is an 'action towards democracy', it seems that the ruling system can control such actions and if its own power is endangered can stop them, unless it is convinced

that the final result is compatible with its own goals". (Zargar, 1989:318). Our examination of reconstruction and development in Belfast supports the latter claim. In fact it is just as likely that involvement of the public will help dissolve or possibly even eliminate popular misunderstanding of decisions and thus work in *partnership* with the central government. But more importantly it can contribute to the reduction of expensive and wasteful State machinery and enrol the energies of the community in carrying out the many tasks, now, if not performed by the government, are promised and so often remain undelivered.

Today, with the recent world-wide shift to market economies, many governments are trying to convince themselves of the necessity to restructure towards a more democratic society, particularly those emerging from national and civil wars, for example Croatia. Adopting participatory reconstruction could serve as an example of what can be achieved.

ii. International development aid.

People's involvement in reconstruction is necessary in order for governments to obtain fair deals of international development aid. Participation is considered a good thing and has become a pre-condition for the intervention of a number of international organisations such as the World Bank and the United Nations Centre for Human Settlements. In their publication FY89 Sector Review Urban Development Operations; Reaching the Poor through Urban Operation, the World Bank (1989:1) cited, in relation to its urban development lending, "Strong commonalities can be identified... (i) the subsequent endorsement of national government policies of decentralization...; (ii) the recognition of a pivotal role for the informal sector in providing urban services and employment and in supporting the shift from a subsistence to a market economy; (iii) recognition of the need to strengthen local institutions..", etc.

International agencies have to recognise that it is not realistic to attach participation as a condition to aid packages. This is because:

1. States can manipulate the issue by only including it on official policy papers, but not necessarily in reality and implementation. A different approach could be to implement relatively small participatory reconstruction projects or self-help schemes accompanied by an international campaign that would encourage the greater use of formal local and municipal authorities and in-country institutions and NGOs to support national reconstruction plans, as in the case with the present World Bank policy for the development of institutional urban management.
2. In a state where democracy is badly needed and resources are limited, participation could be used as a political vehicle to avoid State responsibility for reconstruction. During the author's visit to Iran, he had the impression that the government there, tends to justify its inefficient role in reconstruction by claiming that it is pursuing a participatory approach.

iii. Building social solidarity.

Social and political instabilities are often post-war characteristics, generated by all kinds of pressure. Participation in reconstruction would emphasise the social solidarity that would have already been established between individuals and families of a community during a national war. Thus, building the local capabilities through involving them in the *action for peace*. Such involvement could also help to strengthen the relationship between the state and people.

iv. Comprehensive reconstruction.

The multidisciplinary nature of the task of post-war reconstruction demands a comprehensive approach, in which the integrated tasks of the economy, housing, infrastructure, health, education, employment etc. can be tackled. Promoting a partnership between the local communities, the private sector and the Government, for instance to provide housing. This would allow the government to concentrate its efforts on other vital reconstruction issues, such as economic recovery and the provision of infrastructure, thus enabling investment in revitalising industry and commerce, including the construction industry, refugees, etc. Of course, for approach to work, the Government has to facilitate the process and mobilise the private industrial sector and the community to rebuild its own settlements.

v. Participation as a psychological therapy.

The psychological and sociological disturbance of war have been explored in Chapter 2 of this dissertation. The connection between people participating in reconstruction following a disaster and the speed of their psychological recovery and the reestablishment of their social patterns have been researched elsewhere (Raphael, 1986; Ørner, 1988; 1989 Najran & Zargar, 1988; Cuny, 1983; Meyers, 1991). A common conclusion has been reached: "...the greater the role of the survivors in different reconstruction activities, the greater the chance of a rapid psychological recovery" (Zargar, 1989:301) and the return for social and therefore economic normality. (Dynes, 1992:67-71).

vi. Participation as a means of insuring cultural continuity.

We are tackling the issue of Post-war reconstruction in the Middle East, at a time when there is a recognition that Western models of architecture and urban planning are not very suited to the local resources, climatic circumstances, energy use and socio-cultural well being. This combined with the universal disillusionment with 'Modern International' architecture, means that we must take this opportunity to have a rethink. Nowadays, reconstruction should be seen as a good opportunity to recognise the contribution that 'traditional knowledge' can make to the solutions of many contemporary problems. Moreover, it could be an opportunity to actually implement some of this knowledge. Central planners of all kinds must learn to view the policies of local development through local engagement and harness the latent commitment and energy inherent in all sections of the society.

Traditions date back to the beginnings of any human society and are often among the very few surviving 'properties' of any war or disaster-devastated society. The decades-old traditional architecture of entire settlements could be razed to the ground in a few hours, yet the traditions which created and maintained the growth of those settlements will still be alive, as long as there are some human survivors, they must be drawn into the national effort.

In our view, no matter how good the architect or planner is and how strong his belief in tradition, it is very difficult to achieve a local identity in a rebuilt city without the direct involvement of its inhabitants, simply because tradition is greater than any individual planner or architect. It is time to open our search for identity to the contribution of the lay people concerned, rather than limiting it to a group of elitist and professional experts, often lost in their own maze of assumed values and assumptions, many of which come from other cultural sources.

In a post-war planning situation we have an opportunity that may not exist in a newly designed settlement. The traditions of a partially devastated community are everywhere in evidence and well established within the surviving inhabitants, we do not need to look far for them, we just need to respect and employ them.

9.7.2. Suggesting a model for a partnership.

How then should the people, who represent the nation's greatest resource, be helped to play a more effective role in reconstruction? And to what extent does this include some share in policy as well as decision-making, concerning settlement rebuilding. We believe that "Much caution must be exercised in emulating programmes that may have worked in one place for another". (Hamdi, 1991:80). Caution is needed in order not to repeat mistakes made in the 1950's and 1960's when Western models of planning and construction were imposed through Cold War politics. It is true that we borrow from each other, but surely by now it is obvious that imposed Western forms, without alteration or adjustment are simply inappropriate and only serve those interested in making profit from the misfortune of ordinary people. In our view, community participation methods and techniques should be adjusted to the different socio-cultural, economic and political situations not only between different countries, but also between different communities within any one country. We must take our lead from and be accountable to, the 'affected community'. Thus it is important to work towards strengthening local institutions and encourage positive governmental attitudes towards participation. It is more important to represent participation in a community-state partnership instead of the anti-governmental image often publicised by international NGOs. It is clear that NGOs can not operate without the established governmental infrastructure in normal development situations, let alone during or after war. Recent examples of NGOs'

failure to operate in Somalia, where the Central Government infrastructure has been severely disrupted, supports this claim¹¹.

It is refreshing to see that in a recent publication Cuny (1992:24) wrote: "We have to restructure our thinking about how Governments work and find new ways to involve NGO's and Governments in a better dialogue". Nevertheless, he still believes that "This is going to be difficult, given the problems of many of the Governments we have to deal with in the Third World" (Cuny, 1992:24). Though, he still does not go into some of the shortcomings of the way NGOs operate.

The Dhamar participation story demonstrated how difficult it is to implement reconstruction programmes that draw on a participatory approach, while constrained by central planning decisions made in the interest of obtaining aid from the West. "[Central] Planning has tended to be too theoretical, and lacking in real meaning for the average person whose life it hopes to affect. While community development has at times been too engrossed in practical local problems, with little if any direct relation to the overall intention at national level". (United Nations, 1967:4). On the other hand central planning depends too much on precision and logic, overlooking the waywardness of the human factor when it comes to implementation and even more when it comes to feedback and evaluation. Following a disaster and because of the assumed urgency and great need, community participation, seems from the planners point of view too relaxed. On a closer look, however, it is easy to see how these very differences in emphasis, are what makes community participation and over-all planning complementary or indeed justifies their being considered as two essential aspects of a single process of development.

We may not be able to rebuild from the ashes without a centralised decision-making body, but that does not deny and should not preclude the importance of involving the local communities in the rebuilding of their own settlements, if only because they possess the essential '*know how*'. On the other hand, this does not mean using 'people's participation' to provide cheap labour to implement projects imposed from above. And it certainly does not mean avoiding responsibilities by burdening the people in the name of participation.

This Section seeks to illustrate an approach to reconstruction that allows a partnership between the state and community to grow. John Turner's concept of

¹¹ To assist NGOs in the distribution of aid in Somalia the United Nations deployed 50,000 American and French troops in December 1992.

"users decide, sponsors provide", identifies the role of the State as cited by a number of participation advocates. (Turner, 1976:149). Our examination so far shows that this definition may not be entirely always appropriate in the Middle East context. Although we see the State's role in reconstruction as an enabler, and facilitator to help communities rebuild their own settlements, we have to acknowledge the dominating role of the State. Of course different States emerge from war with different needs and, similarly different communities will have different needs and abilities to contribute, thus it would not be realistic to suggest that participation is a 'good' and necessary thing in all post-war situations. What we are suggesting is that, there are different modes and levels of participation, and one has to consider what is best for a particular situation.

9.7.2.1. Institutional development: a prerequisite for a sensitive approach

According to Hamdi (1991:81) "Institutional development is an idea very much in currency among supporters and funding agencies". However, institutional development is widely taken to mean building capabilities within government organisations and institutions and advancing their efficiency in receiving revenues, managing land and controlling development. What we are seeking is some kind of institutional development (both *formal* and *informal* institutions) that would allow some space for participation in the three stages of settlement reconstruction: *formulation, implementation and monitoring*. Of course this approach is not limited only to structural adjustment policies, but also to attitudinal change on behalf of the existing organisational structures.

The objective of such development would be to identify alternative institutional arrangements and attitudes that are able to draw on the experience of different disciplines and can establish direct relationships among officials of the State, its professionals, the market, and the community represented by its formal and informal organisations.

i. Formal institutions.

1. Concluding that we should not underestimate the role of central government and its professionals, we recognise, that, no matter how actively citizens are involved in the action of rebuilding, they alone will not succeed in rebuilding war-damaged areas in an attractive, healthy, creative and functional form; free from poverty and fear, because of the nature of the task of reconstruction which may not be influenced only by national government decisions but also international or United Nations decisions (e.g the UN sanctions against Iraq).

2. The State bears a great responsibility to strengthen substantial programmes designed to create new enterprises and to upgrade the surviving organisations providing employment, housing, health and welfare services. But these programmes can only succeed if they can be effectively linked to the real needs and energies of the citizens. Thus institutional development is needed to achieve:

Sensitivity, in assessing needs, as well as the potentials of local communities.

Realistic planning, that corresponds to the emerging needs of the post-war period and to what is affordable and acceptable.

Flexibility, from policies that are should be flexible enough to accept adjustment based on feed back from experience.

3. We might be seen as an advocate of centralised planning and direct government intervention in reconstruction. But nevertheless, we are critical of the excessive bureaucratization and professionalisation of State intervention and believe that community involvement in reconstruction ideally needs to be promoted much more vigorously and effectively, because of the many long term benefits for the community, its settlements and the State. But for the time being we have to approach it with a realistic and pragmatic view. We may be able to achieve little, but it should be a steady change for the better.
4. To be able to achieve such institutional development retraining professionals is essential.

ii. Informal institutions.

1. We have always had the view that, "...settlement reconstruction' is an 'incremental learning process' by local people, who have to learn to 'grow it' for themselves and thus to 'grow with it'. The product; the 'new' settlement has to 'belong' to those who live in it. This 'sense of place' and people's 'sense of belonging' to it can only be fully realised over time, but we believe it can be planted right at the beginning by putting the responsibility with the prospective inhabitants through their *involvement*". (Barakat & Cockburn, 1991a:60-65).
2. Such involvement should be built on 'respecting' the existing hierarchical social and political structures. There is no need to intervene in order to create our own 'ideal' structure that suits some inevitably Western based concept of participation, in which everybody has to have a voice. In some communities only the head of the household has a say, in others only the head of the tribe has. In both cases we should not be tempted to enforce our ideals, no matter how unfair the social structure might seem to us.
3. The development of informal institutions should be based on: (a) Respecting and strengthening existing ones, such as social coping mechanisms, tribal systems, religious structures, etc; and (b) education and public awareness to appreciate the difficult task of national reconstruction and the great role individuals and families can play.

9.7.2.2. Peoples' Involvement In the different stages of reconstruction.

Our investigations of the Dhamar Self-help programme showed that despite the fact of limited involvement of the local communities in reconstruction, a number of advances were apparent to the author, though they had little to do with the biased feedback presented by the IHS's reports. Thus we suggest that every effort should be made by central government to involve the people in the reconstruction process. Such involvement should be seen as part of an established national reconstruction policy. They can take part in the formulation of the reconstruction plans, their implementation and evaluation of the results.

i. Formulation.

During the formulation of reconstruction policies, peoples' inputs have to be considered, and this could be done either indirectly or directly at the different stages of needs assessment; establishing feasibility; reconstruction priorities and finally design.

Indirect participation is the minimum form of involvement in the process that has to be achieved in all reconstruction programmes. For instance, the minimum is to involve the affected communities at the stage of *assessing the needs and losses*. An involvement that would inevitably maximise the sensitivity of reconstruction policies to the local conditions. This could be done indirectly through employing sensitive qualitative techniques along side the quantitative ones. For this purpose retraining professionals might be necessary. This kind of participation can be achieved by a step by step approach:

- 'Walking through': actually visiting the damaged areas, understanding the local culture by talking to the survivors, observing the environmental and economic structure, as well as the immediate needs and the scale of damage.
- Conducting meetings with groups of people. This is a more advanced method of indirect involvement in the formulation of reconstruction policies. It could easily be carried out in an informal atmosphere.
- Organising community development groups, could be the most advanced method to involve people, through their representation, while respecting the local socio-power structure.

Direct participation at the stage of formulation of reconstruction policies and plans may prove to be much more problematic and in some cases impossible at first, due to the reasons we discussed earlier. However, assuming that participation is an

objective desired by the State, one of the major deterrents is likely to be *communication*. In order for the local inhabitants to participate effectively without misunderstanding the professionals (who usually use their own vocabulary), people need more time and education to assimilate and the professionals need more training in communication skills. At this stage, involvement can be attempted in one or more of the following ways:

- *Establishing feasibility*: Assessing the feasibility of planned intervention is the first step in which a community can be involved.
- *Defining priorities*: Identifying priorities for reconstruction, is a step in which community input is crucial. For instance, a number of studies have shown that shelter often comes as the forth or fifth priority to people affected by a disaster or war. (see Aysan & Oliver 1987; Masri, 1991).
- *Designing policies*: Involving communities in designing reconstruction policies or strategies might be impossible. However, they could start by being involved in the design of local neighbourhoods and shelter. "This type of participation can be facilitated by the skilful use of scale models, drawings, competitions, posters, 'comic books' and video tapes" (Wegge, 1983:7). However, as it is difficult for laymen to visualise the out come of two dimensional blue prints, the encouragement of community representatives to make study visits to different sites where they can talk to the residents, might be the best means. A major deterrent is the fact that the State usually wants to provide a 'product' rather than a 'process' for development.

At this point, it is necessary to note that direct participation in the formulation of reconstruction plans is particularly needed during the restoration and reconstruction of war damaged settlements. Existing structures, both physical and social, have to be supported and it may become necessary, for instance to evacuate a particular area or to rehouse some families, greater involvement of the people could better ensure their rights and help to reduce any friction, when it comes to implementation.

ii. Implementation.

The direct participation of local people in the physical implementation of a reconstruction programme might prove to be the easiest thing to do (eg. clearing the rubble, building houses, skilled and unskilled labour, etc.). However, it is important to draw attention to the fact that direct participation in implementation could take other forms beside labour input, such as participation in a management role.

- *Labour input:* "Labour input can vary from as little as an individual putting finishing touches on his house to as much as groups carrying out infrastructure work" (Wegge, 1983:8). A number of studies have pointed out the relation between labour input and cost reduction as well as good maintenance. However, such involvement could easily be turned into exploitation. It may be easier to start with the involvement of people in the construction of their houses, than in the construction of community services or infrastructure in order to restore some sort of normality.
- *Management:* Participation in management during implementation does not only help in developing the project, but can also be an important means for initiating self-motivated development. It is up to officials and professionals to realise some degree of participation in the management process. However, this is often hindered by the fact that reconstruction is mainly seen as a construction project, in which meeting schedules is very important. 'Working together' in managing the implementation can also include: beneficiary selection, provision of construction sites, participation in skills development, supervision, issuing and supplying building materials and continuous feedback.
- *Enablement:* This, we are so often told, is the ideal role for government or the outside intervenor: to enable the people to rebuild their lives. However, an enabling role makes a number of assumptions that have legal and financial implications that have to be addressed.

iii. Evaluation and Monitoring.

Following the implementation of each stage of reconstruction, feedback is vital for the design and implementation of the following stage. Our examination so far, showed how monitoring and feedback are concepts lacking in the reconstruction management models currently employed in the Middle East.

What we mean by monitoring is very different from the usual evaluation reports and mission statements that tend to be exclusively concerned with measurable performance. It may seem ironic that Intelligence Departments and Military Police divisions can and do gather detailed information while other government's departments such as housing and development are unaware of people's reaction towards the provided reconstruction programmes (I have in mind the case of Dhamar, Yemen and Fao, Iraq).

The creation of a *monitoring* function could benefit from involving the community itself.



This Chapter showed how important it is to define specific state/community post-war relationships. They would differ from one country to another and from one

conflict to another. The key issue, however, is to understand and operate within the existing traditional formal and informal structures, which can provide us with valuable insights into the nature and extent of people's involvement in reconstruction. The coming Chapter (10) concludes this study by pulling together the arguments and conclusions from our previous discussions.

CHAPTER TEN

**CONCLUSION: THE YORK CHARTER,
A STEPPING STONE TOWARDS COMMON IDEAS.**

10.1. INTRODUCTION.

At an earlier stage of this work, three main areas of concern in relation to studying the rebuilding of settlements after war were identified, namely: (a) Lack of specialised knowledge on the subject; (b) States being irresponsible in their attitude towards rebuilding settlements; and (c) absence of international interest and commitment to the issue of reconstruction. As we reviewed the existing literature and examined specific case-studies, it became clear that if the rebuilding of human settlements after war is to be, in any way, responsive to the real needs of the people, immediate action is needed to bridge the gaps apparent within those three areas of influence.

Thus, it was felt that the knowledge acquired so far in this research should be presented in a way that sows the seeds for an urgently needed considered *philosophy of reconstruction*. Such philosophy would establish the general framework of recommendations for reconstruction that ought to be respected nationally and internationally. Furthermore, it should be based on the moral conviction that says, the innocent victims will be fully compensated and their local communities reconstructed. In other words, *the aim of such philosophy should be to derive a set of recommendations by which it is possible to speed the recovery of the 'survivors' and to 'rebuild' settlements in a post-war context, where the local organisational, social and cultural structures are disrupted, and where many resources are in short supply, while at the same time, allowing the State to meet its immediate political needs from reconstruction, without inflicting a negative socio-cultural impact on society.* Furthermore, in order for these recommendations to be widely disseminated and hopefully, eventually respected, we have summarised them in a Charter that builds on previous United Nations work in this field.

The aim of this Chapter is to pull together the conclusions of previous

discussions. It will do so in six Sections. The first summaries the previous Chapters, highlighting a number of General Conclusions that have to do with war and subsequent reconstruction. The following Section will present some recommendations using the 1976 UN-Vancouver Declaration on Human Settlements, as a general framework. In the expectation of promoting better dissemination of 'good-practice', the third Section will put those recommendations in the form of a Reconstruction After War Charter. In this Section the Charter and the stages of its progress will be reviewed. The fourth Section draws attention to some cautionary remarks to do with post-war reconstruction research in general and the applicability of the Reconstruction Charter in particular. Finally some suggestions on future research.

10.2. GENERAL SUMMARY AND CONCLUSIONS.

In the absence of hard data, Chapter 1 was presented as *a number of working hypotheses*, which best defined the author's stand concerning the dilemma of war, peace and development. It was suggested that war is directly related to development in both, developed and developing countries. Developing countries continue to spend an estimated 200 billion dollars a year on their armed forces. In the developed countries the production of arms is supporting a considerable section of their economies, while the consumption of these weapons in the South, suggests that too many 'small' conflicts are due to the failure of fair economic and social development policies, at both national and international levels.

The theoretical background of the study of reconstruction after war was reviewed, making a number of speculations on why the issue of war and the subsequent reconstruction has been neglected by international disaster research. Accepting the similarities that have been identified between natural and war disasters, this Chapter argued that being too much dependence on natural disasters literature, could be misleading. Thus, it attempted to understand war by formulating a general framework, based on identifying a number of dimensions in which war is different from natural disasters and that can be used to 'measure' war. It highlighted the fact that war has always played a part in human history, and whether we like it or not, it has a feeling of horrible 'normality'. Therefore, reconstruction should be looked at in a similar way and an international mechanism should be established to address such 'normal' needs. Chapter 1 ended with the issue of war vulnerability, claiming that it is very difficult to assess the scale of vulnerability and subsequently to take

mitigating measures against possible war damage, simply because the means of destruction are being constantly updated. Also the somewhat predictable nature of natural disasters is not the case with wars. Though some would argue that even there we could be better prepared to take preventative action, however, there are a number of measures that can be taken to reduce damage, in areas of social, cultural, economic and ideological vulnerability.

Having briefly analyzed armed conflicts and their different dimensions, **Chapter 2** explored some of the effects of war and stages of recovery. Citing that though no two wars are alike, in terms of their effects, we distinguished the effects of war into three main categories recognising in practice they overlap: immediate impact, indirect effects and side effects. To plan reconstruction we presented an integral picture of the impact of war on the four responsibilities of a stable State: the community, the government, the market and the environment (built: housing in particular and ecological). The impact of the different bounds of a society were reviewed. A particular emphasis was given to the psychological effect of war and to the issue of refugees and displaced people.

Finally, Chapter 2 reviewed the different stages of recovery after war through introducing the concept of a war sub-culture. It cited that social preparedness is more likely in the case of war than in other types of disasters. Soon after the war starts, people will develop their own ways of dealing with the sacrifices demanded of them, they will eventually become used to lower standards of living, in their efforts to survive. War subculture is not only about 'preparing' for and 'surviving' the war; the strengthening and rebuilding of social relations is usually one of the positive outcomes of going through hard times together and this is why war survivors should not be looked upon as helpless in the reconstructing of their homes.

The gathered experiences in **Chapters 3 & 4** identified a number of *common* issues and dilemmas, in an attempt to cover some of the gaps in the knowledge of reconstruction after war, which existed due to, (1) lack of documents on the subject; (2) the fact that it is difficult to depend on the available literature, which mostly deals with the aftermath of the Second World War in Europe; (3) the absence of a satisfactory conceptual framework for the study of reconstruction after war. Thus the experience of post-war reconstruction in 30 countries was reviewed, 16 of which were after the 2WW. These experiences were evaluated and grouped under 'main headings' of issues, which must be considered when formulating a national reconstruction strategy (in Chapter 3) and issues that should also be observed during

the process of reconstruction, in order to reduce possible undesirable outcomes. (in Chapter 4). It was concluded that reconstruction is unlikely to be fully controllable by the State, there are a number of factors that will inevitably regulate, and in some cases dictate, the reconstruction strategy and its outcome, the intermittent recurrence of attacks; government policies and resources; international political pressure; the economics of reconstruction; and the social and psychological impact of war.

Three observations are evident from past-experiences relating to national reconstruction strategies: 1) the need for a national strategy directly depends on the nature of the war itself and the extent of the damage inflicted on the society; 2) establishing a strategy requires a long time, as lengthy and arduous debates are bound to erupt, particularly where different political parties and social groups, are involved; 3) while each nation's strategy for post-war reconstruction, may be unique and relevant to that country only, a framework might be developed that is common to most if not all post-war nations. However, in order to formulate a national strategy a number of 'good practice' issues should be considered: Administration and organisation; damage assessment and resource evaluation; defining goals, objectives and priorities; reconstruction and development; resource mobilisation; centralisation versus local decision-making; timing of actions and phases of reconstruction; training, education and research. Upon reflection it has to be admitted at this stage of our research that most of them seem like common sense.

At the *planning* level, the issues that were argued varied from, whether the planner should view post war reconstruction as a 'crisis' or an 'opportunity', to, whether to replicate that which existed before the war or reform the environment. These issues were categorised under the following headings: conservation of cultural heritage; public and private roles and investments; housing and infrastructure provision; legislation; attracting back pre-war population and issues concerning settlements; reconstruction and civil defence; environmental problems and solutions.

Over *implementation*, a number of arguments were put forward, concerning: local needs assessment; the promotion of local participation; compensation; speed of reconstruction; building techniques; quality control; monitoring and evaluation, and finally the role of the media. Those arguments were the seed knowledge towards developing the forthcoming reconstruction recommendations.

A description of the *research methods* adopted by the author through out his studies was presented in Chapter 5. It discussed, besides the literature survey and research methods used during field work in four countries (Iraq, Iran, Yemen and

Northern Ireland) a number of workshops, conferences and short courses that have acted as 'learning tools' for the author. The author devised appropriate data collection techniques that satisfied the different explorative and descriptive needs of each case. These techniques were dependent on (a) being socially acceptable (b) being innovative (c) using locally available resources; (d) making and taking opportunities; (e) using locally acceptable practices.

Chapter 5 was concluded by listing a number of observations concerning the research and research methods on the subject of reconstruction after war, in the hope that by considering some of those observations, researchers can in the future carry on with further studies on this important topic in a more effective way.

Chapter 6, 7 and 8 presented the field work carried out in Basrah and Fao, Dhamar and Belfast, respectively. Each case study had its own objectives and supports one part or more of the main hypothesis of this dissertation. In considering the reconstruction experience of Iraq in Chapter 6, the emphasis was on aspects of decision-making and implementation of reconstruction at a national strategy level, based on a short term evaluation using the 11 Principles of Reconstruction derived in 1989. The extreme centralization of decisions and the marginalization of the local inhabitants resulted in the unsatisfactory outcome of the reconstruction of Fao city. Attention was drawn to make governments more responsible and responsive to the real needs of war suffering people.

Chapter 7 examined the post-earthquake reconstruction projects carried out in Dhamar, Yemen between (1982-1991). This time our examination exceeded reconstruction policies to look into the detailed process of reconstruction implementation by contractors and the long term results of such processes on the reconstructed settlements. More than 50 settlements were visited and a detailed evaluation was presented, based on feedback given by the local inhabitants nine years later.

The contractor built housing programme in Yemen demonstrated how the issue of post-disaster reconstruction is not just a simple matter of constructing reinforced houses. Our research questioned the value of delivering thousands of earthquake-resistant houses that do not correspond to the local socio-cultural and economic reality. These houses have not served their intended purpose; to shelter people as quickly as possible and to reduce their future vulnerability. The reconstructed settlements suffer from a number of misjudgments and unrealistic assumptions that were made at both policy and implementation levels. In defence it has to be said that

governments, such as the Yemen, have very little leverage in these situations and usually have to be satisfied with what they are offered - no matter how inappropriate.

Realism was the key concept concluded from this case. It was argued that reconstruction and the incorporation of mitigation measures have to be faced in the following ways: (1) realistic assessments of the real needs of the people, their priorities and expectations, rather than the 'assumed ones' by distant professionals and foreign intervenors; (2) when estimating the needed reconstruction resources, regional and local should be included as well as central, including the people's own abilities to reconstruct their dwellings; (3) realistic appreciation of differences between urban and rural; (4) the *assumed efficiency* of employing foreign contractors is a myth; (5) realistic *standards of safety*, mean there will always be a certain degree of risk attached to building in earthquake zones. Safety standards should be based on available, affordable and culturally acceptable measures; (6) *Organisational* demands and responsibilities must be based on local experience; newly-established emergency bodies should co-ordinate existing implementing bodies, not set up another one; (7) realistic appreciation of the *dynamics of reconstruction*. Rebuilding settlements and mitigation should be seen as a complex, multidimensional process. Thus policies have to be *flexible* enough to accept alteration and adjustment based on continuous genuine feed back from the field; (8) plans for reconstruction must be made taking account of the real nature of foreign aid and intervention.

Chapter 8, was dedicated to look at the issue of war and reconstruction in a totally alien context for the author: Belfast, Northern Ireland. Following an extensive debate, Chapter 8 concluded by listing a number of lessons or themes learned from the experience of Belfast and can be adapted somewhere else. These themes were: (1) The effects of war and civil strife could go beyond physical damage to influence planning and the built environment in the long term and thus to affect the socio-cultural structure of a particular society; (2) Centralisation seems to replace local decision in planning and development in time of war, even in a country as democratic as the United Kingdom; (3) In an ethnically divided community reconstruction should be used as an instrument of integration; (4) 'Centrally controlled participation' is being practised in Belfast and it has shown some positive effects in terms of improving the reconstructed environment; (5) the Belfast experience supports the argument that reconstruction of housing should be looked at as a process and not a finished product; (6) The *anti-terrorist defences* section of this Chapter showed how it is becoming more and more difficult to protect against bomb damage.

Nevertheless, the Belfast experience showed that a number of defence measures can be incorporated in the design of buildings and in the layout of housing estates to reduce the degree of damage caused by bombing; (7) A number of conclusions in relation to damage compensation were reached; and finally (8) It was concluded that it is possible for reconstruction and development to be used to achieve a balance between the realistic needs of the inhabitants and the State's immediate political needs.

Chapter 9 suggested a model of looking at reconstruction as a partnership between the state and the local communities. It maintained that there is a need to address two types of audience, who, beside local communities, are the main actors in reconstruction, in an attempt to influence their attitudes towards post-war people participation in reconstruction. On the one hand Central Governments, need to know that the involvement of the people in reconstruction is crucial, and that this involvement if directed in a proper way, will not necessarily undermine their authority. On the other hand *International Agencies and national NGOs* need to appreciate the fact that they can not achieve much without the involvement of Central Government. They have to be realistic in their attitude towards demanding direct grass-roots involvement in reconstruction. They need to join efforts to help governments to change their attitudes too, and never portray themselves in an anti-governmental way.

10.3. SOME RECONSTRUCTION RECOMMENDATIONS.

Having looked at a number of reconstruction case studies, it was recognised that the nation State, as well as the international NGOs could use reconstruction, as a powerful instrument, that does not necessarily support the real needs of the people suffering from war damage. Thus, it was felt that it is crucial for any reconstruction recommendations given by us to build on already existing, and internationally respected Human settlement principles and recommendations, which hold States responsible for and accountable to their communities, and emphasises the international responsibility towards human suffering from war, no matter where they are. This feeling is strengthened by the current development in the role of the United Nations as a liberation force (eg. Kuwait 1991); a peace keeping force (eg. Lebanon; Croatia and Bosnia 1992/3; Kampuchea 1992, etc.) and an aid relief force (eg. Somalia) that might be developed into concern with post-war reconstruction (a small UNDP-UNCHS reconstruction programme is being conducted in Afghanistan).

Note that in this Section we are using the phrase recommendation and not guideline or principle. This is because we do not believe in establishing a reconstruction 'cookbook', but rather a set of nutritious recommendations based on the body of knowledge and insight derived from this dissertation and in conformity with the Universal Declaration of Human Rights and the Vancouver Declaration on Human Settlements¹.

The Declaration of Human Rights is specifically used in this Chapter to derive a set of Entitlements of Civilian non-combatant suffering from war damage to his/her physical environment, while the structure and content of the Declaration on Human Settlements is used as a general framework within which we will place our reconstruction recommendations, building upon the two direct references to reconstruction in:²

- (1) Recommendation B.13 "Planning for temporary human settlements should provide for community needs, and the integration of such settlements, where appropriate, into the permanent network of settlements"; and
- (2) Recommendation B.14 "Planning for human settlements should avoid known hazards which could lead to natural disaster. The planning of reconstruction after natural or man-made disasters should be used as an opportunity to improve the quality of the whole settlement, its functional and spatial pattern and environment".

Our recommendations shall cover eight areas: (a) reconstruction policies and strategies; (b) national economic recovery; (c) social and psychological aspects; (d) public participation; (e) settlement reconstruction planning; (f) institutions and management; (g) shelter, infrastructure and services and finally (h) legislation and issues of land. Of course, the author is aware of the fact that the forthcoming recommendations would require further editing using internationally accepted legislative language.

¹ United Nations (1948) *Universal Declaration of Human Rights*. Final Authorized Text, United Nations Office of Public Information, DPI/15-September 1983, reprinted in UN, New York, August 1988.

² From the United Nations Conference on Human Settlements, Vancouver, 1976, came a comprehensive plan for national action to improve the quality of life in human settlements. This action plan was adopted by delegates of the 132 state attended the Conference and embodied 64 recommendations.

10.3.A. Reconstruction policies and strategies.

- A.1. ■ Countries involved in armed conflicts should establish as a matter of urgency, a national strategy on the reconstruction of war-damaged settlements, embodying the sheltering of refugees and displaced people, and other related economic and social activities within their national territory.
- i- Such a strategy should be based on internationally accepted human rights and settlement declaration.
 - ii- It is important to recognise that difficult choices may have to be made between conflicting requirements, such as defence and reconstruction.
 - iii- A national strategy should enjoy a firm political commitment and be supported by public understanding.
 - iv- Such strategy should be based on a notional assessment of the extent of damage to the economy, infrastructure and settlements. Equally important is to have an overall evaluation of the surviving resources and the conditions of the people.
 - v- It should be devised to facilitate the economic, social, cultural and physical revival of war damaged settlements, focusing on the central role of the survivors as agents for reconstruction.
 - vi- It should take into account the national as well as the international economic and political constraints.
 - vii- It should recognise the fact that it may take years or even decades for a settlement to be totally reconstructed after the devastation of war.
- A.2. ■ A national settlement reconstruction strategy should be an integral part of a national economic and social post-war development policy. Governments should attempt to review and adjust their pre-war development policies, interrupted by the war, rather than drawing new reconstruction and development plans.
- i- It should be formulated through a genuine interdisciplinary approach.
 - ii- A national strategy has to be supported at the highest political level while being formulated in co-ordination with regional and local planning levels.
 - iii- A Settlement reconstruction strategy has to take into account all settlements affected by the war, rural and urban, dispersed and concentrated, old and new.
 - iv- It has to be directed at all section of the society that have suffered from the war regardless of ethnic origin, political stand, etc.
 - v- It has to be consistent with the need for preservation and restoration of settlements with cultural and/or architectural interest damaged by war. Also with the need to protect the natural environment.

- vi- A national strategy needs to take into account the social and economic changes in society due to the war, i.e. the emerging war sub-culture.
- A.3. ■ A national reconstruction strategy should have clear goals and objectives, concentrating on key issues and provide basic direction for action.
- i- It is important that reconstruction goals can be read in their economic, political, ideological, social, cultural, etc. constructs.
 - ii- To implement such goals, however, they have to be composed into workable, feasible, and specific objectives at social, sectoral, and territorial levels, covering all spheres of the society's political economy.
 - iii- To achieve these objectives they have to be arranged in order of priority, reflecting immediate needs, long-term goals, and/or availability of resources.
 - iv- In setting objectives, the government should be realistically modest and not utopian, accounting for resources, needs, perceptions, expectations, potentialities, and constraints. More importantly there is a need to be realistic in terms of accounting for global trends as well as international and national constraints and opportunities.
- A.4. ■ The reviving of war stricken settlements must receive higher priority in the allocation of available resources, which ought to be identified, mobilised and carefully distributed between the various components of the reconstruction strategy, in particular human capacities.
- i- In order to better identify reconstruction resources both existing and potential, it is helpful to think of resources in terms of their types: (1) human; (2) material or physical; (3) services and (4) financial or credit.
 - ii- Subsequently each resource should be identified in terms of its immediate and long-term use possibilities. Thus determining its (a) quality; (b) amount; (c) distribution; (d) cost; (e) function; (f) ease of use and (g) impact. In cases of lack of one kind of resources emphases should be put on other kinds, for instance in case of lack of financial resources labour intensive activities should be given priority. This would not only remove bottle necks but will also provide badly needed jobs.
 - iii- Indigenous resources must be distinguished from external resources and emphasised. The latter must be carefully identified in terms of the foregoing characteristics, their national origins, and the conditions attached to their purchase, transfer or adaptation.
 - iv- Allocation of resources must always be approached with a view to improving efficiency and accountability.
 - v- Inter-regional solidarity should be organised and encouraged between regions that have suffered from the war and those that have not. Similarly, twining between cities should be part of such policy.

- vi- Self-reliance in reconstruction should be encouraged, and the role that could be played by the private sector should be enhanced.
- vii- The development of new sources of finance to be made available for the people to rebuild their own houses, based on suitable terms and conditions.
- viii- Priority should be given to research in the development of resources, building materials, technologies, energy, etc.
- ix- Special attention should be given to training issues and to what could be named as reconstruction education;
- x- In addition, reconstruction education should facilitate technical training for ex-service men to equip them with skills that could help in transferring them from fighters to builders, thus making their future employment easier.

A.5. ■ Any national reconstruction strategy must be explicit, comprehensive and designed according to a realistic appreciation of the dynamics of reconstruction. Rebuilding settlements should be seen as a complex, multidimensional process. Thus policies have to be flexible enough to accept alteration and adjustment based on continuous genuine feedback from the field.

- i- It is important for reconstruction strategy to anticipate failure and act accordingly.
- ii- Such a strategy requires continuous evaluation based on genuine feedback from the inhabitants, hence comes the importance of co-operation and participation of all sectors of the population.
- iii- Thus, the so-called 'controlled decentralisation' has to come into existence. Controlled decentralisation is seen as a half-way solution that could meet the needs of the central body and to some extent that of the local people.
- iv- The best time to plan reconstruction is during the war so that the nation is prepared for considerable start in reconstruction activity when the war is over.
- v- Gradual reconstruction, allows more space for local people to participate and most importantly, it helps in developing the much needed local skills, thus leaving less need to rely on outside help.
- vi- Cultural policies have to be thought out carefully. Part of these policies are concerned with preserving cultural and physical symbols that will allow cultural continuity. More importantly, cultural policies promoting peace, tolerance and mutual understanding through education are needed.

- A.6. ■ Governments should monitor and continuously evaluate the conditions of the reconstructed settlements as integral part of the reconstruction strategy.**
- i- Reconstruction should be carefully documented and evaluated and results published periodically in various forms and places.**
 - ii- This is needed for a better management of reconstruction and for the transfer of the experience to the general public (to encourage participation), academic communities (for theoretical development), and to practitioners in other countries and in the future.**
 - iii- The evaluation and documentation of reconstruction plays a crucial role in assessing the long-term implications of reconstruction on the socio-cultural and economic life of the community.**
 - iv- It is essential to establish an independent national body with the task of monitoring the reconstructed settlements, assessing the potentials, social and environmental costs and benefits of alternative reconstruction plans.**
 - v- Field evaluation is best carried out as an independent component in all major reconstruction programmes.**
 - vi- The national monitoring body should be responsible for the documentation and analysis of studies. It should also be able to disseminate the results to other concerned institutions in order for them to be able to adjust future reconstruction plans.**

10.3.B. National economic aspects of reconstruction.

- B.1. ■ It is crucial to recognise the fact that unlike most natural disasters, war affects the economy of the entire country. Thus, post-war reconstruction is dependent on the state of the national economy following war.**
- i- However, the state of economy is dependent on a number of factors: 1) pre-war economic conditions; 2) the extent of damage to economic installations and the degree of opportunity and productivity losses; 3) the potential for revival of the economy; 4) the availability of national and international resources; 5) the degree of adaptation needed as a result of population displacement; mortality and occupation of territories.**
 - ii- Wars generate budget deficit next to a huge private liquidity, inflation, unemployment, and poverty among other problems.**
 - iii- Wars do not just destroy part of what exists; they also prevent a society from making new investments, to utilise its production capacities and resources, and to develop its skills and technical capabilities. This proves the strong relation that should exist between reconstruction and development. Therefore, developmental reconstruction should not be concerned with damaged items but deficits that will remain after rebuilding all destroyed structures.**

- B.2. ■ The reconstruction of the economy is a pre-requisite for physical reconstruction (housing, infrastructure, etc.). It is important to recognise that by supporting the economy, governments will be producing wealth that will initiate recovery initiatives, thus taking pressure off the public sector.**
- B.3. ■ Post-war governments will be faced with the task of creating sound economic policies that are directed towards generating higher public revenues, redirecting the wandering cash towards more productive use, encouraging investment, creating jobs, and undertaking redistributive reforms.**
- i- Reestablishing security is crucial for this to happen.**
- B.4. ■ It is important to counter the intensification and acceleration of economic tendencies operative during the war, into the post-war era.**
- i- One of these tendencies can be observed in the industrial sector which, due to tariff and trade barriers, is likely to have shifted emphasis from export to the home market, consideration that must be addressed following a war.**
 - ii- Another tendency could be the central government's approach to provide people from the war damaged areas with direct contributions of cash and food, etc. This approach could be expected to change once the war is over, and the government should shift emphasis from direct contributions to individuals, to revitalising the economy of war-damaged regions by improving the economic infrastructure, activating productive sectors, and creating employment.**
 - iii- This issue is more urgent to consider in countries where there is little or no infrastructure that is needed to distribute income or even aid (eg. social security). Thus, the only way for money directly to reach the people would be through labour intensive projects and this requires a healthy economic system offering job opportunities. This would also help in controlling levels of inflation and consumption.**
- B.5. ■ Before the preparation and implementation of post-war reconstruction plans, the general economic ground must be surveyed afresh, and agreements as to what is needed and how it should be planned for, must be accomplished.**
- i- This involves a new investigation and analysis of facts and a comprehensive study of traditional habits, customs and ideas.**
 - ii- Immediately following war, there is a need for the collection of statistics on a nationwide scale in order to identify areas of urgent economic and social problems as well as to update knowledge on the resources available for the country and the conditions of its people.**
 - iii- There are five categories in which various kinds of statistics need to be gathered, which can be applied to the measurement of economic trends and used in the assessment of the success rate of economic policies of reconstruction of war damaged areas: (1) employment; (2) national product; (3) national expenditure, (4) prices and (5) finance and money**

supply.

- iv- It is important to keep up-to-date information and statistics during the different stages of reconstruction planning and implementation.
- B.6. ■ One of the major requirements for a smoother return to economic activity in the post-war era is, a careful control of the monetary system to prevent unemployment and high inflation. This objective could be achieved through, both, taxation (on those who benefited from the war) and incentives (to those who lost).
- B.7. ■ Experience gained from reconstruction after war indicates that the most healthy, most simple and practical way of creating quick employment is activating the construction industry which includes the production of building materials, contractors and builders.
- i- Reviving the construction industry will create immediate employment to able-bodied persons, generate income, stimulate people to improve their own environments and encourage young people to enter technical vocations.

10.3.C. Social and psychological aspects.

- C.1. ■ People are the principal factor in recovery and reconstruction. During war the survival of people must be induced, facilitated and planned as the foundation of reconstruction and development.
- i- Hence the importance of the provision of civil defence mechanisms and war shelters.
- C.2. ■ Following survival a number of steps have to be taken in order to enrich and improve the society and its ability to contribute to the reconstruction efforts. Thus the whole reconstruction process should be seen as a means by which exalted human values should be enhanced. As such the government's responsibility does not end with reconstruction of the city's physical structures and/or infrastructural system.
- i- This consideration is particularly important if we are to change the conventional attitude of viewing the survivors as recipients of aid, rather than as agents of development.
- C.3. ■ There are a number of social needs that would have developed exclusively due to the war and its consequences. Some urgent policies, concepts, schemes and institutions have to be formulated to provide the necessary support to those who have suffered in the war.
- i- In physical reconstruction those policies should include new building code regulations and modification of the existing structures to accommodate this population.
 - ii- The physically and mentally injured population, amongst whom are the

disabled war veterans and ex-servicemen.

- iii- Often war victims include children, and thus special policies and institutions are needed to care for them.

C.4. ■ Dealing with refugees is another important aspect of reconstruction and social development. Policies that make the refugee population and other war-inflicted groups become used into the victim's mentality and lead to their increased dependency on the state must be avoided. Rather, they should be provided with start up capital, technical assistance, and social support to begin a new life.

- i- Such incentives are particularly critical for those who wish to return to their war-shattered residences. Assistance might be given to them for housing provision and job creation.
- ii- The critical point to remember is that the state's policies should lead to increasing affordability of the war-inflicted families rather than their dependency. Clearly, the state must be ready to provide housing for those who otherwise will be left homeless.

C.5. ■ Conflicts introduce levels of psychological stress which often inhibit rational or responsible behaviour by populations. Good will disappears in time of conflict. Memory and interest in the past may be lost or seen as undesirable. Social behaviour may breakdown and introduce consequent destructive actions, such as looting.

- i- Very little can be done to alter the psychological state of communities in times of conflict except to remove the source of stress.
- ii- It is important however for those who intervene to recognise the likelihood and nature of irrational or conflictual contact.
- iii- Recognition of the importance of involving the survivors in reconstruction as one kind of therapy.

10.3.D. Public participation.

D.1. ■ Public participation in decision making is a human right, a political duty and an instrument essential for post-war reconstruction. It has to be understood and respected internally and never imposed by an outsider or an international agency. Thus it is important to work towards strengthening local institutions and encouraging positive governmental attitudes towards participation.

- i- Within a post-war context it is crucial to represent participation in a community-state partnership rather than the anti-governmental image often publicised by international NGOs.
- ii- It is clear that NGOs failed to operate without the established governmental infrastructure during or after war situations.

- D.2. ■ World-wide experience suggest the existence of a number of linkages between involving the local population and resolving issues that are exclusive to post-war reconstruction.**
- i- In a rapidly changing 'world order', public participation in reconstruction can be used as a controlled, but progressive action towards democracy.**
 - ii- Public participation in reconstruction would encourage international aid and development agencies to participate in the reconstruction process.**
 - iii- Participation would emphasise the social solidarity that would have already been established between individuals and families of a community during war.**
 - iv- Approaching reconstruction in a partnership with the local communities and the private sector would facilitate the task of achieving comprehensive reconstruction.**
 - v- The greater the role of the survivors in different reconstruction activities, the greater the chance of a rapid psychological recovery.**
 - vi- Public participation is the only way of achieving cultural continuity in the reconstructed settlements.**
 - vii- Participation is crucial for its role in enabling the people to manage and look after their own environment. Subsequently, to achieve sustainable reconstruction.**
- D.3. ■ Public participation as a 'means' of improving reconstruction policies should be encouraged to constitute an integral element in the planning, implementation and evaluation of such policies as well as in the future management of the reconstructed settlements.**
- i- Particular attention should be paid to the definition of the role of public participation as a technical tool to mobilize human resources badly needed following a war, when financial and social ones are scarce.**
 - ii- Sensitivity and realism in assessing needs, planning and implementing reconstruction are prerequisites for public participation.**
- D.4. ■ It is clear that participation embodies a number of benefits and limitations to the reconstruction process. Thus, the mode, nature and extent of public participation must respond to the newly emerging social, political, cultural and economic needs of post-war societies and states.**
- i- It is much more difficult to apply the notion of participation in a reconstruction context, particularly post war, than it is in small development projects.**

- ii- Still it is not impossible to reach a pragmatic kind of participation. Such participation requires changing in attitudes at the intermediate level of State employed technically oriented professionals. In other words, 'development by education'.

10.3.E. Settlement reconstruction planning

E.1. ■ A broad-based settlement planning system seems indispensable for the post-war reconstruction. Otherwise, the risk of chaos, duplication, and wasteful use of scarce and valuable resources would be high. Such system should occur within a general social and economic reconstruction framework.

- i- Settlement planning should be geared to long term development.
- ii- Special emphasis should be placed on the recognition of the difficulties inherent in a truly comprehensive approach for reconstruction planning and the need to evolve and employ suitable methods and procedures.
- iii- Settlement planning as a continuing process must be effectively linked to institutions which implement the actual reconstruction.

E.2. ■ A purely planned approach to reconstruction is neither possible nor desirable as it encourages bureaucratic red tape and inflexibility no matter how decentralized it might be. Similarly, it is unrealistic to expect the market mechanism to reconstruct on its own.

- i- Existing planning procedures should be reviewed with the aim of making the process less bureaucratic, in some cases legislations and plans have to be quick enough to actually catch up with the speedy return of the population, even if it was on the cost of professional perfection.
- ii- Although it is important to have a general planning framework, within this framework the market mechanism should be allowed to rebuild itself.
- iii- Mixed approach for the implementation of reconstruction programmes is the most attractive proposition. There is no fixed formula for such a mix as the amount of the ingredients in the mix could vary from case to case and time to time. However, issues such as, the degree of burden of the public sector and the dominating ideological and political structure, as well as the availability of private resources for investment influence the formula of such mixture. The private sector could be encouraged in areas of attractive investment opportunities, requiring moderate investment with high returns.

E.3. ■ Planning for reconstruction and managing resources and implementation without a proper assessment could lead to a waste of resources and long-term social problems within the community.

- i- Traditional ways of surveying people's needs, depending mainly on

collecting quantitative data suffers from a number of shortcomings, which means that the type of information collected does not reflect the real needs of the local population.

- ii- Recently, communication skills of assessors have been given a great importance. Damage assessment should go beyond counting destroyed structures and the number of death and injuries, to determine the extent of damage, type, importance to the local communities, ownership, local priorities for reconstruction, and most importantly, opportunities and difficulties of replacement, and financial value.
- iii- Damage and needs assessments have to be thorough and frank, without minimizing difficulties, bottle-necks, etc.
- iv- The local skills which exist need to be identified and made use of as effectively as possible.
- v- Reconstruction plans should not be built on anticipated external help. Outside agencies can help, but only if they have a clear idea of what is needed.
- vi- It should be understood that bilateral aid is most likely to have hidden strings, particularly in post-war situations. Furthermore, free gifts should not be accepted just because they are free. It is important to make sure that help offered matches long-term as well as short-term needs.

E.4. ■ Reconstruction planning should encourage the return of the population to their deserted settlements. Such return indicates a healthy start for the reconstruction process.

- i- Often people are eager to return to their settlements while government bureaucracy and military conditions do not allow them to do so.
- ii- In other cases, mostly because people have spent a long time away from their settlements, direct incentives might be needed to attract back at least the younger people.
- iii- These incentives could take the form of creating employment opportunities; ensuring employment and income; provisions for home ownership; providing job placement facilities for war veterans; distributing land for housing, developing small-scale industries; creating share holding opportunities in public industries through long-term and easy credit; and providing provisions for educational facilities, etc.
- iv- As importantly is the issue of attracting back, businesses, banks, insurance companies, small industries, etc. This needs more investment in infrastructure, financial and physical security as well as social stability.

E.5. ■ Settlement reconstruction planning should attempt to achieve a balance, between retaining what was good in a settlement with a cultural or symbolic value and at the same time using reconstruction as an opportunity to improve the built environment. However, as far as possible reconstruction should

attempt to reflect regional and local characters based on indigenous values.

- i- The rising opposition between those who want to rebuild the settlement to its pre-war form and those who want to capitalise on the opportunity to reform and modernise, should be seen as a healthy sign for any reconstruction programme.
- ii- Each approach has its own advantages and limitations. For instance, while total reform may advance and modernise the built environment, it would inevitably cost more and slow the reconstruction process because of the different limitations of having to create a new pattern of land ownership, infrastructure, etc. Also, it makes it almost impossible to involve the local population;
- iii- On the other hand restoring to pre-war conditions has the value of being able to involve the locals, help them to go back to normality faster and in a more settled fashion, however, one would miss the opportunities of advancement and modernisation.
- iv- In any case major clearance operations should be avoided, attempts should be made to rebuild and rehabilitate as far as it is feasible.

E.6. ■ Planning for the reconstruction of rural settlements should aim to stimulate their agricultural economic base.

- i- It should be recognised that the social coping mechanism of rural communities is stronger from that of urban, also they tend to be more attached to their local land. They are more capable of reconstructing their own shelter.
- ii- For the above reasons planning efforts should be concentrated on devising medium and long-term agricultural development programmes.

E.7. ■ Temporary settlements for refugees and/or displaced people should, as far as possible be avoided. Buildings vacant during the war could be used to temporarily accommodate them (eg. hotels, schools, etc.).

- i- As the period of war is unpredictable, the 'temporary' refugee camps may easily become permanent settlements. The longer people seek refuge the less the likelihood of their return.
- ii- In cases where there is no other option but to provide a temporary settlement phased integration into existing settlements network should be planned.
- iii- It is important to erect temporary accommodation within devastated settlements and not on the outskirts of settlements, as this proved to be socially more acceptable. Also this way existing infrastructure can be used.

E.8. ■ Careful relocation of settlements may become necessary for security

considerations, or because of total devastation. Still relocation imposes long-term economic, social, cultural and psychological burdens on the people, and should be avoided as much as possible.

- i- Careful selection of the location of new settlements.
- ii- Planning for new locations should avoid known hazards which could lead to natural disasters.
- iii- Special attention should be given to providing for the welfare of the affected inhabitants especially with respect to employment opportunities (source of living), basic infrastructure and services.
- iv- Attempts should be made to reflect in the new settlement, as far as possible, the social and cultural fabric of the old settlements, in respect to extended families, neighbourhoods, tribes, names of squares and streets etc.

E.9. ■ Settlement planning should enable and encourage social, cultural and religious integration between different ethnic and religious groups.

E.10 ■ Despite international conventions (such as the Hague 1954) cultural heritage properties are continuing to be targeted in wars. Hence, reconstruction should be aimed, as far as possible to counter such losses. Conservation efforts should be focused where the most important historical and architectural buildings and sites are at risk, not to restore them, but to stabilise their condition, paying particular attention to the places where people can live and work.

- i- It is essential to take measures to protect cultural monuments in foreseen circumstance of war.
- ii- Often local and even national conservation authorities can not respond quickly enough to unforeseen circumstance. Even when war starts they would have to compete with higher priorities (safety, health, security).
- iii- Thus it is recommended to make the protection of monuments a natural part of the responsibilities of active civil protection institutions (eg. fire brigades, civil defence, etc.).
- iv- Readiness planning for protection in times of war; (training, community model, manuals, guidelines, etc.). Communities may not be aware of the available skills and priorities of action (what to protect) or appropriate means of protection.

10.3.F. Institutions and management

F.1. ■ The designation of institutions responsible for the formulation of reconstruction policies at national, regional and other appropriate levels is crucial. It is important that such institutions are based on local experience and enjoy the direct support of the highest political level.

- i- A reconstruction management model should provide for the following: 1) *Central* co-ordination of all efforts of reconstruction on a national level carried out by the central government and its agencies; 2) *Regional* co-ordination, carried out by a number of administrative units in all war damaged areas that can be coordinated by a central regional authority; 3) *Communal / local* administrative structure that would look after the immediate concerns of the people living in war-damaged areas.
- ii- Reconstruction planning institutions should be coordinated by and accountable for a central policy formulation office. The latter should report directly to a supreme council of reconstruction, preferably headed by the President or Prime minister.
- iii- The fact that reconstruction can be an enormous and costly task that will stretch the public sector at all points, means that allocation of roles to a wide range of governmental departments is essential, as well as the delegation of authority to non-governmental bodies. Thus, the reconstruction programmes do not necessarily have to be implemented by such institutions.
- iv- Thus, while the central institution is responsible for drawing bold reconstruction strategies and planning projects of national importance, the regional and local institutions would be responsible for settlement planning and monitoring and evaluation of reconstruction programmes.
- v- Some of the reconstruction needs are best addressed by local bodies, such as: housing, relocation / resettlement, local infrastructure and health.
- vi- The existence of too many organisations dealing with reconstruction efforts could be as confusing and cause obstacles as the absence of any organisation at all.

F.2. ■ Reconstruction institutions should play a coordinating role between national government departments responsible for areas of social and economic development: Ministries of housing, environment, education, health, transport, etc.

- i- To do so reconstruction institutions should ensure adequate representation of the real needs and aspirations of the inhabitants on the policy-making level.

F.3. ■ It is more desirable to allocate reconstruction planning responsibilities to already well established institutions; such as Ministry of planning. However, when this is not possible and a new institutions have to be established, they should be flexible enough to adapt to changing circumstances, and should not outlive their original purpose.

- i- In case of creating new institutions, it is important to establish their life span and budgetary instruments.
- ii- Means should be provided for the continuous review of such institutions

to ensure that they are responsible to the affected communities' needs.

- iii- Transferring functions and responsibilities to permanent institutions in preplanned stages, should be part of the agenda of such temporary institutions.
- iv- Existing institutions taking over reconstruction responsibilities should evolve and adapt to new organisational pattern that corresponds to the urgent needs of reconstruction.

F.4. ■ Institutions should be designed to encourage and facilitate the involvement of the public in the planning and implementation of reconstruction through a partnership. They should be able to enter into co-operative and collaborative arrangements with other public and private organisations and explore innovative approaches for management, giving more responsibilities to the local communities.

- i- To achieve such aim it is important to build in a mechanism of consultation between various types of institutions at different levels.
- ii- Facilitate dialogue between the affected communities, professionals and decision makers.
- iii- Provide for continuous training programmes for professionals on needs assessment, communication skills, and feed back evaluation.

F.5. ■ For institutions to act effectively they need four basic requirements: (1) authority to act; (2) competence to act; (3) resources to act and (4) acceptance by the war-affected community.

- i- Post-war legislations must establish a clear and firm authority for reconstruction institutions.
- ii- Having the authority and resources to act, without vital knowledge needed for the tasks at hand could lead to a disaster of reconstruction.
- iii- The development of research capabilities, and the acquisition and dissemination of knowledge and information on reconstruction should receive high priority within reconstruction institutions, and it is best developed in association with established research organisations (eg. universities).

F.6. ■ Separate financial institutions and adequate means are necessary to meet the requirements of reconstruction.

- i- The main role of such institutions would be to negotiate terms of loans and aid with international banks and institutions. It is important to have confident institution that speaks the international language of investment in order not to fall into long-term debt trap.
- ii- Through such institutions government can pay compensation while ensuring that public and private investors in reconstruction, especially

those receiving compensation are protected from the damaging effects of monetary inflation.

- iii- Selectivity in directing public funds, to give priority to areas where private investment is unlikely.

F.7. ■ Mechanism should be established for the future management of reconstructed settlements. This is best handled by local organisations dominated by local inhabitants.

- i- This is important in order to prevent speculation on people's basic needs and aspirations.
- ii- It is also important in order to Sustain cultural, architectural and social heritage.
- iii- Maintaining and restoring infrastructure and settlement facilities for general public welfare in the long run is only possible through such mechanism.
- iv- Providing information and incentives for inhabitants to maintain and improve their dwellings and surroundings.

10.3.G. Shelter, Infrastructure and services

G.1. ■ The political pressure on post-war governments to be seen implementing physical reconstruction is appreciated. However, the badly needed shelter, infrastructure and services should not be entirely used as a political propaganda exercise. People have the right for proper physical reconstruction.

- i- Governments should avoid raising false expectations by promising the replacement of each and every single home damaged by the war.
- ii- Such raised expectations often lead the people to believe that if they reconstruct their own buildings they will lose on governmental aid.

G.2. ■ Shelter, infrastructure and services should be planned in an integrated way and provided in a sequence responsive to the real needs of the war-devastated communities.

- i- For instance, to be able to reach the war damaged areas, infrastructure repair is needed, and for life to return to devastated settlements, services are needed.
- ii- Estimation and allocation of resources should include central as well as regional and local ones, including the people's own abilities to reconstruct their own shelter.
- iii- In order to achieve such aim it is important to phase reconstruction over several stages and regulate the flow of financial resources in accordance

with the sequence of operations envisaged in each phase.

- G.3. ■ To be able to provide services and infrastructure to war damaged areas, access to and within settlements has to be secured and civilian safety guaranteed. This includes mine clearing and the demolishing of unstable buildings.**
- i- Operations of clearing mines and demolishing unstable buildings are best done by military engineers divisions.**
 - ii- Rubble clearing can also be handled by military, but this will exclude the population from their right to salvage their own belongings.**
- G.4. ■ The reconstruction of shelter, infrastructure and services must be geared to achieving the over-all objectives of national reconstruction strategy.**
- i- Employment generation by using labour intensive construction methods.**
 - ii- Encouraging public participation and private investment in construction, including the voluntary sector.**
 - iii- Combination of settlement improvement with reconstruction.**
 - iv- Mitigation against natural disasters and possible future war damage.**
- G.5. ■ Recognising that the post-war needs for shelter, infrastructure and services are nearly always greater than the capacity of public authorities to provide them. The role of central government ought to be concentrated on providing infrastructure and needed services, while its role in housing provision should be mostly preparative [i.e. mobilizing and directing the needed resources towards enabling housing construction by the private sector and the people themselves].**
- i- The concentration of scarce central government resources in the housing sector would create shortages and bottlenecks in other sectors.**
 - ii- Given secure employment and adequate means for construction of low cost housing, people will do the rest themselves.**
 - iii- Post-war housing should not be seen as a finished product that needs to be urgently delivered to war-devastated areas.**
- G.6. ■ Conventionally, it was thought that speed of construction could only be achieved through the application of modern building technologies, prefabrication and mass production. This is not necessarily true.**
- i- Such beliefs have often driven governments into a scale of reconstruction much bigger than what they can manage, with negative results.**
 - ii- It is important to recognise that speed in construction is likely to be achieved at the expense of quality control and building standards, and even more so at the expense of the socio-cultural values of the affected communities.**

G.7. ■ Enabling people to house themselves individually and/or co-operatively should be encouraged and programmes and instruments to do so should be devised.

- i- This would require simplification of procedures for acquisition of land, building permits, etc;
- ii- Facilitating long-term financial loans;
- iii- Provision of infrastructure on a totally subsidised basis, in conjunction with shelter being provided by the people for themselves;
- iv- Incentive to the imaginative use of local materials and the recycling of debris, e.g. through demonstration projects.
- v- Ensuring the availability of building materials in the market in affordable and fixed prices.
- vi- Developing the construction industry.

G.8. ■ The crucial importance of the construction industry should be recognised and the industry should be given the political, financial and technical support it requires to meet the national reconstruction objectives.

- i- Special attention should be given to removing obstacles to the development of the local construction industry.
- ii- Encouraging the establishment of small and local building material manufactures and construction contractors.
- iii- Simplifying formal procedures for such establishments.
- iv- Having a training component for builders, contractors and labour.
- v- Providing finance guarantees and if necessary selective subsidies to local building material industries, particularly at the early stages of their establishment.

G.9. ■ Realistic appreciation of differences between urban and rural settlements. Such appreciation should be reflected on all decisions concerned with the provision of shelter, infrastructure and services.

- i- Attempts to concentrate dispersed rural population in bigger settlements through reconstruction on the basis that that would make it cheaper to provide them with services, would only lead to a disaster of reconstruction.

G.10. ■ Realistic standards for shelter, infrastructure and services should be the bases for any reconstruction policy. Standards should be based on what is available, affordable and culturally acceptable.

- i- The adaptation of imported standards of provision should be avoided.
 - ii- The use of local materials and construction methods should be encouraged. Also there should be a reduction in the dependency on foreign technologies, resources and materials.
 - iii- The salvaging of building materials and metals from destroyed buildings should be encouraged. In this case issues of ownership have to be tackled.
 - iv- Prominence should be given to the human dimension through understanding and appreciation of local social and family structures and their specific needs.
- G.11. ■ Investing directly in permanent housing proved to be the most sensible thing to do. A first step should be to utilise buildings in need of minimum repair. Of course in some cases, where the situation is such that it is impossible to wait, (i.e. people can not be sheltered anywhere else) and that it is necessary to utilize temporary shelter either for climatic or even political reasons a limited number of temporary housing units can be provided.
- i- In these cases it is recommended that such structures should be built not at the periphery of urban areas but in the heart of the cities and war-damaged neighbourhoods, in order to build on the existing socio-economic patterns and to make use of the surviving public utilities.
- G.12. ■ Post-war infrastructure (transportation and communication) policy should take into consideration any new economic, administrative and/or defensive role played by settlements in war zone.
- i- Infrastructure should be designed to minimise any possible future impact of war.
- G.13. ■ Safe water supply and hygienic waste disposal should receive priority in reconstruction of infrastructure.
- G.14. ■ In the reconstruction of settlements the quality of the environment must be preserved. Pollution should be prevented by minimizing the generation of wastes; wastes which can not be avoided should be effectively managed.
- i- Rubble produced from clearing damage should be reused to cover swamps, fill roads, etc.
 - ii- Building materials used in reconstruction should be environmentally sound.

10.3.H. Legislation and issues of land.

- H.1. ■ Proper post-war legal framework (in terms of new laws and enabling legislation) for policies to be implemented and in some cases to be enforced is crucial. Such framework for reconstruction legislation must establish clear and realistic direction, while safeguarding civilian rights.
- i- Issues of land ownership and speculation in prices, public acquisition of land, building laws, urban zoning, price control for building materials, tendering procedures, etc, have to be examined in detail.
 - ii- Promulgation of 'emergency' legislation that enables the implementation of reconstruction strategies, while safeguard individual rights against arbitrary decisions.
 - iii- Reconstruction legislation should aim at the benefit of the whole community, thus it should be realistic, easily understood and efficiently applied.
 - iv- Such legislation should be revised periodically to correspond to changing circumstances and needs of society. It should not outlive its original purpose.
- H.2. ■ Compensating civilians for the loss of their property is one of their basic rights. A legal framework has to be established as to who should be compensated and in what form. It should be noted that direct payment is not necessarily the best and only way of compensating people for their losses.
- i- The fact that insurance companies do not insure against war damage should be recognised. Thus governments are the only source of compensation for people suffering losses from war.
 - ii- In the same way some governments are forced to compensate others, the state has to compensate its population.
 - iii- The form of compensation can vary from direct payments, long-term loans, to building materials, land, tax relief, etc.
 - iv- Whatever is the agreed form of compensation it should take into account the complexity of reconstruction and anticipate unforeseen changes in circumstances. For instance, it should take into account the damaging effect of inflation.
- H.3. ■ In the aftermath of war devastation, land is often the only surviving resource, the proper management of which could become a great asset to reconstruction by individuals and the nation.
- H.4. ■ Comprehensive knowledge of pre-war land use and patterns of land ownership is a basic requirement for both urban and rural settlement reconstruction planning.

- i- Without solving land ownership problems, reconstruction can not start.
 - ii- This requires the introduction of new surveying methods and mapping technologies suitable to the post-war conditions along side effective use of the existing information.
 - iii- Development and use of methods for assessing possible economic, social and environmental impacts from proposed reconstruction land use.
- H.5. ■ Pre-war patterns of ownership rights and inheritance should be respected as far as they do not pose a threat to public welfare.
- i- However, promoting land reform measures to bring ownership rights into conformity with post-war needs of society might be necessary in some cases.
- H.6. ■ Land owned by the government should be used, as a first option, wherever land is needed for resettling communities, providing infrastructure and services. Acquisition of private land for such purposes should be avoided as much as possible.
- i- Land acquisition should be resolved only when it is in the interest of the nation and general public, e.g. extension and improvement of existing settlements, provision of public services, preservation of historic areas, and protection of natural environment.
 - ii- This recommendation is particularly relevant in cases of post-civil war and when dealing with rural communities, where it proved to cause far reaching conflicts.
- H.7. ■ It is crucial to anticipate urban land speculation and to have the appropriate measures to recapture the rise in land values due to reconstruction and change in land use.
- i- This requires frequent assessment of land values since the end of the war, and determination of the rise of value relative to pre-war values.
 - ii- levying appropriate land taxes, e.g. capital gains taxes, land betterment charges on lands with higher post-war value.
 - iii- Those taxes could be paid into reconstructing public facilities within the same area or to compensate other owners for the acquisition of their land.
 - iv- It is fair to adapt pricing and compensation policies relating to land value post-war, rather than its pre-war commercial value, when acquiring land for public use.

10.4. THE YORK CHARTER FOR RECONSTRUCTION AFTER WAR.

Yet another Charter, it might be said. There are already a number of Charters and international Declarations on different issues, which are partly or even totally not respected in some countries. For instance, newspapers give us daily evidence of the brutality with which the Declaration of Human Rights is abused. Similarly other declarations do not seem to be internationally respected, so what is the value of another Charter?

In our view, despite the fact that such declarations can be abused, yet they remain there as internationally accepted standards of Government behaviour and responsibility, which if not met will become the basis for accusation. It is perhaps with this that the York Charter for Reconstruction After War should first be judged. Not that the process of which it is the outcome has been of merely academic interest. The meetings, site visits and exchange of experience and views over the last few years have been of immense value in supporting the need for such a '*reconstruction reference point or standard*'. It is believed that the production of this Charter would add to the existing 'stepping stones' by which mankind makes its slow progress towards higher common ideals.

The idea of concluding this research by a Charter first came to light in July 1991, during the *Third York International Workshop on Reconstruction after War*. This workshop was planned by the author and Charles Cockburn with a wider aspiration in mind; namely, '*to make the reconstruction policies of governments more responsive to the needs of people*'. The Workshop participants agreed that a step forward towards achieving such an aspiration could be the production of a Charter that embodies some principles of good government practice in reconstruction. Another step could be by encouraging a network of future workshops to promote such policies, disseminate knowledge and monitor practice across the world.

A set of principles to constitute the York Charter was developed by the author and jointly edited with C. Cockburn (between November 1991 and May 1992). These principles were presented at the *Roots of the Future, a Global NGO Conference in relation to the 1992 Earth Summit, December 1991, Paris*, and the *International Forum on Habitat, Poverty and Environment, April 1992, Tunis*. The Charter was also widely disseminated through publication³. The aim of this publicity exercise was to obtain

³ The Charter was published in Barakat & Cockburn (1991b; 1992), and in Aspect, issue number two, 1992.

some feed back. Later on, during the *Post-war Reconstruction and Conservation in Croatia Conference, November 1992, York*, the Charter was tabled at a specialised planning for rehabilitation workshop, to see whether the principles embodied by the Charter are applicable to a specific context, in this case post-war Croatia. The overall feeling was that the Charter is very useful indeed as a reference point.

Over the last few months a number of remarks on both the content and the structure of these principles were received. These remarks centred around the following issues:

1. Esteeming the York Charter to be a sound, humanitarian set of guidelines advocating the rights of human beings, hurt by war, to be treated with respect and decency. It is sad that so many generations of human history have passed without these minimal guarantees. (L. Kulba, USA).
2. The fact that the document would be stronger if it would say who is to be responsible for ensuring the rights of the victims of reconstruction. (Human Settlement Workshop, Paris, Dec. 1991).
3. The design of the structures, materials used, the process of reconstruction etc, should not create by themselves sources of pollution. (P. Poddar, India).
4. The Charter must be promulgated on behalf of the war suffering people to Governments and aid-agencies including military agencies.
5. The Charter must set out the rights of non-combatants to have their property restored in accordance with certain ethical, ethnic and practical standards. (J. Warren, UK).
6. The duty to provide this services must be with the combatants. Any failure to provide it must be complained of to the United Nations - perhaps via UNESCO.
7. Too much emphasis on the maximum use of local resources might imply exploitation.

Those remarks and others were taken into account and based on the previously mentioned reconstruction recommendations, the author proposed the final text of the York Charter for Reconstruction After War. (see appendix 2).

The Charter consists of seven sections: (1) Introduction; (2) Aim of the Charter; (3) War destruction; (4) The 60 Post-war reconstruction recommendations; (5) The entitlements of non-combatant suffering from war damage to his/her physical environment; and (6) Support for the Charter.

10.5. REMARKS

The recommendations outlined above are not a recipe for success. They simply indicate an approach to reconstruction of war damaged settlements which this study suggests may lead to a greater tendency to success than otherwise. We expect each reconstruction group to design their own guidelines for rebuilding and their own detailed settlements plans. However, in applying these principles the following considerations should be borne in mind:

◆ *Continuation of war.* Undoubtedly reconstruction is very much affected by the continuation of war. In fact, in some cases, reconstruction may never begin before the total termination of hostilities. Even when it does, reconstructed projects may still run the risk of destruction. A decision has to be made on whether it is worth starting reconstruction during the war and risking further damage for the sake of helping communities recover as soon as possible and on their own land.

◆ *Political Hidden Agendas.* Post-war reconstruction is a highly political and ideological issue. This effect occurs mainly because war is waged and halted by politicians and reconstruction is bound to follow the political trend. Thus, one should draw attention to the often hidden agenda of reconstruction priorities. In many countries, rebuilding of the national defence system has been the first priority for post-war rebuilding. Astronomic investment, badly needed for recovery and reconstruction, is redirected towards purchasing weapons and training soldiers, on the basis that force is needed for security, without which no long-term investments and reconstruction can take place. Politically symbolic reconstruction is often another hidden agenda and could become a must in some contexts. Reconstruction policies should not fall into the trap of such agendas, at the same time they should not resist it altogether because of the political weight often behind such agendas. The challenge is to allow a breathing space for such hidden agendas to be partly realised while achieving as much as possible of the people's real needs. One must pacify, temporize, agree and in general, as with fire: be ready to retreat only to advance later.

◆ *International constraints and opportunities.* In the case of war damage international assistance will strictly follow political alliances. In a post Cold War era the United Nations seems to be the main hope for international co-operation, and it is through the United Nations that war-devastated countries can be helped to recover. The UN might be able to play a more active role in reconstruction if resources are made available. This could be achieved through the establishment of an international

war reconstruction fund administered by the UN into which member states would *all* contribute a fixed proportion of their G.N.P. and reclaim according to an agreed measure of their need. Having said that, it is important to acknowledge the fact that the existing power structure of the UN has out lived its intended purpose, and now there is a case for a more world-wide representative structure. This may sound politically naive and practically impossible; yet what alternative is there other than leaving the casualties of war to reconstruction programmes constrained by devastated national economies and international enterprise culture "...in which strides forward seem to be made at the expense of the less fortunate". (Green, 1991:15).

◆ **Development.** Thinking of reconstruction as a step in an ongoing development process is not an easy task, as it involves recovering the war's opportunity costs and then going beyond such recovery. However, every effort should be made to ensure that any investment in reconstruction is being planned as part of a longer term development process. Reconstruction inevitably enters the field of development and becomes concerned with a socioeconomic transformation in the direction of broad national goals. Long-term comprehensive planning and strategic thinking become the most urgent, as does government financing and international assistance.

◆ **Trained professionals.** This research emphasises the fact that reconstruction should be approached in a multidisciplinary manner in order to achieve positive results. However, the lack of trained professionals (eg. policy makers, economic and physical planners, architects, engineers, managers, local leaders, psychologists, public works officials, credit administrators, builders, and intermediate personnel to assemble information on the population and its disruption) is often an obstacle for any reconstruction strategy. In our view there is a need to train professionals (particularly architects and planners) in the different aspects of reconstruction planning and management.

◆ **Manipulation.** During war, central governments use different techniques to lobby the people around their policies and to ensure that propaganda messages have reached everyone. The objective is to achieve government policy regardless of any hardship imposed on the people. In reconstruction the objective is to bring benefits to the people suffering from war damage. In both cases the activity to publicise policies and recommendations is about manipulation. We, the outsiders are trying to change attitudes towards a direction which we prefer. We have to learn the skills of governmental manipulation which have become highly sophisticated, analyze and implement them with a greater feeling of responsibility. Unlike, central governments,

we have a responsibility to be realistic about our recommendations. We also have a responsibility to publicise the limitations and possible short-term hardships of our recommendations.

10.6. FUTURE RESEARCH

The principles embodied in the York Charter for Reconstruction After War constitute a proposal for the skeleton of a common philosophy of reconstruction after war. There is a need to explore in more detail some aspects of the Charter and its applicability. Some examples of topics for future research are identified below:

Topic 1. The Reconstructionist.

This study showed the importance of re-training professionals (architects, planners, engineers, etc.) in a multidisciplinary manner that corresponds to the needs of reconstruction after war. More research is needed to identify the best way of doing so, on a national and international levels. Also research can be directed towards education and raising public awareness, to see how is it possible to emphasize the moral values of human rights and their reflection on reconstruction. Education on reconstruction should be also targeted at the military. Soldiers and commanders need to see the long-term results of their actions. As a start, military education could address cultural issues.

Topic 2. Specific reconstruction recommendations domains.

This study suggested general inter-cultural reconstruction recommendations, based on a number of location-specific studies. More of such studies are needed with attempts to draw up specific domains. In this study, the Middle East (as a geographical, cultural and political) was identified as one such domain. There is a need to identify other domains which have relevance to reconstruction recommendations. There would be scope for classification in terms of other geographical zones, such as the Balkans, or Latin America. Alternatively there would be a scope for classification in terms of type of war: civil, national or international, etc. It is important to accumulate a number of such studies and then to compare the results.

Topic 3. Other reconstruction fields.

Although the focus of this study has been on physical settlement reconstruction,

It has attempted to do so in a realistic economic, social, cultural and political view. It is important for researchers from disciplines other than architecture to examine the specific issues of economic, political and social reconstruction that accompany the physical one.

Topic 4. Testing the recommendations.

Research is needed to test the above recommendations in specific and real situations. For instance, the initial examination of these recommendations by a group of Croatian planners and architects (November 1992) showed their relevance to their situation. However, there is a need to test them in the field and in a variety of countries, to see whether they could become an international philosophy.

Topic 5. International action towards post-war reconstruction.

The international community can and should play a major role in supporting national action in reconstruction after war, irrespective of political alliances. Further research is needed to identify ways in which technical and financial assistance can be best directed towards the reconstruction of settlements. Also the best ways in which the above recommendations and the reconstruction rights of the civilians can be safeguarded. The United Nations could play a significant role through its already established organisations and infrastructure, what is needed is a plan of co-ordination. The United Nations Centre of Human Settlements (UNCHS) could be a possible provider of such co-ordination, funded by the UNDP, World Bank, the recently established European Bank for Reconstruction and Development, etc.

Topic 6. The use of the media in reconstruction.

This study has touched on the role of the media in conducting war, a more comprehensive study is needed. More important is to find ways in which the media can be employed to serve the objectives of reconstruction. For instance, the international media are represented in almost all situations of civil and national wars, would it be possible to convince them to report on issues of reconstruction rather than exclusively reporting destruction? An international documentary film on the needs and prospects of reconstruction in a number of countries could be a good step towards raising international attention as to the importance of the issue.

Topic 7. Post-war reconstruction and the role of Non Governmental Organisations.

There is a need to investigate in more detail, ways in which the attitude of international NGOs can be changed and in which the skills of their aid workers can be improved to be able to better cope with a war situation. The aim should not be just to help people to survive the war but also to grow within themselves the seeds of recovery and reconstruction. Field workers should be equipped with the needed knowledge/skill to ensure: (1) higher performance, leading to better use of manpower and resources; (2) better understanding of the needs of those to be helped; (3) an increased awareness of personal safety; (4) smoother and more efficient intervention leading to a faster recovery and more appropriate social reconstruction; (5) a decrease in post-traumatic stress disorder amongst staff and survivors/refugees. A great deal of knowledge can be identified from the experiences of returning European volunteers and field workers, who have spent time in war zones.

APPENDIX ONE

GUIDELINES FOR AUTHORITIES RESPONSIBLE FOR THE
RECONSTRUCTION OF TOWNS AND CITIES DEVASTATED BY WAR

Chair: Edited by Ian Davis
Disaster Management Centre
OXFORD POLYTECHNIC

These Guidelines were developed by participants attending
the second workshop on SETTLEMENT RECONSTRUCTION AFTER WAR

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*Guidelines for the reconstruction
of towns and cities devastated by war.*

D E T A I L E D G U I D E L I N E S

PRINCIPLE 1: IT IS VITAL TO MAXIMISE LOCALLY AVAILABLE RESOURCES

* It is essential in any country that is economically exhausted by war, to develop reconstruction policies that maximise all locally available resources (i.e. labour, skills, building materials, including debris, institutions and leadership) in order to regenerate the economy and reduce the costs of imported goods and services.

1. *Reconstruction is only part of resettlement.*
2. *You cannot resettle people. They must resettle themselves.*
3. *You can do a lot to help people resettle themselves - provided you restrict your assistance to those jobs they cannot do for themselves.*
4. *Too much relief is the enemy of resettlement.*

Otto Koenigsberger

A distinction must be drawn between the necessity for decentralised preparedness planning and the equal necessity for decentralised implementation at the local level. Sectoral and ministerial conflicts threaten effective policies. If decision-making at local levels is taken to central government, there is a weakening of the authority of local officials centralisation also results in both human and material assistance flooding into the area from central sources, thus reducing the opportunities for the revival of the local economy, or for local officials to take responsibility for their own structures.

Yasemin Aysan and Paul Oliver

1.1 Centralisation and the Local Community

Whilst the centre will have a key role to fulfil in reconstruction planning, it is important to note the dangers of over-centralisation of power and decision making.

The local community within overall regional development strategies and its administration should exercise power over the decisions which will effect them. Governments will be wise to accept this principle which is in their own interests.

1.2 Scales of War and Reconstruction

Normally States wage wars, but it is left to the affected communities to recover and in some instances rebuild.

Therefore the character and scale of war needs to be met with a matching character and scale of reconstruction.

For example, a war may be a skirmish or tribal feud - and recovery will probably be a local response, or it may be conflict between two countries, or an international war with multiple countries involved. In such situations a foreign country may (as in the case of the U.S.A. after World War 2) provide extensive reconstruction assistance.

1.3 Public Participation

In addition to the active involvement of the local population in the reconstruction process through, for example, self-build projects, people should also be consulted in decision-making. Inevitably this slows down the overall process but the social gains are likely to be well worth such minor hold-ups. The ultimate satisfaction of the occupants of a settlement with its final form is a vital relationship that will not occur with a fully professionalised reconstruction process. It is essential to plan around people and their perceptions and aspirations rather than expect people to fit in with predetermined plans.

Participation can occur at varying levels and stages from initial consultations to the evaluation of completed projects to give feed-back for subsequent schemes.

1.4 Recycling of Usable Debris

The recycling of debris is a vital matter with such categories as:

- architectural salvage, i.e. components (doors, windows, etc.)
- precious metals (i.e. lead pipes)
- rubble for hardcore
- reusable timber, etc.

The recycling can be a community endeavour involving youth brigades, scouts, etc., but must be supervised since these are security issues concerning theft opportunities.

1.5 Inventory of Resources Available for Reconstruction.

An inventory of available resources for reconstruction is the essential first step. It should include such matters as:

- building materials/technologies
- credit

*Guidelines for the reconstruction
of towns and cities devastated by war.*

- skills
- labour
- the role of women (see item 1.9 below)
- local leadership (These are vital, and many political leaders
(
- local institutions (are ignorant of such vital resources.
- assistance programmes
- training institutions

1.6 Skills and Technology

The assessment of resources proposed above should be related to quality considerations, i.e.

- what level of skills
- what type of technology, in terms of:
 - a) its appropriateness for the task in hand and
 - b) whether it is accessible or appropriable (i.e. usable) to the community in question
- the quality of the institutional structure of the Stage (both in terms of public and private institutions).

1.7 Mobilisation of Resources

Human resources are mobilised in various ways:

- by patriotism
- by concern for a new future for their family or community
- by good local and national leadership
- by religious concerns
- by economic incentives.

Normally a combination of the above will be needed.

1.8 Training Needs

Training of personnel at all levels should ideally be seen as a complementary element of reconstruction, i.e.:

- professional groups

- local leaders
- craftsmen
- builders
- government public works officials
- officials concerned with credit administration.

1.9 The Role of Women

This is a decisive factor in the mobilisation of local resources for reconstruction for two reasons:

- a) women traditionally play a vital role in building provision and maintenance in most countries (particularly for low-income housing)
- b) frequently wars have a decisive impact on the role of women in society - where they are obliged due to shortage of man-power to exercise tasks normally regarded as male preserves.

Therefore in post-war reconstruction operations women can be utilised to expand on this new expression of their role as they provide "basic needs" across the whole spectrum of society.

Their leadership role is a decisive factor in effective recovery.

1.10 "Un-met Needs"

When local inventories of resources are complete it will be possible to determine "un-met needs"; from such information a further resource analysis of international assistance can be undertaken.

1.11 The Local Community - the Primary Resource for Reconstruction

Throughout this section of the Guidelines people (or more specifically the local surviving residents of the area being rebuilt) have been regarded as the primary resource. The mobilisation of their collective energy, skills and support is the most important pre-requisite for reconstruction. But this resource must not be supplanted, neglected or by-passed. It will need to be carefully nurtured by civic and national leaders by means of encouragement, institutional support, and intervention where local conflict prevail, etc.

PRINCIPLE 2: EFFECTIVE RECONSTRUCTION WILL ONLY OCCUR WHEN IT IS COMPREHENSIVE IN ITS SCOPE.

- * The Planning Process will need to be wide-ranging, covering such issues as: Immediate Post-War Planning Activities; the Assessment of Needs and Damage; The Planning Process; Private and Public Roles in Reconstruction; Implementation of Reconstruction and Long-Term Planning Considerations.

... we must plan for the fine rebuilding of our war-damaged towns. We must see to it that our towns become pleasant, healthy and convenient places in which to live and work ... meanwhile, there is a great amount of preparatory work to be done, many difficulties to be overcome, innumerable details to be worked into an ordered scheme and much legislation to be drafted so that once we turn from war to peace we may begin building at once.

W.S.Morrison 1943

(First Minister of Town and Country Planning in U.K.)

... when you embark on reconstruction planning everyone you talk to blames this or that problem you encounter on the disaster. But gradually as you proceed it becomes all too apparent that at least 90% of the problems you are confronting were present well before the disaster occurred. All that has happened is that the disaster has acted as a surgeon's scalpel to expose these latent weaknesses in buildings, the urban fabric, the planning system or the administrative infrastructure.

George Nez

Principle 2 is an all-embracing issue that covers six themes. they will be covered in sequence as follows:

- 2.1 Immediate Post-War Planning Activities
- 2.2 The Assessment of Needs and Damage
- 2.3 The Planning Process
- 2.4 Private and Public Roles in Reconstruction
- 2.5 Implementation of Reconstruction
- 2.6 Long-term Planning Considerations

2.1 Immediate Post-War Planning Activities

- 2.1.1 The Balance of Relief to Reconstruction: There is a need for an Emergency Action Programme to return settlements to normality as quickly as possible and to restore public morale. But early decisions need to be taken to establish a balance between relief and reconstruction, in order to avoid wasting precious resources that will be needed in the long-term reconstruction process.

2.2 The Assessment of Needs and Damage

2.2.1. **Needs Assessment:** Information about the victims whose lives and property have been damaged or destroyed is an important input in reconstruction planning. Physical planning to restore the artifacts of a society should recognise the demographics (gender, age, employment and social status) of the survivors, of community members lost or disabled and their needs. Usually this is best achieved by direct survey carried out in close relationship with the damage surveys noted below. There can be the highly productive involvement of survivors in this planning process - especially if there is an opportunity to improve upon what has been lost (or even removed).

2.2.2. **Assessment of Survivors' Status:** Some of the population affected by the war will have been permanently displaced by the devastation of their environment. Some of those temporarily displaced may be needing a "staging post" prior to being returned. Others may "dig-in" to make a political stand (i.e. Palestinians in Gaza, etc.).

Therefore, a full appraisal of the affected population with subsequent monitoring is needed, prior to making physical reconstruction plans.

2.2.3. **Damage Assessment:** Prior to planning and implementation of the reconstruction programme it will be essential to undertake an assessment of the damage sustained. This should include building and infrastructure condition surveys to determine what should be retained, renewed and rebuilt.

2.2.4. **Assessment of Deficits:** Careful note should be taken of pre-war deficiencies in the housing stock or urban infrastructure, and ways to compensate for the lack of:

- a) building, and
- b) maintenance

during the war period. Such "losses" will need to be added to the losses resulting from the war.

2.3 The Planning Process

- 2.3.1. Overall Planning: An integral approach involving physical, social, economic and transport planning is essential. The reconstruction team must be multi-disciplinary, and include, amongst others, planners, architects, engineers, economists, landscape architects and social scientists. The close inter-relationships between land use, transport systems, economic development and cultural issues need to be recognised. Plans should be realistic and capable of being implemented.
- 2.3.2. Military Involvement in Reconstruction: The military possess expertise in engineering and infrastructure. Such skills and resources can be mobilised in reconstruction efforts.
- Some aspects of war planning will later be seen as reconstruction planning.
- 2.3.3. Flexible Planning: During reconstruction planning numerous matters will surface whilst the design process continues, and this presents the need for a high level of flexibility. Any rigid approach will be difficult to sustain in view of changing priorities and newly discovered needs. Another name for this flexible approach is "action planning" and experience would suggest that this is a more effective attitude than traditional planning approaches.

2.4 Private and Public Roles in Reconstruction

2.4.1. **Public Sector versus Private Sector Economic Inputs:** A vital question concerns how to determine an appropriate ratio between public and private investment, and what criteria to use?

Three factors need to be considered:

- 1) **Measuring the burden of the Public Sector:**
 - look into budget deficit and compare with other countries
 - look into the resources and organisational capacity of the Government
 - measure the public sector's effectiveness, using appropriate methods.
- 2) The provision of public goods and services must remain in the public domain (this is on account of the private sector's lack of interest in investment, in such provision and production).
- 3) The mixture of what is best suited for public and private sector investment is sector-specific. Certain sectors of reconstruction invite private investment more than others. On the other hand, the public sector is more effective in sectors which require large investments with low returns.

2.4.2. **Public Sector versus Private Sector Planning:** Given the scale of the task both the public and private sectors will need to be involved in the process of reconstruction.

It is wise for planning authorities, particularly within poor countries, to recognise that their role is limited and although they might see themselves as "goal scorers", they may be better regarded as "referees". It is unlikely that most societies have adequate finances to support a full reconstruction programme. Therefore much of the planning process will be to channel the resources of the private sector in the appropriate directions.

2.4.3. **Labour Intensive versus Capital Intensive Reconstruction:** The normal maxim for low-income housing development in Developing Countries - labour intensive construction in lieu of capital intensive construction - is a critical factor in reconstruction. This is due to two factors:

- firstly, employment generation of ex-servicemen and women
- secondly, the need to regenerate the damaged or dislocated economy.

However, there is also the need for partial mass-production of buildings or building components (i.e. roof trusses, windows, door frames, etc.). This need will be particularly important where speed of reconstruction is a high priority. The factory units that prefabricate such items could be partially staffed by disabled people (see Principle 9, page 00).

2.5 Implementation of Reconstruction

- 2.5.1. Implementation: Utilities and social infrastructure must be seen in parallel and be integrated in overall building reconstruction and economic development.
- 2.5.2. Institutional Framework: Planning and implementation are complementary concerns and must be seen as such from the outset. An effective authority is needed, with adequate skills and resources to implement the plan. This authority needs to represent both political and technical decision making. (See Guidelines under Principle 4, pages 00-00).
- 2.5.3. International Assistance: Reconstruction is such a costly venture that countries are tempted to acquire massive international loans to finance operations. In addition, authorities have often brought in foreign consultants and foreign building systems as part of a bilateral or multilateral aid project. All of these processes are a two-edged sword and all potential benefits need to be weighed against their costs in social, economic or cultural terms.

2.6 Long-Term Planning Considerations

- 2.6.1 **Urbanisation:** National settlement and economic development policies will determine the urban/rural balance of development. Reconstruction in rural areas is likely to be significantly different to that in urban areas. The focus of these recommendations is towards the urban context, but must take into account rural-urban migration.
- 2.6.2 **Pre-disaster Planning and Preparedness:** The process of disaster planning, in anticipation of a disaster, is well established for all natural disasters in many countries. However, there are very few countries in the world where this has been undertaken in anticipation of warfare. Normally pre-disaster planning against hostilities is primarily concerned with protection of people and property, and it is unlikely that detailed plans can go beyond this point to a consideration of reconstruction planning.
- 2.6.3 **Reconstruction and Development:** The conflict will have interrupted and severely retarded pre-war development plans and projects. Thus, reconstruction can pick up the pieces of such discarded plans and may incorporate those which remain relevant into reconstruction plans.

The later stages of reconstruction should be regarded as a developmental activity - but with certain reservations and distinctions as are noted in these Guidelines.

PRINCIPLE 3: THE TIMING OF ACTIONS IS CRITICAL

- * There are critical timing considerations in reconstruction that relate to the priority or sequence of required actions.

There are some problems of Government in which speed of decision is the great thing, in which it is essential that some decision, even though it be not the ideal decision, should be taken quickly ...

... you do well to ask yourself two questions. First - is the damage that would be done by some delay in reaching a decision more serious than the damage that a wrong decision would entail? Second - is the material that is the subject of your deliberation such that a decision found to be defective in practice can readily be amended?

W.S. Morrison, 1943

3.1 When to Reconstruct?

There are two options:

- A as damage occurs during warfare, rebuild and repair - to maintain accommodation and strengthen public morale;
- B don't rebuild during hostilities, since there is a risk of "double reconstruction" as earlier actions are further damaged or destroyed.

(Option B is normally the best course of action - but temporary repairs should be effected).

3.2 Returning Residents

Reconstruction needs to be timed to relate to when people have returned to their locality following war-evacuation or from military service.

3.3 Incentives to Encourage the Return of Residents to Their Locality

Some form of incentives may be needed to attract families back to their original settlements, since they may have become accustomed to a new environment that is not scarred by damage and does not lack essential services.

3.4 Planning During the War

Wherever possible reconstruction can be planned during the war, ready for rapid post-war action. Speed is essential to capitalise on political will and funding provision that will become a declining resource over time.

3.5 Phases of Shelter Reconstruction

Frequently shelter reconstruction policies go through a 1-2-3-sequence:

- 1 = tents or temporary shelter
- 2 = prefabrication
- 3 = permanent reconstruction.

Attempts should be made to avoid the prefabricated option on cost grounds, since this is essentially a "double reconstruction". So the best course of action will be 1 and 3, but this implies the possibility of rapid reconstruction.

PRINCIPLE 4: DO NOT WAIT FOR POLITICAL AND ECONOMIC REFORMS

- * If reconstruction is delayed to await political or economic reforms there is a risk of losing the momentum for action that exists in the immediate post-war situation. However new legislation is normally essential but this can probably be introduced in parallel to implementation.

Waiting for - or linking resettlement with major economic or political reforms, such as legislative changes in land tenure, taxation on local democracy means losing the impetus for change which exists in the immediate post-disaster period.

Otto Koenigsberger

It is essential to base reconstruction plans on the existing social-political situation, not on wishful thinking of what you would like it to be - realism is the first priority.

Paul Stollard

4.1 Legislation

New laws or enabling legislation will probably be needed to facilitate reconstruction.

4.2 Expropriation

The expropriation or compulsory purchase of sub-standard property, or property with unclear land titles, or property that is in the way of changes in road layouts, may be a vital necessary tool.

This may be particularly appropriate where rents have been frozen at totally unrealistic levels, thus not providing sufficient income for owners to maintain their property.

4.3 Compensation

Appropriate compensation payments for those who suffer losses in families, livelihoods, household assets, buildings, vehicles, livestock, etc., will need to be established before reconstruction commences. Fair compensation can be regarded as a pre-condition for reconstruction.

4.4 Agencies to Manage Reconstruction

It may be necessary to legally establish special reconstruction agencies, especially where the scope and complexity is too great to be tackled by local authorities. Such development agencies should have executive powers and their own budgets, and should comprise local and governmental representatives as well as experts co-opted for their professional experience.

4.5 Efficiency versus Equity

Authorities will need to balance two concerns that may often be in conflict, namely the concern for national growth (efficiency) and equity of distribution of resources in reconstruction (equity).

4.6 New Administrative Systems

In organising a reconstruction programme many countries have formed an entirely new layer of government administration. On the surface this kind of specialised "task orientated" agency may seem an effective measure, however, in reality it is probably advisable to link the ?????

4.7 Cash Resources

It must be recognised that the maintenance of cash resources is the pre-requisite to reconstruction planning.

These sources include:

- domestic funds
- foreign currency.

A different strategy to locate and maintain money supply from both sources is essential.

4.8 Economic Factors

Prior to physical reconstruction of buildings and infrastructure there may be a massive advantage in rebuilding the damaged or dislocated local economy - industry/markets/agriculture/commerce, etc. Once this has recovered finance will begin to flow within the economy and thus aid reconstruction on a wider range of levels.

However, in considering this priority it is important to note:

- a) That there are critical "life-line" elements that will need to be addressed simultaneously.
- b) Not all the above sections are as complex or as costly to reinstate. For example, agriculture is a simpler task than industrial reconstruction.
- c) Rebuilding different sectors will need to be:
 - 1) put in order of priority of importance;
 - 2) put in a time sequence.

PRINCIPLE 5: THERE ARE LIMITED OPPORTUNITIES TO REFORM THE DESIGN OF BUILDINGS AND SETTLEMENT PATTERNS IN RECONSTRUCTION.

- * There are obvious unique opportunities for reform in recovery and reconstruction actions, but these must not become "utopian dreams" in view of exceedingly tight economic constraints.

It was expected that post-war reconstruction would give the Modern Movement enormous impetus; in fact that from the first ten years of reconstruction there would emerge a Europe transformed - at least as regards the newer parts - from the scene of confusion, arising from generations of conflicting aims and prejudices, into a scene adorned with a consistent, though perhaps a regionally differentiated, standard of architecture deserving the adjective 'modern'. Somehow that has not happened. The confusion is still with us. The products of ten years of rebuilding are little different to look at from what they would have been before the war; at least that is the impression that the traveller gets everywhere in Europe

J.M. Richards 1955

The immediate post-disaster period provides the planning (reformer) with two unique advantages:

- a. *Survivors are ready to accept change;*
- b. *The public is ready to provide funds.*

On the other hand there are strong forces against change:

- a. *Frightened people and, even more, frightened authorities are wary of change. Reform needs courage.*
- b. *Pre-disaster conditions, however bad, appear to victims in a rosy light.*

Otto Koenigsberger

5.1 Relocation Planning

Numerous attempts have been made to relocate entire communities following disaster impact. There are various reasons for this, such as the desire for a "green field" site rather than cope with rebuilding in the midst of dereliction and building debris. However, the experience of communities that have been relocated is fairly negative. There are social reasons for this which include the desire for continuity, but there are also a wide range of practical issues to be noted. These include problems of land ownership, existing investment in a settlement (it may appear that all has been destroyed but there are likely to be underground services, roads, etc. which may be restored). The only success stories of relocation planning appear to be on rather a small scale where sections of a community have been moved. But on balance the total transplant of an entire settlement should not be regarded as a viable option.

5.2 Utopian Expectations

Residents and authorities may have aspirations and expectations that are utterly unrealistic for:

- rapid reconstruction
- the standard of reconstruction
- new amenities
- "new houses for all", etc.

Authorities will need to continually inform the public they serve as to the "art of the possible", given stringent economic conditions. But plans should allow for subsequent improvements as resources become more plentiful.

PRINCIPLE 6: IT IS VITAL TO PRESERVE THE CULTURAL HERITAGE IN RECONSTRUCTION

- * To re-establish the community's identity and provide cultural continuity, it is imperative to preserve or rebuild selected damaged or destroyed cultural landmarks.

The restoration of a familiar environment goes a long way to make disaster victims feel settled.

Otto Koenigsberger

A basic error of the professional community is to assume implicitly that formal studies, plans and designs are requirements for reconstruction. There is already a plan for reconstruction, indelibly stamped in the perception of each resident - the plan of the pre-disaster city. The new studies, plans and designs compete with the old.

Robert Kates

6.1 Cultural Landmarks

Special consideration should be given to the presentation or rebuilding of buildings, sculptures, civic places, street names, libraries, museums, religious places, memorials, etc., which have symbolic importance to the affected society. Such buildings and artefacts can provide a "collective memory" to help the community to relate to their rebuilt settlement.

PRINCIPLE 7: IT IS ESSENTIAL TO INTRODUCE SAFETY MEASURES IN RECONSTRUCTION

- One of the key reforms will be to minimise or mitigate future damage from wars or other forms of disaster in urban planning and building design.

Traditionally, mitigation has concentrated on human settlements and man-made buildings and structures, with the focus on development of land-use regulations, settlement planning, the development of techniques for strengthening buildings and structures, and the development of building codes to encourage or enforce use of these building techniques.

A broader and more progressive view of mitigation has evolved in the last decade. For example, efforts can be taken to diversify economies and to balance and place jobs and income-producing resources strategically so as to reduce the likelihood that all would be affected in a disaster. Economic buffers such as insurance have received new emphasis.

Fred Cuny

7.1 Safety Factors - Regarding War Risk

The incorporation of mitigation measures into post-disaster reconstruction is an obvious subject for any prudent planning of a new settlement. However, the assessment of risk against natural disasters can be infinitely more precise than against warfare. For example, earthquake forces are unchanging in their nature and the building process is slow to change over time, therefore fairly accurate damage predictions can be made. This is not the case with warfare since military systems are continually changing and as these weapon systems develop rapidly, there is a mismatch with the very slow process in the renewal of building stock. Therefore, apart from some elements of dispersal planning and the overall location of settlements in particularly vulnerable border situations (see next item 7.2), there is not a great deal that can be done to plan a city against attack from modern weapon systems.

7.2 Safety in Sensitive Border Zones

The regional development/reconstruction of sensitive border zones between potentially hostile neighbours requires specific attention in terms of public safety. On the one hand politicians may see the need to populate such areas to avoid future incursions, on the grounds that empty land is a clear invitation for invasion/land grabbing. But against this strategic consideration, there is the conflicting demand to avoid placing populations and economic assets in a situation of unacceptable risk.

7.3 Air Raid Shelters

Authorities in Iraq and Lebanon have incorporated air raid shelters with garages in the basements of buildings as a general legal requirement for new building. This is a prudent use of resources - but it has to be recognised that such provision is not a protection against missile impact.

7.4 Safety Factors - Regarding Natural Disasters

The opportunity to rebuild should always take note of ways to build structures and infrastructures to withstand natural disaster forces, i.e. earthquakes, high winds, flood risks. Such mitigation measures will affect the siting, form, material selection, structural design and planning of buildings.

7.5 Safety Factors and Limited Resources

Within many countries with limited resources extensive physical mitigation measures as noted under item 7.2 may be economically or politically impossible. Therefore, in such situations it will be necessary to place emphasis on preparedness/civil defence planning (i.e. non-structural safety measures).

7.6 Fire Safety

Special care will be necessary to ensure that normal structural/fire safety standards are satisfied, given the scale of building work and the risk of relaxed standards of supervision and enforcements.

PRINCIPLE 8: IT WILL BE POSSIBLE TO ADAPT SECTIONS OF THE WAR ECONOMY TO RECONSTRUCTION.

- * It will be possible to adapt the technology or production capacity of the "war economy" into one that may produce essential building or infrastructure components needed in reconstruction, thus avoiding mass unemployment through factory closures and shortages of key building elements.

The method which alone makes possible the construction of large numbers of aircraft and of other machines of all kinds provides a lesson which industry cannot ignore it does not mean, for example, that its adoption would force us all to live in metal houses. Another important advantage of extending the application of factory methods to building is that this extension automatically increases the building capacity of the country.

John Madge 1945

8.1 Production of Armaments versus Reconstruction Products

Whilst there may be opportunities for the factory production of war related items to be adapted to the production of items/building components needed in reconstruction, there is the key issue of whether a respected and comprehensive peace-settlement exists. If this is not the case, then war production for further hostilities can undermine the use of factory production resources for reconstruction purposes.

"Reconstructionists must also be peace activists" - otherwise resources may be diverted from recovery towards the defence sector.

PRINCIPLE 9: THE NEEDS OF HANDICAPPED PEOPLE MUST BE CATERED FOR.

- * Special attention is needed in rebuilding to satisfy the specific needs of those who have been wounded in mind or body during hostilities.

Despite all measures which may be taken, some people injured in disasters will in fact become permanently disabled. They therefore stand in need of rehabilitation: not in the sense of fully restoring them to their former condition, for that would be impossible, but so that through care, treatment and training they may come to live as normal a life as the disability allows, and not, except in the most extreme cases, become a charge upon the society in which they live.

UNDRO

9.1 Rehabilitation within Reconstruction

Special attention should be given to the families of those who were killed and to those people who have been handicapped by the war. Rehabilitation and care of the handicapped should be given special consideration. Buildings and the entire new settlement will need to be adapted for use by a larger number of severely handicapped people. Special inventories of the percentages of the handicapped will be necessary.

9.2 Reconstructing Lives before Buildings

Whilst these Guidelines are concerned with the physical reconstruction of an entire settlement, it is important to recognise that shattered lives need to be reconstructed and that this "micro-process" is an essential part of the "macro-process". Psychologists, psychotherapists, health personnel, the caring professions and religious leaders have a key role in this therapeutic activity.

PRINCIPLE 10: RECONSTRUCTION SHOULD BE REGARDED AS THERAPY

- * It is vital to recognise the therapeutic need to closely involve war survivors (or victims) in rebuilding activities wherever this is possible. They should be regarded as active participants in the planning and implementation of reconstruction rather than being mere spectators of others' actions.

Too often it happens, especially in poorer countries, that large numbers of able-bodied men stand idle, living on relief, while outsiders get busy on reconstruction. Not only is such a happening demoralising to the able-bodied, but it wastes much needed resources.

George Atkinson

10.1 Therapeutic Readjustment

The affected population needs to become active participants in the process of reconstruction rather than onlookers. This is essential to maximise resources of skills and labour, but also to assist those who need work as a process of therapeutic readjustment, in order to restore their self-esteem and their place in society.

PRINCIPLE 11: KNOWLEDGE NEEDS TO BE DOCUMENTED AND DISSEMINATED

- * An information and education programme which draws on the experience of other countries can be of great help to a society, to cope with their problems of recovery and reconstruction.

Our Agency is full of activists, nobody here likes writing, even less storing their papers since we are badly understaffed and generally too busy with our work. So in consequence we tend to reinvent the wheel two or three times a week

Anon

11.1 The Documentation of Survival and Coping Abilities

People are more resilient than buildings. After wars oral history interviews can gain valuable insights on the way individuals and communities coped or survived the war, and how they were involved in decisions on reconstruction.

11.2 Education/Training and Public Awareness

In order to gain the maximum support of the population in the reconstruction process, it is essential to place a major emphasis on the development of human resources by means of information, training and educational programmes. They could focus on reconstruction strategies, constraints, priorities, sequences, links to development, the "culture" of recovery, etc. (i.e. taking up the issues raised in these Guidelines).

11.3 Evaluation of Reconstruction and its Dissemination

Just as these Guidelines result from the documentation of the experience of recovery, it is essential to document and publicise the process of reconstruction. Such reports need to be candid appraisals that note the failures as well as the successes. Ideally they would be best produced outside of Government control, by independent observers with access to key data.

In the late 1980's some previously classified material that relates to World War II and recovery actions is only just becoming available for public access. Such Governmental secrecy can seriously retard the "lesson-learning process".

APPENDIX TWO

THE YORK CHARTER FOR RECONSTRUCTION AFTER WAR

INTRODUCTION

'Prevention is better than cure'; a basic rule that applies to war and the subsequent rebuilding. We would like to think that avoiding wars is everyone's aspiration, but hopes raised by a peace initiative in one part of the world are soon dashed by a new conflict somewhere else.

During and after war, citizens, local and central governments as well as international and non governmental organisations (NGO's) will embark on the difficult task of reconstruction and the return to normal life. There appears to be little or no systematic understanding of this task and its requirements.

Although it is the citizen who is required to rebuild his/her shattered life, set up home, restart work and send their children to school under the most difficult conditions; he or she is the last to be consulted and involved in reconstruction policies. Consequently official preoccupation with the technical aspects of rebuilding often overwhelms the genuine needs and concerns of the citizens, resulting in the disaster of war being followed by the disaster of reconstruction.

AIM OF THE CHARTER

The aim of this Charter is to make the reconstruction policies of governments more responsive to the needs of their people. This Charter does not offer ready solutions, it raises strategic issues that go beyond conventional practice and need to be considered when planning for reconstruction.

Therefore Local Governments and NGOs are expected to formulate their own reconstruction guidelines in the light of the principles embodied in the York Charter.

DESTRUCTION

War damage goes far beyond the easily observed human and material losses. Social, cultural, psychological and environmental consequences of armed conflicts are enormous and can take decades to recover from. In many cases it is impossible to do so. Reconstruction measures should be planned to take greater account of all kinds of damage.

Environmental consequences of war are not necessarily restricted to the countries involved in the conflict, they could easily become regional or even global catastrophe.

There is an 'opportunity cost' for the accumulative results of war. Resources used in the prosecution of a conflict and on the subsequent necessary reconstruction could have been directed into the development and greater welfare of the people.

THE 60 RECOMMENDATIONS OF POST-WAR RECONSTRUCTION **Reconstruction policies and strategies.**

A. Reconstruction policies and strategies.

- A.1. ■ Countries involved in armed conflicts should establish as a matter of urgency, a national strategy on the reconstruction of war-damaged settlements, embodying the sheltering of refugees and displaced people, and other related economic and social activities within their national territory.
- A.2. ■ A national settlement reconstruction strategy should be an integral part of a national economic and social post-war development policy. Governments should attempt to review and adjust their pre-war development policies, interrupted by the war, rather than drawing new reconstruction and development plans.
- A.3. ■ A national reconstruction strategy should have clear goals and objectives, concentrating on key issues and provide basic direction for action.
- A.4. ■ The reviving of war stricken settlements must receive higher priority in the allocation of available resources, which ought to be identified, mobilised and carefully distributed between the various components of the reconstruction strategy, in particular human capacities.
- A.5. ■ Any national reconstruction strategy must be explicit, comprehensive and designed according to a realistic appreciation of the dynamics of reconstruction. Rebuilding settlements should be seen as a complex, multidimensional process. Thus policies have to be flexible enough to accept alteration and adjustment based on continuous genuine feedback from the field.
- A.6. ■ Governments should monitor and continuously evaluate the conditions of the reconstructed settlements as integral part of the reconstruction strategy.

B. National economic aspects of reconstruction.

- B.1. ■ It is crucial to recognise the fact that unlike most natural disasters, war affects the economy of the entire country. Thus, post-war reconstruction is dependent on the state of the national economy following war.
- B.2. ■ The reconstruction of the economy is a pre-requisite for physical reconstruction (housing, infrastructure, etc.). It is important to recognise that by supporting the economy, governments will be producing wealth that will initiate recovery initiatives, thus taking pressure off the public sector.

- B.3. ■ Post-war governments will be faced with the task of creating sound economic policies that are directed towards generating higher public revenues, redirecting the wandering cash towards more productive use, encouraging investment, creating jobs, and undertaking redistributive reforms.
- B.4. ■ It is important to counter the intensification and acceleration of economic tendencies operative during the war, into the post-war era.
- B.5. ■ Before the preparation and implementation of post-war reconstruction plans, the general economic ground must be surveyed afresh, and agreements as to what is needed and how it should be planned for, must be accomplished.
- B.6. ■ One of the major requirements for a smoother return to economic activity in the post-war era is, a careful control of the monetary system to prevent unemployment and high inflation. This objective could be achieved through, both, taxation (on those who benefited from the war) and incentives (to those who lost).
- B.7. ■ Experience gained from reconstruction after war indicates that the most healthy, most simple and practical way of creating quick employment is activating the construction industry which includes the production of building materials, contractors and builders.

C. Social and psychological aspects.

- C.1. ■ People are the principal factor in recovery and reconstruction. During war the survival of people must be induced, facilitated and planned as the foundation of reconstruction and development.
- C.2. ■ Following survival a number of steps have to be taken in order to enrich and improve the society and its ability to contribute to the reconstruction efforts. Thus the whole reconstruction process should be seen as a means by which exalted human values should be enhanced. As such the government's responsibility does not end with reconstruction of the city's physical structures and/or infrastructural system.
- C.3. ■ There are a number of social needs that would have developed exclusively due to the war and its consequences. Some urgent policies, concepts, schemes and institutions have to be formulated to provide the necessary support to those who have suffered in the war.
- C.4. ■ Dealing with refugees is another important aspect of reconstruction and social development. Policies that make the refugee population and other war-inflicted groups become used into the victim's mentality and lead to their increased dependency on the state must be avoided. Rather, they should be provided with start up capital, technical assistance, and social support to begin a new life.
- C.5. ■ Conflicts introduce levels of psychological stress which often inhibit rational or responsible behaviour by populations. Good will disappears in time of

conflict. Memory and interest in the past may be lost or seen as undesirable. Social behaviour may breakdown and introduce consequent destructive actions, such as looting.

D. Public participation.

- D.1. ■ Public participation in decision making is a human right, a political duty and an instrument essential for post-war reconstruction. It has to be understood and respected internally and never imposed by an outsider or an international agency. Thus it is important to work towards strengthening local institutions and encouraging positive governmental attitudes towards participation.
- D.2. ■ World-wide experience suggest the existence of a number of linkages between involving the local population and resolving issues that are exclusive to post-war reconstruction.
- D.3. ■ Public participation as a 'means' of improving reconstruction policies should be encouraged to constitute an integral element in the planning, implementation and evaluation of such policies as well as in the future management of the reconstructed settlements.
- D.4. ■ It is clear that participation embodies a number of benefits and limitations to the reconstruction process. Thus, the mode, nature and extent of public participation must respond to the newly emerging social, political, cultural and economic needs of post-war societies and states.

E. Settlement reconstruction planning

- E.1. ■ A broad-based settlement planning system seems indispensable for the post-war reconstruction. Otherwise, the risk of chaos, duplication, and wasteful use of scarce and valuable resources would be high. Such system should occur within a general social and economic reconstruction framework.
- E.2. ■ A purely planned approach to reconstruction is neither possible nor desirable as it encourages bureaucratic red tape and inflexibility no matter how decentralized it might be. Similarly, it is unrealistic to expect the market mechanism to reconstruct on its own.
- E.3. ■ Planning for reconstruction and managing resources and implementation without a proper assessment could lead to a waste of resources and long-term social problems within the community.
- E.4. ■ Reconstruction planning should encourage the return of the population to their deserted settlements. Such return indicates a healthy start for the reconstruction process.
- E.5. ■ Settlement reconstruction planning should attempt to achieve a balance, between retaining what was good in a settlement with a cultural or symbolic value and at the same time using reconstruction as an opportunity to improve the built environment. However, as far as possible reconstruction should

attempt to reflect regional and local characters based on indigenous values.

- E.6. ■ Planning for the reconstruction of rural settlements should aim to stimulate their agricultural economic base.
- E.7. ■ Temporary settlements for refugees and/or displaced people should, as far as possible be avoided. Buildings vacant during the war could be used to temporarily accommodate them (eg. hotels, schools, etc.).
- E.8. ■ Careful relocation of settlements may become necessary for security considerations, or because of total devastation. Still relocation imposes long-term economic, social, cultural and psychological burdens on the people, and should be avoided as much as possible.
- E.9. ■ Settlement planning should enable and encourage social, cultural and religious integration between different ethnic and religious groups.
- E.10 ■ Despite international conventions (such as the Hague 1954) cultural heritage properties are continuing to be targeted in wars. Hence, reconstruction should be aimed, as far as possible to counter such losses. Conservation efforts should be focused where the most important historical and architectural buildings and sites are at risk, not to restore them, but to stabilise their condition, paying particular attention to the places where people can live and work.

F. Institutions and management

- F.1. ■ The designation of institutions responsible for the formulation of reconstruction policies at national, regional and other appropriate levels is crucial. It is important that such institutions are based on local experience and enjoy the direct support of the highest political level.
- F.2. ■ Reconstruction institutions should play a coordinating role between national government departments responsible for areas of social and economic development: Ministries of housing, environment, education, health, transport, etc.
- F.3. ■ It is more desirable to allocate reconstruction planning responsibilities to already well established institutions; such as Ministry of planning. However, when this is not possible and a new institutions have to be established, they should be flexible enough to adapt to changing circumstances, and should not outlive their original purpose.
- F.4. ■ Institutions should be designed to encourage and facilitate the involvement of the public in the planning and implementation of reconstruction through a partnership. They should be able to enter into co-operative and collaborative arrangements with other public and private organisations and explore innovative approaches for management, giving more responsibilities to the local communities.

- F.5. ■ For institutions to act effectively they need four basic requirements: (1) authority to act; (2) competence to act; (3) resources to act and (4) acceptance by the war-affected community.
- F.6. ■ Separate financial institutions and adequate means are necessary to meet the requirements of reconstruction.
- F.7. ■ Mechanism should be established for the future management of reconstructed settlements. This is best handled by local organisations dominated by local inhabitants.

G. Shelter, infrastructure and services

- G.1. ■ The political pressure on post-war governments to be seen implementing physical reconstruction is appreciated. However, the badly needed shelter, infrastructure and services should not be entirely used as a political propaganda exercise. People have the right for proper physical reconstruction.
- G.2. ■ Shelter, infrastructure and services should be planned in an integrated way and provided in a sequence responsive to the real needs of the war-devastated communities.
- G.3. ■ To be able to provide services and infrastructure to war damaged areas, access to and within settlements has to be secured and civilian safety guaranteed. This includes mine clearing and the demolishing of unstable buildings.
- G.4. ■ The reconstruction of shelter, infrastructure and services must be geared to achieving the over-all objectives of national reconstruction strategy.
- G.5. ■ Recognising that the post-war needs for shelter, infrastructure and services are nearly always greater than the capacity of public authorities to provide them. The role of central government ought to be concentrated on providing infrastructure and needed services, while its role in housing provision should be mostly preparative [i.e. mobilizing and directing the needed resources towards enabling housing construction by the private sector and the people themselves].
- G.6. ■ Conventionally, it was thought that speed of construction could only be achieved through the application of modern building technologies, prefabrication and mass production. This is not necessarily true.
- G.7. ■ Enabling people to house themselves individually and/or co-operatively should be encouraged and programmes and instruments to do so should be devised.
- G.8. ■ The crucial importance of the construction industry should be recognised and the industry should be given the political, financial and technical support it requires to meet the national reconstruction objectives.
- G.9. ■ Realistic appreciation of differences between urban and rural settlements. Such appreciation should be reflected on all decisions concerned with the

provision of shelter, infrastructure and services.

- G.10. ■ Realistic standards for shelter, infrastructure and services should be the bases for any reconstruction policy. Standards should be based on what is available, affordable and culturally acceptable.
- G.11. ■ Investing directly in permanent housing proved to be the most sensible thing to do. A first step should be to utilise buildings in need of minimum repair. Of course in some cases, where the situation is such that it is impossible to wait, (i.e. people can not be sheltered anywhere else) and that it is necessary to utilize temporary shelter either for climatic or even political reasons a limited number of temporary housing units can be provided.
- G.12. ■ Post-war infrastructure (transportation and communication) policy should take into consideration any new economic, administrative and/or defensive role played by settlements in war zone.
- G.13. ■ Safe water supply and hygienic waste disposal should receive priority in reconstruction of infrastructure.
- G.14. ■ In the reconstruction of settlements the quality of the environment must be preserved. Pollution should be prevented by minimizing the generation of wastes; wastes which can not be avoided should be effectively managed.

10.3.H. Legislation and issues of land.

- H.1. ■ Proper post-war legal framework (in terms of new laws and enabling legislation) for policies to be implemented and in some cases to be enforced is crucial. Such framework for reconstruction legislation must establish clear and realistic direction, while safeguarding civilian rights.
- H.2. ■ Compensating civilians for the loss of their property is one of their basic rights. A legal framework has to be established as to who should be compensated and in what form. It should be noted that direct payment is not necessarily the best and only way of compensating people for their losses.
- H.3. ■ In the aftermath of war devastation, land is often the only surviving resource, the proper management of which could become a great asset to reconstruction by individuals and the nation.
- H.4. ■ Comprehensive knowledge of pre-war land use and patterns of land ownership is a basic requirement for both urban and rural settlement reconstruction planning.
- H.5. ■ Pre-war patterns of ownership rights and inheritance should be respected as far as they do not pose a threat to public welfare.
- H.6. ■ Land owned by the government should be used, as a first option, wherever

land is needed for resettling communities, providing infrastructure and services. Acquisition of private land for such purposes should be avoided as much as possible.

- H.7. ■ It is crucial to anticipate urban land speculation and to have the appropriate measures to recapture the rise in land values due to reconstruction and change in land use.

The Entitlements of Civilian non-combatant suffering from war damage to his/her physical environment.

- The restitution of his/her property or the equivalent.
- The right to recover his/her personal possessions from an abandoned home.
- The right to an appropriate temporary shelter.
- The right to be consulted about the form of reconstruction.
- The right to draw on skilled help in reconstruction where needed.
- The repair and reconstruction of his/her dwelling in an ethnically sympathetic manner to standards no less than previously and with appropriate hygienic facilities.
- The re-establishment of the local community in a manner no less adequate than before.
- The provision of a means of livelihood and workplace.
- The provision of essential community facilities in terms of medical support, water and fuel supplies, drainage and waste disposal.

SUPPORT FOR THE CHARTER

In order that more planning authorities all over the world join this effort of improving reconstruction policies, the York Workshop calls upon governments, international agencies and NGO's to use the charter as a basis for considering *Settlement Reconstruction following War*.

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