

I N T E R N A L M I G R A T I O N

A N D

R E G I O N A L P O L I C Y I N I R A Q

(TWO VOLUMES)

V O L U M E II

W A L E E D A B B A S H I L M I

A Thesis submitted to the University of Sheffield
for the Degree of Doctor of Philosophy

DEPARTMENT OF TOWN AND REGIONAL PLANNING

JUNE 1978

INTERNAL MIGRATION
AND
REGIONAL POLICY IN IRAQ

VOLUME II

PART IV THE REVERSE MIGRATION STRATEGY -
"SHIHAMYA PROJECT" - A CASE STUDY

PART V CONCLUSIONS: MIGRATION CONTROL POLICIES
AND STRATEGIES

PART VI APPENDICES AND SELECTED BIBLIOGRAPHY

VOLUME II

TABLE OF CONTENTS

	<u>Page</u>
<u>PART IV</u> <u>THE REVERSE MIGRATION STRATEGY - "SHIHAMYA PROJECT"</u>	
<u>A CASE STUDY</u>	
4.1 THE REVERSE MIGRATION STRATEGY IN THE CONTEXT OF PREVIOUS GOVERNMENTAL ACTIONS ON MIGRATION CONTROL	572
4.2 THE REVERSE MIGRATION STRATEGY DEVELOPMENT	573
4.3 THE REVERSE MIGRATION STRATEGY: PHILOSOPHY AND OBJECTIVES	576
4.4 THE REVERSE MIGRATION PROJECT: LOCATION SELECTION CRITERIA	584
4.5 THE EVALUATION OF THE SELECTION OF THE PROJECT LOCATION	590
4.5.1 The Selection of the Subregional Location of the Project	590
4.5.2 Project Location Characteristics within the Subregion of Wasit	592
4.5.3 Project Area: Description and History	598
4.6 THE SELECTION OF PARTICIPANTS	602
4.7 PROJECT'S STARTING AND INITIATION STAGE	609

	<u>Page</u>
4.8 GENERAL PROJECT'S INVENTORY	620
4.8.1 Shihamya Project Land Use	621
4.8.2 Type of Agricultural Systems	621
4.8.3 Livestock on Project	624
4.8.4 Agricultural Machinery on the Project	624
4.8.5 Buildings on the Project	625
4.8.6 Social Facilities on the Project	626
4.8.7 Project's Personnel	626
4.8.8 Organisational Set-up on the Project	627
4.9 THE PROJECT'S RESEARCH SURVEY	631
4.9.1 Survey Objectives	631
4.9.2 Survey Methodology	632
4.9.3 Survey Data Processing	634
4.9.4 Analysis of Survey Data	635
4.9.4.1 The Theoretical Base for Analysis	635
4.9.4.2 The Variables Analysis for the Project Research Survey	640
I Variables Totals Analysis	647
II Participants' Income (Performance) Cross- tabulation	757
III Stability Cross-tabulation	793
IV General Purpose Cross- tabulation	827

	<u>Page</u>
4.10 PROJECT OPERATION - OBSERVATIONS AND COMMENTS	834
4.10.1 The Profitability Issue	834
4.10.2 The Technocrats versus the Politicians	836
4.10.3 The Three Years' Experience - A Critical Analysis	839
4.10.4 Project's Evaluation Reports	861
4.11 SHIHAMYA REVERSE MIGRATION PROJECT CASE STUDY - SUMMARY OF FINDINGS	868
4.11.1 Findings of the testing of the Project Location Criteria	868
4.11.2 Findings of the testing of the Project Experiment Applicability as a Prototype for Future Similar Projects	869
4.11.3 Findings of the testing of the Project Participants' Selection Criteria	871
4.11.4 Project's Attainment of the Government Main Objectives	879
4.11.5 Project's Operations - Summary of Findings	882
4.11.6 Final Comments	884

	<u>Page</u>
<u>PART V</u>	
<u>CONCLUSIONS: MIGRATION CONTROL, POLICIES AND STRATEGIES</u>	
5.1 MAJOR INDICATORS	891
I The Agricultural Situation	891
II The Migration Pattern	893
III The Problems of the Future	895
(a) The Capital Immigration, the Southern Region and Central Region Outmigration: Future Prospects	895
(b) The Northern Region Migration Pattern	896
5.2 MIGRATION MOVEMENT CONTROL MEASURES	897
5.2.1 Constraints	897
5.2.2 Options	899
I Option I: Growth Poles and Industrial Development Strategy	899
II Option II: Agricultural Development Strategy and Rural Centres Growth	899
5.2.3 Migration Movement Control Measures (Details)	904
I Immediate	904
(a) Direct (Migration Pattern)	904
(b) Indirect (Agricultural Sector)	906
II Short Range	907
(a) Direct (Migration Pattern)	907
(b) Indirect (Agricultural Sector)	909
III Long Range	915
(a) Direct (Migration Pattern)	915
(b) Indirect (Agricultural Sector)	917
5.3 CHARACTERISTICS OF THE PREFERRED STRATEGY	919

	<u>Page</u>
<u>PART VI</u> <u>APPENDICES AND SELECTED BIBLIOGRAPHY</u>	922
APPENDIX NO. I	X-1
APPENDIX NO. II	X-17
APPENDIX NO. III	X-107
APPENDIX NO. IV	X-152
SELECTED BIBLIOGRAPHY	X-187

Pages in this Part of the Thesis are
prefaced by "X" for differentiation
from the rest of the Thesis

PART IV

THE REVERSE MIGRATION STRATEGY - "SHIHAMYA PROJECT" -

A CASE STUDY

- 4.1 THE REVERSE MIGRATION STRATEGY IN THE
CONTEXT OF PREVIOUS GOVERNMENTAL ACTIONS
ON MIGRATION CONTROL

- 4.2 THE REVERSE MIGRATION STRATEGY DEVELOPMENT

- 4.3 THE REVERSE MIGRATION STRATEGY:
PHILOSOPHY AND OBJECTIVES

- 4.4 THE REVERSE MIGRATION PROJECT:
LOCATION SELECTION CRITERIA

- 4.5 THE EVALUATION OF THE SELECTION OF
THE PROJECT LOCATION

4.6 THE SELECTION OF PARTICIPANTS

4.7 PROJECT'S STARTING AND INITIATION STAGE

4.8 GENERAL PROJECT'S INVENTORY

4.9 THE PROJECT'S RESEARCH SURVEY

4.10 PROJECT OPERATION - OBSERVATIONS
AND COMMENTS

4.11 SHIHAMYA REVERSE MIGRATION PROJECT
CASE STUDY - SUMMARY OF FINDINGS

PART IV

THE REVERSE MIGRATION STRATEGY

"SHIHAMYA PROJECT" * - A CASE STUDY

4.1 THE REVERSE MIGRATION STRATEGY IN THE CONTEXT OF PREVIOUS GOVERNMENTAL ACTIONS ON MIGRATION CONTROL

Between the establishment of the National Rule in Iraq in 1920 and the present time the action taken by the various Governments in Iraq to combat migration could be classified into three major categories:

- (1) Dealing with the migration of cultivators through legislation concentrating on the land tenure and agricultural practices (periods up to 1958 Revolution).
- (2) Direct measures of prevention of migration together with land reform legislation (period between the 1958 Revolution up to the enactment of the new Agrarian Reform Law in 1970 and the creation of the Supreme Agricultural Council).
- (3) Dealing with the agricultural sector as a whole and within a strategy of National Comprehensive Development Planning. Emphasis is put on collective agricultural production, separate agricultural planning machinery (Supreme Agricultural Council) and direct Government intervention through State and Government farming and introducing new direct action

* Author submitted a Paper on this Case Study to the Royal Town Planning Institute Summer School, September, 1977, University of Lancaster, U.K.

strategies like the "Reverse Migration Projects" (between 1970 and the present time).

The objective of the Second Case Study in this Part IV of the Thesis is to examine the Shihamyia Reverse Migration Project experiment as a proposed tool for a long time strategy adopted by the current Government in Iraq to deal with the rural migration problem. This is done through the examination of the performance of this project and assessing its effectiveness as a migration control mechanism.

4.2 THE REVERSE MIGRATION STRATEGY DEVELOPMENT

According to L. Al-Dulaimy,⁽¹⁶⁴⁾ the pressure for returning to the rural areas from the Arab Baath Socialist Party Peasants Organisations started in early 1970 after the enactment of the new Agrarian Reform Law and the speeding up of agricultural land expropriation efforts all over the country (see Land Tenure Section, Part I, p.47). Numerous reports and delegations were received at the Peasants Bureau Headquarters at Baghdad from peasants requiring to return to their rural lands. The Thawra Town Arab Baath Socialist Party Organisation was also approached by its branches reporting mass desire in the migrants' settlements in Baghdad to return to the rural areas if offered suitable land. Around late 1970 a study was conducted by the Central Peasants Bureau of the Baath Party, the Peasants Union and the Peasants Association Organisation to see the feasibility of setting up an

(164) Latif Al-Dulaimy, Vice-Chairman of Baath Party Bureau for Peasants Affairs, Editor of "Sout Al Falah" Journal, and Chief Organiser of Shihamyia Reverse Migration Operation. Interviewed by the Author, Baghdad - 29th May, 1975.

experimental project for returning rural migrants currently settling in towns to the rural areas. The project was officially labelled "Reverse Migration Project" by the Chairman of the Peasants Central Bureau of the Baath Party in March 1971 and Al-Dulaimy was appointed as chief organiser of the process. In his paper "Peasants Conditions and the Pre-requisites of the Reverse Migration"⁽¹⁶⁵⁾ he outlined six points to be considered when planning a Reverse Migration Project:

- (1) Peasant participants should be resettled only at agricultural projects to make use of available facilities and resources.
- (2) Agricultural projects with low population densities should be favoured over those with higher densities as potential sites for resettlement of participants, keeping in mind the necessity of not disturbing the local residents of these projects and not infringing on their interests.
- (3) Participants in the Reverse Migration experiment have to meet the necessary legal conditions specified for agricultural contract holders by the 1970 Agrarian Reform Law.

(165) L. Al-Dulaimy - "Peasants Conditions and the Pre-Requisites of the Reverse Migration" - Dar Al Zaman Press, Baghdad, 1971, p.4.

- (4) Before any resettlement process is to take place basic community facilities such as roads, schools, health centres, markets, etc., should be provided; also utility systems like electricity, sanitary, water supply, telephone, etc. Agricultural production requirements and machinery should be available and organised.
- (5) Participants should be encouraged through free transportation to resettlement site; relaxed administrative formalities such as changing of occupation and transfer of registration place (which was severely complicated and restricted as a measure to curb migration) and civic records transfer should be simplified; and assistance should be provided to make the process of transition for participants from their urban environments to their new rural settlements as smooth as possible.
- (6) The Arab Baath Socialist Party - being the leading Party in the Government - should utilize its organisations to follow up and safeguard the experiment not only to help evading negative factors but also to educate the participating peasant socially and politically.

4.3 THE REVERSE MIGRATION STRATEGY: PHILOSOPHY AND OBJECTIVES

To the Government political leadership the philosophy behind the Reverse Migration experiment for a strategy lies in a diversified agglomeration of social, economical and political factors. These factors are: (166)

- (a) A political move to consolidate the confidence of peasants in the New Government and to re-establish the "lost" confidence between peasants and previous Governments.
- (b) Not as an economically viable project at the early stages of operation; that is one reason why the National Popular Work Organisation (which organises and conducts voluntary work campaigns in various projects and parts of Iraq and which is view by the Government as a tool for socialistic transformation of the populace) was asked to help in setting up the early settlements (in an effort to reduce the initial capital cost of the project). This move was also sighted as a tool to strengthen the relationship between the resettled migrants and the local peasants who led the Popular Work Voluntary Campaign to build the settlements.
- (c) To increase the agricultural output through the utilisation of idle labour force that belonged to the agricultural sector and had under abnormal

(166) L. Al-Dulaimy - 29th May, 1975, Interview, op. cit.

circumstances left it.⁽¹⁶⁷⁾ This "returned" labour force of peasants is certain now that their output will not be taken by the feudal landlords, and will be entirely their own, thus giving them a tremendous boost in productivity and confidence.

- (d) The fact that the participants in such an experiment are from different tribal backgrounds will tend to minimise the possibility of predominance of tribal customs and making it more possible to mould into the newly-created society solely devoted to collective farming and free from tribal struggle.
- (e) The participants, having lived a long period in the urban areas, will transfer with them the "seeds" of civilization to the backward countryside. Thus creating an atmosphere of change to the resident communities in the project area and the surrounding areas.
- (f) The success of the experiment will eventually reduce the Governmental Consumptive Budget in cities. It also will reduce the unemployment rate between the non-skilled and illiterate migrants. While this Governmental objective of setting up the project could be truer at least

(167) Arab Baath Socialist Party, Central Peasants Bureau, "Expected Outcomes of the Reverse Migration Experiment at Shihamyia" - Sout Al Falah Journal, dated 23rd August, 1971, Baghdad, p.4.

on the face of it, through reducing the size of the migrants' population in the city it remains to be seen whether Governmental expenditure to run the project is any cheaper than the cost of keeping migrants in towns. The inaccuracy of Government Municipal budgeting in the Capital and the extreme difficulty in measuring social overheads, both in the Capital and in the rural areas, put the testing of this economic feasibility analysis beyond the scope of this Thesis. The project is treated in this Case Study as a strategy adopted by the Government to control migration and to revitalise the agricultural sector. The Case Study analysis will concentrate on these two aspects with an underlined assumption that in the long run the combined impact of a highly productive and successful reverse migration project with the reduced cost of removing the excess population from the Capital will make the economic feasibility of the project a valid assertion. As is mentioned before, (b) above, the Government, at least in the first few years of the project operation, is not concerned about the profitability of the project. The socio-political benefits of experiment, the Project Organisers argue, will outweigh any financial loss inflicted on the State. This has considerably reduced the necessity, at this stage, to embark on exhaustive economic

analysis especially if the data for such an exercise is not available.

- (g) The Reverse Migration experiment from the urban areas to the rural areas signifies a deep-rooted attachment to the land by the migrants. It represents a clear indication that despite the attraction of modern living in towns, the peasants who migrated to towns long before this experiment still consider their lands as an irreplaceable way of life and the only acceptable source of living for them and their families.
- (h) The Reverse Migration movement represents a real revolutionary step against the long-established trend in the Iraqi society of considering a Government job as the only safe and stable occupation every citizen sought after, regardless of the level of this job. The peasants in this experiment are embarking on direct agricultural production ventures regardless of the assurances of Governmental jobs available in towns. This definitely signifies a basic revolt in the long-established social values and convictions in the Iraqi society.
- (i) Most socio-political theories suggest that the labour class through their constant and direct contact with the technology and the machinery had

acquired a higher degree of sophistication and awareness than the peasants class.⁽¹⁶⁸⁾ The peasants, through long generations of tribal customs and feudal landlords' oppression, were kept away from the ideologies of modern civilization. The participants worked as labourers during their stay in urban centres and this will bring about awareness and sophistication on arrival at the Reverse Migration projects' settlements to assume the role of the nucleus for the new collective farming society. This assumption will defy the common thought that peasants are motivated through a framework of emphasis on individualism. Since the trend of agriculture on Reverse Migration projects is collective farming, there is little evidence of any peasant's belief in private ownership or individualism.

- (j) As a major output of such an experiment is the renewal of peasant-Government lost confidence, every effort should be made to maintain and improve this experiment. The post 1968 Revolution Government had since its establishment taken various significant steps in stabilising and developing the rural areas. These steps had contributed to the creation of an atmosphere of trust between the rural migrants in towns (as well as the rest of the nation) that the

(168) L. Al-Dulaimy - 29th May 1975 - Interview, op.cit.

long-forgotten rural sector of the society is on the Government top list of priorities. The Reverse Migration experiment as an offspring of this "atmosphere of trust" should receive all possible political and Governmental backing of all parties' organisations and Governmental agencies' backing. It is of utmost urgency that this backing should be continued, intensified and improved.

- (k) The newly-created settlements of the Reverse Migration project could be the nucleus of the settlements to implement the Governmental strategy of socialising the rural sector of the nation. It signifies the start of deep-rooted changes to achieve the Government's social, political and economic transformation of the rural society in Iraq on the road to Socialism. The success of the Reverse Migration experiment will establish two vital elements in this process of transformation:

First: If the atmosphere of trust between peasants and the Government could be maintained through the success of the experiment then chances will be available for the project's expansion and creation of other similar projects.

Second: Act as a nucleus for Socialism transformation of the rural sector gradually through pre-planned strategies

for collective farming, elimination of tribal tradition and dominance of backward norms and convictions and finally the emergence of the agricultural labour class that replaces individualism in favour of collective production and national welfare.

The above listed elements of the ideological framework of the Reverse Migration philosophy could be simplified further through translating it to direct operational objectives of the project as frequently outlined by the Project's authorities and organisers since the time of the project formulation in early 1971; (this list will be tested by the Case Study Analysis Sections, see p.639):

- (1) As a means to tackle the continuous migration waves towards major towns. The scale of the project does not render immediate results in this respect but the success of the experiment will give the Government a possible tool to be implemented in much larger projects currently under implementation in the agricultural settlements field (such as: Greater Dujaila Project, Dhaghara Project - in the central and southern regions; Khalis Project - in the northern and central regions).
- (2) As a tool to help the stabilization of rural population.
- (3) As an employment centre offering better opportunities to the unemployed/non-skilled rural migrants in the urban areas. A

secondary effect of this factor is reduction of crime rates in the migrant settlements and improving the unemployment situation in these settlements.

- (4) As testing grounds for collective farming as a new concept in the agricultural economy in Iraq.
- (5) As testing grounds for new techniques in agricultural production, operation and marketing.
- (6) As testing grounds for cultivation of new crops that will meet the demand in the development of the industrial sector.
- (7) To act as a training ground to educate the peasants through concentrated efforts in social, education and political fields.
- (8) To introduce ideological changes contrary to tribal segregation and traditions that hinders Socialism development in the rural areas.
- (9) To introduce new relationships between the Administrative Government Agencies and peasants to replace the traditional hostility and mistrust which characterised this relationship in the past.

In summary and in the words of the chief personality behind the Reverse Migration project L. Al-Dulaimy: ⁽¹⁶⁹⁾

(169) L. Al-Dulaimy: Interview, 29th May, 1975, Ibid.

"The project is of a vital importance in the Party strategy for rural development. We look forward to the emergence of the advanced, educated and politically-enlightened peasant through the success of projects of this nature. We strive to create planned, well-integrated rural settlements within productive, self-sufficient agricultural projects. These settlements will act as the nucleus for comprehensive development strategies in the rural sector. Thus producing improved standards of living, higher incomes, higher productivity and better administrative control of population movement. The ultimate goal being the elimination of the chronic lag of rural areas behind urban centres, thus rendering migration towards urban centres a thing of the past."

4.4 THE REVERSE MIGRATION PROJECT: LOCATION SELECTION CRITERIA

The Arab Baath Socialist Party Peasants Bureau contacted the Ministry of Agriculture and Agrarian Reform to select a project site for the Reverse Migration project. The following criteria were agreed upon for the selection process:

(A) Regional location factors:

- (1) Within a maximum distance of 150 km. from Baghdad, the Capital. This measure will:
 - (a) ensure administrative control over the project operation
 - (b) facilitate communication with the project
 - (c) facilitate transfer of personnel, materials and equipment; also mobile services especially during the early stages of the project operation

- (d) encourage early settlers in being close to their original homes at migrant settlements in Baghdad to prevent abrupt transference of families too far away from their neighbourhoods in Baghdad. It was also an assurance for the participants of the possibility of returning in case of the project failure, or their change of mind.
- (2) Outside Baghdad's Direct Zone of influence* (Metropolitan area of the Capital as determined by the Capital Master Plan Consultants).
- (3) Within an adjoining subregion to the Capital which:
- (a) needs more agricultural stabilization than other subregions in competition for the project
 - (b) is more agriculturally oriented than other subregions
 - (c) has the worst condition of rural migration to urban areas (notably to Baghdad)
 - (d) has the worst agricultural land tenure historical conditions

* Estimated by Poles Service (The Capital Master Plan Consultants) to be around 100 km. Source: S. S. Shafi (U.N. Adviser on the Capital Master Plan) "On recent Development of Baghdad" - a progress report submitted to the Government of Iraq, Baghdad Municipality, April 1973. Map No. 3, p.13/14.

The competing subregions according to (1),
(2) and (3) above are:

Anbar, Diala, Wasit, Babylon
and Kerbala

- (4) Project's selected area should be well-located in relation to regional and national transportation network to facilitate transporting of products and materials to and from the project to other parts of the nation.

(B) Subregional (local) location factors

- (1) Project should be located within the subregion selected close to one or more urban centres and/or administrative centres.
- (2) Project should also be located close to an established agricultural project which is under operation.
- (3) Project's subregional location should be in a central location as much as possible for accessibility and service network utilisation.
- (4) Project's subregional location should be within an area socially compatible to the migrant settlements' population in the Capital from which participants are selected.

- (5) Project's basic facilities for agricultural operation should be available (or could be made available with minimum cost or effort). These facilities may include:
- (a) fertile agricultural land and absence of serious salinity conditions
 - (b) drainage network possibilities
 - (c) irrigation network available or an irrigation water distributing system which could be made operational with minimum cost
 - (d) preferably existence of a residents' settlement to act as a nucleus and to extend possible aid at the early stages of participants settling
- (6) The area available for the project should be sufficiently large to facilitate flexibility of operation and possible mobility of early settlers yet not too small to prevent efficient utilization of facilities and manpower to prevent future autonomy of project operation.
- (7) Involve minimum disturbance of local peasants' communities and should in no way encroach upon their rights and interests.
- (8) Be within an area of strong well-organised Peasants' Organisations.

On those bases the Ministry of Agriculture and Agrarian Reform together with representatives of the Central Peasants Bureau of the Arab Baath Socialist Party and the Peasants Union suggested the "Shihamyia Area" as the site for the proposed "Reverse Migration Project". Al-Dulaimy insisted, in the face of mounting waves of technical criticism which the project was subjected to later on, that it was agreed with the Ministry of Agriculture and Agrarian Reform on the proposed location⁽¹⁷⁰⁾ the main reasons for selecting Shihamyia were:

- (1) The only project area that fitted most of the regional and local criteria outlined above, and that was readily available for the experiment.
- (2) The drainage scheme could be started immediately as there had been previous studies on the area for this purpose.
- (3) The proposed project subregion (Wasit) extended all possible facilities within their Mohafadat to start the project immediately and to mount a vast voluntary work campaign to get the initial settlements started.

(170) L. Al-Dulaimy: 29th May, 1975, Interview - Ibid.



Fig No.30 SHIHAMYIA PROJECT ON THE NATIONAL MAP OF IRAQ

4.5 THE EVALUATION OF THE SELECTION OF THE PROJECT LOCATION

On the evidence of data collected in this research let us examine the validity of the project location selection both subregionally and locally:

4.5.1 The Selection of the Subregional Location of the Project

The subregions in competition for the project were all the Central Region subregions, falling within the 100-150 km. limit from the Capital set by the project selectors, which were namely, Diala, Anbar, Wasit, Babylon and Kerbela. Using the Government subregional location criteria the central subregions' characteristics gave Wasit as the clear favourite position to be selected for the project's location as follows:

- (a) Wasit showed the worst agricultural land tenure conditions (pre-1958 conditions) with average size of agricultural holdings; (Part I, Table No. 2, p.23) much higher than the rest of the central subregions and indeed the highest of the nation, suggesting a strong feudal system presence in the subregion.
- (b) In terms of agricultural land utilization Wasit, despite its large agricultural land holdings in the region (highest land per capita of the region), shows the second worst land utilization (second to Diala) with only 49% of its agricultural land cultivated annually (see Appendix No. I, Table No. 2, p.X-3).

- (c) In terms of population growth Wasit is by far the worst of the central subregions. Its share of the National population increase in the 1947-1975 period at 2.4% is the lowest in the central region and the second lowest in the Nation (Appendix No. I, Table No. 6, p.X-8). It also showed an alarming 0.4% annual growth rate for its rural population for the same period with 1.9% for the total subregion population annual growth rate, both the lowest in the region (Appendix No. I, Table No. 5, p.X-7).
- (d) Wasit migration pattern also reflects the worst condition of any central subregion with its net migration figure deteriorating from plus 1 in 1947 to minus 130 in 1965 and forecast to further drop in the 1975 C.S.O. Data. No other subregion in the central region shows a similar or worst decline than Wasit, suggesting a severe out-migration problem in the subregion (Appendix No. II, Subregional Analysis Form No. II-3, pp. X-90 to X91).

4.5.2 Project Location Characteristics within the Subregion of Wasit

The location factors within the subregion selected as the site for the Reverse Migration project also seemed to be met by the Shihamya area in the subregion of the project, Wasit. In examining the project location within the Wasit subregion, the following characteristics, which were originally sought by the Project Selectors, seem to emerge:

- (1) The project is located amidst four of the most significant development projects in the country. Although they are diverse in nature and operational aspects, they are all basic segments in the Governmental efforts to stimulate growth and enhance development outside the Capital City region. The first of these projects is the huge industrial complex at Iskenderia, 60 km. north-west of Shihamya (see Fig. No. 31). The first stage of this complex was completed in the late 60's and produces agricultural machinery, tractors and trucks. Designed basically to face the demand for mechanisation of the agricultural sector, as outlined in the Economic Development Strategy of the Government, it currently employs over 6,000 workers and is projected to produce jobs in excess of 50,000 in the

year 1980 when the full complex will be completed. (171)

The other three projects are agricultural resettlement projects. They are the Greater Mussayab project adjoining Shihamya from the west, the Greater Dujaila project located at the south-eastern end of Shihamya and the Dhaghara project to the south. While the Greater Mussayab project has been in operation for the last 25 years (see Part I, p. 31), the other two projects, (i.e. Dujaila and Dhaghara) are under implementation at the present time and are scheduled to be operational in the early 80's.

A summary of the characteristics of those three projects is as follows: (p.594)

- (2) The project is located between two of the most important (newly started) regional links in the south-central region of Iraq: the Suwaira-Mussayab regional link and the Namania-Madhatia regional link. Both are of modern standards and the first will be opened early 1977 with the second following in the next two years. Together with the existing north-east arteries, the project area

(171) Ministry of Municipalities, Directorate General of Planning and Engineering, Baghdad, "A Report on Al-Iskenderia Industrial Project", August, 1973, p.13.

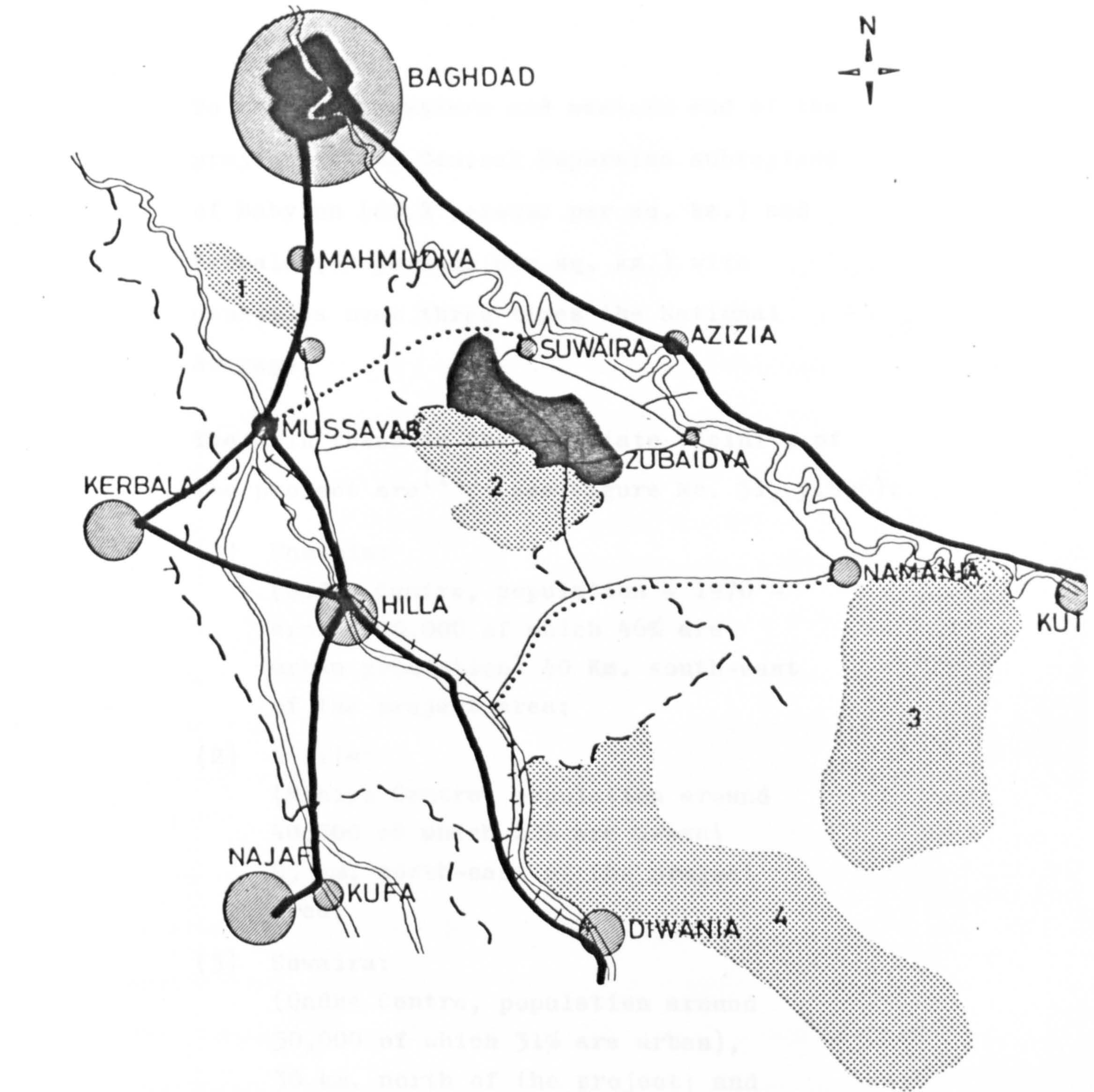
Characteristics of the agricultural resettlement projects

<u>Agricultural Project</u>	<u>Original Population</u>	<u>Projected Population</u>	<u>Area Covered (donum)</u>	<u>Character of Operation of Project</u>
1. Greater Mussayab	1,200	25,000	300,000	Individual production agricultural units and resettlement villages
2. Greater Dujaila	1,500-2,000	250,000	396,000	Collective farming, agro-industrial complexes and resettlement project
3. Dhaghara	5,000	200,000	340,000	Collective farming, State farms (basically a land reclamation project)

is surrounded with a modern fast and accessible network which will link it to the whole country. The significance of these two regional links is that when they are completed they will be the first two arteries linking the Tigris growth corridor and the Euphrates growth corridor terminating the necessity to pass through the congested capital area when moving between towns on these corridors. As far as the development of agricultural projects in the area is concerned, these two links will facilitate the transport of crops to all parts of the central and southern regions and the receiving of goods and services from various parts of these regions to the projects.

- (3) In studying the population distribution in the region surrounding the Shihamyia project it seems that it is located on the peripheries of the two most densely populated regions of Iraq. To the north of the project the Capital, Baghdad, has a 1973 population density of 153.4 persons per square kilometre,⁽¹⁷²⁾ the highest density in the Nation and over six times the National Average of 25.6.

(172) Ministry of Planning, C.S.O., Baghdad, 1973 Annual Abstract of Statistics, Table 7, p.19, and 1975 Annual Abstract of Statistics, Table 2/1, p.34.



0 10 20 30 40 50Km

Key

- | | |
|-------------------------------|-----------------------------------|
| == Major Rivers | ■ Major Towns |
| — Earth Roads | ■ Shihamya Project |
| + + Railways | ■ 1 Iskenderia Industrial Complex |
| — Major Roads | ■ 2 Greater Mussiab Project |
| - - - Subregional Territories | ■ 3 Dujaila Project |
| New Regional Links | ■ 4 Dhaghara Project |

Fig Na31 SHIHAMYA PROJECT REGIONAL LOCATION

To the south-western and western end of the project is the Central Euphrates subregions of Babylon (82.2 persons per sq. km.) and Kerbala (82 persons per sq. km.) with densities over three times the National Average.

The main towns in the immediate vicinity of the project are⁽¹⁷³⁾ (see Figure No. 31, p.596):

- (1) Namania:
(Qadha Centre, population - 1970 - around 30,000 of which 46% are urban population) 40 Km. south-east of the project area;
- (2) Azizia:
(Nahiya Centre, population around 40,000 of which 22% are urban) 25 km. north-east of the project area;
- (3) Suwaira:
(Qadha Centre, population around 30,000 of which 31% are urban), 30 km. north of the project; and finally,
- (4) Zubaidya:
the project's administrative area town (Nahiya Centre, population around 18,000 of which 14% are urban), 18 km. east of the project area.

(173) Ministry of Planning, C.S.O., Baghdad "Preliminary Summary of 1970 Population Count" - October, 1972, Tables 1 and 2, p. 31/32 (unpublished)

4.5.3 Project Area: Description and History

The land of the project extends some 30km. parallel to the right bank of the Tigris and more than 20 km. in width. The earth road joining the major Baghdad-Basrah Highway to the project site extends over 30 km. away from the Tigris and links with the highway at a point 116 km. away from Baghdad (Figure No. 31). The project area is in the centre of one of the largest land holdings in the feudal system of the pre-1958 Revolution in Iraq. The Central Euphrates feudal system, which extended between the nation's twin rivers south of Baghdad, claimed over 9.5 million donums of agricultural land or over 40% of the country's total agricultural holdings before the Agrarian Reform Law of 1958. Wasit (Kut) subregion within which the Shihamya project is located has the highest average size of agricultural holding in the Nation, about seven times the National Average and about three times the average figure for the second place, Misan (Amara) subregion (Part I, Table No. 2, p. 23). As pointed out in Part III, the possible correlation between the large sizes of agricultural holdings and the predominance of the feudal system with a high rate of migration is a strong possibility (see p.465). In the pre-1958 Revolution era big land holdings of prominent names in the feudalistic system in Iraq surrounds the Shihamya area. The project area itself was owned by the Al-Yasin, a tribe's chief who held

agricultural land of about 200,000 donums. To the north of it the previous Royal Family owns over 177,000 donums and to the south of it was the second largest single agricultural land holding in the Nation; over 420,000 donums owned by Al-Habib, the powerful Rabia's Tribes chief.⁽¹⁷⁴⁾ The agricultural land ownership distribution in Iraq at this time, (as discussed in Part I, p. 19), was severely in favour of large land estates feudal lords.

The project land has an alluvial highly fertile soil, created through successive historic overflowing of the Twin Rivers. The Central Euphrates landlords, though considered by modern Iraq's socio-political standards to be extremely feudalistic in nature, were the established rulers and tribal chiefs of thousands of rural "Felleheen" families. They dug the major canal that links the internal irrigation canals system of the Shihamyia area to the Tigris. The approximate date of this operation is not accurately estimated but most available sources put it in the period after the construction of the Kut Barrage in 1939.⁽¹⁷⁵⁾ The significance of the Barrage Construction was that it impounded the Tigris River Water thus making canal systems north of Kut City (where the Barrage was

(174) M. S. Hassan "Economic Development in Iraq",
op. cit., p.197.

(175) Ibid., p.29.

constructed 170 km. south of Baghdad) operational.

The word "project" in most agricultural areas in Iraq literally means a "canal", thus the Shihamya "project" came into being around that date.*

The original Shihamya Canal, though modernised in its present state, more or less managed to keep its predominance over the area landscape. With its 4 metres by 2 metres frame, it extends some 25 km. from its intake 30 km. upstream from the town of Zubaidya (see Figure No. 31, p.596). A system of secondary canals was later introduced to almost completely cover the total utilized agricultural land of the project. (176)

In the late 30's, during the early stages of the area development, the population of the area was estimated around 2,000 families. (177) The project that was originally spread over 60,000 donums of agricultural land operated on the fallow cultivating system.

* It is ironic that the construction of the Kut Barrage has caused considerable improvement in the agricultural areas in the "upstream" along the Tigris, while it was a direct cause of deterioration of the canal system in the downstream Provinces, (Baghdad's leading migrant origin), where it resulted in mass migration of rice paddies peasants due to the acute shortage of irrigation water. (See A. B. Al-Hilali "Migration of Rural Folk to Towns in Iraq" - Baghdad, 1958, p.131).

(176) M. M. Khorsheed "A Study in Planning and Development of newly-created Settlements in Iraq" Ministry of Planning Press, Baghdad, January 1973, p.125.

(177) Al Muharib Journal, Baghdad, 12th July 1973, p.4.

The overall poor condition which dominates the living conditions in the rural areas in Iraq is very much the same in the Shihamyia settlement as the pre-1958 Agrarian Reform Law period. The original population of the project area which reached a record high of 3,000 families in the mid-40's gradually deteriorated to less than 2,000 families by the early 50's; but the major blow that the project received was the devastating 1954 Tigris River flood which swept across the central and southern regions of the country. It was of such a magnitude that even the well-protected area of the Capital City of Baghdad was partially covered by the tidal wave. The exact figures of the influence of this flood on the rural-urban migration in this part of Iraq cannot be easily estimated. Yet some researchers noted a sharp rise in the 1955 migrants figures coming into the Capital. At one estimate the migrants from Maysan (the province adjacent to Shihamyia area) on a daily flow were estimated at ten lorry loads per day.⁽¹⁷⁸⁾ The influence of this flood was discussed in Parts I and II of this Thesis and data suggests that it has a major effect on the migration pattern to the capital from the southern and central regions. It was after the 1954 major Tigris flood that the project was completely abandoned and the 200-300 families left on the project area were more or less tribesmen looking after the livestock of the tribe's sheikh with little or no agricultural produce above their subsistence level.

(178) D. Warriner, *op.cit.*, p.153.

4.6 THE SELECTION OF PARTICIPANTS

Before any formal interviewing of applicants commenced the Central Bureau of Peasants of the Arab Baath Socialist Party led a widespread publicity campaign between migrants in Baghdad's major migrant settlements to familiarise them with the nature of the project and the prospects of joining it. Public meetings were held; mass media unleashed a concentrated campaign to get as much as possible public awareness of the project nature and its future. The Government Agencies involved prepared initial settlement plans under the instruction of the project organising committee headed by L. Al-Dulaimy. The Voluntary Work Organisation (called the Popular Work National Committee), together with the Peasants Organisations in the project's subregion of Wasit and the surrounding subregions started the building of the initial villages. Mud-built two room units, averaging in plot size around 300 sq. metres, were built in three batches of 150 units each in a record time of just under two weeks.⁽¹⁷⁹⁾ Peasants totalling in number over 7,000 took part in the work campaign on the project. A local liaison committee was set up to receive the incoming participants. Funds were made available to the Directorate General of Agricultural Projects in the Ministry of Agriculture and Agrarian Reform to start the necessary construction of administrative offices and transfer of technical personnel to run the project. A top priority status was given to the project and all Governmental Agencies

(179) L. Al-Dulaimy - 29th May, 1975, Interview, op. cit.

were instructed to get the project ready for habitation (and operation) within two months (April and May, 1971) at the latest. The Ministry of Municipalities set up temporary water tanks with portable purification machinery and the Ministry of Housing and Public Works made road improvements linking the project area to nearby Zubaidya and also within the project area road network improvements were made. Electricity lines were drawn to the project area from the power station at Zubaidya linking the project electric power to the national network. It may not sound much in modern terms but for a country like Iraq these steps, which normally take years to be accomplished, all were done within weeks of announcing the National Campaign to get Shihamyia opened on 1st June, 1971.

A committee was set up to interview applicants at the Thawra migrant settlement in Baghdad. It was formed from representatives of the following Agencies and Organisations:

- (1) Representative of the Peasant Union
- (2) Representative of the Local Administration in Thawra Qadha (who was the chief administrative officer)
- (3) Representative of the Peasant Co-operative Organisation
- (4) Representative of the Ministry of Agriculture and Agrarian Reform
- (5) Representative of the Local Community (in the Shihamyia area)

Applicants were invited to mass meetings where members of the screening panel stressed and detailed the following aspects (after a careful description of the project experiment had been given to the participants).⁽¹⁸⁰⁾

- (a) As a pioneering experiment they would get the full support of the Party leadership and organisations and of every Governmental Agency the project administration might need.
- (b) Seeds, fertilisers, machinery, land and starting funds would be made available to each participant through the administration of the project and the Peasants Co-ops and Organisations. A free housing unit in villages would be supplied with free basic necessities and within communities supplied with schools, health centres and community facilities.
- (c) Participants should terminate their business engagements in Baghdad and devote their entire time and efforts to the project. This will involve the transfer of their place of residence to the project, a process to be done free of charge and by Governmental aid and assistance.
- (d) Applicants should not be Government employees or pensioners.
- (e) It was made very clear that difficulties were expected and in the words of an official at the Directorate General of Agricultural Projects

(180) L. Al-Dulaimy - 29th May, 1975, Interview, op.cit.

"we made it quite clear to all participants that it would not be a picnic"⁽¹⁸¹⁾ Hard work and a considerable amount of personal sacrifice are expected, yet assurance of all possible Governmental and Party resources and help is promised during the project operation.

- (f) The project will start operating its agricultural cycle on the fallow system to evade, as long as possible, the salinity problem. A complete drainage network construction is to be started very shortly and should be available in 2 to 3 years from the project starting date of June, 1971. Full cultivation will be expected when this network is completed.
- (g) The participants are joining the project of their own free will and no Organisation or Agency is going to force them to join the project, or to stay on it if they choose to leave after a trial period provided that no obligations or debts are entered into by the participants concerned with the Government administration on the project.
- (h) A complete well-equipped organisation will be residing on the project in the form of administrative staff, technicians, health and

(181) Director General of Agricultural Projects - Interview, Baghdad, 18th June, 1975.

educational staff, etc. A water supply scheme and electricity networks are being implemented and should be made ready for the first batch of settlers upon arrival on the project.

The Selection Panel interviewed and screened applicants on a pre-decided selection criteria based on the legal requirements specified by the Agrarian Reform Law No. 117/Year 1970 and on additional socio-economical characteristics. Each selected participant is asked to sign a standard agricultural contract with the Ministry of Agriculture and Agrarian Reform to reside on the project and work abiding by rules and regulations set by the project administration.

The main elements of the selection criteria are:

(A) Legal Aspects

(a) Article No. 16 Agrarian Reform Law No.117/Year 1970 specified that:

"Agrarian reform land to be distributed to peasants individually or collectively according to the conditions of area where the distribution is taking place within the limits set herewith".

For the condition of Shihamyia area which is a flow-irrigated area, this Article specifies:

Article No. 16, paragraph (b)
section 2: (182)

(182) Ministry of Municipalities - Laws Collection - First Vol. "Agrarian Reform Law No.117/Year 1970" - Article No. 16, Baghdad, 1970, p.144-145.

40 donums of partial fertile land
that is irrigated by a mean
(by pumping at Shihamy).

(b) Article No. 18 specifies the following
requirements for an individual to qualify
as a candidate for agricultural land
allocation:⁽¹⁸³⁾

1. The peasant candidate for land
allocation should be:

- i. an Iraqi National aged
not less than 16 years
- ii. peasant by occupation
- iii. owns less than the limit
set by Article No. 16 of
of this law for agricultural
land ownership.

2. Agricultural labourers are considered
as peasants and come next in priority
for allocation.

3. The Supreme Agricultural Council may
include in the distribution Arab
Countries Nationals and Graduates of
Agricultural Colleges, Institutes and
Schools who had agriculture as an
occupation exempted from Paragraph 1
of this Article.

(c) Article No. 24 specifies the obligations of
peasant recipients of agricultural lands to
adhere to the following:⁽¹⁸⁴⁾

(183) Ministry of Municipalities, Laws Collection, Ibid.,
p.146.

(184) Ministry of Municipalities, Laws Collection, Ibid.,
p.148.

1. To cultivate the land allocated to him and take the necessary care and precautions to preserve the soil productive efficiency. He must also reside at locations designated at the distributed area.
2. To join the Co-operative Society formed under this Law.
3. Not to transfer to others the ownership of land allocated to him in accordance with Articles 18 and 19 of this Law.
4. Not to subject the allocated land to any rights of others according to Article 18 of this Law.
5. Not to violate any obligations dictated to him by this Law or any other instructions, regulations and directives issued from the Supreme Council or other official bodies.

The contents of Article 24 is the main body of the standard agricultural contracts signed by participants before joining the project.

(B) Those candidates satisfying the legal aspects in (A) above will be selected on the following selection criteria:

- (a) Unemployed is favoured over employed also low income candidates are favoured over those with higher incomes.
- (b) Married persons are favoured over non-married and those with larger households are favoured over those with smaller ones.

- (c) Preferably age of participant is 20-30 years.
- (d) Readiness to join project on short notice (added merit).
- (e) Social homogeneity with Shihamya Area Society a positive element.
- (f) Period stayed in Baghdad is considered by the Screening Panel as being irrelevant. Most sociologists would argue that the length of this period will be a negative factor. According to Dulaimy (185) the most important factor is the willingness of participants to join.

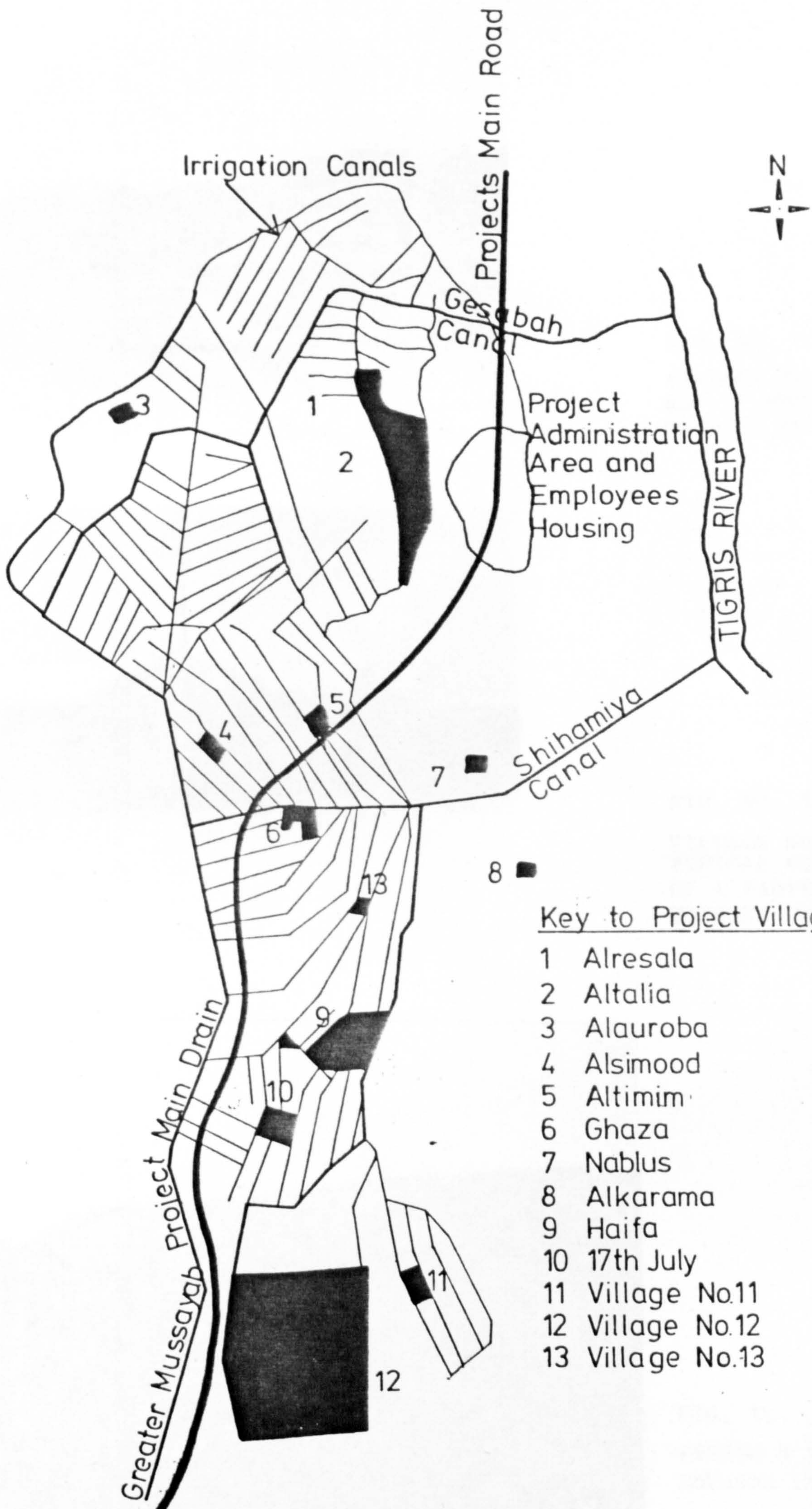
4.7 PROJECT'S STARTING AND INITIATION STAGE

The initial settlements of 500 units were built by voluntary work executed by Peasants Organisations within the subregion of Wasit (project's subregion) and from neighbouring subregions. When the first batch of settlers (150 families) reached the project in June, 1971, they, together with the second batch (250 families) who arrived shortly after, started building a further 400 units for the third and largest batch (400 families) who joined the project two months later. The mud-built

(185) L. Al-Dulaimy - May, 1975, Interview - op.cit.

housing units had a total plot area of about 300 sq. metres. The mud units are temporary until the final location of modern brick-built villages is located when the layout of the project's drainage network is completed. But at the time the Author surveyed the project in April and June, 1975, the drainage network had not been completed and this delay in completing the drainage network (originally planned to be ready by 1973 - 1974 at the latest) was a major setback to the project.

Each mud house has two rooms, one to be used as a bedroom, the other as a living room and the rest of the fenced plot being left to individual participants to tailor to their family needs. Most participants built an additional one or two rooms to accommodate their family needs. The kitchen and the traditional conical bread oven are also added by participants to their units. A typical housing layout and unit internal structure is shown in Fig. Nos. 35 to 38 (pp. 612-4). The roofs of these units are made of mats covered with mud mixed with hay as a stabilizer. The roof is supported by reeds and wooden columns. The unit's floor is not paved, being only slightly straightened up with graders before the units were built. These units are very much like the hutments built by migrants in the capital upon arrival after migrating from their rural villages. (See Part III, Fig. Nos. 19 & 20, p. 284 & p. 286). The layout of the villages is in the form of raw housing blocks. Each two blocks are separated by a footpath closed at the end with a large



Key to Project Villages

- 1 Alresala
- 2 Altalia
- 3 Alauroba
- 4 Alsimood
- 5 Altimim
- 6 Ghaza
- 7 Nablus
- 8 Alkarama
- 9 Haifa
- 10 17th July
- 11 Village No.11
- 12 Village No.12
- 13 Village No.13

Fig No.32 SHIHAMIYA REVERSE MIGRATION PROJECT LAYOUT



FIG. NO. 33
 VILLAGE NO. 10 -
 ROW OF PARTICIPANTS'
 HOUSING UNITS

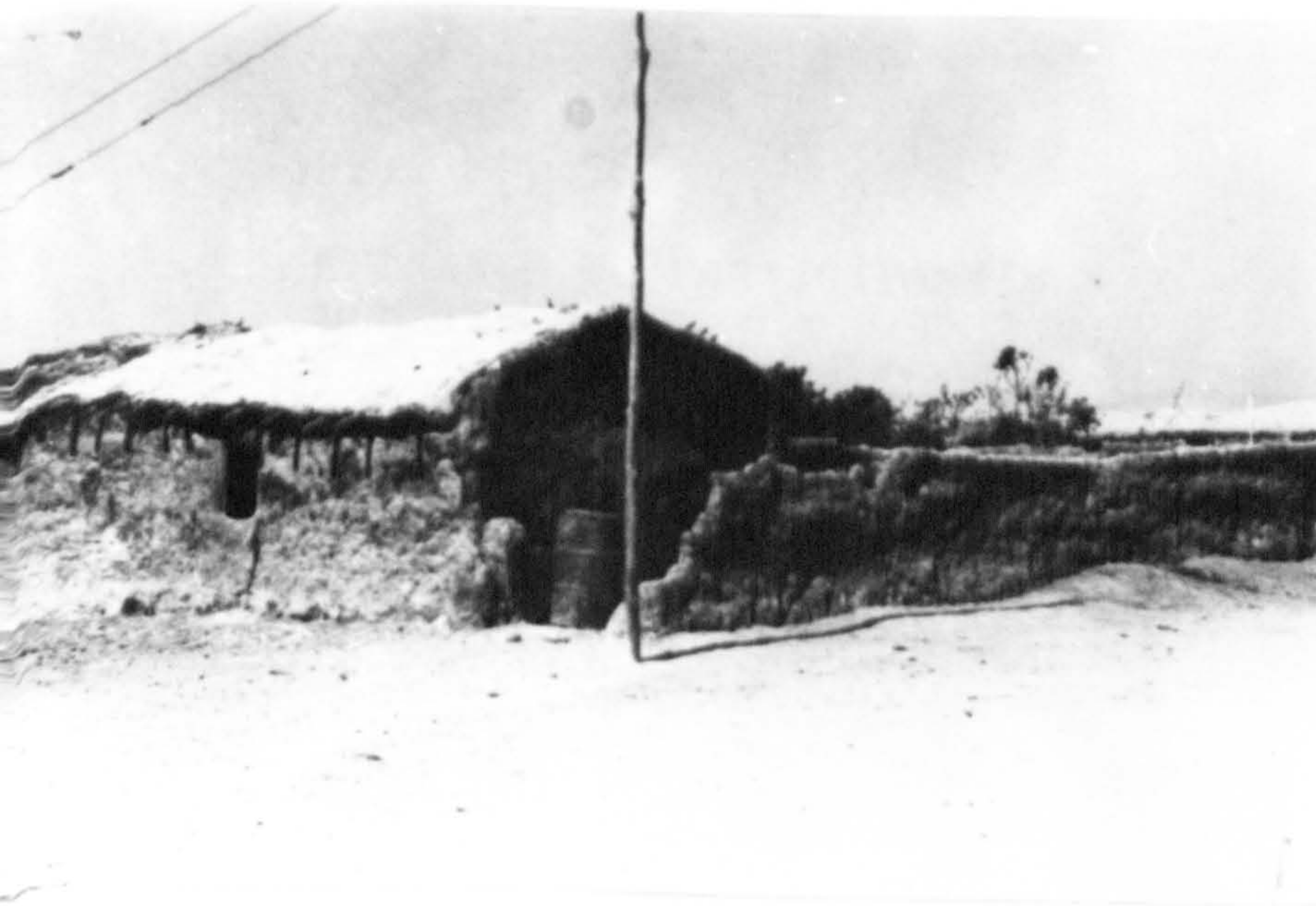


FIG. NO. 34
 VILLAGE NO. 10 -
 TYPICAL OUTSIDE VIEW
 OF A PARTICIPANT'S
 HOUSING UNIT



FIG. NO. 35
 INSIDE A PARTICIPANT'S
 HOUSING UNIT



FIG. NO. 36

ENTRANCE TO PARTICIPANT'S
HOUSING UNIT



FIG. NO. 37

INSIDE A PARTICIPANT'S HOUSING UNIT -
GRAIN STORAGE AND BREAD OVEN UNIT

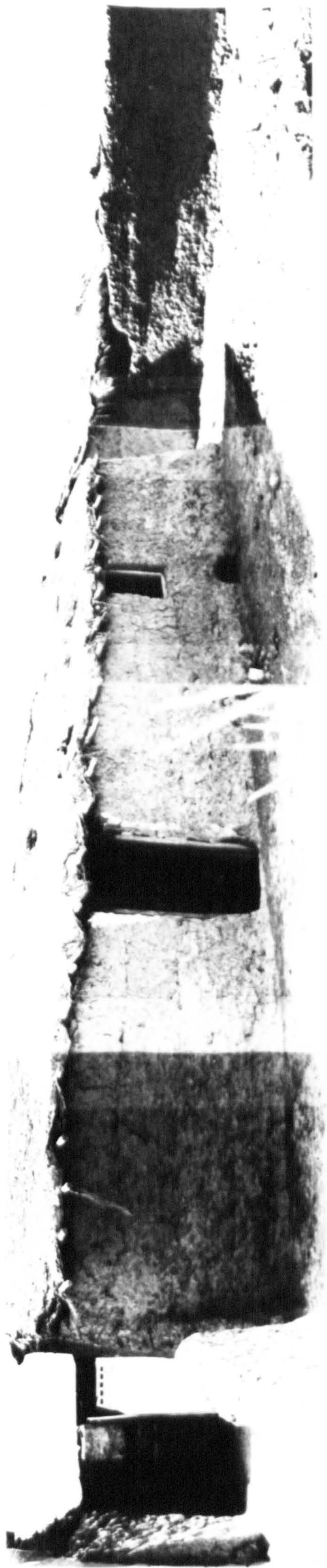
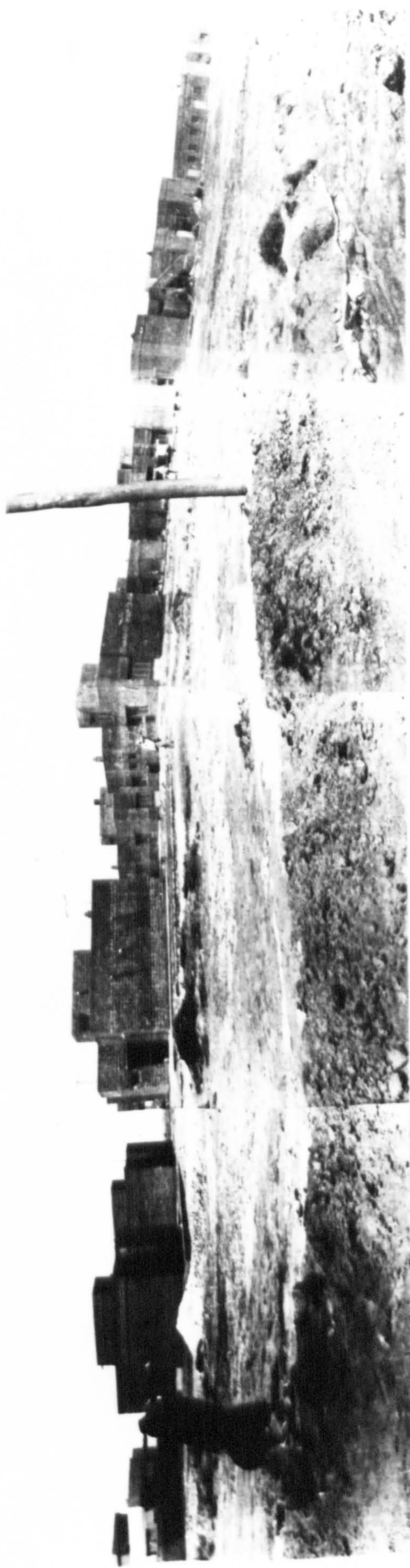


FIG. NO. 38 INSIDE A PARTICIPANT'S HOUSING UNIT - ENTRANCE, TWO ROOMS AND YARD

FIG. NO. 39 PROJECT'S EMPLOYEES HOUSING SECTOR - IN THE PROJECT'S MAIN ADMINISTRATION AREA



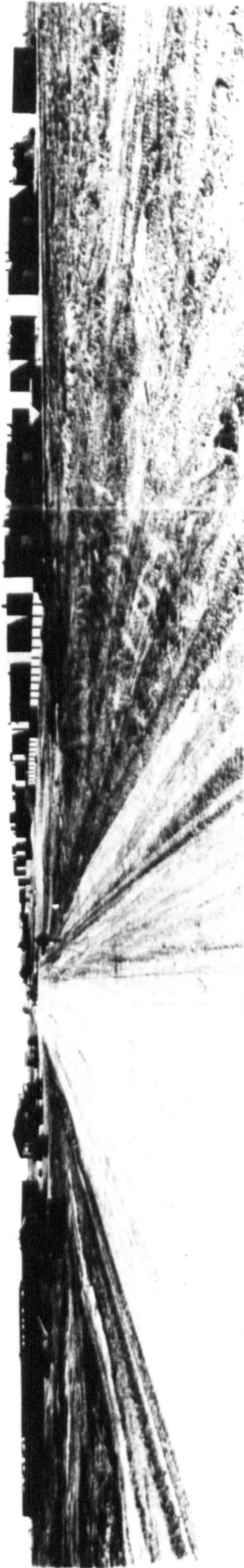


FIG. NO. 40 PROJECT'S MAIN ADMINISTRATION AREA - NORTHERN ENTRANCE TO THE AREA
(PROJECT'S EMPLOYEES HOUSING SECTOR ON RIGHT OF PICTURE
WITH PROJECT'S MECHANICAL SERVICES GARAGE ON THE LEFT)



FIG. NO. 41 PROJECT'S MAIN ADMINISTRATIVE AREA - SOUTHERN ENTRANCE



FIG. NO. 42 PROJECT'S GRAIN STORAGE IN THE PROJECT'S
MAIN ADMINISTRATION AREA



FIG. NO. 43 PROJECT'S HEALTH CENTRE IN THE PROJECT'S
MAIN ADMINISTRATION AREA

animal shed. These "community" animal sheds are to be used in "collective" live stock⁽¹⁸⁶⁾ but up to now (May, 1975) have not been very successful and are mostly deserted. The water supply is not completed at all project villages. Only four villages closest to the project administration area (which includes the staff housing) have water purification units, and even those are not house-to-house distribution. Each village has 3 - 5 water points distributed in different parts of the village for the inhabitants to use, usually at intervals on alternate ends of housing blocks. Electricity is supplied to the villages from nearby Zubaidya Station. At the beginning of the project only village streets had electric power for lighting but by the end of 1974 all housing units had an extension of electric power. This step of supplying electricity to individual housing units was done when it became apparent that the permanent villages were going to be delayed and participants had run out of patience waiting for the "electricity furnished" permanent units.

The layout plan for the Shihamyia project (see Figure No. 32, p. 611) has 12 modern brick-built villages which replace the project's existing mud-built villages. As the initial policy was to make the minimum disturbance to the villages already built by voluntary work, the newly-built brick permanent villages were built as close as possible to the site of the relocated mud-built villages on the project. A main road passes through the 12 villages

(186) M. M. Khorsheed - op. cit., p.132

and is drawn so as to be as accessible as possible to all villages. The main administration area has in addition to the project hospital, mechanical garage units, storage depots and a housing sector for the project staff and employees. The table on page 625 shows the various components of the project on a time-scale for the date of each component's completion which will serve to show the different stages the project went through since its beginning in 1971.

Schools at the project were distributed among the project's 12 villages. Till May, 1975, the total number of primary schools at the project was six, mostly understaffed and only two of them are built in brick and cement. There are no intermediate or secondary schools at the project, despite the fact that by Iraqi urban standards 1,200 families should get at least one intermediate school. Pupils at the project attending intermediate or secondary school level make daily a two way journey to Zubaidya 18 km. away to attend school there. This process is severely hindered during the rainy season since the Zubaidya-Shihamya road is not yet paved. There are no market facilities available in the project villages and participants, while producing their daily requirements, make monthly shopping trips to nearby towns (mostly Namania, 40 km. away)* for family needs and supplies. Limited shopping activities take place at some

* Research Survey Data



FIG. NO. 44 VILLAGE NO. 12 SCHOOL BUILDING, SOCIAL CLUB, AND AGRICULTURAL SUPERINTENDENT'S OFFICE

of the larger villages (Village No.12 for example, - see Figure No. 32, p.611 - population 226 families), mostly by travelling villagers on horseback or camelback. The project administration area shop has very little business with the peasants due to the absence of credit facilities in this shop. Each village has allocated one of the large housing units to be the Mosque of the village. A social activities centre is located at most villages. Health and administration facilities are located at the project's administration area. Except during the rainy season (November to April) most project facilities are reasonably accessible. Mobile health services units tour the project villages at regular intervals (twice weekly) for inspection, innoculation campaigns and guidance.

4.8 GENERAL PROJECT'S INVENTORY

Having described the basic concepts behind setting up the Shihamya Reverse Migration Project, the process of selecting the area and participants and finally the initial build up of the project, it seems necessary to give a general rundown on what the project is formed of and so project components, buildings, machinery and personnel up to the end of 1974 are described in detail. The time scale showing various changes during the first three years of the project's operation is given when possible.

4.8.1 Shihamya Project Land Use (1974) (187)

	<u>Donums</u>
(1) Total project area	122,800
(2) Land suitable for agriculture	80,000
(3) Land not suitable for agriculture - reclaimable	30,000
(4) Area for buildings and roads	1,000
(5) Salin soil	11,800

4.8.2. Type of Agricultural Systems (188)

	<u>No.</u>	<u>Area - Donums</u>
(1) State farms	1	4,000
(2) Collective farms	5	63,717

which are run by five agricultural co-operatives as follows:

	<u>No. Members</u>	<u>Area - Donums</u>
Shihamya Agricultural Co-operative **	350	14,000
Henwa Agricultural Co-operative	487	9,253
Ghsaiba Agricultural Co-operative ***	520	24,294
Jebel Al Sakher Agricultural Co-operative **	238	9,320
Alaedon Agricultural Co-operative **	230	6,850
Total Membership	<u>1825</u>	
Reverse Migration experiment participants	818	
Local community peasants	7007	

(187) Ministry of Agriculture and Agrarian Reform, Directorate General of Agricultural Projects, Statistics Section "Shihamya Project Report", Baghdad, June 1974, p.1.

(188) Ibid., p.3.

** Reverse Migration Participants Co-operatives at the start of the Project - June 1971.

*** Nearby Collective added to the Project after the end of first year 1971/1972.

(3) Combined Co-operative

an organisation set up to include a group of agricultural co-operatives; while the individual co-operative was basically in charge of the actual production work and production stages, the combined co-operative is in charge of:

- (a) supply of agricultural equipment, seeds, fertilizers and agricultural services
- (b) marketing of the output of its members co-ops
- (c) liaison activities with:
agricultural bank and government agencies in charge of agricultural machinery, seeds, fertilizers, agricultural services, etc.

The pattern of work on the project is only done through collective farms. The collective farms are administered by the Agricultural Co-operative Council which is formed of an elected body from member peasants. The Governing Body of the Agricultural Co-operative also includes representatives of the Project Administration and Peasants Union. The agricultural cycle is planned by the Ministry of Agriculture and Agrarian Reform Agencies and submitted to the individual agricultural co-operatives through the Project Administration member in the Co-operative Governing Body. Theoretically, the agricultural cycle plan was prepared on individual

project bases and sent to the Ministry for approval. The agricultural co-operative then worked out its requirements sheet and submitted it to the combined co-operative which would study it, together with the requirements of other member agricultural co-operatives, and start its contacts to get the requirements sheet's particulars supplied. Agricultural co-operatives get all their machinery, seeds, fertilizers from the combined co-operative, which in turn markets the produce, deducts the charges which it gets for supplies to the member agricultural co-operative and submits the profit to member co-operatives for distribution to individual participants. In their Report to the Ministry of Agriculture and Agrarian Reform the Evaluation Committee of the Shihamyia project described the work in the project collective farms as follows:

"Since 1st June, 1971, the project adopted the collective distribution system (for agricultural land) where each peasant was allocated 27 donums annually of which 20 donums were for winter crops and 7 donums for summer crops. Each peasant was also given 2 donums as a private family farm in which he usually cultivated feeding crops for his animal stock. The peasants are usually grouped in groups of ten peasants each to cultivate their combined lands (of 200 donums in winter and 70 donums in summer). Then each 5 - 10 groups are again combined together where their lands will be a continuous block for cultivation, although each individual group is responsible for its part of the block." (189)

(189) University of Baghdad, Applied Agricultural Research Organisation - "Evaluation Study - Shihamyia Project" Baghdad, July, 1976, p.54.

This is basically the pattern of work in the project's collective farms and will be further discussed in the analysis section.

4.8.3 Live Stock on the project⁽¹⁹⁰⁾

	<u>Sheep</u>	<u>Cows</u>	<u>Poultry</u>
State farms	5,204	58	0
Agricultural Co-operatives	2,405	0	0
Individual Participants	39,830	4,555	5,460

4.8.4 Agricultural Machinery on the Project

(A) Owned by Project Administration:

Excavators	7
Graders	2
Bulldozers	3
Tractors	11
Transport vehicles (mostly jeeps)	17
Lorries	4
Tankers	4

(B) Owned by the Combined Co-operative:

Tractors	73
Reapers	18

(190) Ministry of Agriculture and Agrarian Reform
"Shihamya Project Report" - op.cit., p.6.

4.8.5 Buildings on the Project (191)

	<u>1971/72</u>	<u>1972/73</u>	<u>1973/74</u>
Main Administration (320 sq. m.)	1	0	0
Warehouses (450 sq. m.)	1	2	0
Project Director's House (240 sq. m.)	0	1	0
Staff Housing (106 sq. m.)	0	0	9
Workers Housing (55 sq. m.)	25	19	6
Agricultural Guidance Officer (280 sq. m.)	3	0	0
Sheep sheds (325 sq. m.)	1	3	0
Cow sheds (120 sq. m.)	7	0	0
Row Housing (270 sq. m.)	1000	900	0
Garages (350 sq. m.)	0	0	6
Social Club (Staff) (191 sq. m.)	0	0	1
Generators sheds (electricity) (37 sq. m.)	0	0	37
Mechanical Unit Garage (1,000 sq. m.)	0	1	0
Fuel Depot (2,780 sq. m.)	0	0	1
Health Centre (1,500 sq. m.)	1	0	0
Social Welfare and Guidance Centre (130 sq. m.)	4	0	0
Vetinarian Centre (1,000 sq. m.)	0	0	1
Water purification treatment units (30 sq. m.)	0	4	0

(191) see following page - p.626

There were no school brick buildings - the peasants used mud houses as schools till late 1974 when three school buildings were started.

There was no market building or space allocation, outside "one" single shop which does not sell on credit, at the Project Administration area.

4.8.6 Social Facilities on the Project

Illiteracy Abolition Centres	14	(Male centres)
Illiteracy Abolition Centres	10	(Female centres)
Social Activities Centres (Clubs)	18	(Male centres)
Social Activities Centres (Clubs)	10	(Female centres)
Primary Schools	6	
Hospital (Health Centre)	20	Beds - Male
	20	Beds - Female
Health Clinic	1	

4.8.7 Project's Personnel

Agricultural Engineers (includes Project Director)	6
Agricultural Guidance	4
Agricultural Superintendents	26
Electrical Engineer	1
Vetinarian Doctor	1
Social Workers	4
Clerks	11

(191) Footnote from previous page - p.625:
Ministry of Agriculture and Agrarian Reform -
Directorate General of Agricultural Projects
"Buildings in Directorate's Projects", Baghdad,
Jan. 1975, p.2.

Doctor (Physician)	1
Nurse (Male)	3
Labourers	145

4.8.8 Organisational Set-up of the Project

Basically there are five types (or indeed sources) of organisations on the Project:

(1) The Project Governmental Organisation:

The project's formal administration is formed with the Director, his Deputy, technicians and staff (as outlined in 4.8.7 above).

They are linked to the Technical Division of the Directorate General of Agricultural Projects in Baghdad, which is one of the Offices of the Ministry of Agriculture and Agrarian Reform. This administration is responsible for the operation of the project, maintenance and supervision of the project's buildings, irrigation, transport and utility network.

While this is largely true for facilities and services supplied by the project administration itself, it is not entirely true for those supplied by Agencies outside the project's area. Schools for example are built by the Wasit Mohafadat local administration offices, staffed and administered by the

Ministry of Education. The project administration has no administrative jurisdiction over the school operation but co-operates with its officials in carrying out their duties. The same could be said of health facilities (Ministry of Health), water supply schemes (Ministry of Municipalities) and electricity power network (Ministry of Industry). As will be shown in (5) below this led to administrative bottlenecks in the operation of the project, especially with regard to the facilities which are directly related to the agricultural operations on the project.

It also has representatives in the Governing Bodies of the five Agricultural Co-operatives on the project, and on the Board of the combined Co-operative. It also undertakes the usual administrative jurisdiction, regulation implementation, safety and security on the project. It establishes close co-ordination with political and peasants organisations on the project.

(2) Political Organisation:

The project, being the brainchild of the Peasants Central Bureau of the Arab Baath Socialist Party, is closely monitored by the project party organisation linked to the Party

Central Peasants Bureau. The Project's Party Organisation has access to the highest Government hierarchy.

(3) Agricultural Co-operatives and the combined co-operatives:

Both have Governing Bodies or Boards of almost the same structure, except that the combined Co-operative Board has representatives of its member agricultural co-operatives in addition to the regular representation of political and administrative organisations at the project.

(4) Tribal and Social Leadership:

This is a very effective, yet unanimously denied by all participants, type of control on the project. Any researcher spending a reasonable amount of time on the project will quickly recognise the existence of a group of elderly citizens acting as advisers and respected by all peasants. Some enlightened participants refuse to be led by these social leaders and condemn their influence as the reminiscence of the feudalistic lords era.

(5) Governmental Agencies other than the Project Administration:

The lack of project autonomy has led to the fragmentation of responsibility of various

project facilities to a large number of Governmental Agencies. As an example of this fragmentation let us consider the following basic facilities and see which Agency is responsible for each facility:

1. Schools:

- a. Buildings - Wasit Mohafadat
Local Administration -
Ministry of Interiors
- b. Teachers - Ministry of Education
and Staff

2. Water supply scheme:

- a. Buildings - Wasit Mohafadat Local
Administration -
Ministry of Interiors
- b. Plans, - Ministry of
designs, Municipalities
technical
detail and
staff

3. Road Network:

- a. Design and - Directorate General
construction of Roads and Bridges -
Ministry of Public
Works and Housing
- b. Maintenance - Wasit Mohafadat -
Dept. of Roads and
Bridges

4. Irrigation Water Distribution Network:

- a. Design and - Directorate General
construction for Irrigation Projects -
Ministry of Irrigation
- b. Maintenance - State Establishment for
and dredging Excavation and
Agricultural Stations
plus Wasit Mohafadat
Irrigation Division

c. Operation - Directorate General
and for Agricultural
supervision Projects -
Technical Division
and Project
Administration

This condition of fragmented control had led to serious administrative and operational bottlenecks in the project and in most cases has turned the project administration into a crippled organisation so that the best it could do when a certain problem arose was to get in touch with the Directorate General of Agricultural Projects to contact the agency concerned and wait. As will be discussed in the Project's Research Survey Analysis, the peasants feel that the poor administration is, by far, the most important single deficiency in the project operation.

4.9 THE PROJECT'S RESEARCH SURVEY

4.9.1 Survey Objectives

- (1) To test the project area selection criteria.
- (2) To test validity of participants' selection criteria.
- (3) To test project efficiency and operation.
- (4) To test the project's Governmental objectives.

- (5) To further test some of the migrant household characteristics and migration pattern characteristics obtained in the Baghdad's Migrants Survey. To establish that the project's participants are typical migrants.
- (6) To statistically describe different aspects of project operation.
- (7) To formulate a future base for similar projects.

4.9.2 Survey Methodology

The survey forms and the method of conducting the survey were done under the supervision of the National Centre for Sociological and Criminological Research in Iraq. The survey was conducted at the project site by direct interview method. A pilot survey was conducted to test the survey forms, prior to the main survey process. The adjustment of the survey forms for the main survey was done and minor adjustments were carried out. The pilot survey sample amounted to 20% of the sample taken for the main survey. Twenty five families were covered by the pilot survey and the main survey was designed to cover 15-20% of the total 650 households remaining on the Reverse Migration Project. The sample was selected on a random basis from the project villages and the interviews were carried out by the Author at different

locations on the project but mainly in the agricultural fields during the actual working hours of the peasants. The total sample covered was 110 households. The following are some of the -

Major Observations of the Survey Process:

- (1) The survey interview of each peasant selected was done in complete privacy attended on a few occasions by a representative of the Peasants Union, which helped establish a comparative base for correct data received.
- (2) Income data is judged to be accurate because interviews covered different members of the same peasants' work gang and gave similar values.
- (3) The Government representative who attended a few early interviews at the pilot survey stage and whose attendance resulted in peasants' apprehension was asked through the Peasants Union representative not to attend at further interviews.
- (4) The average time per interview was between one hour to one and a half hours at the pilot survey stage, reduced to between 45 minutes and one hour at the main survey stage

depending on the size of the household and on the ability of the peasant to understand and react to the survey

- (5) The author made several visits to the project over a period of six weeks between May and June 1975 to complete the pilot and the main survey. Another visit was also conducted in October 1976.
- (6) Survey coding and processing was done in the University upon returning to England, although a few forms (about 15) were coded and checked at the beginning of the main survey for checking purposes.

4.9.3 Survey Data Processing

The Shihanya Survey Questionnaire forms were coded and processed by the Author at the University of Sheffield Computer Centre using the "SPSS - Version 5.5 - SPSS 100 - 15th October, 1973 - Statistical Package for Social Sciences".⁽¹⁹²⁾ The Questionnaire Form (see Appendix No. IV, pp. X-154 to X-159) was transformed

(192) Norman H. Nie, D. H. Bent, C. H. Hull "SPSS" - op. cit.

via a variable coding form, (see Appendix No. IV, pp. X-160 to X-168) to coding sheets (see Appendix No. IV, p. X-171) for the computer processing stage. This is similar to the Baghdad Migrant Settlements Case Study method of analysis in this Thesis (Part III).

4.9.4 Analysis of Survey Data

4.9.4.1 The Theoretical Base for the Analysis

In examining the major objectives of the survey (Section 4.9.1) the Case Study Analysis seems to fall in the following main investigation issues:

- (a) If participants selected for the project according to the Governmental selection criteria are the right type of participants in terms of their stability and performance characteristics on the project.
- (b) If the project locational aspects (both subregionally and locally) are in line with the location criteria set out by the Government Project Administration.
- (c) If the project, which has been planned as a prototype for future projects of a similar nature to relocate rural migrants from major migrants' settlements in towns to the rural areas, has the characteristics for such an objective in terms of:

- (i) being supplied by typical rural migrants from the Capital's migrant settlements
 - (ii) project facilities being self-sufficient and adequately providing for the participants' needs.
- (d) If the project has achieved some of the more socio-politically oriented objectives which the Government had originally planned for the project experiment.

Since (b) above has already been examined (Sections 4.5.1, p.590 and 4.5.2, p.592) and both the subregional and local project's location characteristics proven to be valid, the survey analysis in this section regarding the project location issue will concentrate on that aspect of the location of the project which deals with the utilisation of nearby town centres for the supply of the project's participants needs.

For (a) above the selection criteria for participants satisfying the legal requirements for receiving agricultural land (outlined in Section 4.6, p.608-609) are to be tested against (in cross-tabulation form) their performance on the project (measured by average per capita monthly income of household members based on the household head's monthly

income for the period on the project)* and their stability (measured by the participant's declared intention of staying on the project or of leaving it). These tested selection criteria include age of participants, origin, size of household, employment and income in the Capital, occupation before migration (part of the legal requirements favour peasants occupation over others), and the number of years the candidates stayed in the Capital. The last element was ignored by the Selection Panel but the Author is testing the validity of leaving this factor out of the selection process.

Participant's income on the project and its comparison to his last income in the Capital forms an additional testing element in the stability analysis.** The underlying hypothesis for this last element is that it has direct bearing on the stability of the participant on the project as will be explained later in the cross-tabulation section.

Both (c) and (d) above will mostly be covered in the Analysis Section dealing with the totals of

* As both the supply of agricultural production requirements (such as seeds, fertilizers, machinery, etc.) and the marketing process are done centrally for the whole project through the agricultural combined co-operative on the project and whereupon deduction of their costs the participants receive their income based on their output proportion of the total collective farm output, thus it is possible to assume that the participant's income is a measure of his own performance on the project.

** Unless otherwise stated, the participant's income on the project is the average for the three year period of the project operation, namely, 1971-74, that this Case Study is examining.

variables investigated in the survey process. The necessity to prove (or disprove) that the Shihamya participants are typical rural migrants will establish the validity of applying the experience gained from the project for future projects planned on the same reverse migration strategy as that of Shihamya; also if the project planned and implemented in Shihamya is self-sufficient for the needs of the participants and if there are deficiencies in its facilities, then the participants will be the judge of these deficiencies and their impact on the quality of life on the project. The Government* main objectives in setting out the project (outlined in Section 4.3, p.582-583) are also examined in the Variables Totals Section to test whether or not these objectives have been accomplished. The following table (p.639) shows the theoretical base for the Survey Analysis against the Analysis Section used for testing.

The numbers of cross-tabulations and variables totals analysis referred to in the above-mentioned table are detailed in the next Section which deals with the Variables Analysis lists of the Research Survey.

* The term "Government" in the Survey Analysis section of this part of the thesis refers mainly to the Shihamya project administration. The participants also refer to the project administration as the "Government".

<u>Theoretical Base for Analysis</u>	<u>Analysis Section</u>
I Testing the participants selection criteria	Participants Income Cross-tabulation (No. 1P through 7P) Stability Cross-Tabulation (No. 1S through 8S) General Cross-tabulation (No. 1G)
II Project to act as a prototype for future similar projects	Variables Totals (No. 1T, 2T, 3T and Cross-tabulation No.2G)
i. Typical migrant population	
ii. Project has self-sufficient facilities	Variables Totals (No. 4T and 6T)
III Subregional location of project (Utilisation of nearby centres)	Variables Totals (No. 4T)
IV Project attaining Government main objectives	
i. Project offers "better" employment opportunity	Variables Totals (No. 5T)
ii. As a possible means to stabilize rural population	Variables Totals (No. 7T)
iii. To introduce collective farming, new agricultural techniques and peasants organisations	Variables Totals (No. 6T)
iv. To create new relationship between the Government and peasant to replace the traditional mistrust and lack of confidence relationship	Variables Totals (No. 7T)
v. To introduce new crops to replace the traditional wheat/barley cultivation	Mostly in the Section dealing with the Project Operation (4.11) also in Variables Totals (No. 5T)

4.9.4.2 The Variables Analysis for the Project Research Survey

Based on the theoretical base of analysis (Section 4.9.4.1), the Variables Analysis of the Project Research Survey are:

- I Variable Totals Analysis
- II Participants Income (Performance)
Cross-tabulation Analysis
- III Stability Cross-tabulations
- IV General Cross-tabulations

In the last Analysis Section of this Part of the Thesis, namely, Section 4.10, Data on the Project Operation, the Author's observations and comments will also include evaluation of the project experience using in addition to the Research Survey data other information gathered on the project from various references.

Before going into the lists of the Variables Analysis of the Project Research Survey, let us examine some of the terms and special variables used in the Variables Analysis in the analysis process:

(a) Terms used in the Analysis:

- VAR. = Abbreviation for VARIABLE
(as also used in Part III
of this Thesis)
- VAR.NO. = Survey Variables numbers
from VAR.01 to VAR.63,
according to the survey
coding form (Appendix No.
IV, pp. X-173 to X-178)
- VAR.TOTALS = The totals of each variable
by components of the variable,
percentages of these components
and statistical indices.

(b) Special variables:

Created by the Author through combinations of variables in the Research Survey (See Appendix No. IV, pp. X-177 to X-178).

- Z1 = First year income on the project (household head's average monthly income) measured as a percentage of the household head's average monthly income last year in Baghdad
- Z2 = SAME but for the second year on the project
- Z3 = SAME but for the third year on the project
- Z4 = SAME but average for the three years' period on the project
- Z5 = Per capita average monthly income during last year in Baghdad (household head's income only)
- Z6 = Per capita average monthly income during stay on the project (three years' average income - household head's income only)
- Z7 = Per capita average monthly income during last year in Baghdad (household members total income)
- Z8 = Per capita average monthly income during stay on the project (three years' average monthly income - household members total)

I. The Variables Totals Analysis List:

(Using the letter T as a prefix to identify the Variables Totals Analysis)

**Variables Totals
Analysis**

- | | |
|--------|--|
| No. 1T | Shihamyia Project Sample Vital Statistics |
| No. 2T | The migration characteristics of the participants household heads |
| No. 3T | The participants' occupations in the Capital |
| No. 4T | The self-sufficiency of the Project's social infra-structure and participants' domestic needs facilities |
| No. 5T | Participant's income on the Project |
| No. 6T | The Project's operational deficiencies and suggested improvements as seen by participants |
| No. 7T | Project participants' present and future stability on the project |

II. Participants Income (Performance) Cross-tabulation list:

(Using the letter P as a prefix to identify the participants income cross-tabulations)

Cross-tabulation

No. 1P	Participant's (household head) age	VAR.10
versus	Average per capita monthly income (household head's income only) for total period on the project	vs. Z6
No. 2P	Participants by their last year (fifth year) in the Capital jobs	VAR.21
versus	Average per capita monthly income (head only) for total period on project	vs. Z6
No. 3P	Household size	VAR.07
versus	Average per capita monthly income (head only) for total period on project	vs. Z6
No. 4P	Participants average monthly income last year in the Capital	VAR.24
and	Per capita monthly income (household head's income only) last year in the Capital	and Z5
versus	Average per capita monthly income (head only) for total period on project	vs. Z6
No. 5P	Number of years participants stayed in Capital	VAR.12
versus	Average per capita monthly income (head only) for total period on project	vs. Z6

Cross-tabulation

No. 6P	Participant's occupation before migrating to the Capital	VAR.16
--------	--	--------

versus

vs.

Average per capita monthly income (head only) for total period on project	Z6
---	----

No. 7P	Participant's (household head) origin	VAR.11
--------	--	--------

versus

vs.

Average per capita monthly income (head only) for total period on project	Z6
---	----

III. Stability Cross-tabulation Analysis List:

(Using the letter S as a prefix to identify the Stability cross-tabulations)

Cross-tabulation

No. 1S	Household head (participant) age	VAR.10
--------	-------------------------------------	--------

versus

vs.

If participant is thinking of leaving project	VAR.55
--	--------

No. 2S	Participant's occupation before migrating to the Capital	VAR.16
--------	--	--------

versus

vs.

If participant is thinking of leaving project	VAR.55
--	--------

No. 3S	Number of years partici- pant stayed in the Capital	VAR.12
--------	---	--------

versus

vs.

If participant is thinking of leaving project	VAR.55
--	--------

Cross-tabulation

No. 4S	Participant's (household head) origin	VAR.11
	versus	vs.
	If participant is thinking of leaving project	VAR.55
<hr/>		
No. 5S	Household size	VAR.07
	versus	vs.
	If participant is thinking of leaving project	VAR.55
<hr/>		
No. 6S	Average per capita monthly income (household head only) for total period on project	Z6
	versus	vs.
	If participant is thinking of leaving project	VAR.55
<hr/>		
	Average per capita monthly income (head only) last year in the Capital	Z5
	versus	vs.
	If participant is thinking of leaving project	VAR.55
<hr/>		
	Household head's monthly income (average for total period on the project) as a percentage of his average monthly income (last year in the Capital)	Z4
	versus	vs.
	If participant is thinking of leaving project	VAR.55
<hr/>		
No. 7S	Participants by their last year (fifth year) job in the Capital	VAR.21
	versus	vs.
	If participant is thinking of leaving project	VAR.55
<hr/>		
No. 8S	If participant is thinking of leaving project	VAR.55
	versus	vs.
	If project fulfilled participant's hopes and objectives	VAR.60

I. Variables Totals Analysis:

Variables Totals
Analysis
No. 1T

Shihamya Project Survey Sample Vital Statistics
(VAR.01 to VAR.10)

(a)	Age/Sex composition	(VAR.01 to VAR.06)
(b)	Household size	(VAR.07)
(c)	Number of basic families per household	(VAR.08)
(d)	Relation of household head to members	(VAR.09)
(e)	Household head's age	(VAR.10)

Comparing the above characteristics of the Shihamya Project Survey Sample to that of the Baghdad Migrant Settlements Survey (see Part III, p. 369), the following table (p.648) will emerge.

The data in the above-mentioned table clearly shows a strong resemblance between the Project Survey Sample and the Baghdad Migrant Settlements Sample. An interesting point here is that despite the selection criteria of favouring large households in the project participants' selection, the average size of the household for the project sample is slightly less than the average for the migrant settlements in the Capital where both the selection of participants and the Research Survey for Baghdad Settlements took place. Both the average age of participants at 44.364 years and the relatively

<u>Variables Shihamya Survey</u>	<u>Shihamya Survey Data</u>	<u>Baghdad Migrant Settlements Survey data</u>
Female 0 - 5	12.9%	10.0%
Female 6 - 15	14.0%	13.7%
Female over 15	<u>22.5%</u>	<u>23.4%</u>
Total Female	<u>49.4%</u>	<u>47.1%</u>
Male 0 - 5	13.0%	9.8%
Male 6 - 15	15.8%	19.4%
Male over 15	<u>21.9%</u>	<u>23.5%</u>
Total Male	<u>50.7%</u>	<u>52.7%</u>
Household Size (average)	7.54	7.68
Number of basic families per household - family size	1.111	1.138
	6.787	6.749
Relation of household head to members	(Father) 91.8%	(Father) 96.8%
Household head's age (average)	44.364	46.025

smaller size households are indications that the selection criteria were not very well adhered to. This is rather useful from the point of view of having to select typical migrant families for the project rather than being biased to one characteristic or another. Both samples show a typically headed household with over 90% in both samples having the father as the head.

BEST COPY

AVAILABLE

Variable print quality

FILE NONAME (CREATION DATE = 06/06/77)

VARIABLE VAR01 NOS FEMALE AGE 0 TO 5 YRS

VALUE LABEL	VALUE	ABSOLUTE FREQUENCY	RELATIVE FREQUENCY (PERCENT)	ADJUSTED FREQUENCY (PERCENT)	CUMULATIVE ADJ FREQ (PERCENT)
	1.00	46	41.8	64.8	64.8
	2.00	16	14.5	22.5	87.3
	3.00	6	5.5	8.5	95.8
	4.00	3	2.7	4.2	100.0
	0.00	39	35.5	MISSING	100.0
TOTAL		110	100.0	100.0	100.0

STATISTICS:

MEAN	1.521	STD ERROR	0.091	MEDIA'	0.000
MODE	1.000	STD DEV	0.826	VARIANCE	0.682
KURTOSIS	1.550	SKEWNESS	2.187	RANGE	3.000
MINIMUM	1.000	MAXIMUM	4.000		

VALID OBSERVATIONS = 71
MISSING OBSERVATIONS = 39

FILE NONAME (CREATION DATE = 06/06/77)

VARIABLE VAR02 NOS FEMALE AGE 6 TO 15 YRS

VALUE LABEL	VALUE	ABSOLUTE FREQUENCY	RELATIVE FREQUENCY (PERCENT)	ADJUSTED FREQUENCY (PERCENT)	CUMULATIVE ADJ FREQ (PERCENT)
	1.00	32	29.1	47.8	47.8
	2.00	24	21.8	35.8	83.6
	3.00	7	6.4	10.4	94.0
	4.00	4	3.6	6.0	100.0
	0.00	43	39.1	MISSING	100.0
TOTAL		110	100.0	100.0	100.0

STATISTICS..

MEAN	1.744	STD ERROR	0.107	MEDIAN	1.562
MODE	1.000	STD DEV	0.876	VARIANCE	0.768
KURTOSIS	0.406	SKEWNESS	10.275	RANGE	3.000
MINIMUM	1.000	MAXIMUM	4.000		

VALID OBSERVATIONS = 67
MISSING OBSERVATIONS = 43

SHIHAMIYA SURVEY

FILE NONAME (CREATION DATE = 06/04/77)

VARIABLE VAR03 NOS FEMALE AGE OVER 15 YRS

VALUE LABEL	VALUE	ABSOLUTE FREQUENCY	RELATIVE FREQUENCY (PERCENT)	ADJUSTED FREQUENCY (PERCENT)	CUMULATIVE ADJ FRFQ (PERCENT)
	1.00	58	52.7	53.7	53.7
	2.00	29	26.4	26.9	80.6
	3.00	15	13.6	13.9	94.6
	4.00	4	3.6	3.7	98.1
	5.00	1	0.9	0.9	99.1
	6.00	1	0.9	0.9	100.0
	0.00	2	1.8	MISSING	100.0
TOTAL		110	100.0	100.0	100.0

STATISTICS:

MEAN	1.761	STD ERROR	0.096	MEDIAN	0.000
MODE	1.000	STD DEV	0.999	VARIANCE	0.998
KURTOSIS	2.701	SKEWNESS	0.317	RANGE	5.000
MINIMUM	1.000	MAXIMUM	6.000		

VALID OBSERVATIONS = 108
MISSING OBSERVATIONS = 2

SHIMAMIYA SURVEY

FILE NONAME (CREATION DATE = 06/06/77)

VARIABLE VAR06 NOS MALE AGE 0 TO 5 YRS

VALUE LABEL	VALUE	ABSOLUTE FREQUENCY	RELATIVE FREQUENCY (PERCENT)	ADJUSTED FREQUENCY (PERCENT)	CUMULATIVE ADJ FREQ (PERCENT)
	1.00	35	31.8	51.5	51.5
	2.00	25	22.7	36.8	83.2
	3.00	8	7.3	11.6	100.0
	0.00	42	38.2	MISSING	100.0
	TOTAL	110	100.0	100.0	100.0

STATISTICS:

MEAN	1.603	STD ERROR	0.084	MEDIAN	0.000
MODE	1.000	STD DEV	0.694	VARIANCE	0.482
KURTOSIS	=0.660	SKEWNESS	1.310	RANGE	2.000
MINIMUM	1.000	MAXIMUM	3.000		

VALID OBSERVATIONS = 68
MISSING OBSERVATIONS = 42

SHIMANIYA SURVEY

FILE NONAME (CREATION DATE = 06/06/77)

VARIABLE VAROS NOS MALE AGE 6 TO 15 YRS

VALUE LABEL	VALUE	ABSOLUTE FREQUENCY	RELATIVE FREQUENCY (PERCENT)	ADJUSTED FREQUENCY (PERCENT)	CUMULATIVE ADJ FREQ (PERCENT)
	1.00	43	39.1	57.3	57.3
	2.00	17	15.5	22.7	80.0
	3.00	6	5.5	8.0	88.0
	4.00	7	6.4	9.3	97.3
	5.00	1	0.9	1.3	98.7
	6.00	1	0.9	1.3	100.0
	0.00	35	31.8	MISSING	100.0
	TOTAL	110	100.0	100.0	100.0

STATISTICS..

MEAN	1.787	STD ERROR	0.133	MEDIAN	0.000
MODE	1.000	STD DEV	1.154	VARIANCE	1.332
KURTOSIS	1.779	SKEWNESS	153.515	RANGE	5.000
MINIMUM	1.000	MAXIMUM	6.000		

VALID OBSERVATIONS = 75
MISSING OBSERVATIONS = 35

FILE NONAME (CREATION DATE = 06/06/77)

VARIABLE VAR06 NOS MALE AGE OVER 15 YRS

VALUE	ABSOLUTE FREQUENCY	RELATIVE FREQUENCY (PERCENT)	ADJUSTED FREQUENCY (PERCENT)	CUMULATIVE ADJ FRFO (PERCENT)
1.00	70	63.6	63.6	63.6
2.00	16	14.5	14.5	78.2
3.00	18	16.4	16.4	94.5
4.00	4	3.6	3.6	98.2
5.00	2	1.8	1.8	100.0
0.00	0	0.0	MISSING	100.0
TOTAL	110	100.0	100.0	100.0

STATISTICS...

MEAN	1.655	STD ERROR	0.095	MEDIAN	0.000
MODE	1.000	STD DEV	0.999	VARIANCE	0.999
KURTOSIS	1.117	SKEWNESS	41.273	RANGE	4.000
MINIMUM	1.000	MAXIMUM	5.000		

VALID OBSERVATIONS = 110
MISSING OBSERVATIONS = 0

SHINAIYA SURVEY
 FILE NONAME (CREATION DATE = 06/06/77)
 VARIABLE VAR07 NOS HHOLD MEMBERS

VALUE	ABSOLUTE FREQUENCY	RELATIVE FREQUENCY (PERCENT)	ADJUSTED FREQUENCY (PERCENT)	CUMULATIVE ADJ FREQ (PERCENT)
1.00	3	2.7	2.7	2.7
2.00	1	0.9	0.9	3.6
4.00	7	6.4	6.4	10.0
5.00	8	7.3	7.3	17.3
6.00	30	27.3	27.3	44.5
7.00	10	9.1	9.1	53.6
8.00	15	13.6	13.6	67.3
9.00	16	14.5	14.5	81.8
10.00	8	7.3	7.3	89.1
11.00	3	2.7	2.7	91.8
12.00	1	0.9	0.9	92.7
13.00	2	1.8	1.8	94.5
14.00	3	2.7	2.7	97.3
15.00	1	0.9	0.9	98.2
17.00	2	1.8	1.8	100.0
0.00	0	0.0	MISSING	100.0
TOTAL	110	100.0	100.0	100.0

STATISTICS:

MEAN	7.536	MEDIAN	7.100
MODE	6.000	VARIANCE	8.563
KURTOSIS	1.466	RANGE	16.000
MINIMUM	1.000		
STD ERROR	0.272		
STD DEV	2.926		
SKEWNESS	-1.236		
MAXIMUM	17.000		
VALID OBSERVATIONS =	110		
MISSING OBSERVATIONS =	0		

SHIHAMIYA SURVEY
FILE NONAME (CREATION DATE P 06/06/77)

VARIABLE VAR08 NOS BASIC FAMILIES PER HHOLD

VALUE LABEL	VALUE	ABSOLUTE FREQUENCY	RELATIVE FREQUENCY (PERCENT)	ADJUSTED FREQUENCY (PERCENT)	CUMULATIVE ADJ FREQ (PERCENT)
	1.00	97	88.2	89.8	89.8
	2.00	10	9.1	9.3	99.1
	3.00	1	0.9	0.9	100.0
	0.00	2	1.8	MISSING	100.0
TOTAL		110	100.0	100.0	100.0

STATISTICS:

MEAN	1.111	STD ERROR	0.033	MEDIAN	0.000
MODE	1.000	STD DEV	0.346	VARIANCE	0.118
KURTOSIS	9.781	SKEWNESS	56.385	RANGE	2.000
MINIMUM	1.000	MAXIMUM	3.000		

VALID OBSERVATIONS = 108
MISSING OBSERVATIONS = 2

SHINAWA SURVEY

FILE NONAME (CREATION DATE = 06/04/77)

VARIABLE VAR09 RELATION OF HHOLD HD TO MEMBERS

VALUE LABEL	VALUE	ABSOLUTE FREQUENCY	RELATIVE FREQUENCY (PERCENT)	ADJUSTED FREQUENCY (PERCENT)	CUMULATIVE ADJ FREQ (PERCENT)
FATHER	1.00	101	91.8	91.6	91.8
BROTHER	3.00	7	6.4	6.4	98.2
OTHERS	7.00	2	1.8	1.8	100.0
	0.00	0	0.0	MISSING	100.0
TOTAL		110	100.0	100.0	100.0

STATISTICS

MEAN	1.236	STD ERROR	0.000	MEDIAN	0.000
MODE	1.000	STD DEV	0.928	VARIANCE	0.861
KURTOSIS	25.411	SKEWNESS	26.083	RANGE	6.000
MINIMUM	1.000	MAXIMUM	7.000		

VALID OBSERVATIONS = 110
MISSING OBSERVATIONS = 0

SHINAMIYA SURVEY

FILE NQNAME (CREATION DATE = 06/06/77)

VARIABLE VAR10 HHOLD HD. AGE

VALUE	ABSOLUTE FREQUENCY	RELATIVE FREQUENCY (PERCENT)	ADJUSTED FREQUENCY (PERCENT)	CUMULATIVE ADJ FREQ (PERCENT)
25.00	14	12.7	12.7	12.7
35.00	22	20.0	20.0	32.7
45.00	43	39.1	39.1	71.8
55.00	19	17.3	17.3	89.1
65.00	12	10.9	10.9	100.0
0.00	0	0.0	MISSING	100.0
TOTAL	110	100.0	100.0	100.0

STATISTICS

MEAN	44.366	STD ERROR	1.098	MEDIAN	44.419
MODE	45.000	STD DEV	11.516	VARIANCE	132.619
KURTOSIS	0.601	SKEWNESS	2.482	RANGE	60.000
MINIMUM	25.000	MAXIMUM	65.000		

VALID OBSERVATIONS = 110
MISSING OBSERVATIONS = 0

Conclusions:

In terms of age/sex composition, family and household size, both the Project Survey Sample and the Baghdad Migrants Settlement Sample show similar characteristics. This suggests that the project participants' households are typical migrant households in their composition and vital characteristics.

Variables Totals
Analysis
No. 2T

The Migration Characteristics of the
Household Head
(VAR.11 to VAR.16)

- | | | |
|-----|--|--------------------------------|
| (a) | Birth place of household head | (VAR.11) |
| (b) | Number of years household head stayed
in the Capital (date of migration) | (VAR.12) |
| (c) | First order/second order and third
order reason for migration to
Baghdad | (VAR.13,
VAR.14,
VAR.15) |
| (d) | Participant's occupation before
migration to Baghdad | (VAR.16) |

In comparing the data of both surveys (Shihamya and Baghdad Migrants) on the bases of totals of the above variables again and as shown before, there is a strong similarity between the characteristics of both samples on the migration pattern issue as follows:

SHIMANYA SURVEY

FILE NO'IA'IE (CREATION DATE = 23/03/76)

VARIABLE VAR11 BIRTH PLACE OF HHOLD HD.

VALUE LABEL	VALUE	ABSOLUTE FREQUENCY	RELATIVE FREQUENCY (PERCENT)	ADJUSTED FREQUENCY (PERCENT)	CUMULATIVE ADJ. FREQ (PERCENT)
WASIT	1.	20	18.2	18.2	18.2
BAGD DJALA RABLN	2.	5	4.5	4.5	22.7
QADISYA YITHNA	3.	35	31.8	31.8	54.5
TWIOAR	4.	26	23.6	23.6	78.2
MYSAN	5.	24	21.8	21.8	100.0
	0.	0	0.0	MISSING	100.0
TOTAL		110	100.0	100.0	100.0

STATISTICS..

MEAN	3.264	STD ERROR	0.129	MEDIAN	3.357
MODE	3.000	STD DEV	1.352	VARIANCE	1.829
KURTOSIS	-7.885	SKEWNESS	-0.603	RANGE	4.000
MINIMUM	1.000	MAXIMUM	5.000		

VALID OBSERVATIONS = 110

MISSING OBSERVATIONS = 0

SHIMAHIYA SURVEY
 FILE NONAME (CREATION DATE = 06/06/77)
 VARIABLE VAR12 YRS. IN BAGHDAD

VALUE LABEL	VALUE	ABSOLUTE FREQUENCY	RELATIVE FREQUENCY (PERCENT)	ADJUSTED FREQUENCY (PPERCENT)	CUMULATIVE ADJ FREQ (PERCENT)
UP TO 3YRS	1.00	22	20.0	20.0	20.0
3 TO 4YRS	2.00	29	26.4	26.6	46.6
7 TO 12YRS	3.00	20	18.2	18.2	64.5
13 YRS AND OVER	4.00	39	35.5	35.5	100.0
	0.00	0	0.0	MISSING	100.0
TOTAL		110	100.0	100.0	100.0

STATISTICS..

MEAN	2.691	STD ERROR	0.110	MEDIAN	2.700
MODE	4.000	STD DEV	1.153	VARIANCE	1.335
KURTOSIS	1.635	SKEWNESS	-0.110	RANGE	3.000
MINIMUM	1.000	MAXIMUM	4.000		

VALID OBSERVATIONS = 110
 MISSING OBSERVATIONS = 0

SHINAMIYA SURVEY

FILE NONAME (CREATION DATE = 06/06/77)

VARIABLE VAR13 1ST REASON FOR MIGRATING TO BAGD

VALUE LABEL	VALUE	ABSOLUTE FREQUENCY	RELATIVE FREQUENCY (PERCENT)	ADJUSTED FREQUENCY (PERCENT)	CUMULATIVE ADJ FREQ (PERCENT)
SEEK WORK	1.00	44	41.8	41.8	41.8
PUSH BY LNDLORD	2.00	32	29.1	29.1	70.9
TRIBAL FACTORS	3.00	5	4.5	4.5	75.5
FOLLOW OTHR MEMBS	5.00	3	2.7	2.7	78.2
AGROLAND PROBS	6.00	24	21.8	21.8	100.0
	0.00	0	0.0	MISSING	100.0
TOTAL		110	100.0	100.0	100.0

STATISTICS:

MEAN	2.582	STD ERROR	0.188	MEDIAN	1.781
MODE	1.000	STD DEV	1.976	VARIANCE	3.897
KURTOSIS	0.762	SKEWNESS	1.017	RANGE	5.000
MINIMUM	1.000	MAXIMUM	6.000		

VALID OBSERVATIONS = 110
 MISSING OBSERVATIONS = 0

SHIMANIYA SURVEY

FILE NONAME (CREATION DATE = 06/04/77)

VARIABLE VARI16 2ND REASON FOR IMMIGRATING TO BAGD

VALUE LABEL	VALUE	ABSOLUTE FREQUENCY	RELATIVE FREQUENCY (PERCENT)	ADJUSTED FREQUENCY (PERCENT)	CUMULATIVE ADJ FREQ (PERCENT)
SEEK WORK	1.00	39	35.5	41.1	41.1
PUSH BY LANDLORD	2.00	13	11.8	13.7	54.7
TRIBAL FACTORS	3.00	8	7.3	8.4	63.2
TOWN ATTRACTION	4.00	2	1.8	2.1	65.3
FOLLOW OTHER MEN	5.00	8	7.3	8.4	73.7
AGROLAND PROBS	6.00	22	20.0	23.2	96.8
OTHERS	7.00	3	2.7	3.2	100.0
	0.00	15	13.6	MISSING	100.0
TOTAL		110	100.0	100.0	100.0

STATISTICS

MEAN	3.053	MEDIAN	2.154
MODE	1.000	VARIANCE	4.774
KURTOSIS	1.486	RANGE	6.000
MINIMUM	1.000		

VALID OBSERVATIONS = 95
MISSING OBSERVATIONS = 15

SHIMANIYA SURVEY

FILE NONAME (CREATION DATE = 06/06/77)

VARIABLE VAR15 3RD REASON FOR MIGRATING TO BAGD

VALUE LABEL	VALUE	ABSOLUTE FREQUENCY	RELATIVE FREQUENCY (PERCENT)	ADJUSTED FREQUENCY (PERCENT)	CUMULATIVE ADJ FRFQ (PERCENT)
SEE WORK	1.00	13	11.8	32.5	32.5
PUSH BY LNDLORD	2.00	1	0.9	2.5	35.0
TRIBAL FACTORS	3.00	4	3.6	10.0	45.0
FOLLOW OTHER MEMBERS	5.00	19	17.3	47.5	92.5
AGROLAND PROBS	6.00	3	2.7	7.5	100.0
	0.00	70	63.6	MISSING	100.0
TOTAL		110	100.0	100.0	100.0

STATISTICS..

MEAN	3.500	STD ERROR	0.306	MEDIAN	4.15A
MODE	5.000	STD DEV	1.935	VARIANCE	3.744
KURTOSIS	1.637	SKEWNESS	1.151	RANGE	5.000
MINIMUM	1.000	MAXIMUM	6.000		

VALID OBSERVATIONS = 60
MISSING OBSERVATIONS = 70

FILE NONAME (CREATION DATE = 00/06/77)

VARIABLE VAR16 HD OCCUPATION BEFOR MIGRATION

VALUE LABEL	VALUE	ABSOLUTE FREQUENCY	RELATIVE FREQUENCY (PERCENT)	ADJUSTED FREQUENCY (PERCENT)	CUMULATIVE ADJ FRFQ (PERCENT)
FARMER LANDLESS	2.00	86	78.2	78.2	78.2
UNEEMPLOYED	3.00	8	7.3	7.3	85.5
SALES SERVICES	4.00	9	8.2	8.2	93.6
ANIMAL RAISING	5.00	6	5.5	5.5	99.1
OTHERS	7.00	1	0.9	0.9	100.0
	0.00	0	0.0	MISSING	100.0
TOTAL		110	100.0	100.0	100.0

STATISTICS

MEAN	2.665	STD ERROR	0.092	MEDIAN	0.000
MODE	2.000	STD DEV	0.963	VARIANCE	0.928
KURTOSIS	6.970	SKEWNESS	15.275	RANGE	5.000
MINIMUM	2.000	MAXIMUM	7.000		

VALID OBSERVATIONS = 110
MISSING OBSERVATIONS = 0

(a) Birth place (origin) of household head (VAR.11):

Both samples show in excess of 80% of the total sample from the subregions of Wasit, Mysan, Thiqr and Qadisya/Muthna. While the Baghdad Migrants' Sample showed a large majority of Mysan migrants (53.5%) (Part III, p. 336) - due to the fact that the survey naturally reflected the overall majority of this southern subregion's migrants in the Capital total migration population (see Part II, Table No. 15, p.220), the Shihamya Project Sample - due to the participants' selection criteria - gave all subregions with social similarity to the project area equal priority. Yet the overall pattern showed similar predominance of these four southern and central (Wasit) subregions in the origins of the project participants.

(b) In examining the periods during which migrants came into the Capital (VAR.12), both samples showed the following almost identical pattern:

<u>Sample Proportion Migrated</u>	<u>Shihamya Survey</u>	<u>Baghdad Migrants Settlements Survey*</u>
After 1958	64.5%	67.0%
Before 1959	35.5%	33.0%

* (Part III, p. 344)

Since we have seen that the migration main reason (in relation to date of migration was also similar in both survey samples (Cross-tabulation No. 2G in this Part of the Thesis), one could assume that the migration pattern is identical for both samples. This fact is also shown when the factors of migration are examined in both surveys as in (c) below:

(c) Sample Proportion giving Main Reason for Migration as:	Shihamyia Survey*	Baghdad Survey**
1. Economic reasons (including land salinity, agricultural problems, deterioration of standards in living in rural areas, and rural unemployment, etc.)	63.6%	51.3%
2. Feudal system factors (including tribal factors in Shihamyia survey)	33.6%	30.7%
3. Other factors (including attraction of the Capital)	2.7%	17.9%
* (VAR.13, VAR.14 and VAR.15)		
** Baghdad Migrants Settlement Survey (Part III, p.350)		

Attraction of the Capital (listed as others in the Shihamyia Survey) appeared only as part of the second order reason of migration, again similar to the Baghdad Survey when this

factor made a significant showing only as second and third order factors of migration (see Part III, p.351). In the Shihamya sample a large part of the sample (63.6%) gave no third order reason for migration which, to a large extent, supports the strength of the argument that the economic factor and the feudal system factor are enough to induce the migratory movement.

- (d) In examining both surveys' data on the pre-migration occupation (at the rural village) of the migrant (VAR.16), both surveys showed a very large majority in agriculturally-engaged occupations with the Shihamya Sample (due to the participants' selection criteria which favoured peasantry occupation participants) having a larger proportion of those agriculturally-engaged at 78.2% against 72.1% of the Baghdad migrant settlements sample (Part III, p.419). Similarly for the same reason the non-agriculturally engaged proportion of the Baghdad migrant settlements survey sample was almost double the Shihamya proportion (of 14.1%) at around 29%.

Conclusions:

There is sufficient statistical evidence in this Variables Totals Analysis (in addition to data in the Variables Totals Analysis No. 1T) to suggest that the Shihamya Project Sample was to a large extent similar in character to the Baghdad Migrants Settlement Survey Sample (Part III of this Thesis). To this extent it is reasonable to assume that the project's participants are by and large typical migrant households, very similar in nature to the majority of those living in the main migrant settlements in the Capital. Conclusions on the Survey at the Shihamya Project could be assumed to be applicable to the majority of the Capital migrants population.

Variables Totals
Analysis
No. 3T

Participants' Occupations in the Capital
over the last five years of their
residence in the Capital
(VAR.17, VAR.18, VAR.19, VAR.20 and VAR.21)

In examining the data on the participants' occupations in the Capital for the last five years (as shown on p.670), a striking similarity could be seen to the data of the Baghdad Migrant Settlements Survey relating to the migrants' occupation in the Capital. Their first year jobs in the Capital

Type of Job	Job After				
	1 Year (VAR. 17)	2 Years (VAR. 18)	3 Years (VAR. 19)	4 Years (VAR. 20)	5 Years (VAR. 21)
1. Non-skilled (Construction)	71 (65.1%)	60 (58.8%)	52 (59.1%)	38 (54.3%)	31 (50.8%)
2. Skilled (Construction)	0 (0%)	2 (2.0%)	4 (4.5%)	6 (8.6%)	6 (9.8%)
3. Sales and Services	16 (14.7%)	17 (16.7%)	15 (17.1%)	13 (18.6%)	13 (21.3%)
4. Non-skilled (Mechanical)	1 (0.9%)	0 (0%)	0 (0%)	2 (2.9%)	2 (3.3%)
5. Skilled (Mechanical)	1 (0.9%)	0 (0%)	0 (0%)	0 (0%)	0 (0%)
6. Non-skilled (General)	12 (11.0%)	10 (9.8%)	7 (8.0%)	3 (4.3%)	3 (4.9%)
7. Others	3 (2.8%)	5 (4.9%)	7 (8.0%)	5 (7.1%)	3 (4.9%)
8. Unemployed	5 (4.6%)	8 (7.8%)	3 (3.4%)	3 (3.4%)	3 (4.9%)
9. Joined project	1	8	22	40	49
Total (excluding those joining the project)	109	102	88	70	61
TOTAL SAMPLE	110	110	110	110	110

(VAR.17) are mostly the non-skilled type of occupations, predominantly in the construction sector (65.1%) and in the general non-skilled category (11%). Over the five years the non-skilled category dropped from its first year level of 77% to 59% in the fifth year, while in the same period skilled jobs and sales and services jobs showed significant increases. The skilled jobs increased from 0% to 9.8% and the sales and service jobs increased from 14.7% to 21.3%. This upholds the findings of the Baghdad Migrant Settlements Case Study regarding the kind of jobs taken by migrants once they are in the Capital and the migrants taking on skilled jobs as the period of their presence in the Capital increases (see Part III, p.429 and p.427).

Conclusions:

On the issue of the type of employment the migrant takes once in the Capital and the pattern of change in the type of migrants' occupations in the Capital there is a strong resemblance between the Shihamyia Sample and the Baghdad Migrant Settlements Sample.

FILE NONAME (CREATION DATE = 06/04/77)

VARIABLE VAR17 1ST YR JOB AT BAGHDAD.

VALUE LABEL	VALUE	ABSOLUTE FREQUENCY	RELATIVE FREQUENCY (PERCENT)	ADJUSTED FREQUENCY (PERCENT)	CUMULATIVE ADJ FRFQ (PERCENT)
N.SKILD CONSTRN	1.00	71	64.5	64.5	64.5
SALES+SERVICES	3.00	16	14.5	14.5	79.1
N.SKILD MECHANCL	4.00	1	0.9	0.9	80.0
SKILD MECHANCL	5.00	1	0.9	0.9	80.9
N.SKILD GENERAL	6.00	12	10.9	10.9	91.8
OTHERS	7.00	3	2.7	2.7	94.5
UNEMPLOYED	8.00	5	4.5	4.5	99.1
JOINED PROJ	9.00	1	0.9	0.9	100.0
	0.00	0	0.0	MISSING	100.0
TOTAL		110	100.0	100.0	100.0

STATISTICS..

MEAN	2.455	MEDIAN	0.000
MODE	1.000	VARIANCE	5.259
KURTOSIS	0.383	RANGE	5.000
MINIMUM	1.000		

VALID OBSERVATIONS = 110
MISSING OBSERVATIONS = 0

FILE NONAME (CREATION DATE = 06/06/77)

VARIABLE VAR18 2ND YK JOB AT BAGHDAD

VALUE LABEL	VALUE	ABSOLUTE FREQUENCY	RELATIVE FREQUENCY (PERCENT)	ADJUSTED FREQUENCY (PERCENT)	CUMULATIVE ADJ FREQ (PERCENT)
N.SKILD CONSTRN	1.00	60	54.5	54.5	54.5
SKILD CONSTRN	2.00	2	1.8	1.8	56.4
SALES+SERVICES	3.00	17	15.5	15.5	71.8
N.SKILD GENERAL	6.00	10	9.1	9.1	80.9
OTHERS	7.00	5	4.5	4.5	85.5
UNEMPLOYED	8.00	8	7.3	7.3	92.7
JOINED PROJ	9.00	8	7.3	7.3	100.0
	0.00	0	0.0	MISSING	100.0
TOTAL		110	100.0	100.0	100.0

STATISTICS

MEAN	3.165	STD ERROR	0.274	MEDIAN	0.000
MODE	1.000	STD DEV	2.870	VARIANCE	8.236
KURTOSIS	-0.695	SKENNESS	-0.322	RANGE	8.000
MINIMUM	1.000	MAXIMUM	9.000		

VALID OBSERVATIONS = 110
MISSING OBSERVATIONS = 0

FILE NONAME (CREATION DATE = 06/04/77)

VARIABLE VAR19 JRD YK JOB AT BAGHDAD

VALUE LABEL	VALUE	ABSOLUTE FREQUENCY	RELATIVE FREQUENCY (PERCENT)	ADJUSTED FREQUENCY (PERCENT)	CUMULATIVE ADJ FREQ (PERCENT)
N.SKILD CONSTN	1.00	52	47.3	67.3	67.3
SKILD CONSTN	2.00	4	3.6	3.6	50.9
SALES+SERVICES	3.00	15	13.6	13.6	64.5
N.SKILD GENERAL	6.00	7	6.4	6.4	70.9
OTHERS	7.00	7	6.4	6.4	77.3
UNEMPLOYED	8.00	3	2.7	2.7	80.0
JOINED PROJ	9.00	22	20.0	20.0	100.0
	0.00	0	0.0	MISSING	100.0
TOTAL		110	100.0	100.0	100.0

STATISTICS..

MEAN	3.800	MEDIAN	2.250
MODE	1.000	VARIANCE	10.859
KURTOSIS	11.338	RANGE	8.000
MINIMUM	1.000		

VALID OBSERVATIONS = 110
MISSING OBSERVATIONS = 0

SHINAMIYA SURVEY
 FILE NONAME (CREATION DATE = 06/06/77)
 VARIABLE VAR20 6TH YR JOB AT BAGHDAD

VALUE LABEL	VALUE	ABSOLUTE FREQUENCY	RELATIVE FREQUENCY (PERCENT)	ADJUSTED FREQUENCY (PERCENT)	CUMULATIVE ADJ FREQ (PERCENT)
N.SKILD CONSTRN	1.00	38	34.5	34.5	34.5
SKILD CONSTRN	2.00	6	5.5	5.5	40.0
SALES+SERVICES	3.00	13	11.8	11.8	51.8
N.SKILD MECHANCL	4.00	2	1.8	1.8	53.6
N.SKILD GENERAL	6.00	3	2.7	2.7	56.4
OTHERS	7.00	5	4.5	4.5	60.9
UNEMPLOYED	8.00	3	2.7	2.7	63.6
JOINED PROJ	9.00	40	36.4	36.4	100.0
	0.00	0	0.0	MISSING	100.0
TOTAL		110	100.0	100.0	100.0

STATISTICS..

MEAN	4.855	STD ERROR	0.342	MEDIAN	3.346
MODE	9.000	STD DEV	3.580	VARIANCE	12.878
KURTOSIS	-1.819	SKEWNESS	-3.701	RANGE	8.000
MINIMUM	1.000	MAXIMUM	9.000		

VALID OBSERVATIONS = 110
 MISSING OBSERVATIONS = 0

FILE NONAME (CREATION DATE = 06/06/77)

VARIABLE VAR21 LAST YR [5TH YR] JOB AT BAGD

VALUE LABEL	VALUE	ABSOLUTE FREQUENCY	RELATIVE FREQUENCY (PERCENT)	ADJUSTED FREQUENCY (PERCENT)	CUMULATIVE ADJ FREQ (PERCENT)
N.SKILD CONSTRN	1.00	31	28.2	28.2	28.2
SKILD CONSTRN	2.00	6	5.5	5.5	33.6
SALES+SERVICES	3.00	13	11.8	11.8	45.5
N.SKILD MECHANCL	4.00	2	1.8	1.8	47.3
N.SKILD GENERAL	6.00	3	2.7	2.7	50.0
OTHERS	7.00	3	2.7	2.7	52.7
UNEMPLOYED	8.00	3	2.7	2.7	55.5
JOINED PROJ	9.00	49	44.5	44.5	100.0
	0.00	0	0.0	MISSING	100.0
TOTAL		110	100.0	100.0	100.0

STATISTICS..

MEAN	5.600	STD ERROR	0.343	MEDIAN	6.500
MODE	0.000	STD DEV	3.600	VARIANCE	12.958
KURTOSIS	=1.820	SKEWNESS	=5.774	RANGE	8.000
MINIMUM	1.000	MAXIMUM	9.000		

VALID OBSERVATIONS = 110

MISSING OBSERVATIONS = 0

Variables Totals
 Analysis
No. 4T

The self-sufficiency of the project's social
 infrastructures and participants' domestic
 needs facilities

(VAR.38 to VAR.51)

- (a) To check if the project's participants are getting
 all their needs (services and domestic requirements)
 on the project or from destinations outside the
 project where they may get their needed supplies:

If household members get services
 on project (VAR.38)

First preference of service centres
 outside project (VAR.39)

Second preference of service centre
 outside project (VAR.40)

- (b) To test the supply of basic facilities, services
 and domestic needs on the project:

If participant obtains - ... outside the
 project

... foodstuffs ... (VAR.41)

... clothing needs ... (VAR.42)

... home appliances ... (VAR.43)

... health services ... (VAR.44)

... educational services ... (VAR.45)

... social services ... (VAR.46)

.. administrative and legal services.. (VAR.47)

... other services ... (VAR.48)

- (c) To test the frequency of supply from outside the project:

Frequency participant obtains	...	-	...	outside the project	
	...		foodstuffs	...	(VAR.49)
	...		clothing needs	...	(VAR.50)
	...		home appliances	...	(VAR.51)

- (a) In examining the data for the first part of this Total Analysis, (a) above, it seems that:

1. Participants responded by an overwhelming majority of 99.1% that they do not get all their needs from the project area and consequently have to go to shopping centres outside the project area in nearby towns. (VAR.38)
2. One of the locational criteria of the project is to be close to existing towns and local centres to supply the participants with their needs which they cannot obtain on the project. While the project was originally planned to be self-sufficient, the shopping facilities on the project were very limited. One small shop located in the project's administration area represents the "shopping facilities" provided by the project organisation for the participants' use. Not only is it inadequate (in terms of the range of goods it supplies) but also it is far from the majority of the project village facilities and it does not extend credit facilities to the project participants (who traditionally pay their debts

SHIHAMIYA SURVEY

FILE NONAME (CREATION DATE = 06/04/77)

VARIABLE VAR38 NHOLD IIEH6 GET SERVICES ON PROJ

VALUE LABEL	VALUE	ABSOLUTE FREQUENCY	RELATIVE FREQUENCY (PERCENT)	ADJUSTED FREQUENCY (PERCENT)	CUMULATIVE ADJ FREQ (PERCENT)
YES	1.00	1	0.9	0.9	0.9
NO	2.00	109	99.1	99.1	100.0
	0.00	0	0.0	MISSING	100.0
TOTAL		110	100.0	100.0	100.0

STATISTICS..

MEAN	1.991	STD ERROR	0.009	MEDIAN	0.000
MODE	2.000	STD DEV	0.095	VARIANCE	0.009
KURTOSIS	105.000	SKEWNESS	-10.425	RANGE	1.000
MINIMUM	1.000	MAXIMUM	2.000		

VALID OBSERVATIONS = 110
MISSING OBSERVATIONS = 0

SHIHAMIYA SURVEY

FILE NONAME (CREATION DATE = 06/06/77)

VARIABLE VAR39 1ST PREF OUTSIDE SERVICE CENTERS

VALUE LABEL	VALUE	ABSOLUTE FREQUENCY	RELATIVE FREQUENCY (PERCENT)	ADJUSTED FREQUENCY (PERCENT)	CUMULATIVE ADJ FREQ (PERCENT)
ZUBAIDIYA	1.00	9	8.2	8.3	8.3
NAMANIYA	2.00	100	90.9	91.7	100.0
	0.00	1	0.9	MISSING	100.0
TOTAL		110	100.0	100.0	100.0

STATISTICS..

MEAN	1.917	STD ERROR	0.026	MEDIAN	0.000
MODE	2.000	STD DEV	0.277	VARIANCE	0.076
KURTOSIS	7.201	SKEWNESS	-2.994	RANGE	1.000
MINIMUM	1.000	MAXIMUM	2.000		

VALID OBSERVATIONS = 109
MISSING OBSERVATIONS = 1

SHIRAZIYA SURVEY

FILE NONAME (CREATION DATE = 06/06/77)

VARIABLE VAR60 2ND PHES OUTSIDE SERVICE CENTERS

VALUE LABEL	VALUE	ABSOLUTE FREQUENCY	RELATIVE FREQUENCY (PERCENT)	ADJUSTED FREQUENCY (PERCENT)	CUMULATIVE ADJ FREQ (PERCENT)
ZUBAIDIYA	1.00	20	18.2	20.8	20.8
HAMANIYA	2.00	9	8.2	9.4	30.2
SUWAIRA	5.00	65	59.1	67.7	97.9
OTHERS	6.00	2	1.8	2.1	100.0
	0.00	14	12.7	MISSING	100.0
TOTAL		110	100.0	100.0	100.0

STATISTICS..

MEAN	3.906	STD ERROR	0.178	MEDIAN	4.085
MODE	5.000	STD DEV	1.742	VARIANCE	3.033
KURTOSIS	1.061	SKEWNESS	-4.975	RANGE	5.000
MINIMUM	1.000	MAXIMUM	6.000		

VALID OBSERVATIONS = 96
MISSING OBSERVATIONS = 14

after the harvest season). The project participants faced with that situation were obliged to go to nearby town merchants who had a long history of trading with peasants with payment due to be made after the harvest season. Those town merchants were also moneylenders and agricultural crops traders who, in the pre-Agrarian Reform days, had played a significant role in increasing the miseries of the peasants (see Part I, p. 29). While it is hard to get enough evidence to suggest that the current situation for project participants in terms of their dealing with the merchants of nearby towns is similar to the pre-1958 years, the deteriorated economic return on the project and the popularity of dealing with these merchants certainly suggests a similar pattern whereby most of the peasant's crop had already been lent away to the merchants well in advance of the harvest season. This situation is a major deficiency of the project operation and requires immediate action to rectify it.

In terms of attractiveness of nearby towns (VAR.39 and VAR.40), (see Figure No. 31, p.596), Namania, the largest town in the project vicinity (about 40 km. from the project area) is the shopping destination for 90.9% of the project's participants. A Qada centre with a 1970 population of around 30,000, despite being the furthest of the towns in the project area vicinity, attracts the majority of the first order preference of the project's participants.

Credit facilities and moneylenders are the main reasons for the popularity of Namania town among the project participants. Zubaidya comes second in the first order preference with 8.2% of the project participants' preference votes. A Nahya Centre is only 18 km. away from the project and administratively it represents the project's administrative unit. The 1970 population of Zubaidya was around 18,000, the smallest town in the project's vicinity. Suwaira, the other Qadha centre in the project's vicinity was the main second preference town with 59.1% of the second preference votes. Slightly smaller than Namania with a 30,000 population in 1970, it is only 30 km. away from the project and is linked to the project with a reasonably accessible earth road (as have the rest of the towns in the project vicinity). During the winter rainy season, the roads to all these towns become practically unusable and the project is more or less in isolation. Only animal transport remains possible which adds more to the urgency of rectifying the participants' needs supply problem. It is not conceivable that this pattern of preference towards one supply centre or another would alter dramatically due to the improvement of the local transport network, since it relates more to the presence or absence of experienced town merchants in dealing with the peasants, but it certainly would make other facilities such as educational (high school level) or more advanced health facilities more accessible to the project participants.

SHIHANIYA SURVEY

FILE NONAME (CREATION DATE = 06/06/77)

VARIABLE VAR61 FOOD STUFFS OBTAINED OUTSIDE PROJ

VALUE LABEL	VALUE	ABSOLUTE FREQUENCY	RELATIVE FREQUENCY (PERCENT)	ADJUSTED FREQUENCY (PERCENT)	CUMULATIVE ADJ FRFQ (PERCENT)
YES	1.00	109	99.1	100.0	100.0
	0.00	1	0.9	MISSING	100.0
	TOTAL	110	100.0	100.0	100.0

STATISTICS..

MEAN	1.000	STD ERROR	0.000	MEDIAN	0.000
MODE	1.000	STD DEV	0.000	VARIANCE	0.000
KURTOSIS	0.000	SKEWNESS	0.000	RANGE	0.000
MINIMUM	1.000	MAXIMUM	1.000		

VALID OBSERVATIONS = 109
 MISSING OBSERVATIONS = 1

SHINANIYA SURVEY

FILE NONAME (CREATION DATE = 06/04/77)

VARIABLE VAR62 CLOTHES OBTAINED OUTSIDE PROJ

VALUE LABEL	VALUE	ABSOLUTE FREQUENCY	RELATIVE FREQUENCY (PERCENT)	ADJUSTED FREQUENCY (PERCENT)	CUMULATIVE ADJ FREQ (PERCENT)
YES	1.00	109	99.1	100.0	100.0
	0.00	1	0.9	MISSING	100.0
	TOTAL	110	100.0	100.0	100.0

STATISTICS..

MEAN	1.000	STD ERROR	0.000	MEDIAN	0.000
MODE	1.000	STD DEV	0.000	VARIANCE	0.000
KURTOSIS	0.000	SKEWNESS	0.000	RANGE	0.000
MINIMUM	1.000	MAXIMUM	1.000		

VALID OBSERVATIONS = 109
MISSING OBSERVATIONS = 1

06/77

SHIMANIYA SURVEY
FILE NO NAME (CREATION DATE = 06/04/77)

VARIABLE VAR63 HOME APPL OBTAINED OUTSIDE PROJ

VALUE LABEL	VALUE	ABSOLUTE FREQUENCY	RELATIVE FREQUENCY (PERCENT)	ADJUSTED FREQUENCY (PERCENT)	CUMULATIVE ADJ FREQ (PERCENT)
YES	1.00	107	97.3	98.2	98.2
NO	2.00	2	1.8	1.8	100.0
	0.00	1	0.9	MISSING	100.0
TOTAL		110	100.0	100.0	100.0

STATISTICS:

MEAN	1.018	STD ERROR	0.013	MEDIAN	0.000
MODE	1.000	STD DEV	0.135	VARIANCE	0.018
KURTOSIS	40.510	SKEWNESS	7.270	RANGE	1.000
MINIMUM	1.000	MAXIMUM	2.000		

VALID OBSERVATIONS = 109
MISSING OBSERVATIONS = 1

SHIMANIYA SURVEY

FILE NO NAME (CREATION DATE = 06/04/77)

VARIABLE VAR66 HEALTH SERV OBTAINED OUTSID PROJ

NO	VALUE	ABSOLUTE FREQUENCY	RELATIVE FREQUENCY (PERCENT)	ADJUSTED FREQUENCY (PERCENT)	CUMULATIVE ADJ FREQ (PERCENT)
	2.00	109	99.1	100.0	100.0
	0.00	1	0.9	MISSING	100.0
	TOTAL	110	100.0	100.0	100.0

STATISTICS..

MEAN	2.000	STD ERROR	0.000	MEDIAN	0.000
MODE	2.000	STD DEV	0.000	VARIANCE	0.000
KURTOSIS	0.000	SKEWNESS	0.000	RANGE	0.000
MINIMUM	2.000	MAXIMUM	2.000		

VALID OBSERVATIONS = 109
MISSING OBSERVATIONS = 1

SHINAIYA SURVEY

FILE NOHANE (CREATION DATE = 06/04/77)

VARIABLE VAR65 EDUCT SERV OBTAINED OUTSIDE PROJ

NO	VALUE	ABSOLUTE FREQUENCY	RELATIVE FREQUENCY (PERCENT)	ADJUSTED FREQUENCY (PERCENT)	CUMULATIVE ADJ FREQ (PERCENT)
	2.00	109	99.1	100.0	100.0
	0.00	1	0.9	MISSING	100.0
	TOTAL	110	100.0	100.0	100.0

STATISTICS

MEAN	2.000	STD ERROR	0.000	MEDIAN	0.000
MODE	2.000	STD DEV	0.000	VARIANCE	0.000
KURTOSIS	0.000	SKEWNESS	0.000	RANGE	0.000
MINIMUM	2.000	MAXIMUM	2.000		

VALID OBSERVATIONS = 109
MISSING OBSERVATIONS = 1

FILE NAME (CREATION DATE = 06/06/77)

VARIABLE VAR66 SOCIAL SERV OBTAINED OUTSID PROJ

NO	VALUE	ABSOLUTE FREQUENCY	RELATIVE FREQUENCY (PERCENT)	ADJUSTED FREQUENCY (PERCENT)	CUMULATIVE ADJ FREQ (PERCENT)
	2.00	109	99.1	100.0	100.0
	0.00	1	0.9	MISSING	100.0
	TOTAL	110	100.0	100.0	100.0

STATISTICS..

MEAN	2.000	STD ERROR	0.000	MEDIAN	0.000
MODE	2.000	STD DEV	0.000	VARIANCE	0.000
KURTOSIS	0.000	SKEWNESS	0.000	RANGE	0.000
MINIMUM	2.000	MAXIMUM	2.000		

VALID OBSERVATIONS = 109
 MISSING OBSERVATIONS = 1

SHINJIYA SURVEY

FILE NONAME (CREATION DATE = 06/06/77)

VARIABLE VAR67 ADH+LEGL SERV OBTAND OUTSID PROJ

NO	VALUE	ABSOLUTE FREQUENCY	RELATIVE FREQUENCY (PERCENT)	ADJUSTED FREQUENCY (PERCENT)	CUMULATIVE ADJ FREQ (PERCENT)
	2.00	109	99.1	100.0	100.0
	0.00	1	0.9	MISSING	100.0
	TOTAL	110	100.0	100.0	100.0

STATISTICS..

MEAN	2.000	STD ERROR	0.000	MEDIAN	0.000
MODE	2.000	STD DEV	0.000	VARIANCE	0.000
KURTOSIS	0.000	SKEWNESS	0.000	RANGE	0.000
MINIMUM	2.000	MAXIMUM	2.000		

VALID OBSERVATIONS = 109
MISSING OBSERVATIONS = 1

FILE MONAHE (CREATION DATE = 06/04/77)

VARIABLE VAR68 OTHER SERV OBTAINED OUTSIDE PROJ

NO	VALUE	ABSOLUTE FREQUENCY	RELATIVE FREQUENCY (PERCENT)	ADJUSTED FREQUENCY (PERCENT)	CUMULATIVE ADJ FRFQ (PERCENT)
	2.00	109	99.1	100.0	100.0
	0.00	1	0.9	MISSING	100.0
	TOTAL	110	100.0	100.0	100.0

STATISTICS..

MEAN	2.000	STD ERROR	0.000	MEDIAN	0.000
MODE	2.000	STD DEV	0.000	VARIANCE	0.000
KURTOSIS	0.000	SKEWNESS	0.000	RANGE	0.000
MINIMUM	2.000	MAXIMUM	2.000		

VALID OBSERVATIONS = 109
 MISSING OBSERVATIONS = 1

Sheer physical proximity to a local centre which was one of the project's original location criteria, does not seem to be the main factor in whether or not the project's participants will make use of that centre for the supply of their needs.

- (b) In terms of what basic facilities (health, education, etc.), services and domestic needs there are on the project, participants seem to be content with the health facilities (VAR.44), educational facilities (VAR.45), social services (VAR.46), administrative and legal services (VAR.47) and other services (post, telegraph, etc.) with 100% of the participants reporting that they use those on the project.

Shopping (as discussed in (a) above) is done almost entirely outside the project area. Foodstuffs and clothing needs received 100% votes for outside the project and home appliances received 98% (with two participants reporting that they did not need any!) (VAR.41, VAR.42 and VAR.43).

In examining the type of public services available on the project (see p.617), water

and electricity are extended to the villages but not individual housing units since there are no permanent villages as yet on the project. Schooling is only to the primary level and secondary school pupils have to go to nearby Zubaidya for their school (which becomes very difficult in the rainy season). The local health centre is not equipped to deal with the more serious types of illness and patients have to be taken to nearby Namania or Suwaira or even as far as Baghdad or Kut for medical attention. Telephones are non-existent on the project, and the post office is very limited in its services supply. All in all the services on the project leave a lot to be desired and the necessity for improvement is vital. Participants' priorities are mostly related to the agricultural operations on the project and most of them consider the present services for their domestic needs on the project to be adequate.

- (c) Foodstuff requirements are mostly obtained on a monthly basis (95.5% of project participants - VAR.49), clothes semi-annually in the summer and winter seasons (92.7% -

FILE NONAME (CREATION DATE = 06/06/77)

VARIABLE VAR69 FREQNCY FOOD STUF OUTND OTSD-PROJ

VALUE LABEL	VALUE	ABSOLUTE FREQUENCY	RELATIVE FREQUENCY (PERCENT)	ADJUSTED FREQUENCY (PERCENT)	CUMULATIVE ADJ FREQ (PERCENT)
MONTHLY	4.00	105	95.5	96.3	96.3
SEMI ANNUALLY	5.00	2	1.8	1.8	98.2
AS NEEDED	7.00	2	1.8	1.8	100.0
	0.00	1	0.9	MISSING	100.0
TOTAL		110	100.0	100.0	100.0

STATISTICS:

MEAN	4.073	STD ERROR	0.041	MEDIAN	0.000
MODE	4.000	STD DEV	0.424	VARIANCE	0.180
KURTOSIS	39.863	SKENNESS	6.381	RANGE	3.000
MINIMUM	4.000	MAXIMUM	7.000		

VALID OBSERVATIONS = 109
 MISSING OBSERVATIONS = 1

FILE NONAME (CREATION DATE = 06/06/77)

VARIABLE VARSO PRONCY CLOTHES OBTND OUTSD PROJ

VALUE LABEL	VALUE	ABSOLUTE FREQUENCY	RELATIVE FREQUENCY (PERCENT)	ADJUSTED FREQUENCY (PERCENT)	CUMULATIVE ADJ FREQ (PERCENT)
SEMI ANNUALLY	2.00	102	92.7	93.6	93.6
ANNUALLY	3.00	2	1.8	1.8	95.4
AS NEEDED	4.00	5	4.5	6.6	100.0
	0.00	1	0.9	MISSING	100.0
TOTAL		110	100.0	100.0	100.0

STATISTICS..

MEAN	2.110	STD ERROR	0.062	MEDIAN	0.000
MODE	2.000	STD DEV	0.433	VARIANCE	0.191
KURTOSIS	13.583	SKEWNESS	29.888	RANGE	2.000
MINIMUM	2.000	MAXIMUM	4.000		

VALID OBSERVATIONS = 109
MISSING OBSERVATIONS = 1

FILE NAME (CREATION DATE = 06/06/77)

VARIABLE VARS1 FRQNCY NUM APP OBTND OUTSD PROJ

VALUE LABEL	VALUE	ABSOLUTE FREQUENCY	RELATIVE FREQUENCY (PERCENT)	ADJUSTED FREQUENCY (PERCENT)	CUMULATIVE ADJ FREQ (PERCENT)
AS NEEDED	6.00	109	99.1	100.0	100.0
	0.00	1	0.9	MISSING	100.0
	TOTAL	110	100.0	100.0	100.0

STATISTICS..

MEAN	6.000	STD ERROR	0.000	MEDIAN	0.000
MODE	6.000	STD DEV	0.000	VARIANCE	0.000
KURTOSIS	0.000	SKEWNESS	0.000	RANGE	0.000
MINIMUM	6.000	MAXIMUM	6.000		

VALID OBSERVATIONS = 109
MISSING OBSERVATIONS = 1

VAR.50) and home appliances as needed (99.1% - VAR.51). The monthly pattern of supply of foodstuffs suggests that daily needs (such as bread, milk, meat, etc.) are supplied at the project mostly by participants themselves. This pattern is typical of most of the Nation's population.

Conclusions:

There are serious deficiencies in the services, basic facilities and domestic needs supply for the project's participants. Marketing facilities are non-existent and thus participants are led to rely on the same town merchants who exploited them in the pre-Agrarian Reform era. The transport network makes the linkages to nearby towns extremely difficult, notably in the rainy season, thus, the deficiency in the project facilities (especially health and education above primary school level) is even more severe. Urgent steps are needed for the situation to be rectified. This situation is a direct contradiction to the Government's announced intentions of assisting the transfer process of the participants from their urban environment to their new rural one on the project by supplying an acceptable level of basic services and amenities.

The situation is especially serious in the non-existence of credit facilities for participants to get their family needs of foodstuffs, clothing and home appliances. It illustrates the lack of understanding by the project administration of the peasants' social habits and failure to meet with simple procedural alterations in the operation of the only shop on the project (which is run by the project administration). Together with the poor financial return on the project (Totals Analysis No. 5T, following), the poor supply of participant's needs aggravates the already precarious stability situation of the participants and accelerates the running out of their patience.

Variables Totals
Analysis
No. 5T

Participants' Incomes on the Project

In the analysis of the level of income on the project the following steps are implemented:

- (a) As the project experiment is examined for the three years the project has been in operation (1971/72, 1972/73 and 1973/74) income of participants on the project was measured for each year and for the total period both in total monthly income for the household head (VAR.25, 26, 27 and 28)

FILE NONAME (CREATION DATE = 06/04/77)

VARIABLE VAR23 FEMALES AGE>15 TYPE OF WORK

VALUE LABEL	VALUE	ABSOLUTE FREQUENCY	RELATIVE FREQUENCY (PERCENT)	ADJUSTED FREQUENCY (PERCENT)	CUMULATIVE ADJ FREQ (PERCENT)
HOUSEHOLD	1.00	6	5.5	5.6	5.6
UNAPPLICABLE	4.00	101	91.8	94.6	100.0
	0.00	3	2.7	MISSING	100.0
TOTAL		110	100.0	100.0	100.0

STATISTICS..

MEAN	3.832	STD ERROR	0.067	MEDIAN	0.000
MODE	4.000	STD DEV	0.693	VARIANCE	0.481
KURTOSIS	12.893	SKEWNESS	3.870	RANGE	3.000
MINIMUM	1.000	MAXIMUM	4.000		

VALID OBSERVATIONS = 107
MISSING OBSERVATIONS = 3

SHIHAMIYA SURVEY
FILE NONAME (CREATION DATE = 06/06/77)

VARIABLE VAR26 HD MONTH INCOME LAST YR IN BAGD

VALUE LABEL	VALUE	ABSOLUTE FREQUENCY	RELATIVE FREQUENCY (PERCENT)	ADJUSTED FREQUENCY (PERCENT)	CUMULATIVE ADJ FREQ (PERCENT)
	5.00	12	10.9	10.9	10.9
	15.00	36	32.7	32.7	43.6
	25.00	36	32.7	32.7	76.4
	35.00	15	13.6	13.6	90.0
	45.00	11	10.0	10.0	100.0
	0.00	0	0.0	MISSING	100.0
TOTAL		110	100.0	100.0	100.0

STATISTICS:

MEAN	22.900	STD ERROR	1.074	MEDIAN	21.946
MODE	25.000	STD DEV	11.260	VARIANCE	126.781
KURTOSIS	=0.514	SKEWNESS	=0.685	RANGE	40.000
MINIMUM	5.000	MAXIMUM	45.000		

VALID OBSERVATIONS = 110
MISSING OBSERVATIONS = 0

SHIHAIYA SURVEY

FILE NONAME (CREATION DATE = 31/03/78)

VARIABLE VAR24 HD MONTH INQUIRY LAST YR IN BAGD

VALUE LABEL	VALUE	ABSOLUTE FREQUENCY	RELATIVE FREQUENCY (PERCENT)	ADJUSTED FREQUENCY (PERCENT)	CUMULATIVE ADJ FREQ (PERCENT)
UP TO 20 I.D	1.00	48	43.6	43.6	43.6
21 TO 40 I.D	2.00	51	46.4	46.4	90.0
OVER 40 I.D	3.00	11	10.0	10.0	100.0
	0.00	0	0.0	MISSING	100.0
TOTAL		110	100.0	100.0	100.0

STATISTICS..

MEAN	1.664	STD ERROR	0.062	MEDIAN	1.637
MODE	2.000	STD DEV	0.654	VARIANCE	0.427
KURTOSIS	0.714	SKEWNESS	0.474	RANGE	2.000
MINIMUM	1.000	MAXIMUM	3.000		

VALID OBSERVATIONS = 110
MISSING OBSERVATIONS = 0

5/06/77

SHINAMIYA SURVEY

FILE NONAME (CREATION DATE = 06/06/77)

VARIABLE VAR25 HD MONTH INCOME 1STYR AT PROJ

VALUE LABEL	VALUE	ABSOLUTE FREQUENCY	RELATIVE FREQUENCY (PERCENT)	ADJUSTED FREQUENCY (PERCENT)	CUMULATIVE ADJ FRFQ (PERCENT)
	2.50	68	61.8	81.9	81.9
	7.50	8	7.3	9.6	91.6
	15.00	7	6.4	8.4	100.0
	0.00	27	24.5	MISSING	100.0
TOTAL		110	100.0	100.0	100.0

STATISTICS..

MEAN	4.036	STD ERROR	0.402	MEDIAN	0.000
MODE	2.500	STD DEV	3.659	VARIANCE	13.389
KURTOSIS	4.070	SKEWNESS	86.080	RANGE	12.500
MINIMUM	2.500	MAXIMUM	15.000		

VALID OBSERVATIONS = 83
MISSING OBSERVATIONS = 27

SHIHAIYA SURVEY

FILE NONAME (CREATION DATE = 06/06/77)

VARIABLE VAR26 HD MONTH INCOME 2NDYR AT PROJ

VALUE LABEL	VALUE	ABSOLUTE FREQUENCY	RELATIVE FREQUENCY (PERCENT)	ADJUSTED FREQUENCY (PERCENT)	CUMULATIVE ADJ FRFQ (PERCENT)
	2.50	92	83.6	86.0	86.0
	7.50	10	9.1	9.3	95.3
	15.00	5	4.5	4.7	100.0
	0.00	3	2.7	MISSING	100.0
TOTAL		110	100.0	100.0	100.0

STATISTICS..

MEAN	3.551	STD ERROR	0.284	MEDIAN	0.000
MODE	2.500	STD DEV	2.935	VARIANCE	8.613
KURTOSIS	8.353	SKEWNESS	2.905	RANGE	12.500
MINIMUM	2.500	MAXIMUM	15.000		

VALID OBSERVATIONS = 107
MISSING OBSERVATIONS = 3

SHIHAMIYA SURVEY

FILE NONAME (CREATION DATE = 06/06/77)

VARIABLE VAR27 HD MONTH INCOME 3RDYR AT PROJ

VALUE LABEL	VALUE	ABSOLUTE FREQUENCY	RELATIVE FREQUENCY (PERCENT)	ADJUSTED FREQUENCY (PERCENT)	CUMULATIVE ADJ FREQ (PERCENT)
	2.50	81	73.6	81.8	81.8
	7.50	13	11.8	13.1	94.9
	15.00	4	3.6	6.0	99.0
	45.00	1	0.9	1.0	100.0
	0.00	11	10.0	MISSING	100.0
	TOTAL	110	100.0	100.0	100.0

STATISTICS..

MEAN	4.091	STD ERROR	0.508	MEDIAN	0.000
MODE	2.500	STD DEV	5.056	VARIANCE	25.568
KURTOSIS	42.093	SKEWNESS	1643.910	RANGE	42.500
MINIMUM	2.500	MAXIMUM	45.000		

VALID OBSERVATIONS = 99
MISSING OBSERVATIONS = 11

SHIMAHIYA SURVEY

FILE NONAME (CREATION DATE = 06/04/77)

VARIABLE VAR28 HD AVG INTH INCOME AT PROJ

VALUE LABEL	VALUE	ABSOLUTE FREQUENCY	RELATIVE FREQUENCY (PERCENT)	ADJUSTED FREQUENCY (PERCENT)	CUMULATIVE ADJ FREQ (PERCENT)
	2.50	93	84.5	84.5	84.5
	7.50	11	10.0	10.0	94.5
	15.00	6	5.5	5.5	100.0
	0.00	0	0.0	MISSING	100.0
TOTAL		110	100.0	100.0	100.0

STATISTICS..

MEAN	3.682	STD ERROR	0.297	MEDIAN	0.000
MODE	2.500	STD DEV	3.117	VARIANCE	9.714
KURTOSIS	6.907	SKEWNESS	2.658	RANGE	12.500
MINIMUM	2.500	MAXIMUM	15.000		

VALID OBSERVATIONS = 110
MISSING OBSERVATIONS = 0

FILE NONAME (CREATION DATE = 06/06/77)

VARIABLE VAR31 HHOLD TOTAL MONTH INCOME IN BAGD

VALUE LABEL	VALUE	ABSOLUTE FREQUENCY	RELATIVE FREQUENCY (PERCENT)	ADJUSTED FREQUENCY (PERCENT)	CUMULATIVE ADJ FRFQ (PERCENT)
	2.50	4	3.6	3.8	3.8
	15.00	25	22.7	23.6	27.4
	25.00	39	35.5	36.8	64.2
	35.00	23	20.9	21.7	85.9
	45.00	6	5.5	5.7	91.5
	55.00	5	4.5	4.7	96.2
	65.00	4	3.6	3.8	100.0
	0.00	4	3.6	MISSING	100.0
TOTAL		110	100.0	100.0	100.0

STATISTICS

MEAN	28.019	STD ERROR	1.312	MEDIAN	26.154
MODE	25.000	STD DEV	13.508	VARIANCE	182.466
KURTOSIS	0.784	SKEWNESS	1.917	RANGE	62.500
MINIMUM	2.500				

VALID OBSERVATIONS = 106
MISSING OBSERVATIONS = 4

FILE NONAME (CREATION DATE = 06/04/77)

VARIABLE VAR32 HHOLD MONTH INCOME 1STYR AT PROJ

VALUE LABEL	VALUE	ABSOLUTE FREQUENCY	RELATIVE FREQUENCY (PERCENT)	ADJUSTED FREQUENCY (PERCENT)	CUMULATIVE ADJ FREQ (PERCENT)
	2.50	70	63.6	82.4	82.4
	7.50	8	7.3	9.4	91.8
	15.00	7	6.4	8.2	100.0
	0.00	25	22.7	MISSING	100.0
	TOTAL	110	100.0	100.0	100.0

STATISTICS..

MEAN	4.000	STD ERROR	0.393	MEDIAN	0.000
MODE	2.500	STD DEV	3.623	VARIANCE	13.125
KURTOSIS	4.276	SKEWNESS	89.430	RANGE	12.500
MINIMUM	2.500	MAXIMUM	15.000		

VALID OBSERVATIONS = 85
MISSING OBSERVATIONS = 25

SHINAIYA SURVEY

FILE NAME (CREATION DATE = 06/06/77)

VARIABLE VAR33 HHOLD MONTH INCOME 2NDYR AT PROJ

VALUE LABEL	VALUE	ABSOLUTE FREQUENCY	RELATIVE FREQUENCY (PERCENT)	ADJUSTED FREQUENCY (PERCENT)	CUMULATIVE ADJ FREQ (PERCENT)
	2.50	89	80.9	83.2	83.2
	7.50	12	10.9	11.2	94.4
	15.00	5	4.5	4.7	99.1
	35.00	1	0.9	0.9	100.0
	0.00	3	2.7	MISSING	100.0
TOTAL		110	100.0	100.0	100.0

STATISTICS..

MEAN	3.960	STD ERROR	0.411	MEDIAN	7.000
MODE	2.500	STD DEV	4.268	VARIANCE	18.067
KURTOSIS	26.431	SKEWNESS	4.512	RANGE	32.500
MINIMUM	2.500	MAXIMUM	35.000		

VALID OBSERVATIONS = 107
MISSING OBSERVATIONS = 3

SHIMANIYA SURVEY

FILE NONAME (CREATION DATE = 06/04/77)

VARIABLE VAR36 HHOLD MONTH INCOME 3RDYR AT PROJ

VALUE LABEL	VALUE	ABSOLUTE FREQUENCY	RELATIVE FREQUENCY (PERCENT)	ADJUSTED FREQUENCY (PERCENT)	CUMULATIVE ADJ FREQ (PERCENT)
	2.50	78	70.9	78.8	78.8
	7.50	15	13.6	15.2	93.9
	15.00	5	4.5	5.1	99.0
	45.00	1	0.9	1.0	100.0
	0.00	11	10.0	MISSING	100.0
	TOTAL	110	100.0	100.0	100.0

STATISTICS:

MEAN	6.318	STD ERROR	0.521	MEDIAN	0.000
MODE	2.500	STD DEV	5.186	VARIANCE	26.890
KURTOSIS	37.010	SKEWNESS	1498.991	RANGE	42.500
MINIMUM	2.500	MAXIMUM	45.000		
VALID OBSERVATIONS =	99				
MISSING OBSERVATIONS =	11				

0166 177

SHINJIYA SURVEY

FILE: NONAME (CREATION DATE = 06/06/77)

VARIABLE VAR33 NHOLD AVG MONTH INCOME AT PROJ

VALUE LABEL	VALUE	ABSOLUTE FREQUENCY	RELATIVE FREQUENCY (PERCENT)	ADJUSTED FREQUENCY (PERCENT)	CUMULATIVE ADJ FREQ (PERCENT)
	2.50	89	80.9	80.9	80.9
	7.50	14	12.7	12.7	93.6
	15.00	7	6.4	6.4	100.0
	0.00	0	0.0	MISSING	100.0
TOTAL		110	100.0	100.0	100.0

STATISTICS..

MEAN	3.932	STD ERROR	0.319	MEDIAN	0.000
MODE	2.500	STD DEV	3.343	VARIANCE	11.177
KURTOSIS	6.982	SKEWNESS	2.225	RANGE	12.500
MINIMUM	2.500	MAXIMUM	15.000		

VALID OBSERVATIONS = 110
MISSING OBSERVATIONS = 0

FILE NONAME (CREATION DATE = 06/04/77)

VARIABLE Z5 PER CAPITA INCOME HDINGOME LAST YR RAGD

VALUE LABEL	VALUE	ABSOLUTE FREQUENCY	RELATIVE FREQUENCY (PERCENT)	ADJUSTED FREQUENCY (PERCENT)	CUMULATIVE ADJ FREQ (PERCENT)
0 TO 2.01.D	1.00	35	31.8	31.8	31.8
2.1 TO 4.01.D	2.00	38	34.5	36.5	66.4
OVER 4.01.D	3.00	37	33.6	33.6	100.0
	=99.00	0	0.0	MISSING	100.0
TOTAL		110	100.0	100.0	100.0

STATISTICS..

MEAN	2.018	STD ERROR	0.077	MEDIAN	2.026
MODE	2.000	STD DEV	0.813	VARIANCE	0.660
KURTOSIS	11.671	SKEWNESS	-6.101	RANGE	2.000
MINIMUM	1.000	MAXIMUM	3.000		

VALID OBSERVATIONS = 110
 MISSING OBSERVATIONS = 0

FILE NAME (CREATION DATE = 06/06/77)

VARIABLE Z6 PER CAPITA INCOME HDINCOME AVG ON PROJ

VALUE LABEL	VALUE	ABSOLUTE FREQUENCY	RELATIVE FREQUENCY (PERCENT)	ADJUSTED FREQUENCY (PERCENT)	CUMULATIVE ADJ FREQ (PERCENT)
0 TO 0.351.D	1.00	45	40.9	40.9	40.9
0.36 TO 0.751.D	2.00	45	40.9	40.9	81.8
OVER 0.751.D	3.00	20	18.2	18.2	100.0
	-99.00	0	0.0	MISSING	100.0
TOTAL		110	100.0	100.0	100.0

STATISTICS:

MEAN	1.773	STD ERROR	0.070	MEDIAN	1.722
MODE	1.000	STD DEV	0.735	VARIANCE	0.544
KURTOSIS	1.076	SKEWNESS	3.154	RANGE	2.000
MINIMUM	1.000	MAXIMUM	3.000		

VALID OBSERVATIONS = 110
MISSING OBSERVATIONS = 0

SHIMANYA SURVEY

FILE NO: 1418 (CREATION DATE = 23/03/78)

VARIABLE Z6 PER CAPITA INCOME AVG ON PROJ

VALUE LABEL	VALUE	ABSOLUTE FREQUENCY	RELATIVE FREQUENCY (PERCENT)	ADJUSTED FREQUENCY (PERCENT)	CUMULATIVE ADJ FREQ (PERCENT)
	0.15	2	1.8	1.8	1.8
	0.17	1	0.9	0.9	2.7
	0.18	3	2.7	2.7	5.5
	0.19	2	1.8	1.8	7.3
	0.25	8	7.3	7.3	14.5
	0.28	16	14.5	14.5	29.1
	0.31	13	11.8	11.8	40.9
	0.36	10	9.1	9.1	50.0
	0.42	25	22.7	22.7	72.7
	0.50	2	1.8	1.8	74.5
	0.63	7	6.4	6.4	80.9
	0.68	1	0.9	0.9	81.8
	0.94	2	1.8	1.8	83.6
	1.25	4	3.6	3.6	87.3
	1.36	2	1.8	1.8	89.1
	1.50	6	5.5	5.5	94.5
	2.50	6	5.5	5.5	100.0
	-99.00	0	0.0	MISSING	100.0
	TOTAL	110	100.0	100.0	100.0

STATISTICS:

MEAN	7.595	STD ERROR	0.055	MEDIAN	0.307
MODE	7.617	STD DEV	0.577	VARIANCE	0.332
KURTOSIS	6.121	SKWENESS	2.230	RANGE	2.353
MINIMUM	7.167	MAXIMUM	2.500		

FILE NO:AME (CREATION DATE = 06/04/77)

VARIABLE 27 PER CAPITA INCOME ALLHOLD LAST YR RAGD

VALUE LABEL	VALUE	ABSOLUTE FREQUENCY	RELATIVE FREQUENCY (PERCENT)	ADJUSTED FREQUENCY (PERCENT)	CUMULATIVE ADJ FREQ (PERCENT)
	0.00	4	3.6	3.6	3.6
	0.42	2	1.8	1.8	5.5
	0.50	2	1.8	1.8	7.3
	1.25	1	0.9	0.9	8.2
	1.50	2	1.8	1.8	10.0
	1.67	5	4.5	4.5	14.5
	1.79	1	0.9	0.9	15.5
	1.87	5	4.5	4.5	20.0
	2.14	1	0.9	0.9	20.9
	2.50	16	14.5	14.5	35.5
	2.69	2	1.8	1.8	37.3
	2.78	5	4.5	4.5	41.8
	3.00	2	1.8	1.8	43.6
	3.12	5	4.5	4.5	48.2
	3.57	7	6.4	6.4	54.5
	3.67	1	0.9	0.9	55.5
	3.82	2	1.8	1.8	57.3
	3.89	3	2.7	2.7	60.0
	4.17	14	12.7	12.7	72.7
	4.37	5	4.5	4.5	77.3
	5.00	2	1.8	1.8	79.1
	5.83	5	4.5	4.5	83.6
	6.11	2	1.8	1.8	85.5
	6.25	1	0.9	0.9	86.4
	6.43	2	1.8	1.8	88.2
	7.00	2	1.8	1.8	90.0
	8.75	2	1.8	1.8	91.8

SHIHAMIYA SURVEY

06/04/77

PAGE

	11.25	3	2.7	2.7	94.5
	12.50	1	0.9	0.9	95.5
	13.00	2	1.8	1.8	97.3
	35.00	2	1.8	1.8	99.1
	45.00	1	0.9	0.9	100.0
	-99.00	0	0.0	MISSING	100.0
	TOTAL	110	100.0	100.0	100.0

STATISTICS..

MEAN	6.782	STD ERROR	0.598	MEDIAN	3.426
MODE	2.500	STD DEV	6.268	VARIANCE	39.294
KURTOSIS	22.831	SKEWNESS	4.616	RANGE	45.000
MINIMUM	0.000	MAXIMUM	45.000		

VALID OBSERVATIONS = 110
MISSING OBSERVATIONS = 0

FILE NONAME (CREATION DATE = 06/04/77)

VARIABLE Z8 PER CAPITA INCOME ALLHOLD AVG ON PROJ

VALUE LABEL	VALUE	ABSOLUTE FREQUENCY	RELATIVE FREQUENCY (PERCENT)	ADJUSTED FREQUENCY (PERCENT)	CUMULATIVE ADJ FREQ (PERCENT)
	0.15	2	1.8	1.6	1.8
	0.16	3	2.7	2.7	4.5
	0.15	2	1.8	1.8	6.4
	0.25	6	5.5	5.5	11.8
	0.26	15	13.6	13.6	25.5
	0.31	13	11.8	11.8	37.3
	0.36	10	9.1	9.1	46.4
	0.42	25	22.7	22.7	69.1
	0.50	3	2.7	2.7	71.8
	0.63	7	6.4	6.4	78.2
	0.75	2	1.8	1.8	80.0
	0.33	1	0.9	0.9	80.9
	0.94	2	1.8	1.8	82.7
	1.25	4	3.6	3.6	86.4
	1.36	3	2.7	2.7	89.1
	1.50	6	5.5	5.5	94.5
	2.50	6	5.5	5.5	100.0
	99.00	0	0.0	MISSING	100.0
	TOTAL	110	100.0	100.0	100.0

STATISTICS..

MEAN	0.610	STD ERROR	0.055	MEDIAN	0.398
MODE	0.417	STD DEV	0.578	VARIANCE	0.336
KURTOSIS	3.768	SKEWNESS	1.500	RANGE	2.353
MINIMUM	0.167	MAXIMUM	2.500		

VALID OBSERVATIONS = 110
MISSING OBSERVATIONS = 0

and also in terms of per capita monthly income for the total period of the three years on the project (Z6). Income on the project each year and for the total period is also measured as a percentage of the last year's average monthly income in the Capital for each participant. These percentages are represented by Z1 (for the first year), Z2 (second year), Z3 (third year) and Z4 (for the total three years on the project) (see Part IV, p. 641). Per capita monthly income and total monthly income (all averages) for the household head's last year in the Capital are also measured for comparison purposes (Z5 and VAR.24). All income figures are averages for the period covered and measured in Iraqi dinars (I.D.).

- (b) Income for the household is measured based on the household head's income only, since traditionally in the rural society, it is the only acceptable source of income the household members rely on (see Part III, p. 442). The total income for all household members (including the household head) is taken for comparison purposes in the pre-analysis stage of the survey, and since it (Z8)

showed less than 6.8%, more than the per capita income figure based on the household head's income only (Z6), (in addition to the social view regarding the household source of income, above), it is dropped from the final cross-tabulation and totals analysis stage.*

(c) Income Data Analysis is done in two ways:

1. to measure the average monthly income on the project for the participant as a percentage of the last year in the Capital average monthly income for the participant
2. to compare the per capita income on the project (for the total period of three years) for participants against the per capita income for the rural and total population in the country.

While (1) above measures the gain or loss in financial terms which the project participants sustained through joining the project and leaving their Baghdad jobs, the second method (2) measures the project performance in terms of the financial returns to its participants, against the national levels of rural and total population levels.**

* The income values for the total household members included Variables 32, 33, 34 and 35 and also Z8.

** Using the Baghdad Migrant Settlements Survey data (Part III, p.419) it was also possible to compare project participant income to the pre-migration rural village income reported by the Baghdad Survey Sample.

FILE NONAME (CREATION DATE = 06/06/77)

VARIABLE = 21 PERCENT HDIICOM 1STYR PROJ TO BAGD INCOM

VALUE LABEL	VALUE	ABSOLUTE FREQUENCY	RELATIVE FREQUENCY (PERCENT)	ADJUSTED FREQUENCY (PERCENT)	CUMULATIVE ADJ FREQ (PERCENT)
	0.00	27	24.5	24.5	24.5
	5.56	5	4.5	4.5	29.1
	7.14	14	12.7	12.7	41.8
	10.00	21	19.1	19.1	60.9
	16.67	27	24.5	24.5	85.5
	21.43	1	0.9	0.9	86.4
	30.00	3	2.7	2.7	89.1
	33.33	2	1.8	1.8	90.9
	50.00	5	4.5	4.5	95.5
	60.00	5	4.5	4.5	100.0
TOTAL		110	100.0	100.0	100.0

STATISTICS..

MEAN	13.781	STD ERROR	1.457	MEDIAN	10.612
MODE	16.667	STD DEV	15.283	VARIANCE	233.581
KURTOSIS	2.597	SKEWNESS	8.240	RANGE	60.000
MINIMUM	0.000	MAXIMUM	60.000		

VALID OBSERVATIONS = 110
MISSING OBSERVATIONS = 0

SHIMAZIYA SURVEY

FILE NONAME (CREATION DATE = 06/06/77)

VARIABLE Z2 PERCENT HDINCOH 2NDYR PROJ TO 6AGD INCOM

VALUE LABEL	VALUE	ABSOLUTE FREQUENCY	RELATIVE FREQUENCY (PERCENT)	ADJUSTED FREQUENCY (PERCENT)	CUMULATIVE ADJ FREQ (PERCENT)
	0.00	3	2.7	2.7	2.7
	5.56	5	4.5	4.5	7.3
	7.14	13	11.6	11.8	19.1
	10.00	33	30.0	30.0	49.1
	16.67	36	30.9	30.9	60.0
	21.43	2	1.8	1.8	81.8
	30.00	2	1.8	1.8	83.6
	33.33	4	3.6	3.6	87.3
	50.00	9	8.2	8.2	95.5
	150.00	4	3.6	3.6	99.1
	300.00	1	0.9	0.9	100.0
TOTAL		110	100.0	100.0	100.0

STATISTICS..

MEAN	23.668	STD ERROR	3.671	MEDIAN	13.501
MODE	16.667	STD DEV	38.505	VARIANCE	1482.616
KURTOSIS	25.886	SKEWNESS	4.049	RANGE	300.000
MINIMUM	0.000	MAXIMUM	300.000		

VALID OBSERVATIONS = 110
MISSING OBSERVATIONS = 0

FILE NONAME (CREATION DATE = 06/04/77)

VARIABLE Z3 PERCENT HDINCOM 3RDYR PROJ TO BAGD INCOM

VALUE LABEL	VALUE	ABSOLUTE FREQUENCY	RELATIVE FREQUENCY (PERCENT)	ADJUSTED FREQUENCY (PERCENT)	CUMULATIVE ADJ FREQ (PERCENT)
	0.00	11	10.0	10.0	10.0
	5.56	6	5.5	5.5	15.5
	7.14	9	8.2	8.2	23.6
	10.00	26	23.6	23.6	47.3
	16.67	31	28.2	28.2	75.5
	21.43	6	5.5	5.5	80.9
	30.00	3	2.7	2.7	83.6
	33.33	2	1.8	1.8	85.5
	50.00	11	10.0	10.0	95.5
	100.00	2	1.8	1.8	97.3
	150.00	2	1.8	1.8	99.1
	300.00	1	0.9	0.9	100.0
TOTAL		110	100.0	100.0	100.0

STATISTICS..

MEAN	22.814	STD ERROR	3.475	MEDIAN	13.886
MODE	16.667	STD DEV	36.445	VARIANCE	1328.265
KURTOSIS	31.154	SKEWNESS	136.130	RANGE	300.000
MINIMUM	0.000	MAXIMUM	300.000		

VALID OBSERVATIONS = 110
MISSING OBSERVATIONS = 0

FILE NONAME (CREATION DATE = 06/06/77)

VARIABLE Z6 PERCENT HDINCOH AVRGE PROJ TO BAGD INCOH

VALUE LABEL	VALUE	ABSOLUTE FREQUENCY	RELATIVE FREQUENCY (PERCENT)	ADJUSTED FREQUENCY (PERCENT)	CUMULATIVE ADJ FREQ (PERCENT)
UP TO 10 PERCENT	1.00	49	44.5	44.5	44.5
11 TO 20 PERCENT	2.00	37	33.6	33.6	78.2
OVER 20 PERCENT	3.00	24	21.8	21.8	100.0
TOTAL		110	100.0	100.0	100.0

STATISTICS..

MEAN	1.773	STD ERROR	0.073	MEDIAN	1.662
MODE	1.000	STD DEV	0.786	VARIANCE	0.618
KURTOSIS	4.252	SKEWNESS	2.504	RANGE	2.000
MINIMUM	1.000	MAXIMUM	3.000		

VALID OBSERVATIONS = 110
MISSING OBSERVATIONS = 0

These analyses test a major objective sought by the project organisers, namely, the provision of a "better" employment opportunity to the migrants in the Capital. Income levels on the project in comparison to the participants' previous income in their settlements in the Capital is a major stability factor and does reflect very strongly on whether the project has any future or not.

To examine the totals of Z1, Z2, Z3 and Z4 for method (1) above, the following table (p. 723) has been devised to facilitate the analysis.

Observations:

- (1) With around 80% of the participants making less than one-fifth of their last year's income in the Capital, conditions of participants on the project are very unsatisfactory. This proves invalid the Government objective of giving the participants a "better" employment opportunity than in the Capital. Only Government subsidies are keeping them above subsistence level and keeping the project operational.

Income on Project as a Percentage of last year Income in Baghdad

<u>Year on Project</u>	<u>No Income</u>	<u>Up to 10%</u>	<u>11%-20%</u>	<u>Over 20%</u>	<u>Total</u>	<u>% making equal or more</u>	<u>Year's Average</u>
1st year (Z1)	24.5%	60.9%	24.5%	13.6%	100%	0%	14%
2nd year (Z2)	2.7%	49.1%	30.9%	20.0%	100%	4.5%	24%
3rd year (Z3)	10.0%	47.3%	28.3%	24.5%	100%	4.5%	23%
Period Average (Z4)	-	44.5%	33.6%	21.8%	100%	2.7%	17%

- (2) Data suggests an improving trend over the three years with more participants making over the 20% margin during the three year period. This trend is another factor which keeps up the hopes among the participants to stay on in anticipation of an improving situation.
- (3) Participants blame both the administration practices on the project and the unfamiliar crops for the low productivity on the project. (For examination of this fact, see Section 4.10).
- (4) In comparing the per capita income data on the project against National figures for incomes for rural (agricultural) and total per capita income for the whole country, using 1969/1971, also against rural income (pre-migration) reported by the Baghdad Migrant Settlements Survey, the project income is considerably less than all four figures, as follows:
- (a) per capita monthly income on project (average for three years, household head's income only)(ZG(p.713)
= 0.596 I.D.
- (b) per capita monthly income agricultural family (1969 Data - see Section III Baghdad Migrants Settlements Survey, p. 437)
= 2.83 I.D.

(c) per capita monthly income
(National total rural and
urban)⁽¹⁹³⁾

= 8.192 I.D.

(d) per capita monthly income
reported by migrants (Baghdad
Migrants Settlements Survey
data, Part III) to be their
rural village income (p.419)

= 1.292 I.D.

With the income level on the project as
low as shown above the project's future
and present stability is in a serious
situation.

Conclusions:

Average per capita monthly income on the project
is extremely low even by comparison with pre-migration
rural income reported by migrants in the Capital to
be a major reason for their migration. Actually
it is the Government subsidies and the participants'
faltering hopes that improvement is coming which are
keeping the project going.

These extremely low income figures for partici-
pants on the project take on a further serious
picture when considering the fact that 93.6% of
the participants reported that female members of
the household share in agricultural work (Totals of

(193) Ministry of Planning - C.S.O. Baghdad, "National
Income in Iraq, 1964-71" - Dec., 1973 - Table 5, p.43.

FILE NONAME (CREATION DATE = 06/06/77)

VARIABLE VAR22 FEMAL MFMB AGE>15 WORK IN AGR

VALUE LABEL	VALUE	ABSOLUTE FREQUENCY	RELATIVE FREQUENCY (PERCENT)	ADJUSTED FREQUENCY (PERCENT)	CUMULATIVE ADJ FREQ (PERCENT)
YES	1.00	103	93.6	93.6	93.6
NO	2.00	6	5.5	5.5	99.1
NO FEMALE	3.00	1	0.9	0.9	100.0
	0.00	0	0.0	MISSING	100.0
TOTAL		110	100.0	100.0	100.0

STATISTICS..

MEAN	1.073	STD ERROR	0.028	MEDIAN	0.000
MODE	1.000	STD DEV	0.294	VARIANCE	0.086
KURTOSIS	10.616	SKEWNESS	101.177	RANGE	2.000
MINIMUM	1.000	MAXIMUM	3.000		

VALID OBSERVATIONS = 110
MISSING OBSERVATIONS = 0

FILE NONAME (CREATION DATE = 06/04/77)

VARIABLE VAR29 NOS WAGE EARNERS HHDLD IN BAGD

VALUE LABEL	VALUE	ABSOLUTE FREQUENCY	RELATIVE FREQUENCY (PERCENT)	ADJUSTED FREQUENCY (PERCENT)	CUMULATIVE ADJ FRFQ (PERCENT)
UNEMPLOYED	1.00	3	2.7	2.7	2.7
ONE HHDLD HD	2.00	89	80.9	80.9	83.6
ONE HHDLD MEMB	3.00	4	3.6	3.6	87.3
TWO	4.00	12	10.9	10.9	98.2
THREE	5.00	2	1.8	1.8	100.0
	0.00	0	0.0	MISSING	100.0
TOTAL		110	100.0	100.0	100.0

STATISTICS..

MEAN	2.282	STD ERROR	0.073	MEDIAN	2.084
MODE	2.000	STD DEV	0.768	VARIANCE	0.590
KURTOSIS	2.953	SKEWNESS	4.468	RANGE	4.000
MINIMUM	1.000	MAXIMUM	5.000		

VALID OBSERVATIONS = 110
MISSING OBSERVATIONS = 0

SHIMAMIA SURVEY

FILE NONAME (CREATION DATE = 06/06/77)

VARIABLE VAR30 NOS AGR CONTRACTS HHOLD ON PROJ

VALUE LABEL	VALUE	ABSOLUTE FREQUENCY	RELATIVE FREQUENCY (PERCENT)	ADJUSTED FREQUENCY (PERCENT)	CUMULATIVE ADJ FRFQ (PERCENT)
ONE HHLD HD	1.00	94	85.5	85.5	85.5
TWO	3.00	14	12.7	12.7	98.2
THREE	4.00	2	1.8	1.8	100.0
	0.00	0	0.0	MISSING	100.0
TOTAL		110	100.0	100.0	100.0

STATISTICS..

MEAN	1.306	STD ERROR	0.073	MEDIAN	0.000
MODE	1.000	STD DEV	0.763	VARIANCE	0.582
KURTOSIS	3.000	SKEWNESS	35.718	RANGE	3.000
MINIMUM	1.000	MAXIMUM	4.000		

VALID OBSERVATIONS = 110
MISSING OBSERVATIONS = 0

VAR.22). The fact that at their urban settlements in the Capital there are limited opportunities for the female members of the household to get jobs such as domestic help or non-skilled jobs in industry, the majority of them do not get such jobs, and this makes the situation on the project such that with more members of the household engaged in the work they are getting only a fraction of their income in the Capital. This is a very disturbing condition to the participants on the project.

When comparing the number of wage earners in the Capital per household (Totals of VAR.29) at an average of 1.15 with the fact that all the household members over the age of 15 are working in the project (about 45% of the total number of the household members of 7.54) (Totals Analysis No. 1T) which comes to 3.393, almost three times the wage earners per household in the Capital, the inferior situation of the participant's income on the project shows a very dim picture indeed. The number of agricultural contracts per household (Totals of VAR.30) at 1.16 is very close to the figure of 1.15 above suggesting that the project organisers' intentions were to give the household an equal opportunity to the one they had in the Capital in terms of income earning, but the participants' income situation on the project was so bad that the income they received was, as discussed above, extremely lower than their income in the Capital.

This puts doubts on the success of the objectives. ~~and the~~
of giving the migrant participants in the Capital a
better employment opportunity than their Capital
employment situation by joining the project.

Variables Totals
Analysis
No. 6T

The Project's operational deficiencies
and suggested improvements as seen by
the participants

(VAR.52, 53, 54, 61, 62 and 63)

(a) Project's operational deficiencies as
suggested by participants:

First order deficiencies	(VAR.52)
Second order deficiencies	(VAR.53)
Third order deficiencies	(VAR.54)

(b) Improvements in project operations as
suggested by participants:

First order improvement	(VAR.61)
Second order improvement	(VAR.62)
Third order improvement	(VAR.63)

In analysing the project deficiencies and suggested
improvements as stated by the participants on the
project two main objectives are sought:

- (a) To test some of the Government objectives
in setting up the project.
- (b) To evaluate the participants' opinions
and reaction as regards the project
implementation, operation and future.

FILE NONAME (CREATION DATE = 06/06/77)

VARIABLE VARS2 1ST ORDER DEFNCY IN PROJ SIR+OPR

VALUE LABEL	VALUE	ABSOLUTE FREQUENCY	RELATIVE FREQUENCY (PERCENT)	ADJUSTED FREQUENCY (PERCENT)	CUMULATIVE ADJ FREQ (PERCENT)
NO DIFICIENCIES	1.00	2	1.8	1.8	1.8
POOR PLANNING	2.00	26	23.6	23.6	25.5
POOR ADMINSTR	3.00	41	37.3	37.3	62.7
DELAY AGR CYCLES	4.00	3	2.7	2.7	65.5
LACK OF DRAINAGE	6.00	2	1.8	1.8	67.3
SHRTGE IRG WATER	7.00	35	31.8	31.8	99.1
INEFNT FARM ORGN	8.00	1	0.9	0.9	100.0
	0.00	0	0.0	MISSING	100.0
TOTAL		110	100.0	100.0	100.0

STATISTICS..

MEAN	4.127	STD ERROR	0.204	MEDIAN	3.159
MODE	3.000	STD DEV	2.142	VARIANCE	4.589
KURTOSIS	1.495	SKEWNESS	7.941	RANGE	7.000
MINIMUM	1.000	MAXIMUM	8.000		

VALID OBSERVATIONS = 110
MISSING OBSERVATIONS = 0

SHINAMIYA SURVEY

FILE NONAME (CREATION DATE = 06/04/77)

VARIABLE VARS3 2ND ORDER DEFNCY IN PROJ STR+OPR

VALUE LABEL	VALUE	ABSOLUTE FREQUENCY	RELATIVE FREQUENCY (PERCENT)	ADJUSTED FREQUENCY (PERCENT)	CUMULATIVE ADJ FRFQ (PERCENT)
NO DIFICIENCIES	1.00	2	1.8	1.9	1.9
POOR PLANVING	2.00	36	32.7	33.3	35.2
POOR ADMINSTRN	3.00	29	26.4	26.9	62.0
DELAY AGR CYCLES	4.00	24	21.8	22.2	84.3
SHRTGE IRG WATER	7.00	16	14.5	14.8	99.1
INEFNT FARM ORGN	8.00	1	0.9	0.9	100.0
0.00	2	1.8	MISSING	MISSING	100.0
TOTAL	110	100.0	100.0	100.0	100.0

STATISTICS..

MEAN	3.491	STD ERROR	0.167	MEDIAN	3.052
MODE	2.000	STD DEV	1.737	VARIANCE	3.019
KURTOSIS	0.207	SKEWNESS	55.086	RANGE	7.000
MINIMUM	1.000	MAXIMUM	8.000		

VALID OBSERVATIONS = 108
MISSING OBSERVATIONS = 2

FILE NONAME (CREATION DATE = 06/06/77)

VARIABLE VARS4 3RD ORDER DEFENCY IN PROJ STR+OPH

VALUE LABEL	VALUE	ABSOLUTE FREQUENCY	RELATIVE FREQUENCY (PERCENT)	ADJUSTED FREQUENCY (PERCENT)	CUMULATIVE ADJ FRFQ (PERCENT)
NO DEFICIENCIES	1.00	2	1.8	2.0	2.0
POOR PLANNING	2.00	20	18.2	20.4	22.4
POOR ADMINRN	3.00	15	13.6	15.3	37.8
DELAY AGR CYCLES	4.00	34	30.9	34.7	72.6
SHRTGE IRG WATER	7.00	17	15.5	17.3	89.8
INEPNT FARM ORGN	8.00	8	7.3	8.2	98.0
OTHERS	9.00	2	1.8	2.0	100.0
	0.00	12	10.9	MISSING	100.0
TOTAL		110	100.0	100.0	100.0

STATISTICS..

MEAN	4.327	STD ERROR	0.214	MEDIAN	4.206
MODE	4.000	STD DEV	2.114	VARIANCE	4.470
KURTOSIS	0.833	SKEWNESS	0.617	RANGE	8.000
MINIMUM	1.000	MAXIMUM	9.000		

VALID OBSERVATIONS = 98
MISSING OBSERVATIONS = 12

FILE NONAME (CREATION DATE = 06/06/77)

VARIABLE VARG1 1ST ORDER SUGGESTION TO IMRV PROJ

VALUE LABEL	VALUE	ABSOLUTE FREQUENCY	RELATIVE FREQUENCY (PERCENT)	ADJUSTED FREQUENCY (PERCENT)	CUMULATIVE ADJ FREQ (PERCENT)
IMP AGR CYCL OPR	1.00	36	32.7	32.7	32.7
IMP IRG WATR DST	2.00	26	23.6	23.6	56.4
IMP ADM PROGR	3.00	36	32.7	32.7	69.1
IMP COLCTV FARMG	4.00	6	5.5	5.5	94.5
GET EFCENT TECHN	6.00	4	3.6	3.6	98.2
IMP SERVC FACL	7.00	2	1.8	1.8	100.0
	0.00	0	0.0	MISSING	100.0
TOTAL		110	100.0	100.0	100.0

STATISTICS:

MEAN	2.345	STD ERROR	0.124	MEDIAN	2.231
MODE	1.000	STD DEV	1.346	VARIANCE	1.806
KURTOSIS	2.171	SKEWNESS	1.686	RANGE	6.000
MINIMUM	1.000	MAXIMUM	7.000		

VALID OBSERVATIONS = 110
MISSING OBSERVATIONS = 0

FILE NONAME (CREATION DATE = 06/06/77)

VARIABLE VAR62 2ND ORDER SUGGESTION TO IMRV PROJ

VALUE LABEL	VALUE	ABSOLUTE FREQUENCY	RELATIVE FREQUENCY (PERCENT)	ADJUSTED FREQUENCY (PERCENT)	CUMULATIVE ADJ FRFQ (PERCENT)
IMP AGR CYCL OPR	1.00	41	37.3	37.3	37.3
IMP IRG WATR DST	2.00	33	30.0	30.0	67.3
IMP ADM PROCR	3.00	20	18.2	18.2	85.5
IMP COLCTV FARMG	4.00	7	6.4	6.4	91.9
GET EFCENT TECHN	6.00	6	5.5	5.5	97.3
IMP SERVICE FACL	7.00	3	2.7	2.7	100.0
	0.00	0	0.0	MISSING	100.0
TOTAL		110	100.0	100.0	100.0

STATISTICS..

MEAN	2.291	STD ERROR	0.145	MEDIAN	1.924
MODE	1.000	STD DEV	1.517	VARIANCE	2.300
KURTOSIS	1.883	SKEWNESS	5.967	RANGE	6.000
MINIMUM	1.000	MAXIMUM	7.000		

VALID OBSERVATIONS = 110
MISSING OBSERVATIONS = 0

FILE NONAME (CREATION DATE = 06/04/77)
 VARIABLE VAR63 3RD ORDER SUGGNTION TO IMRV PROJ

VALUE LABEL	VALUE	ABSOLUTE FREQUENCY	RELATIVE FREQUENCY (PERCENT)	ADJUSTED FREQUENCY (PERCENT)	CUMULATIVE ADJ FRFQ (PERCENT)
IMP AGR CYCL OPR	1.00	24	21.8	23.1	23.1
IMP IRG WATR DST	2.00	19	17.3	18.3	41.3
IMP ADM PROCR	3.00	40	36.4	38.5	79.8
IMP COLCTV FARMG	4.00	15	13.6	14.4	94.2
GET EFCENTY TECHN	6.00	4	3.6	3.6	98.1
IMP SERVICE FACL	7.00	2	1.8	1.9	100.0
	0.00	6	5.5	MISSING	100.0
TOTAL		110	100.0	100.0	100.0

STATISTICS..

MEAN	2.692	STD ERROR	0.133	MEDIAN	2.725
MODE	3.000	STD DEV	1.352	VARIANCE	1.827
KURTOSIS	1.151	SKEWNESS	5.194	RANGE	6.000
MINIMUM	1.000	MAXIMUM	7.000		
VALID OBSERVATIONS =	104				
MISSING OBSERVATIONS =	6				

***** GIVEN SPACE ALLOWS FOR 63 VARIABLES AND 146 VALUES FOR CODEROOK *****

CODEBOOK STATISTICS 21 TO 28 ALL

The analysis of both the deficiencies and improvements suggested are done in a combined form as they are basically related in a direct fashion. For improvements are mostly suggested for the observed deficiencies. With the above objectives in mind let us consider the following observations on the Variables Totals in this Analysis.

Observations:

- (1) Poor administration on the project, poor planning (related to the agricultural crops cycle planned and administered by the project administration), shortage of irrigation water and delays in the agricultural cycle are deficiencies suggested by around 95% of the first order and second order deficiencies on the project (Totals of VAR.52 and VAR.53). Actually all these factors are facets of the same problem, as seen by the participants, which is the poor efficiency of the project administration. These factors are also suggested by 78.2% of the third order deficiencies votes on the project (Totals of VAR.54). Poor project administration is the leading first order deficiency with 37.3% of the participants votes. In terms of suggested improvements (Totals of VAR.61, 62 and 63)

these factors received the majority of the first order improvements with 89.1%, second order improvements being 85.5% and third order improvements being 79.8%.

Improving the administrative procedures and personnel were again the leading factors in terms of necessity to improve it with 32.7% of the first order improvements suggested on the project. This shared the first place position with the necessity to improve the agricultural cycle implementation and operation (which is a direct responsibility of the project administration) with 32.7% of the first order improvements votes.

This certainly supports the Author's suggestions, in various parts of this research on the Reverse Migration Project, that project administration inefficiency is the most important single fact in the apparent poor performance of the project.

This view is shared by various bodies which investigated the situation on the project, as will be discussed later.

- (2) Availability of irrigation water, which was one of the main locational criteria of the project, seems to be a non-valid characteristic of the project location as it is one of the

major deficiencies suggested by the project participants. This deficiency received 31.8% of the first order deficiency votes, second only to the poor administrative deficiency. It was also one of the major improvements suggested by the participants, receiving 23.6% of the first order improvements votes. This factor is an interesting one in the sense that the project area is fed by two main canals (see Figure No. 32, p.611), the Shihamya Canal and the Gesabah Canal, (the part irrigated by the latter canal was added to the Shihamya Project Area after the end of the first year of the project operation in early 1973) taking irrigation water from the nearby Tigris River. The problem, as the Author found out was mostly due to silting in the branches of the main project canal and lack of frequent dredging of the main canal and its branches. This factor is again one which could be easily attributed to inefficient project administration. One must point out here that the project administration is not only the personnel of that administration but there is also the procedural and organisational set up that links various elements of that administration and the outside linkages with higher and lower

Government Agencies in the country. The lack of autonomy for the project has caused, and will continue to cause in the future, numerous problems and delays. The dredging of project canals is the function of a State-owned organisation linked to the Ministry of Agriculture and Agrarian Reform but which is almost independent from the rest of the Ministry. The project manager, when asked about the reasons for delays in getting the dredging operations done soon enough, explained that he had to go through prolonged official correspondence to get the canals' dredging to be listed in this dredging organisation's programme. Delays in the agricultural cycle are another example of this type of deficiency blamed by the participants on the project administration. The project agricultural cycle is usually planned for the whole Nation's Government-run agricultural projects by the Supreme Agricultural Council and goes through numerous channels before reaching the project administration and in most cases almost two months after the starting date (according to the annual agricultural pattern of the project area) of the agricultural season. The multiplicity of organisations which are in control of various parts and facilities on the project (see p. 630)

together with a lack of project autonomy are two of the major factors behind the prevailing inefficiency of the project administration.

- (3) The participants' listing of project deficiencies suggests a lack of concern over the performance of agricultural co-operatives, collective farms and peasants organisations. Improving collective farming was mentioned by a slim minority of only 5.5% of the participants as a first order suggested improvement on the project (Totals of VAR.61). Inefficient farmers (peasants) organisations was noted as a first order deficiency by only one participant (0.9% of the sample). This could be viewed as either lack of concern for such organisations or method of agricultural production (which is a setback to a major objective of the project creation) or as a testimony to the efficiency of these organisations and the strategy of collective farming. The poor performance of the project shown by the low financial return could be expressed as a preference towards the lack of concern theory rather than the good efficiency one.

(4) The absence of a drainage network on the project and the possibility of not having one for four years to come (since the drainage network was still under construction in late 1976*) did not seem to disturb the participants. Being accustomed to the fallow system, the most common type of agricultural practice in the country (see Part I, p. 62), which is the system of agriculture on the project, was mentioned as a first order project deficiency by only 1.8% (VAR.52) and was absent in all three orders of improvement suggested for the project; the absence of a drainage network seems to have a very insignificant influence on the participants' attitude towards the project. This fact supports the argument of the political organisation in the early stages of the project's establishment against the technicians who put the absence of the drainage system as the main pre-requisite for starting the project (see also 4.10.2, p.837). After the first year of operation (1971/72) the salinity in a major part of the project area (caused mainly by the drop in the water level in the Greater Mussayab main drain, under the influence of the Euphrates river water shortage,

* Author's second visit to the project in October, 1976.

bordering the project from the west) caused a massive relocation of three villages of the project to new land within the project area. The size of the project area, which was selected to be of a size which would allow flexibility in cases of this kind, made this move an easy one. Despite the setback received by the project organisation in this relocation process, the participants did not seem to mind the relocation process as they are accustomed to moving about in their agricultural land due to salinity problems.

Conclusions:

- (1) Administrative organisation structure, procedures and personnel need urgent revision and improvement as being the main deficiency cited by the majority of the participants and the main suggested improvement put forward by the project participants.
- (2) Irrigation water distribution, quantity and control need urgent attention.
- (3) Planning and implementation of the agricultural cycle on the project has to be improved to eliminate delays which severely effect the productivity of the project.

- (4) Peasants seem to have little concern (or interest) in the functioning of the organisations in charge of Peasants' affairs (Peasants Union, Agricultural Co-operatives, etc.). Collective farming also seems to have a low degree of priority in terms of participants' interest and requires significant reorganisation to bring it to the effective degree of attracting the interest of the participants. This conclusion put serious doubts on the Government main objectives of setting up the project, namely, the one of introduction of collective farming, peasants organisations and new techniques of agricultural practices.

Variables Totals
Analysis
No. 7T

The Project participants' present and future
stability on the Project
(VAR.36, 37, 55, 56, 57, 58, 59 and 60)

This Variables Totals Analysis is concerned with:

- | | | |
|-----|---|----------------------|
| (a) | the reasons behind the participants joining the project | (VAR.57,
58 & 59) |
| (b) | if any of their household members have left the project and to which destinations they have gone (if any) | (VAR.36,
VAR.37) |

- (c) if the project has fulfilled participants hopes and objectives (VAR.60)
- (d) if the participant is thinking of leaving the project and to which destination would he go if he did leave the project (VAR.55)
(VAR.60)

The examining of the Variables Totals in this Analysis will be done in a combined fashion since most of these variables are related to the stability issue. With only 4.5% (5 samples) of the participants reporting that some members of their household have left the project since joining it (Totals of VAR.36), a stable situation is reflected for the present project participants. The five participants reporting that part of their household had left the project also reported that in two cases they went back to their home village and in three cases they went to other places (Totals of VAR.37). The number of cases reporting such a movement is insignificant to suggest an unstable situation. Actually the original number of the Reverse Migration Project participants was about 800 households who joined the project up to September, 1971. At the time the research survey was conducted (May to June, 1975) about 650 households of the original total "Reverse Migrants" are still on the project. This represents over 80% of the original total, which, under the prevailing conditions on the project, could be considered as a very successful process in terms of stability. Most of the

SHIHAIYA SURVEY

FILE NONAME (CREATION DATE = 31/03/78)

VARIABLE VAR36 ALL MEMR STAYED ON PROJ

VALUE LABEL	VALUE	ABSOLUTE FREQUENCY	RELATIVE FREQUENCY (PERCENT)	ADJUSTED FREQUENCY (PERCENT)	CUMULATIVE ADJ FREQ (PERCENT)
YES	1.00	105	95.5	95.5	95.5
NO	2.00	5	4.5	4.5	100.0
	0.00	0	0.0	MISSING	100.0
TOTAL		110	100.0	100.0	100.0

STATISTICS...

MEAN	1.045	STD ERROR	0.020	MEDIAN	1.262
MODE	1.000	STD DEV	0.209	VARIANCE	0.044
KURTOSIS	17.043	SKEWNESS	4.425	RANGE	1.000
MINIMUM	1.000	MAXIMUM	2.000		

VALID OBSERVATIONS = 110
MISSING OBSERVATIONS = 0

FILE NONAME (CREATION DATE = 06/06/77)

VARIABLE VAR37 DESTINATION OF MEMBERS LEFT PROJ

VALUE LABEL	VALUE	ABSOLUTE FREQUENCY	RELATIVE FREQUENCY (PERCENT)	ADJUSTED FREQUENCY (PERCENT)	CUMULATIVE ADJ FREQ (PERCENT)
TO HOME VILLAGE	2.00	2	1.8	1.8	1.8
OTHERS	3.00	3	2.7	2.7	4.5
UNAPLCBL	4.00	105	95.5	95.5	100.0
	0.00	0	0.0	MISSING	100.0
TOTAL		110	100.0	100.0	100.0

STATISTICS..

MEAN	3.936	STD ERROR	0.030	MEDIAN	0.000
MODE	4.000	STD DEV	0.311	VARIANCE	0.097
KURTOSIS	27.066	SKEWNESS	-89.276	RANGE	2.000
MINIMUM	2.000	MAXIMUM	4.000		

VALID OBSERVATIONS = 110
MISSING OBSERVATIONS = 0

participants joined the project due to the Government promises of better living, higher income and enough support to return to the agricultural occupation which most of the participants seemed to have before migrating to the Capital. Government promises was given by 44.5% of the participants as the first order reason for joining the project, (Totals of VAR.57), together with the desire of participants to return to the agricultural work (which represented 31.8% of the first order reasons for joining the project) and the project image which appeared to be a successful one, were the major factors behind the participants joining the project. There was a significant 13.6% of participants who reported dissatisfaction with living in the Capital as their first order reason for joining the project and there was 9.1% who reported this as their second order reason and 5.5% as the third order reason (VAR.58 and VAR.59).

Thus with the Government promises as the main reason for the majority of the participants joining the project, conditions on the project have proved a tremendous disappointment to the participants, with 83.6% of them reporting dissatisfaction with the project experience as their hopes and objectives have not been fulfilled. (Totals of VAR.60). This dealt a strong blow to

FILE NONAME. (CREATION DATE = 06/06/77)

VARIABLE VAR57 1ST ORDER REASON FOR JOINING PROJ

VALUE LABEL	VALUE	ABSOLUTE FREQUENCY	RELATIVE FREQUENCY (PERCENT)	ADJUSTED FREQUENCY (PERCENT)	CUMULATIVE ADJ FRFQ (PERCENT)
GVHNT PROMISES	1.00	49	44.5	44.5	44.5
RETURN TO FARING	2.00	35	31.8	31.8	76.4
FEDUP WITH DADD	3.00	15	13.6	13.6	90.0
IMPRV LIVNG STD	4.00	7	6.4	6.4	96.4
PROJ SEEM SUCESFL	6.00	4	3.6	3.6	100.0
	0.00	0	0.0	MISSING	100.0
TOTAL		110	100.0	100.0	100.0

STATISTICS..

MEAN	1.964	STD ERROR	0.114	MEDIAN	1.671
MODE	1.000	STD DEV	1.196	VARIANCE	1.430
KURTOSIS	2.623	SKEWNESS	3.620	RANGE	5.000
MINIMUM	1.000	MAXIMUM	6.000		

VALID OBSERVATIONS = 110
MISSING OBSERVATIONS = 0

FILE NONAME (CREATION DATE = 06/04/77)

VARIABLE VAR58 2ND ORDER REASON FOR JOINING PROJ

VALUE LABEL	VALUE	ABSOLUTE FREQUENCY	RELATIVE FREQUENCY (PERCENT)	ADJUSTED FREQUENCY (PERCENT)	CUMULATIVE ADJ FREQ (PERCENT)
GOVMT PROMISES	1.00	42	38.2	39.6	39.6
RETURN TO FARMING	2.00	21	19.1	19.8	59.4
FEEDUP WITH BAGD	3.00	10	9.1	9.4	68.9
LIKE RURAL LIFE	5.00	10	9.1	9.4	78.3
PROJ SEEM SUCSFL	6.00	21	19.1	19.8	98.1
FOLLOWD OTHERS	7.00	2	1.8	1.9	100.0
	0.00	4	3.6	MISSING	100.0
TOTAL		110	100.0	100.0	100.0

STATISTICS..

MEAN	2.868	STD ERROR	0.201	MEDIAN	2.024
MODE	1.000	STD DEV	2.066	VARIANCE	4.268
KURTOSIS	=1.240	SKEWNESS	=1.626	RANGE	6.000
MINIMUM	1.000	MAXIMUM	7.000		

VALID OBSERVATIONS = 106
MISSING OBSERVATIONS = 4

FILE NONAME (CREATION DATE = 06/04/77)

VARIABLE VARS9 3RD ORDER REASON FOR JOINING PROJ

VALUE LABEL	VALUE	ABSOLUTE FREQUENCY	RELATIVE FREQUENCY (PERCENT)	ADJUSTED FREQUENCY (PERCENT)	CUMULATIVE ADJ FREQ (PERCENT)
GYMNT PROMISES	1.00	12	10.9	12.2	12.2
RETURN TO FARMING	2.00	4	3.6	6.1	16.3
FEDUP WITH BAGD	3.00	6	5.5	6.1	22.4
IMPRV LIVNG STD	4.00	10	9.1	10.2	32.7
LIKE RURAL LIFE	5.00	7	6.4	7.1	39.8
PROJ SEEM SUCSFL	6.00	41	37.3	41.8	81.6
FOLOWD OTHERS	7.00	13	11.8	13.3	94.9
OTHERS	8.00	5	4.5	5.1	100.0
	0.00	12	10.9	MISSING	100.0
TOTAL		110	100.0	100.0	100.0

STATISTICS..

MEAN	5.000	STD ERROR	0.205	MEDIAN	5.744
MODE	6.000	STD DEV	2.031	VARIANCE	4.124
KURTOSIS	10.454	SKEWNESS	1.191	RANGE	7.000
MINIMUM	1.000				
VALID OBSERVATIONS =	98				
MISSING OBSERVATIONS =	12				

FILE NO NAME (CREATION DATE = 06/06/77)

VARIABLE VAR60 PROJ FULFILLED HOPES AND OBJECTVS

VALUE LABEL	VALUE	ABSOLUTE FREQUENCY	RELATIVE FREQUENCY (PERCENT)	ADJUSTED FREQUENCY (PERCENT)	CUMULATIVE ADJ FREQ (PERCENT)
YES	1.00	18	16.4	16.4	16.4
NO	2.00	92	83.6	83.6	100.0
	0.00	0	0.0	MISSING	100.0
TOTAL		110	100.0	100.0	100.0

STATISTICS..

MEAN	1.836	STD ERROR	0.035	MEDIAN	0.000
MODE	2.000	STD DEV	0.372	VARIANCE	0.138
KURTOSIS	1.307	SKEWNESS	-1.580	RANGE	1.000
MINIMUM	1.000	MAXIMUM	2.000		

VALID OBSERVATIONS = 110
MISSING OBSERVATIONS = 0

SHIHAMIYA SURVEY

FILE NONAME (CREATION DATE = 06/04/77)

VARIABLE VARSS POSSBLTY OF LEAVING THE PROJ

VALUE LABEL	VALUE	ABSOLUTE FREQUENCY	RELATIVE FREQUENCY (PERCENT)	ADJUSTED FREQUENCY (PERCENT)	CUMULATIVE ADJ FREQ (PERCENT)
YES	1.00	53	48.2	48.2	48.2
NO	2.00	57	51.8	51.8	100.0
	0.00	0	0.0	MISSING	100.0
TOTAL		110	100.0	100.0	100.0

STATISTICS..

MEAN	1.518	STD ERROR	0.048	MEDIAN	0.000
MODE	2.000	STD DEV	0.502	VARIANCE	0.252
KURTOSIS	1.995	SKEWNESS	2.653	RANGE	1.000
MINIMUM	1.000	MAXIMUM	2.000		

VALID OBSERVATIONS = 110
MISSING OBSERVATIONS = 0

SHIMAZIYA SURVEY

FILE NONAME (CREATION DATE = 31/03/78)

VARIABLE VAR56 DESTINATION IF LEAVING THE PROJ

VALUE LABEL	VALUE	ABSOLUTE FREQUENCY	RELATIVE FREQUENCY (PERCENT)	ADJUSTED FREQUENCY (PERCENT)	CUMULATIVE ADJ FREQ (PERCENT)
OTHER AREAS	22.00	1	0.9	2.9	2.9
THAURA TOWN SETTLEMENT	27.00	33	30.0	97.1	100.0
	0.00	76	69.1	MISSING	100.0
TOTAL		110	100.0	100.0	100.0

STATISTICS..

MEAN	26.853	STD ERROR	0.147	MEDIAN	25.712
MODE	27.000	STD DEV	0.857	VARIANCE	0.735
KURTOSIS	20.030	SKEWNESS	-5.831	RANGE	5.000
MINIMUM	22.000	MAXIMUM	27.000		

VALID OBSERVATIONS = 34
MISSING OBSERVATIONS = 76

the Government's crucial objective of regaining the lost confidence of the peasants in the previous Governments. The present situation on the project has a very precarious stability with 48.2% reporting their intentions of leaving the project against 51.8% reporting that they did not intend leaving at the present time as they hoped that things would improve on the project (Totals of VAR.55). As will be shown in Cross-tabulation No. 8S (p.826) potential leavers on the project are as high as 86.4% of the total participants. The majority of those who reported the possibility of their leaving the project (97.1%) stated that they would go back to Thawra Town, the Capital migrant settlement from which they were selected to join the project (VAR.56). This possibility, if it happens, will defeat the project's ultimate aim of relocating the Capital migrants and may cause an irreparable damage to the whole Government strategy of controlling rural migration.

Conclusions:

- (1) Government promises are the major factor for the participants to join the project.
- (2) A very high majority of the project participants stated that the project is a severe disappointment to their hopes and objectives. This rendered a major objective of the Government behind setting

up the project in regaining the peasant's own confidence in the Government as an invalid objective.

- (3) Most of those reporting their intention of leaving the project stated that they would be going back to their Capital migrant settlement homes thus defeating the ultimate aim of the project experiment.

II. Participants Income Cross-tabulation Analysis:

Cross-tabulation No. 1P

Participant's Age (household head) (VAR.10)	vs. Average per capita monthly income (household head's income only) for total period on the project (Z6)
---	---

Considering that per capita income of up to 0.35 I.D. as the limit of the lower income group, 0.36 - 0.75 I.D. as the middle income group and above 0.75 I.D. as the upper income group, is only arbitrary and for analysis purposes. Actually the level of income in rural Iraq (see Part III, p.437) in the early 70's (around 2.83 I.D. per capita per month) is much higher than the participants per capita monthly income on the project. Thus all income categories on the project are way below the national average per capita income. This comparison of income on the project to income of rural population in the rest of the country has been discussed in the Variable Totals section of this Case Study evaluation (p.724). For the purpose of this cross-tabulation the above division of income categories will be used and the following observations are noted on the attached cross-tabulations.

- (1) All age groups (average age of 25, 35, 45, 55 and 65 years) showed a very high concentration of their participants in the two lower income categories. The

SHIMAMIYA SURVEY

FILE NO:NAME (CREATION DATE = 06/06/77)

PER CAPITA INCOME HDINCOME BY VARI0 HHDLD HD. AGE

PAGE 1 OF 1

		VAR10					ROW TOTAL
	COUNT	25.001	35.001	45.001	55.001	65.001	
Z6	1.00	7	2	19	13	4	45
	0 TO 0.351.D	15.6	6.4	42.2	28.9	8.9	40.9
		50.0	9.1	44.2	68.4	33.3	
		6.4	1.8	17.3	11.8	3.6	
	2.00	4	17	15	4	5	45
	0.36 TO 0.751.D	8.9	37.8	33.3	8.9	11.1	60.9
		28.6	77.3	34.9	21.1	41.7	
		3.6	15.5	13.6	3.6	4.5	
	3.00	3	3	9	2	3	20
	OVER 0.751.D	15.0	15.0	45.0	10.0	15.0	18.2
		21.4	13.6	20.9	10.5	25.0	
		2.7	2.7	8.2	1.8	2.7	
	COLUMN TOTAL	14	22	43	19	12	110
	TOTAL	12.7	20.0	39.1	17.3	10.9	100.0

CHI SQUARE = 20.79052 WITH 8 DEGREES OF FREEDOM SIGNIFICANCE = 0.0077
 CRAMER'S V = 0.30748
 CONTINGENCY COEFFICIENT = 0.39877
 KENDALL'S TAU B = 0.11023 SIGNIFICANCE = 0.0439
 KENDALL'S TAU C = 0.11380 SIGNIFICANCE = 0.0390
 GAMMA = 0.15565
 SOMER'S D = 0.10126

proportion of age groups in these two income categories varies slightly from a maximum of 89.5% (for the 55 years age group) to a minimum of 75% (for the 65 years age group). The overall sample breakdown is equal to 40.9% for each of the two lower income categories.

- (2) Examining the upper income category, it seems that both the youngest age group participants (average age 25 years) and the oldest age group participants (average age 65 years) showed a very close proportion of their participants in the upper income category. The youngest age group has 21.4% of its members in the upper income category while the oldest group showed 25%. The middle age group (average age 45 years) showed a similar proportion of 20.9%.

These two observations suggest a weak relationship between participant's age and his income on the project.

To eliminate the possibility of the association between the age of the household head and the size of the household (where a possible hypothesis may be

that young household heads may have small size households and vice versa) an additional cross-tabulation is produced between the age of the household head (VAR.07) and the size of the household (VAR.10). The prospect of having small size households with young household heads and large size households with old household heads may render the participants income argument conclusion (above) as invalid. By examining the data of this later cross-tabulation, the following observations may be noted:

- (1) Both the youngest household head group (average age 25 years) and the oldest household head group (average age over 65 years) have similar proportions of the members with sizes of households in the smallest category of household size and also in the largest size category of household size. Actually the youngest household heads group have significantly more of their members heading the next to the largest household size of 8-9 at 35.7% compared to the 25% proportion in this size category for the oldest household heads group.
- (2) The middle household heads age groups (35, 45 and 55 years) gave a mixed pattern when compared to the upper and lower age

FILE HOHAIE (CREATION DATE = 31/03/78)

VAR07 NOS HHOLD MEMBERS C R O S S T A B U L A T I O N O F H H O L D H D . A G E BY VAR10

VAR07	COUNT I	25.001	35.001	45.001	55.001	65.001	ROW TOTAL
UP TO 5 MEMB	1.00	5	4	5	1	4	19
		26.3	21.1	26.3	5.3	21.1	17.3
		35.7	17.2	11.6	5.3	33.3	
		4.5	3.6	4.5	0.9	3.6	
6 TO 7 MEMB	2.00	2	15	16	3	4	40
		5.0	37.5	40.0	7.5	10.0	36.4
		14.3	68.2	37.2	15.8	33.3	
		1.3	13.6	14.5	2.7	3.6	
8 TO 9 MEMB	3.00	5	2	13	8	3	31
		16.1	6.5	41.9	25.8	9.7	28.2
		35.7	9.1	30.2	42.1	25.0	
		4.5	1.8	11.8	7.3	2.7	
10 AND MORE MEMB	4.00	2	1	9	7	1	20
		10.0	5.0	45.0	35.0	5.0	18.2
		14.3	4.5	20.9	36.8	8.3	
		1.2	0.9	3.2	6.4	0.9	
COLUMN TOTAL		14	22	43	19	12	110
		12.7	20.0	39.1	17.3	10.9	100.0

CHI SQUARE = 27.55670 WITH 12 DEGREES OF FREEDOM SIGNIFICANCE = 0.0066
 CRAMER'S V = 0.25617
 CONTINGENCY COEFFICIENT = 0.45398
 KENDALL'S TAU B = 0.16725 SIGNIFICANCE = 0.0048
 KENDALL'S TAU C = 0.16441 SIGNIFICANCE = 0.0054
 GAMMA = 0.22123
 SCHER'S D = 0.16457

groups of the household heads. For while all the middle age groups showed less than the youngest household heads age group in the small size household categories, the 35 years and 45 years age groups household heads showed significantly less than the youngest age group household heads in having next to the largest household sizes category of 8 - 9 members.

- (3) Looking at the composition of household sizes categories no set pattern could be obtained clearly. For the smallest size household category it seems that this is more or less evenly distributed between the 25 years, 35 years, 45 years and 65 years heads age groups with no special preference to any age category. In the largest households category there seems to be double the proportion of young household heads to the oldest groups.

Thus it seems reasonably accurate to assume that a clear correlation between the age of the household head and the size of the household does not exist, and the possible hypothesis linking them is not a valid one. Thus the conclusions of the age of the household head and his income on the project cross-tabulation seems to be a valid one.

Conclusions:

There is little evidence to support the assertion that participant's income on the project was influenced by his age. A possible reasoning may be that although the young age groups have more to offer in terms of physical ability, the old age groups balances this by longer experience. In traditional agriculture experience counts a lot, and in modern agriculture physical strength is not a major determinant of performance. Some doubt is thrown on the validity of having the selection process biased towards the younger age groups.

Cross-tabulation
No. 2P

Participants by their last year (fifth year) in the Capital jobs	vs.	Average per capita monthly income (head only) for total period on project
(VAR.21)		(Z6)

For the purpose of correlating the influence of jobs of participants with their income on the project the fifth year job (VAR.21) is taken for the cross-tabulation. The Government selection criteria favoured those who were unemployed or employed in low-paid jobs in the project selection criteria of participants. A major objective of this cross-tabulation is to test on the basis of the participant's income on the project this selection criteria.

For the purpose of simplifying the analysis the cross-tabulation is produced eliminating those participants who joined the project after staying less than five years in the Capital (49 participants) (see Table p.670) and using the following categories of jobs:

(a) Non-skilled jobs

which include construction sector non-skilled jobs, general non-skilled jobs and also the unemployed. (The latter category added as being the lowest paid category to the usually low paid non-skilled job holders).

(b) Skilled jobs

which include skilled job holders plus the sales and services sector jobs.

(c) Other categories.

The relevance of this cross-tabulation is that it eliminates the statistical weight of those who joined the project after less than five years in the Capital. In addition to that the modified jobs classification from a detailed one to only skilled versus non-skilled classification will allow the emphasis to be put on the criteria used by the Government for the selection of participants which favour low-paid (unemployed and unskilled) candidates over the high paid (skilled) ones.

Examining the cross-tabulation printout the following observations could be drawn:

FILE NAME (CREATION DATE = 04/06/78)

VAR21 LAST YS (5TH YR) JOB AT BAGD CROSSTABULATION OF PER-CAPITA INCOME INDICATOR AVG CI FRQ BY Z6 PAGE 1 OF 1

UNIT	1	2	3	4	5	TOTAL
NON SKILLED	16	22	3	3	3	30
SKLD SALS SRVCS	35.0	56.6	7.7	7.7	7.7	63.0
OTHERS	54.0	91.7	25.0	25.0	25.0	100.0
TOTAL	23.0	36.1	4.9	4.9	4.9	61
UNIT	9	2	8	8	8	10
SKLD SALS SRVCS	47.4	10.5	42.1	42.1	42.1	31.1
OTHERS	32.0	8.3	66.7	66.7	66.7	100.0
TOTAL	14.3	3.3	13.1	13.1	13.1	3
UNIT	2	0	1	1	1	3
SKLD SALS SRVCS	66.7	0.0	33.3	33.3	33.3	4.9
OTHERS	8.7	0.0	8.3	8.3	8.3	100.0
TOTAL	3.3	0.0	1.6	1.6	1.6	61

CHI SQUARE = 16.98615 WITH 4 DEGREES OF FREEDOM SIGNIFICANCE = 0.0019
 CRAMER'S V = 0.37316
 CONTINGENCY COEFFICIENT = 0.46670
 KENDALL'S TAU B = 0.05967 SIGNIFICANCE = 0.2491
 KENDALL'S TAU C = 0.04999 SIGNIFICANCE = 0.2846
 GAMMA = 0.07337
 SOMER'S D = 0.05219

- (1) Non-skilled job holders in the Capital have only 7.7% of their members in the upper income category on the project against 42.1% for participants holding skilled jobs in the Capital. While both groups showed a significant proportion of their members in the lower income category (which is understandable in view of the overall low income of project participants) with the non-skilled group slightly better off with only 35.9% of its members in the lowest income category against 47.4% of the skilled jobs group; the non-skilled group shows a much higher percentage (92.3%) of its members in the two lower categories of income on the project against 57.9% for the skilled jobs group. The skilled group, despite having a smaller number of participants showed 66.7% of the project participants in the upper income category on the project. This does suggest a far better performance for the skilled job group over the non-skilled job (and the unemployed) groups in the participants income scale on the project.
- (2) With only three participants in the Others category, it is too small a sample to draw conclusive observations from the cross-tabulation.

Conclusion:

There is some evidence to suggest that the Government selection criteria for participants on the project in terms of favouring the unemployed and the low-paid job holders in the Capital over higher paid skilled jobs and sales and services job holders can lead to participants with a lower income than if those with skilled jobs at the Capital were chosen. This finding does shed some doubt on the validity of the selection criteria in this respect.

Cross-tabulation
No. 3P

Household size	vs.	Average per capita monthly income (household head income only) for total period on project
(VAR.07)		(Z6)

In selecting the project participants, the Selection Panel considered large households as an added advantage in favour of candidates as large families in the rural areas means more farm hands. The female proportion of the agricultural work force is considerable. In this project survey 93.6% of participants mentioned that females in their households share the agricultural work with household males (Totals of VAR.22). Children from an age as low as 7 years contribute in carrying the work load

of the household in the agricultural areas (in 1965 13% of the agricultural labour force was aged between 7 and 10 years).⁽¹⁹⁴⁾ However, on the project the large households did not meet the expectation of higher participants income to smaller households as will be seen from the cross-tabulation analysis.

Observations:

To facilitate the analysis it may be better to regroup the household sizes shown on the cross-tabulation sheet into: up to five members, 6 - 7 members, 8 - 9 members and 10 or more members as in the following table:

Per capita monthly income on project (Z6) I.D.	Household size (VAR.07)									
	Up to five members		6 - 7 members		8 - 9 members		10 or more members		Total	
0 - 0.35	0	0%	0	0%	29	93%	16	80%	45	41%
0.36 - 0.75	9	47%	35	88%	0	0%	1	5%	45	41%
Over 0.75	10	53%	5	12%	2	7%	3	15%	20	18%
TOTAL	19	100%	40	100%	31	100%	20	100%	110	100%

The following observations are noted from the above:

- (1) The cross-tabulation of household size by participant's income shows the best performance at the less than five members size households, this group having 53% of

(194) Ministry of Interiors, Directorate General of Civic Affairs, Baghdad - "1965 Census Data - Totals for Iraq" - Table 32 (unpublished)

FILE NONAME (CREATION DATE = 06/06/...

PER CAPITA INCOME HDINCONE AVERAGE ON PROJ... CROSSTABULATION OF... MEMBERS... PAGE 1 OF 2

VAR07	1.001	2.001	4.001	5.001	6.001	7.001	8.001	9.001	10.001	11.001	ROW TOTAL
0 TO 0.351.D	0.0	0.0	0.0	0.0	0.0	0.0	13	14	17.8	0.0	45
0.36 TO 0.751.D	0.0	0.0	15.6	4.4	55.6	22.2	0.0	0.0	0.0	2.2	60.9
OVER 0.751.D	3	5.0	0.0	30.0	25.0	0.0	2	0	0	0.2	18.2
COLUMN TOTAL	3	0.9	6.4	7.3	27.3	9.1	15	16	7.3	3	110
TOTAL	2.7	0.9	6.4	7.3	27.3	9.1	13.6	14.5	7.3	2.7	100.0

(CONTINUED)

VAR07	12.001	13.001	14.001	15.001	17.001	ROW TOTAL
0 TO 0.351.D	0.0	4.6	6.7	2.2	4.6	45
0.36 TO 0.751.D	0.0	100.0	100.0	100.0	100.0	60.9
OVER 0.751.D	1	0.0	0.0	0.0	0.0	20
COLUMN TOTAL	1	1.8	2.7	0.9	1.8	110
TOTAL	0.9	1.8	2.7	0.9	1.8	100.0

CHI SQUARE = 155.91481 WITH 28 DEGREES OF FREEDOM SIGNIFICANCE = 0.0000

CRAMER'S V = 0.84185

CONTINGENCY COEFFICIENT = 0.76572

KENDALL'S TAU B = 0.61605 SIGNIFICANCE = 0.0000

KENDALL'S TAU C = 0.68132 SIGNIFICANCE = 0.0000

GAMMA = 0.75082

SOMER'S D = 0.52826

of its participants in the upper income group against 12%, 7% and 15% for the other three categories of household sizes, and it also has about three times the overall project participants percentage in the upper income category. It shows no participants in the lower income category.

- (2) Both the larger groups of household sizes of 8-9 and 10 or more members have a very high majority of those members in the lowest income categories on the project, the largest household size group (10 or more) managing to have a slightly more significant part of its members in the upper income category. Although much less than the small household size group of five members or less, it may give a slight support to the principle adopted by the Government selection panel of manual labour availability in large household sizes, but the proportion of this compared to the total number of project participants sample is too small to suggest a statistical significance.

The monetary return of the project is distributed to individual participants in proportion to their own output volume measured to the total in the collective

farm. This point has already been stressed in arguing for the use of per capita income as a measure of participants' performance on the project. The project administration policy of one agricultural contract per family coupled with the social values that singles out the household head income as the sole source for the household's needs seems to be responsible for the poor showing of large size household participants on the project. Another possible explanation is that the increase in production due to more hands on the agricultural land is less in proportion to the increase in the number of household members working in the parcel allocated to the participant.

Conclusions:

There is enough evidence to suggest that the Government's preference towards participants heading larger households is not a valid selection criteria in view of their performance on the project. Smaller households (five members and less) show a more superior per capita income characteristic compared to larger size households on the project.

Cross-tabulation
No. 4P

Participant's average monthly income last year in the Capital (VAR.24)	vs.	Average per capita monthly income (household head only) for the total period on the project (Z6)
Per capita monthly income vs (household head only) last year in Baghdad (Z5)	vs.	Average per capita monthly income (household head only) for the total period on the project (Z6)

Two approaches were used in this cross-tabulation, namely:

- (a) To cross-tabulate total monthly household head's income at Baghdad (VAR.24) against (Z6)
- (b) To cross-tabulate per capita monthly income at Baghdad (using head's income only) (Z5) against (Z6).

Both cross-tabulations are designed to test the validity of the selection criteria which favours lower income candidates at the Capital as participants for the project. Identical results in both cross-tabulations will in effect eliminate the possibility of household size influencing conclusions resulting from the cross-tabulation.

Observations for (a):

- (1) Those with low incomes in Baghdad (0 - 20 I.D. per head per month) were mostly in the low income group of the project with 52.1% of them making the lowest income on the project, i.e. 0.0 - 0.35 I.D. per capita per month.

FILE NCHAVE (CREATION DATE = 23/03/78)

VAR26 HD 10MTH INCOME LAST YR IN HARD CROSSTABULATION OF PER CAPITA INCOME AVERAGE (CF 1)

24

VAR26	COUNT	10 TO 14.9	15 TO 19.9	20 TO 24.9	25 TO 29.9	30 TO 34.9	35 TO 39.9	40 TO 44.9	45 TO 49.9	50 TO 54.9	TOTAL
UP TO 20	1.00	25	20	3	3	3	3	3	3	3	48
		52.1	41.7	4.2	4.2	4.2	4.2	4.2	4.2	4.2	43.6
		55.4	44.4	15.0	15.0	15.0	15.0	15.0	15.0	15.0	
		22.7	13.2	2.7	2.7	2.7	2.7	2.7	2.7	2.7	
21 TO 40	2.00	17	12	12	12	12	12	12	12	12	51
		33.3	43.1	23.5	23.5	23.5	23.5	23.5	23.5	23.5	46.4
		37.3	48.9	61.0	61.0	61.0	61.0	61.0	61.0	61.0	
		15.5	20.0	10.9	10.9	10.9	10.9	10.9	10.9	10.9	
OVER 40	3.00	3	3	3	3	3	3	3	3	3	11
		27.3	27.3	49.5	49.5	49.5	49.5	49.5	49.5	49.5	10.0
		6.7	6.7	25.0	25.0	25.0	25.0	25.0	25.0	25.0	
		2.7	2.7	4.5	4.5	4.5	4.5	4.5	4.5	4.5	
COLUMN TOTAL		65	65	20	20	20	20	20	20	20	110
TOTAL		40.0	60.0	19.2	19.2	19.2	19.2	19.2	19.2	19.2	100.0

CHI SQUARE = 12.33086 WITH 4 DEGREES OF FREEDOM SIGNIFICANCE = 0.0152
 CRAMER'S V = 0.23555
 CONTINGENCY COEFFICIENT = 0.31725
 KENDALL'S TAU B = 0.25151 SIGNIFICANCE = 0.0000
 KENDALL'S TAU C = 0.23176 SIGNIFICANCE = 0.0001
 GAMMA = 0.1703
 SOMER'S D = 0.25174

If we include the middle income category of the project, i.e. 0.36 - 0.75 I.D. per capita per month, we will find that 93.3% of the low income group in Baghdad made less than 0.75 I.D. per capita per month. Only 6.2% of this group were in the upper income category on the project, compared to 23.5% and 45.5% of the other two groups of the middle and upper income in Baghdad respectively.

- (2) The middle income group at Baghdad, making 21 - 40 I.D. per month per head of household, seemed to do better than the lower income group at Baghdad, but worse than the upper income group. This middle group shows more than the lower Baghdad income group in terms of percentage of participants in the upper income category on the project with 23.5%, but less than the upper income group at 45.5%. It also shows less than the low income groups in terms of having participants in the low income category on the project with 33.3% compared to the 52.1% of the low income group at Baghdad. Again this group showed less in the upper income category on the project at 23.5% compared to the upper income group at Baghdad proportion of 45.5%. It also showed more in the low income category on

the project with 33.3% compared to 27.3% for the upper income at Baghdad group.

- (3) The upper income category at Baghdad shows the best results of income on the project with the lowest percentage of the three groups of its members in the low income category on the project with only 27.3% (compared to 52.1% and 33.3% of the other two categories). It also shows the highest percentage in the upper income category on the project with 45.5% of its members in this category (compared to 6.2% and 23.5% for the other two).

Observations for (b):

Similar type of data is shown in the second cross-tabulation with the upper income group in the Capital (Z5 = over 4.0 I.D. per capita per month) showing higher proportions of its members in the upper income category on the project, compared to the lower income group at the Capital (Z5 = 0 - 2.0 I.D.) and the middle income category (Z5 = 2.1 - 4.0 I.D.). It also showed a lower proportion of its members in the lower income category in the project compared to the other two groups. The middle income group in the Capital showed a much lower proportion than the low income group in terms of its members in the low income category on the

SUSHAMIYA SURVEY FILE NO:ANE (CREATION DATE = 06/04/77) PAGE 100

PER CAPITA INCOME HDINCOME AVG ON PRCJ BY 75 PER CAPITA INCOME HDINCOME LAST YR BAGD

26	25	1.00	2.00	3.00	4.00	5.00	TOTAL
0 TO 0.351.D	26	17	19	20	20	20	60.9
0.36 TO 0.751.D	57.8	37.8	42.2	44.4	44.4	44.4	40.9
OVER 0.751.D	74.3	44.7	50.0	54.1	54.1	54.1	18.2
	23.6	15.5	17.3	18.2	18.2	18.2	
	6	19	20	20	20	20	
	13.3	42.2	44.4	44.4	44.4	44.4	
	17.1	50.0	54.1	54.1	54.1	54.1	
	5.5	17.3	18.2	18.2	18.2	18.2	
	3	2	15	15	15	15	
	15.0	10.0	75.0	75.0	75.0	75.0	
	8.6	5.3	40.5	40.5	40.5	40.5	
	2.7	1.8	13.6	13.6	13.6	13.6	
COLUMN TOTAL	35	38	37	37	37	37	110
	31.8	34.5	33.6	33.6	33.6	33.6	100.0

CHI SQUARE = 43.66972 WITH 4 DEGREES OF FREEDOM SIGNIFICANCE = 0.0000
 CRAMER'S V = 0.64553
 CONTINGENCY COEFFICIENT = 0.53308
 KENDALL'S TAU B = 0.52666 SIGNIFICANCE = 0.0000
 KENDALL'S TAU C = 0.51273 SIGNIFICANCE = 0.0000
 GAMMA = 0.73667
 SOMER'S D = 0.51302

project (44.7% against 74.3%). Only one exception in this trend of data is the the slightly lower proportion of the Capital's middle income group members in the upper income category on the project compared to the lower income group's proportion (5.3% against 8.6%). With all other parts of the trend shown in the first cross-tabulation and repeated in the second cross-tabulation, it is safe to assume that both cross-tabulations gave similar results. This later finding eliminates the possible influence of household size on the conclusions of this cross-tabulation.

Conclusions:

Together with Cross-tabulation No. 2P (p.763), this cross-tabulation's findings shed considerable doubt on the validity of the Government selection criteria of favouring lower income groups in the Capital as candidates for the project. Participants' income on the project seems to vary proportionately with the participants' income in the Capital, with the low income groups in the Capital proving to produce less per capita income on the project than the upper income groups in the Capital. While being biased to a certain income group in the Capital may have its setbacks, a mix that favours the higher income candidates in the Capital could be a better option.

Cross-tabulation
No. 5P

Number of years participant stayed in Baghdad	vs.	Average per capita monthly income (household head only) for the total period on the project
(VAR.12)		(Z6)

The number of years a project participant stayed in the Capital after migrating to it was ignored by the Selection Committee, being considered as irrelevant to the selection criteria for candidates. The objective of this cross-tabulation is to test the hypothesis that

the longer the migrant stayed in the Capital, the more he is bound to lose touch with his old profession, namely, agricultural work, and thus he may be less productive.

According to the Survey Form, data on the number of years participants stayed in the Capital (Totals of VAR.12, p.661) is reclassified according to the following pattern: less than one year, 2 - 3 years, 4 - 5 years, 6 - 7 years, 8 - 9 years, 10 - 11 years, 12 - 13 years and over 13 years. To test whether the above hypothesis is valid a graph is plotted (Figure No. 45, p. 781) for the average participant's income of each category of number of years in the Capital obtained from the attached computer printout of the cross-tabulation of VAR.12 versus Z6. The average value of Z6 is computed from the cross-tabulation as follows: (p.780)

FILE NO: 101 (REPAYMENT DATE = 11/11/78)

PER CAPITA INCOME REGISTRATION OF VARS BY VARS YRS. IN REGISTRATION

PER CAPITA INCOME REGISTRATION OF VARS BY VARS YRS. IN REGISTRATION

PAGE 1 OF 2

COUNT	VAR12								TOTAL
	1-2YRS	3-4YRS	5-6YRS	7-8YRS	9-10YRS	11-12YRS	13YRS & MORE	ROI	
2,15	0	0	0	0	0	0	0	2	2
	0.0	0.0	0.0	0.0	0.0	0.0	0.0	100.0	1.0
	0.0	0.0	0.0	0.0	0.0	0.0	0.0	5.1	
	0.0	0.0	0.0	0.0	0.0	0.0	0.0	1.8	
2,17	0	0	0	0	0	0	0	1	1
	0.0	0.0	0.0	0.0	0.0	0.0	0.0	100.0	0.0
	0.0	0.0	0.0	0.0	0.0	0.0	0.0	2.6	
	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	
2,18	2	1	0	0	0	0	0	0	3
	0.0	46.7	39.3	0.0	0.0	0.0	0.0	0.0	2.7
	0.0	10.0	4.5	0.0	0.0	0.0	0.0	0.0	
	0.0	1.8	0.9	0.0	0.0	0.0	0.0	0.0	
2,19	2	0	0	0	0	0	0	0	2
	0.0	100.0	0.0	0.0	0.0	0.0	0.0	0.0	1.0
	0.0	10.0	0.0	0.0	0.0	0.0	0.0	0.0	
	0.0	1.8	0.0	0.0	0.0	0.0	0.0	0.0	
2,25	0	2	1	1	2	0	0	2	7
	12.5	0.0	29.0	12.5	0.0	25.0	0.0	29.0	7.3
	57.0	0.0	0.1	14.3	0.0	100.0	0.0	5.1	
	0.0	0.0	1.8	0.0	0.0	1.8	0.0	1.8	
2,28	2	4	0	1	0	0	0	0	7
	0.0	12.5	29.0	0.0	6.7	0.0	0.0	56.2	14.5
	0.0	10.0	18.2	0.0	5.0	0.0	0.0	23.1	
	0.0	1.8	1.8	0.0	0.0	0.0	0.0	8.2	
2,31	4	1	0	0	0	0	0	5	13
	0.0	30.8	7.7	0.0	23.1	0.0	0.0	38.5	11.0
	0.0	20.0	4.5	0.0	17.6	0.0	0.0	12.6	
	0.0	3.4	0.9	0.0	2.7	0.0	0.0	4.5	
2,36	4	0	0	0	0	0	0	6	10
	0.0	60.0	0.0	0.0	0.0	0.0	0.0	60.0	9.1
	0.0	20.0	0.0	0.0	0.0	0.0	0.0	15.4	
	0.0	3.6	0.0	0.0	0.0	0.0	0.0	5.5	
2,42	4	7	4	3	0	0	0	2	23
	0.0	16.0	29.0	16.0	32.0	0.0	0.0	4.0	22.7
	0.0	20.0	31.8	57.1	47.1	0.0	0.0	3.1	
	0.0	3.6	4.4	3.6	7.7	0.0	0.0	1.8	
2,50	0	0	0	0	0	0	0	2	2
	0.0	0.0	0.0	0.0	0.0	0.0	0.0	100.0	1.0
	0.0	0.0	0.0	0.0	0.0	0.0	0.0	5.1	
	0.0	0.0	0.0	0.0	0.0	0.0	0.0	1.8	
2,53	0	3	0	2	0	0	0	2	7
	0.0	0.0	42.0	0.0	23.6	0.0	0.0	28.6	6.4
	0.0	0.0	19.8	0.0	11.3	0.0	0.0	5.1	
	0.0	0.0	2.7	0.0	1.3	0.0	0.0	1.8	
2,68	0	0	0	0	0	0	0	0	1
	100.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
	57.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	
	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	
2,94	0	0	0	0	0	0	0	2	2
	0.0	0.0	0.0	0.0	0.0	0.0	0.0	100.0	1.0
	0.0	0.0	0.0	0.0	0.0	0.0	0.0	5.1	
	0.0	0.0	0.0	0.0	0.0	0.0	0.0	1.8	
1,25	0	3	0	0	0	0	0	1	4
	0.0	0.0	29.0	0.0	0.0	0.0	0.0	29.0	3.4
	0.0	0.0	18.4	0.0	0.0	0.0	0.0	2.6	
	0.0	0.0	2.7	0.0	0.0	0.0	0.0	1.8	
1,35	0	0	0	0	0	0	0	2	2
	0.0	0.0	0.0	0.0	0.0	0.0	0.0	100.0	1.0
	0.0	0.0	0.0	0.0	0.0	0.0	0.0	5.1	
	0.0	0.0	0.0	0.0	0.0	0.0	0.0	1.8	
1,50	2	0	2	0	0	0	0	2	6
	0.0	33.3	0.0	33.3	0.0	0.0	0.0	33.3	5.5
	0.0	10.0	0.0	23.6	0.0	0.0	0.0	5.1	
	0.0	1.8	0.0	1.8	0.0	0.0	0.0	1.8	
2,50	0	1	0	0	0	0	0	1	4
	0.0	0.0	14.7	0.0	40.0	0.0	0.0	14.7	5.5
	0.0	0.0	4.5	0.0	17.6	0.0	0.0	2.6	
	0.0	0.0	0.0	0.0	2.7	0.0	0.0	1.8	
COLUMN TOTAL	1.7	18.2	29.0	6.4	19.7	1.8	0.9	14.5	110

SQUARE = 197.1547 114 112 DEGREES OF FREEDOM SIGNIFICANCE = 0.1010
 AMBROS V O J. 31671
 CONFIDENCE COEFFICIENT = 0.9547
 ANDALTS TAU = 0.0439 SIGNIFICANCE = 0.3000
 ANDALTS TAU C = 0.0469 SIGNIFICANCE = 0.452
 AMMA = 0.11231
 AMBROS J = 0.11756

<u>Period in year (Value of VAR.12)</u>	<u>Average Value of VAR.12 in years (for graph plotting)</u>	<u>Average Value of Z6 in I.D. (see Note *)</u>
Less than one year	0.5	0.465
1 - 2 years	1.5	0.419=
3 - 4 years	3.5	0.600
5 - 6 years	5.5	0.704
7 - 8 years	7.5	0.784
9 - 10 years	9.5	0.250
11 - 12 years	11.5	2.500
13 years or more	13.5	0.568

Note * Computed from attached Computer
Printout for Cross-tabulation
VAR.12 vs. Z6

Conclusions:

In plotting the last two columns in the above table the graph resulting (Figure No. 45, p.779) shows that the points for the plot are too scattered to suggest a pattern. While between the value of 1.5 and 7.5 for the number of years in the Capital (VAR.12) there seems to be a rising trend for participants' income with more years of residence in the Capital (which is contradictory to the proposed hypothesis), the rest of the points in the plot have no particular set pattern. The total sample percentage for participants who had a staying period (VAR.12) of between 1.5 and 7.5 years is 60.1% which in itself has a significant weight, but still around 40% of the sample is outside this range of

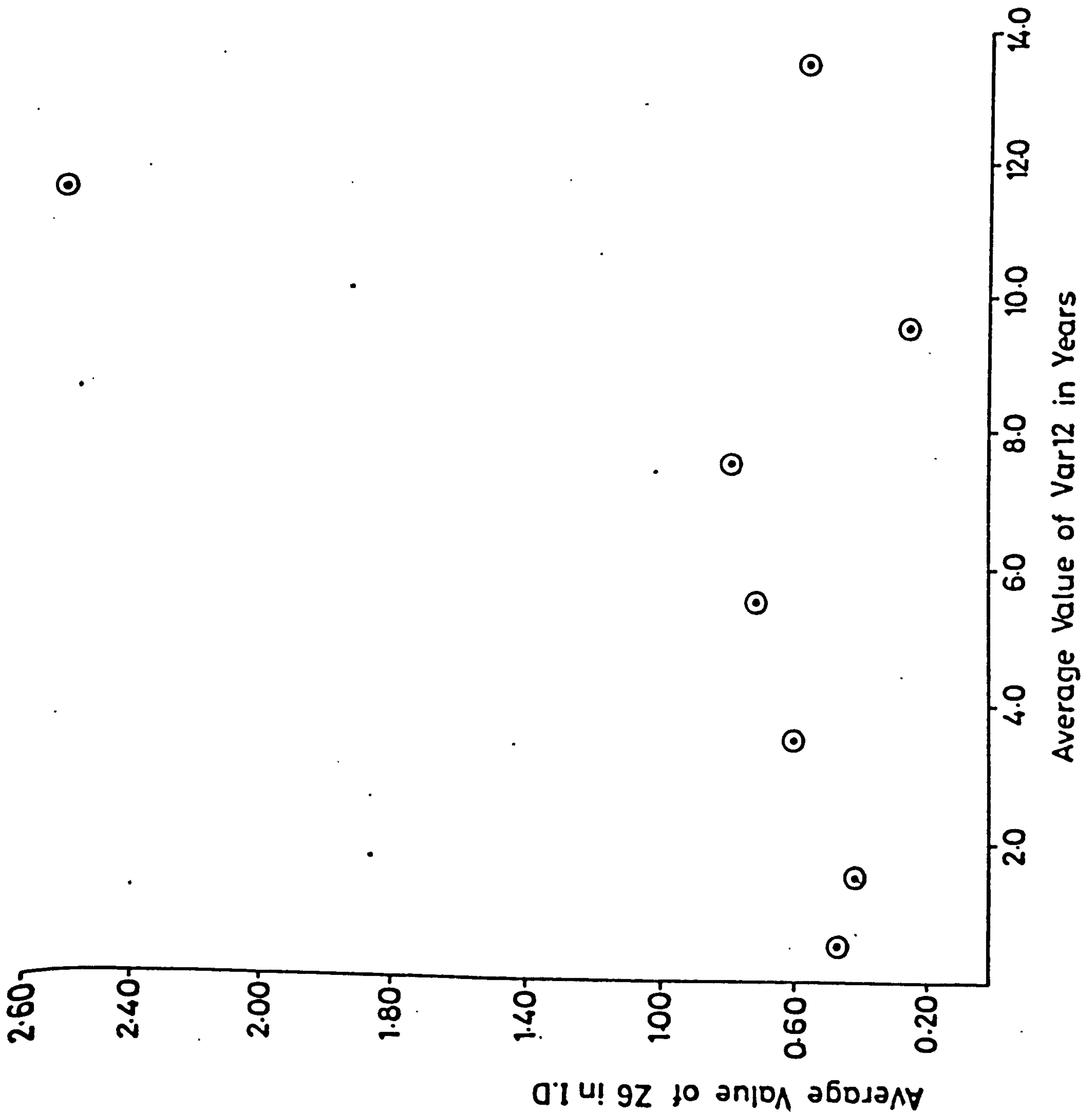


FIG No.45 PLOT OF PARTICIPANTS PER CAPITA INCOME ON PROJECT AGAINST
NUMBER OF YEARS STAYED IN CAPITAL

value of Variable 12. Thus there is no set pattern to suggest a possible correlation between the length of the period a participant stayed in the Capital and his income on the project. This does support the selection criteria of participants for the project as far as ignoring the factor of length of stay in the Capital is concerned.

Cross-tabulation
No. 6P

Participant's occupation before migrating to Baghdad	vs. Average per capita monthly income (household head only) for the total period on the project
(VAR.16)	(Z6)

This cross-tabulation is to check the income of participants who were originally peasants (before migrating to the Capital) against that of other occupations (including the unemployed). Such a test will evaluate the validity of the Government policy to give priority to participants who were of peasantry origin in receiving Government agricultural land. The selection for the Shihamyia Project employed the same priority policy. Two methods of analysis were used, namely:

- (1) Cross-tabulation of VAR.16 versus Z6
- (2) Computation of average per capita income for both the peasantry occupation participant group and for the non-peasantry occupation groups.

SHIMANYA SURVEY

FILE N01A1E (CREATION DATE = 23/03/78)

VAR16 HD OCCUPATION BEFORE MIGRATION CROSSTABULATION OF PER CAPITA INCOME INDICATOR AVG CI PFCJ BY 26 PAGE 8 OF 9

VAR16	GRUNT	10	11	12	13	14	15	16	17	18	19	20	TOTAL	ROW
1.00	37	40	16	16	16	16	16	16	16	16	16	16	16	86
PRESENTRY	34.2	46.5	19.6	19.6	19.6	19.6	19.6	19.6	19.6	19.6	19.6	19.6	19.6	78.2
NON PRESENTRY	64.7	83.9	87.0	87.0	87.0	87.0	87.0	87.0	87.0	87.0	87.0	87.0	87.0	26
	27.3	35.4	14.5	14.5	14.5	14.5	14.5	14.5	14.5	14.5	14.5	14.5	14.5	21.8
	15	5	4	4	4	4	4	4	4	4	4	4	4	110
	62.3	20.8	14.7	14.7	14.7	14.7	14.7	14.7	14.7	14.7	14.7	14.7	14.7	21.8
	37.3	11.1	20.0	20.0	20.0	20.0	20.0	20.0	20.0	20.0	20.0	20.0	20.0	
	17.5	4.5	1.6	1.6	1.6	1.6	1.6	1.6	1.6	1.6	1.6	1.6	1.6	
COLUMN	47	65	70	70	70	70	70	70	70	70	70	70	70	110
TOTAL	47.0	40.0	13.2	13.2	13.2	13.2	13.2	13.2	13.2	13.2	13.2	13.2	13.2	100.0

CHI SQUARE = 5.56115 WITH 2 DEGREES OF FREEDOM SIGNIFICANCE = 0.0376
 CRAMER'S V = 0.24623
 CONTINGENCY COEFFICIENT = 0.23725
 KENDALL'S TAU B = -0.17639 SIGNIFICANCE = 0.0035
 KENDALL'S TAU C = 0.16193 SIGNIFICANCE = 0.0061
 GAMMA = -0.76294
 SOMER'S D = -0.12917

SHIMAMYA SURVEY

23/03/78

PAGE 27

FILE NCHAVE (CREATION DATE = 23/03/78)

VAR16 NO OCCUPATION BEFORE MIGRATION CROSS TABULATION OF PER CAPITA INCOME INDEXIE AVG OF PRJ BY 26 FACE 1 OF 2

	0.151	0.171	0.181	0.191	0.251	0.281	0.311	0.361	0.421	ROW TOTAL
24										
COUNT	2	0	0	2	6	11	9	10	22	86
RJ PCT	2.3	0.0	0.0	2.3	7.0	12.8	10.5	11.6	25.6	78.2
COL PCT	100.0	0.0	0.0	100.0	75.0	68.7	69.2	100.0	86.0	
TOT PCT	1.3	0.0	0.0	1.3	5.5	10.0	8.2	9.1	20.0	
PEASANTRY										
2.00	0	1	3	0	2	5	4	0	3	24
NON PEASANTRY	0.0	4.2	12.5	0.0	8.3	20.8	16.7	0.0	12.5	21.8
	0.0	100.0	100.0	0.0	25.0	31.3	30.8	0.0	12.0	
	0.0	0.9	2.7	0.0	1.3	4.5	3.6	0.0	2.7	

	0.631	0.681	0.941	1.251	1.361	1.501	2.501	ROW TOTAL
26								
COUNT	5	1	2	4	2	4	4	86
RJ PCT	5.3	1.2	2.3	4.7	2.3	4.7	4.7	78.2
COL PCT	71.4	100.0	100.0	100.0	100.0	66.7	66.7	
TOT PCT	6.3	0.9	1.8	3.6	1.3	3.6	3.6	
PEASANTRY								
2.00	2	0	0	0	0	2	2	24
NON PEASANTRY	6.3	0.0	0.0	0.0	0.0	8.3	8.3	21.8
	23.5	0.0	0.0	0.0	0.0	33.3	33.3	
	1.8	0.0	0.0	0.0	0.0	1.8	1.8	
COLUMN TOTAL	7	1	2	4	2	6	6	110
	6.6	0.9	1.8	3.6	1.3	5.5	5.5	100.0

CHI SQUARE = 25.33536 WITH 16 DEGREES OF FREEDOM SIGNIFICANCE = 0.0641

CRAMER'S V = 0.47992

CONTINGENCY COEFFICIENT = 0.63267

KENDALL'S TAU B = 0.13719 SIGNIFICANCE = 0.0219

KENDALL'S TAU C = 0.14314 SIGNIFICANCE = 0.0133

GAMMA = 0.23167

SOMER'S D = 0.73031

Data for both methods are shown in the attached printouts.

Observations:

Although as a group the peasantry occupation participants performed better than the non-peasantry occupation participants, on the average both groups have almost the same per capita income, i.e. 0.597 (peasantry) against 0.590 (non-peasantry); but looking into the performance of each group, we find the peasantry occupation group has a better performance if compared to the non-peasantry group. The former group has more in the upper income category, 18.6%, against 16.7% for the latter group. It also has more in the middle income category, 46.5% against 20.8% and most significantly the peasantry occupation group has almost half the percentage in the lower income group on the project with only 34.9% against 6.5% for the non-peasantry groups. This apparent discrepancy between the two methods of analysis is mainly due to the presence of a small proportion of high per capita income (1.5 I.D. and 2.5 I.D.) participants in the non-peasantry group which helped to push up the group average.

Conclusions:

As a group, there is reasonable evidence to support the biased policy of the Government in selecting participants of a peasantry occupation

origin over others. The overall low participants' income on the project has reduced the difference between the two groups to a negligible value when the average per capita income is compared.

Cross-tabulation
No. 7P

Participant's (household head) origin vs. (VAR.11)	Average per capita monthly income (head only) for the total period on the project (Z6)
--	--

Although the Government policy has been not to favour directly any particular subregion as a preferable origin for participants - social homogeneity is stressed as a selection criteria for participants to the Shihamyia project - the final selection of participants showed that 95.4% of participants come either from Wasit (18.2%), (the project subregion), or surrounding subregions, Qadisya/Muthna (31.8%), Thiqr (23.6%), and Mysan (21.8%), all of which are similar in social terms to the project area. The remaining 4.5% are from the central subregions of Baghdad, Babylon and Diala, who in their social characteristics are slightly different from the project area inhabitants. This selection is a definite manifestation of the Government social homogeneity oriented selection policy. Qadisya/Muthna, Thiqr and Mysan candidates, accounting for over 75% of the participants selected, descend

from the same tribal origin as the Shihamya project inhabitants. There were no candidates for the project from the northern region. The migrants' settlement in the Capital from which participants are selected seldom include migrants from this region. (See Part III, p. 312).

The objective of testing the income of participants from different subregional origins is to see if any participant income differentials could be attributed to subregional differences. The predominance of a certain agricultural crop and the peasants' familiarity with that crop could result in income differentials if that crop or another is cultivated on the project. The project area is mostly known as a wheat growing community, and (as will be discussed later) wheat is the main crop cultivated annually on the project. Wasit, the project's subregion, is a major wheat grower in the central region and in the 1971/72 agricultural season accounted for 17% of the central and southern regions total annual cultivated land of this crop, while subregions which contributed to the participants origin have significantly less than that figure with Qadisya/Muthna at 13%, Thiagar at 8% and Mysan at 3%. Both Mysan and Qadisya/Muthna are mainly rice growers with 31% and 39% of the two regions' rice land cultivated

annually in these two subregions,⁽¹⁹⁵⁾ but socially (tribal origin, social customs, etc.) they are very similar to the project area at Shihamya which forms part of the southern edge of the Wasit subregion in the central region in the country. Thus combining the social similarity issue with the crops familiarity issue, the subregions forming the project participants origins could be broken down into the following categories in terms of their similarity to the project area:

- (1) Very similar: Within Wasit subregion
(project's subregion)
- (2) Similar: Subregions bordering Wasit
and categorised as southern
subregions; these include -
Qadisya/Muthna
Thiqar
Mysan
- (3) Slightly similar: Subregions bordering Wasit
subregions and categorised
as central subregions;
these include -
Baghdad
Babylon
Diala

Observations:

The cross-tabulation in the attached printout shows the following:

- (1) Wasit, the project's subregion, has the highest average value of Z6 at 0.813 and

(195) Ministry of Planning, C.S.O., Baghdad - "1973 Annual Abstracts of Statistics", Table 37, p. 91 and Table 44, p.98.

also the highest proportion of upper income category participants with 40% of its members in this category, (equalled only by the Baghdad-Babylon-Diala group, which due to its small size - only 4.5% of the sample - could be held as insignificant).

- (2) Qadisya/Muthna subregion which as the second rank average value of Z6 at 0.695 also shows the second highest proportion of its members in the upper income category on the project with 22%. Actually Qadisya/Muthna showed the least of all subregions in terms of the proportion of its members in the lowest income category on the project with only 25.7%. The other two subregions of the similar group of Thiqr and Mysan participants came fourth and fifth in their value of Z6 with 0.428 and 0.370 respectively.
- (3) Baghdad, Babylon and Diala group of slightly similar participants which constitutes five samples of the total 110 samples show the highest proportion of their members in the lower income group on the project with 60%. The high average Z6 shown by this group is attributed to the presence of two values of Z6 at 1.5 I.D. which boosted their average considerably.

Both this fact and the size of the group at 4.5% of the total sample makes it possible to neglect the statistical value of the group in favour of the 95.5% remainder of the sample which seems to suggest that participants' income on the project is correlated to the similarity of participant's origin to the project area.

Conclusions:

Data seems to uphold the Government selection criteria of preference for participants with higher similarity to the project area inhabitants.

III. Stability Cross-tabulation Analysis

Preface

Stability is measured by responses indicating the intention of participants to leave the project (answering "yes") or to stay on (answering "no"). This test is only indicative. It does not, for example, quantify the number of participants who are "about to leave" the project. It simply tests the existence of a "tendency" to leave the project that signifies or indicates a case of "non-stability" at the time of the Project Survey (May - June, 1975).

Unlike the Participants' income (performance) criteria, the stability cross-tabulation measures a "current" state of mind on the part of the participant. Yet it resembles the participants' income cross-tabulations in a very important aspect that is both, being the output of the three years' experience of a participant on the project. His decision to stay or leave depends, in the majority of cases, on his experience on the project for the duration of his stay and how it affected his decision to stay or leave in relation to the participant's personal characteristics and that of his household. (All participants in the Survey have stayed the full period on the project). The Author, in posing this question to the participants, asked individual participants to relay his intention based on his experience on the project and not on subjects unrelated to project functioning such as family

or personal matters. The main motive behind measuring stability is the high priority placed upon it as an objective of the project creation. Treated as an indicator, the data collected on stability could be looked at as a valuable tool to measure success of the experiment to achieve a major objective of the project.

Cross-tabulation
No. 1S

Participant (household head) age	vs. If participant is thinking of leaving the project
(VAR.10)	(VAR.55)

The stability of the project participants (Totals of VAR.55, p. 753) is just enough to assume a reasonable, stable condition does exist on the project with 51.8% of participants not thinking of leaving the project against 48.2% of those who are. As the stability of participants will be discussed further in the coming section of this Case Study Analysis Part of this Thesis, discussions in the current section will be concentrated on correlating factors to stability starting with participants age. As has been stated before the selection panel gave priority to young participants over older ones. In the participants income cross-tabulation (No. 1P, p. 759) there was not enough evidence to suggest a link between participant's age and his productivity on the project. In considering the stability cross tabulation of age of participant against whether or

SHIHAWA SURVEY

FILE NAME (CREATION DATE = 23/03/78)

 VAR10 HHHOLD H% AGE ***** C R O S S T A B U L A T I O N O F P O S S I B I L I T Y O F L E A V I N G T H E P R O J *****

 BY VAR55 ***** P A G E 2 O F 4 *****

VAR10	CTUNT	COL PCT	TOT PCT	VAR55	1.001	2.001	ROW TOTAL
25.00	11	73.4	21.4	3	14	17.7	
33.00	7	36.6	10.7	2.7	22	20.0	
43.00	23	46.5	13.7	12.7	43	30.1	
53.00	17	37.5	18.2	20.0	19	17.3	
65.00	6	33.7	7.5	8.2	12	10.9	
	57	49.7	51.8	7	110	100.0	

CHI SQUARE = 7.66774 WITH 4 DEGREES OF FREEDOM SIGNIFICANCE = 0.1045
 CRAMER'S V = 0.26602
 CONTINGENCY COEFFICIENT = 0.25527
 KENDALL'S TAU B = 0.19107 SIGNIFICANCE = 0.0588
 KENDALL'S TAU C = 0.12166 SIGNIFICANCE = 0.0778
 GAMMA = 0.16307
 SOMER'S D = 0.12387

not he is thinking of leaving the project (attached printout), the following may be noted:

Observations:

- (1) The most unstable age group on the project is the youngest (average household head age 25 years) with 78.6% (highest proportion of any other group) of them stating that they are thinking of leaving the project, while the most stable are the eldest group with 66.7% of them stating they are not thinking of leaving the project. This contrast certainly suggests that the selection criteria of being biased towards young participants is not a valid one.
- (2) The other age groups show a mixed pattern, for while the 35 year and 45 year average age of household head groups were stable at 63.6% and 53.5% respectively, with their members not thinking of leaving the project, we find that the 55 years age group is slightly unstable with 52.6% of their members thinking of leaving the project.

While the above data does not give a clear cut conclusion linking age and stability, the contrast between the youngest age group and the oldest age group does suggest a negative characteristic for the youngest group in terms of stability on the project.

If the youngest age group is taken against the rest of the sample (sum total of age groups 35, 45, 55 and 65 years) the pattern shows the following set of data:

	<u>Thinking of leaving</u>	<u>Not thinking of leaving</u>
Youngest age group (25 years)	78.6%	21.4%
Rest of the sample (all remaining age groups)	43.8%	56.2%

This certainly supports the negative characteristic of the youngest age group suggested by the data analysis in the cross-tabulation, and may put the selection criteria in terms of age of participants in a doubtful position.

Conclusions:

Stability data does not seem to support the Government selection criteria of favouring the young age group (20 - 30) as it shows this group to be the least stable on the project, while the oldest age group showed the highest stability of any other age group on the project.

Cross-tabulation

No. 2S

Participant's occupation before migrating to the Capital	vs.	If participant is thinking of leaving the project
(VAR.16)		(VAR.55)

As in the Participants Income Analysis (Cross-Tabulation No. 6P, p.782) the Stability Analysis will focus on the stability of the participants with non-peasantry occupations before migration (sales, services, mechanical, etc.) against the stability of those with a peasantry occupation. The cross-tabulation is again to test the validity of the selection criteria favouring those with peasantry occupations over others. In the Participants Income Analysis this criteria seemed to be upheld by the data suggesting higher per capita income on the project for participants with peasantry occupations before migrating to the Capital. The Stability Cross-tabulation shown on the attached printout suggests the following:

Observations:

The cross-tabulation shows, quite conclusively, that peasantry occupation participants are by far more stable than the non-peasantry occupation participants. The non-peasantry occupation participants were almost 4 to 1 in favour of leaving the project, showing 79.2% to 20.8% against staying on the project. While the peasantry occupations were highly stable with almost 2 to 1 in favour of

SMIHAWYA SURVEY.
FILE NCHAME (CREATION DATE = 23/03/78)

VAR16 HD OCCUPATION R.FOR MIGRATION C R O S S T A B U L A T I O N O F P O S S I B I L I T Y O F L E A V I N G T H E P R O J
BY VAR55 PAGE 1 OF 1

	VAR55	NO	ROW TOTAL
VAR16			
PEASANTARY OCCUP	1.00	52	86
NON PEASANTARY	2.00	24	24
COLUMN TOTAL		57	110
		51.8	100.0

CORRECTED CHI SQUARE = 10.77026 WITH 1 DEGREE OF FREEDOM SIGNIFICANCE = 0.0014
 PHI = .30356
 CONTINGENCY COEFFICIENT = .29722
 KENDALL'S TAU B = -.32758 SIGNIFICANCE = 0.0000
 KENDALL'S TAU C = -.27061 SIGNIFICANCE = 0.0000
 GAMMA = -.70639
 SOMER'S D = -.27077

staying showing 60.5% to 39.5% against leaving the project. This result supports the Government policy of favouring former peasant migrants for selection for the project and indeed to all agricultural land distribution schemes (Agrarian Reform Law No. 117/year 1970 - Article No. 18, see p.607).

Conclusions:

As in the Participants Income Cross-tabulation participants with peasantry occupations before migrating to the Capital performed favourably in terms of stability compared to the participants who, before migrating to the Capital, were holders of non-peasantry jobs. Thus upholding the Government selection policy favouring participants with peasantry occupations before migrating to the Capital.

Cross-tabulation

No. 3S

Number of years participant stayed in the Capital (VAR.12)	vs.	If participant is thinking of leaving the project (VAR.55)
---	-----	---

As is concluded in the Participants Income Cross-tabulation (No. 5P, p.782), this factor, which was neglected in the participants selection process, showed no effect on the participants income

characteristics on the project. In this cross-tabulation stability is related to the time stayed by participants in the Capital by breaking this period into three groups, namely:

- (a) Participants who migrated to the Capital before the 1958 Revolution (that is before the enactment of the 1958 Agrarian Reform Law). For this group the participants had stayed in the Capital 13 years or more before joining the project in 1971.
- (b) Participants migrating to the Capital in the period 1959 up to 1968, the period in which the 1958 Agrarian Reform Law was enacted, implemented and later failed prior to the 1968 Revolution. The participants of this group stayed in the Capital between 3 and 12 years before joining the project.
- (c) Participants migrating to the Capital between 1968 (the year the 1968 Revolution took place) and the project starting date in 1971. The participants of this group stayed in the Capital less than three years.

The significance of linking stability to the period in which the participant migrated to the Capital is to test whether the conditions upon

SHIMAWA SURVEY
FILE NAME (CREATION DATE = 23/03/78)

CROSS TABULATION OF
VAR12 YRS. IN BAGHDAD BY VAR55 POSSIBILITY OF LEAVING THE PROJ
PAGE 1 OF 1

VAR55		COUNT	NO	ROW
		PCT		TOTAL
VAR12	TOT PCT	1.001	2.001	
1968 REV TO 1971	1.00	31.8	15	22
		13.2	68.2	20.0
		6.6	26.3	
			13.6	
1950 TO 1967	2.00	23	76	49
		44.0	53.1	64.5
		43.4	45.6	
		20.0	23.6	
BEFOR 1950 REV	3.00	27	16	39
		50.0	41.0	35.5
		43.6	28.1	
		20.0	16.5	
COLUMN		57	57	110
TOTAL		49.2	51.8	100.0

CHI SQUARE = 4.20020 WITH 2 DEGREES OF FREEDOM SIGNIFICANCE = 0.1219
 CRAMER'S V = 0.19562
 CONTINGENCY COEFFICIENT = .19198
 KENDALL'S TAU B = -.18763 SIGNIFICANCE = 0.0022
 KENDALL'S TAU C = -.20694 SIGNIFICANCE = 0.0007
 GAMMA = -.12103
 SOMER'S D = -.20722

which the participant migrated to the Capital has any influence on his attitude regarding staying on the project. Unlike the participants income analysis which was mostly linked to the influence of staying in Baghdad and whether it had reduced the participants ability to practice agriculture.

The cross-tabulation of the period stayed in the Capital, broken into the three groups above, against the stability variable (VAR.55) is shown on the attached printout.

Observations:

(1) The three groups show the following stability figures:

(i) Highly stable group:

Group (c) above - staying in
Baghdad less
than three years

in favour of staying 68% to 32%

(ii) Slightly stable group:

Group (b) above - staying in
Baghdad
3 - 12 years

in favour of staying 53% to 47%

(iii) Highly unstable group:

Group (a) above - staying in
Baghdad over
13 years

in favour of leaving 59% to 41%

(2) Migrants coming into the Capital before the 1958 Revolution have certainly suffered the most in the rural areas under the conditions

of pre-Agrarian Reform era in Iraq. Their sad experience of having to face feudal lords' oppression, agricultural conditions' deterioration and Government agencies biased to the feudal system has made this group of ex-peasants very impatient with the poor performance of the project during its first three years of operation. They were also well-established in the urban fabric of the Capital with a strong social framework and their movement to the project represented a severe disruption to their way of life. Economically they were the most benefitted migrant group of all times, since modern migrants find the capital living not to be as lucrative as it had been to the older ones (see Time-linked Cross-tabulation No. 33.4.3.3., Part III, p. 539).

The first group (highly stable) who were in the Capital a very short time came at a period when the Capital was not very attractive to new migrants with housing problems and financial difficulties and congestion (see Part III, p. 539, as above). They also witnessed the introduction of the effective 1970 Agrarian Reform Act and have not been subjected to the severe socio-political problems faced in the rural areas by old migrants before 1958; they have little about which to distrust Government policy.

They were not established long enough in the urban fabric of the capital, their attachment with rural areas still is very much alive.

The middle group (slightly stable) exhibited a mixed pattern with its components showing a contradictory pattern to the one shown by the other two groups, but in total it lends itself to being a middle case between the old migrants to the Capital case of instability and stable new migrants to the Capital.

Conclusions:

Data in the above cross-tabulation suggested a negative relation between the number of years stayed in the Capital and the participant's stability on the project. The longer the period stayed by the participant in the Capital before joining the project, the higher is his instability on the project, and vice versa. The absence of correlation in the Participants Income Cross-tabulation (No. 5P) does not seem to reflect on the stability cross-tabulation of this factor where a definite correlation seems to emerge.

Stability is a major objective on the project objectives list and the absence of the length of period stayed in the Capital from the participants' selection criteria is a serious deficiency in the setting up of the project.

Cross-tabulation
No. 4S

Participant's (household head) Origin (VAR.11)	vs. If participant is thinking of leaving project (VAR.55)
---	---

Using the same classification of subregions as in Participants Income Cross-tabulation No. 7P, (p. 790), of "very similar (Wasit), similar (Qadisya/Muthna, Thiqr and Mysan) and slightly similar (Baghdad, Diala and Babylon)", the attached cross-tabulation printout shows the following:

Observations:

- (1) While Wasit (the project subregion) participants were stable with 55% to 45% in favour of staying on, the more stable participants came from neighbouring Thiqr and Qadisya/Muthna with 69.2% and 68.6% respectively in favour of staying. With the slightly similar subregions' participants showing a non-stable characteristic at 60% to 40% in favour of leaving the project, there seems to be reasonable evidence to support the selection criteria bias to social homogeneity on the basis of origin of participants. The tribal origin of the Shihamyia area inhabitants mostly relates to Wasit, Qadisya/Muthna and Thiqr

which together represent 73.6% of the total participants' sample.

- (2) Mysan participants represent an interesting case in the Stability cross-tabulation. Despite being from a similar social background this subregion's participants on the project showed a very unstable characteristic with an overwhelming 91.7% to 8.3% in favour of leaving the project. While the participants of this subregion represent 21% of the total sample (leaving around 80% of the sample in line with the social homogeneity argument), a possible explanation still had to be proposed to explain this apparent discrepancy. Participants' income figures show Mysan participants as being among the lowest on the project (Cross-tabulation No. 7P, p.791) which may be due to the fact that they are basically rice growers, not very familiar with the wheat/barley agricultural pattern on the project. Mysan had always been the main source of migrants in the nation and probably the extremely poor rural conditions in this subregion had produced rural migrants who have little patience with the promised successes on the project.

Their long and bitter experience with rural reform was too strong to withstand low returns on the project, specially, if we consider the fact that the majority of the Capital migrants are from this subregion and its participants leaving the project would not have too much difficulty in resettling in the migrants settlements in the Capital.

Conclusions:

For the majority of the sample there is enough evidence to suggest that on the stability of participants issue the Government social homogeneity criteria of favouring participants, for selection to the project, from similar subregions to the project area is a valid one. There is, however, one exception to this statement which is the Mysan subregion participants.

Cross-tabulation

No. 5S

Household size (VAR.07)	vs.	If participant is thinking of leaving the project (VAR.55)
----------------------------	-----	--

While the Participants Income Analysis (Cross-tabulation No. 3P, p. 771) did not uphold the Government selection criteria of favouring large size household heads as participants for the project,

SHIHAIYA SURVEY

FILE NAME (CREATION DATE = 31/03/78)

VAR07 NOS WHOLD MEMBERS C R O S S T A B U L A T I O N O F P O S S B L Y O F L E A V I N G T H E P R O J
BY VAR55 PAGE 1 OF 1

VAR07	COUNT	NO	ROW TOTAL
UP TO 5 MEMB	17	6	19
6 TO 7 MEMB	14	26	40
8 TO 9 MEMB	15	16	31
10 AND MORE MEMB	11	9	20
COLUMN TOTAL	57	57	110

CHI SQUARE = 6.27405 WITH 3 DEGREES OF FREEDOM SIGNIFICANCE = 0.0990
 CRAMER'S V = 0.23072
 CONTINGENCY COEFFICIENT = 0.23229
 KENDALL'S TAU B = 0.01538 SIGNIFICANCE = 0.4059
 KENDALL'S TAU C = 0.01251 SIGNIFICANCE = 0.3872
 GAMMA = 0.12500
 SOMER'S D = 0.11354

the stability cross-tabulation (attached printout) failed to show a conclusive pattern as indicated by the following:-

Observations:

- (1) Both the smallest size household heads and the largest ones' heads indicated a non-stable characteristic with 68.4% and 55% of the heads of both groups respectively declaring their intentions of leaving the project.
- (2) The middle size household heads (6 - 7 members and 8 to 9 members) both were stable at 65% and 51.6% indicating their intention of staying on.

Conclusions:

No set pattern could be drawn from cross-tabulating household size and the stability variable (VAR.55), thus on the stability issue the Government selection criteria of favouring large size households cannot be upheld or rejected which leaves the evaluation of this selection criteria based on the participants' income alone.

Cross-tabulation
No. 6S

This cross-tabulation is formed in three parts:

- | | | |
|-----|---|---|
| (a) | Average per capita
monthly income
(household head only)
for total period on
the project
(Z6) | vs. If participant is
thinking of leaving
the project

(VAR.55) |
| (b) | Average per capita
monthly income
(household head only)
last year in Baghdad
(Z5) | vs. If participant is
thinking of leaving
the project

(VAR.55) |
| (c) | Household head monthly
income (average for
total period on project)
as a percentage of his
average monthly income
(last year in Baghdad)
(Z4) | vs. If participant is
thinking of leaving
the project

(VAR.55) |
-

The objectives of this set of stability cross-tabulations are to test:

- (1) If stability on the project is a function of the participants income characteristics on the project. The hypothesis to test here is the higher the participant's income on the project, the more is his stability.
- (2) If the Government selection criteria of favouring lower income groups in the Capital as participants to the project is a valid one.

- (3) If the stability on the project is a function of the financial gain (or loss) sustained by the participant due to his joining the project in comparison to his last year's financial position in the Capital. The hypothesis to test here is the higher the financial gain obtained by the participant due to joining the project over his financial position during his last year in the Capital, the more is his stability on the project.

Examining the three attached cross-tabulation printouts, the following observations could be deduced with regard to the above objectives:

(i) Observations for Cross-tabulation (a) - Z6 vs. VAR.55:

- (1) The highest income group on the project (Z6 = over 0.75 I.D.) is the most stable of the three income groups on the project with 60% to 40% in favour of staying on the project. Comparing this to the low income group with its slightly stable character of 51.1% to 48.9% in favour of staying (slightly less than the overall sample stability), it seems there is a reasonable amount of evidence to suggest that the hypothesis suggested above

SHIMAMIYA SURVEY

FILE NONAME (CREATION DATE = 06/06/77)

CROSS TABULATION OF POSSPLTY OF LEAVING THE PROJ
BY VAR55
PER CAPITA INCOME HDINCOME AVG ON PROJ
Z6

		VAR55		ROW TOTAL
COUNT	ROW PCT	COL PCT	TOY PCT	TOTAL
1.00	22	51.1	23	45
0 TO 0.351.D	48.9	40.4	20.9	40.9
	23	48.9	22	45
0.36 TO 0.751.D	51.1	38.6	20.0	40.9
	23	20.0	12	20
3.00	8	60.0	21.1	18.2
OVER 0.751.D	40.0	15.1	10.9	18.2
	15.1	7.3	10.9	18.2
COLUMN TOTAL	53	57	110	110
TOTAL	48.2	51.8	100.0	100.0

CHI SQUARE = 0.69092 WITH 2 DEGREES OF FREEDOM SIGNIFICANCE = 0.7067
 CRAMER'S V = 0.07977
 CONTINGENCY COEFFICIENT = 0.07952
 KENDALL'S TAU B = 0.03971 SIGNIFICANCE = 0.2693
 KENDALL'S TAU C = 0.06463 SIGNIFICANCE = 0.2448
 GAMMA = 0.07057
 SOMER'S D = 0.06466

SHIMAMIA SURVEY

FILE NONAME (CREATION DATE = 06/04/77)

***** C R O S S T A B U L A T I O N O F P O S S I B I L I T Y O F L E A V I N G T H E P R O J
Z5 PER CAPITA INCOME HINC0MF LAST YR BARD BY VARSS ***** PAGE 1 OF 1

VARSS	COUNT	ROW PCT	COL PCT	TOT PCT	ROW TOTAL
0 TO 2.01.D	13	37.1	24.5	11.8	31.8
2.1 TO 4.01.D	21	55.3	39.6	19.1	34.5
OVER 4.01.D	19	51.4	17.3	16.4	33.6
COLUMN TOTAL	53	57	51.8	110	100.0

CHI SQUARE = 2.62038 WITH 2 DEGREES OF FREEDOM SIGNIFICANCE = 0.2698
 CRAMER'S V = 0.15434
 CONTINGENCY COEFFICIENT = 0.15254
 KENDALL'S TAU B = 0.10603 SIGNIFICANCE = 0.0503
 KENDALL'S TAU C = 0.12231 SIGNIFICANCE = 0.0291
 GAMMA = 0.18173
 SOMER'S D = 0.12248

SMIHANIYA SURVEY

FILE NOVANE (CREATION DATE = 06/06/77)

CROSS TABULATION OF POSSBLTY OF LEAVING THE PROJ
24 PERCENT HDIHCN AVRG PROJ TO BAGD INCOM BY VAR55 PAGE 1 OF 1

		VAR55		ROW TOTAL
COUNT	I	NO	NO	
ROW PCT	1.00	30	19	49
COL PCT	61.2	38.8		64.3
TOY PCT	1.001	2.001		
UP TO 10 PERCENT	14	23		37
11 TO 20 PERCENT	37.8	62.2		33.6
26.4	40.6			
12.7	20.9			
OVER 20 PERCENT	0	15		24
37.5	62.5			21.8
17.0	26.3			
8.2	13.6			
COLUMN TOTAL	53	57		110
TOTAL	48.2	51.8		100.0

CHI SQUARE = 6.02108 WITH 2 DEGREES OF FREEDOM SIGNIFICANCE = 0.0493
 CRAMER'S V = 0.23396
 CONTINGENCY COEFFICIENT = 0.22781
 KENDALL'S TAU B = 0.20629 SIGNIFICANCE = 0.0007
 KENDALL'S TAU C = 0.23339 SIGNIFICANCE = 0.0002
 GAMMA = 0.35406
 SOMER'S D = 0.23370

linking participants income to stability is a valid one. This assertion is further strengthened if the stability of the higher Z6 group is compared to the stability of the two lower groups combined which will in this instance break even at 50 : 50 stability compared to 60 : 40 stability shown by the upper income group.

- (2) The middle income group (Z6 = 0.36 to 0.75 I.D.) showed a slightly unstable character of 51.1% to 48.9% in favour of leaving the project. While this group performance is not conclusive, being slightly unstable, the hypothesis under test seems to be holding in around 60% of the sample.

Conclusions:

There seems to be reasonable evidence to suggest that higher participants income is an inducement to more stability on the project. While this in terms of pure logical analysis seems to be a valid statement, the statistical evidence does not give a very strong backing to the validity of the hypothesis. This rather weak backing of the hypothesis may be attributed to the limited range of income on the project, all categories being considered very low in the prevailing per capita income standards in the rural areas in the country (see p. 724).

A wider range may give more clear and conclusive backing to the proposed hypothesis.

(ii) Observations for Cross-tabulation (b) - Z.5 vs. VAR.55:

- (1) The lowest income group in the Capital (Z5 = 0 to 2.1 I.D.) is the only group which showed stability character on the project with 62.9% to 37.1% in favour of staying on. Both the middle and upper income groups in the Capital showed a non-stable (slightly) condition of 55.3% and 51.4% in favour of leaving the project.
- (2) The higher income group in the Capital and the middle income group both show a non-stable character on the project, but the middle income group is slightly more unstable with 55.3% to 51.4% in the upper income group of percentage of participants who are thinking of leaving. While this is not a very significant difference in stability, it is still possible to suggest that participants in the upper income category in the Capital may be financially more able to withstand the financial burdens on the project due to low return. While this is only a possibility, the fact remains that both the middle income and

upper income groups in the Capital are non-stable on the project and the only stable group (by a significant margin) is the low income at Baghdad group.

Conclusions:

Contrary to the Participants income analysis cross-tabulation (No. 4P) the Government selection criteria of favouring low income groups at the Capital as participants for the project seems to be a valid criteria on the basis of the stability on the project. The stability criteria, as was emphasised in the project's objectives, carries more weight than the participants income analysis findings, despite the relatively weakly supported hypothesis in (a), above, of linking them both.

(iii) Observations for Cross-tabulation (c) - Z4 vs. VAR.55:

With 78.1% of the sample making less than 20% of their income in the Capital, there is not very much financial gain on the project to test the hypothesis in (c), above, on its basis. The hypothesis may be altered slightly to read as follows:

the less the financial loss sustained by participants due to joining the project (in comparison to their Capital financial position), the more stable they are on the project.

- (1) The participants group that was worst hit in terms of financial loss for joining the project, making between 0 - 10% of their last year at the Capital income, is the only non-stable group of the three categories of Z5 in the cross-tabulation. They show a strong 61.2% to 38.8% in favour of leaving the project.
- (2) Both the other two groups of participants, making on the project 11-20% of their last year in the Capital income and over 20%, are both similarly stable with 62.2% and 62.5% consequently in favour of staying on at the project.

Conclusions:

There is significant evidence to suggest that the proposed hypothesis linking the level of financial gain (or loss) to stability on the project, with more stability associated with higher financial gain (or lower financial loss), is valid. This further supports the Government selection criteria of favouring those with lower incomes in the Capital over higher income groups in the Capital as participants for the project.

Cross-tabulation
No. 7S

Participants by their last year (5th year) job in the Capital (VAR.21)	vs.	If participant is thinking of leaving the project (VAR.55)
---	-----	---

Using the same job classification as in the Participants Income Cross-tabulation No. 2P (p.764) of skilled/non-skilled jobs in the Capital to test the validity of the Government selection criteria favouring participants for the project who are in non-skilled positions or unemployed in the Capital over others. Examining the attached cross-tabulation printout, the following can be deduced:

Observations:

- (1) The non-skilled category showed a significantly stable character with 64.1% to 35.9% in favour of staying on the project.
- (2) The skilled category showed a significantly unstable character with 57.9% to 42.1% in favour of leaving the project.
- (3) The others category, despite its significant sample size, showed a strong non-stable character of 66.7% to 33.3% in favour of leaving the project.

29/03/78 PAGE 7

SHIMAYA SURVEY

FILE NAME (CREATION DATE = 29/03/78)

VAR21 LAST YRS [STY VRI] JOE AT BAGD BY VAR55 POSSBLTY OF LEAVING THE PROJ
PAGE 1 OF 1

		VAR55		
	COUNT	NO	NO	ROW TOTAL
VAR21			2.001	
NON SKILED	1.00	16	25	39
		35.9	64.1	67.9
		51.9	73.5	
		23.7	41.0	
SKLD SALS SRVCS	2.00	11	8	19
		57.9	42.1	31.1
		40.7	23.5	
		13.7	13.1	
OTHERS	3.00	7	1	3
		66.7	33.3	4.9
		7.6	2.9	
		3.3	1.6	
COLUMN TOTAL		27	34	61
TOTAL		44.3	55.7	100.0

CHI SQUARE = 3.1475 WITH 2 DEGREES OF FREEDOM SIGNIFICANCE = 0.2072
 CRAMER'S V = 0.22716
 CONTINGENCY COEFFICIENT = 0.22152
 KENDALL'S TAU B = -0.22759 SIGNIFICANCE = 0.0056
 KENDALL'S TAU C = -0.21750 SIGNIFICANCE = 0.0063
 GAMMA = -0.42679
 SIMER'S D = -0.22222

Conclusions:

Significant evidence is shown to support the Government selection criteria in favouring the non-skilled and the unemployed category over the skilled category in terms of stability of the participants on the project.

Cross-tabulation
No. 8S

If participant is thinking of leaving the project (VAR.55)	vs.	If the project fulfilled the participant's hopes and objectives (VAR.60)
---	-----	--

This cross-tabulation is basically an auxiliary test designed to see the potentially "unstable" participants amongst those who declared they were staying on (stable); also to investigate the feelings of participants regarding their hopes and realisation and correlating this with their stability on the project for reasons other than the realisation of hopes. The cross-tabulation (attached printout) suggests four types of participants as follows:

- (1) Those who are unstable (thinking of leaving) even though their hopes and objectives have been realised, but who are apparently thinking of leaving the project for an unexpected factor:
 - 3.6% of total sample and
 - 7.5% of those thinking of leaving.

26/11/76 PAGE

SMIHANIYA SURVEY
FILE NONAME (CREATION DATE = 26/11/76)

VAR55 POSSIBILITY OF LEAVING THE PROJ BY VAR60 PROJ FULFILLED HUPES AND OBJECTVS
***** PAGE 1

	COUNT	VAR60	ROW	TOTAL
YES	1.00	4	49	53
NO	2.00	15	42	57
TOT PCT I	1.00	7.5	92.5	48.2
TOT PCT I	2.00	21.1	53.8	
TOT PCT I	3.00	3.6	44.5	
COLUMN	19	91		110
TOTAL	17.3	82.7		100.0

CORRECTED CHI SQUARE = 5.52061 WITH 1 DEGREE OF FREEDOM. SIGNIFICANCE = .0168
 PHI = .24899
 CONTINGENCY COEFFICIENT = .24079
 KENDALL'S TAU B = -.24889
 KENDALL'S TAU C = -.18744
 GAMMA = -.62791
 SOMER'S D = -.32794

- (2) Those who are unstable (thinking of leaving) because what they hoped the project would be has not been realised (as a major reason):

44.5% of the total sample and
92.5% of those thinking of leaving
(unstable group)

- (3) Those who are stable (not thinking of leaving) whose hopes and objectives have been realised on the project:

13.6% of the total sample and
26.3% of those reporting they are
not thinking of leaving
This category represents the most
solid stable group on the project.

- (4) Those who are stable (not thinking of leaving) despite the fact that their hopes and objectives on joining the project were not realised. This is the "patient" group and represents:

38.2% of the total sample and
73.7% of those not thinking of
leaving (stable group)

This group is potentially the one whose stable participants would start converting to unstable groups if things on the project did not begin to improve in the near future.

Conclusions:

It seems that project participants, in terms of stability and the potential of participants leaving the project, fall into four groups:

(a) Solidly stable:

They represent 13.6% of the total sample.

Things on the project have to worsen further for them to start thinking of leaving. Current conditions on the project are not bad enough to cause them to move.

(b) Moderately stable:

They represent 38.2% of the total sample.

While they are dissatisfied with present conditions on the project, they stay on in the hope of things improving.

(c) Unstable for reasons other than what they hoped the project would be:

They represent 3.6% of the total sample.

Despite their satisfaction with conditions on the project, they are thinking of leaving.

(d) Solidly unstable:

They represent the majority of the sample participants with 44.5% of the total. Not only are they dissatisfied with the current situation but they are thinking of leaving at the present time unless immediate measures are taken to improve the situation on the project.

According to this cross-tabulation around 86.4% of the participants on the project are potential leavers if conditions on the project do not begin to improve soon.

IV. General Cross-tabulation Analysis

These cross-tabulations are designed to either investigate the presence of possible bias between variables also to cross-check with the Baghdad Migrant Settlements Survey (Part III of this Thesis). They are in this sense auxiliary to the overall data analysis process of this Case Study of the Project.

Cross-tabulation No. 1G

Participant's (household head) Age (VAR.10)	vs.	Number of years parti- cipant stayed in the Capital (VAR.12)
---	-----	---

This cross-tabulation is basically designed to test if there is a tendency to have higher ages associated with more years spent in Baghdad by participants before joining the project. If such is the case, i.e. if the old ages are associated with longer periods of staying in Baghdad, then the participants' income analyses and stability (involving these factors) would have to be re-evaluated and this bias should be considered carefully in drawing conclusions based on age of participants and number of years they spent in Baghdad. A more random distribution of ages and/or lack of correlation between these two factors will be a positive finding in the examining of data of the project survey. Examining the attached printout for the cross-tabulation, the following may be deduced:

FILE NAME (CREATION DATE = 06/04/77)

CROSS TABULATION OF
VAR12 YRS. IN BAGHDAD BY VAR10 MHOLO HD. AGE
PAGE 1 OF 1

VAR12	COUNT	ROW PCT	COL PCT	TOT PCT	25.001	35.001	45.001	55.001	65.001	ROW TOTAL
UP TO 3YRS	18.2	13.6	18.2	13.6	31.8	18.2	18.2	31.8	18.2	22
	28.6	13.6	0.3	13.6	36.8	33.3	33.3	36.8	33.3	20.0
	3.6	2.7	3.6	2.7	6.4	3.6	3.6	6.4	3.6	
3 TO 6YRS	24.1	20.7	34.5	10.3	10.3	10.3	10.3	10.3	10.3	29
	50.0	27.3	23.3	15.8	15.8	25.0	25.0	15.8	25.0	26.6
	6.4	5.5	9.1	2.7	2.7	2.7	2.7	2.7	2.7	
7 TO 12YRS	0.0	6	7	3	3	6	6	3	6	20
	0.0	30.0	35.0	15.0	15.0	20.0	20.0	15.0	20.0	18.2
	0.0	27.3	16.3	15.8	15.8	33.3	33.3	15.8	33.3	
	0.0	5.5	6.4	2.7	2.7	3.6	3.6	2.7	3.6	
13 YRS AND OVER	7.7	17.9	56.4	15.4	15.4	2.6	2.6	15.4	2.6	39
	21.4	31.8	51.2	31.6	31.6	8.3	8.3	31.6	8.3	35.5
	2.7	6.4	20.0	5.5	5.5	0.9	0.9	5.5	0.9	
COLUMN TOTAL	14	22	43	19	19	12	12	19	12	110
TOTAL	12.7	20.0	39.1	17.3	17.3	10.9	10.9	17.3	10.9	100.0

CHI SQUARE = 22.75472 WITH 12 DEGREES OF FREEDOM SIGNIFICANCE = 0.0209
 CRAMER'S V = 0.26259
 CONTINGENCY COEFFICIENT = 0.41401
 KENDALL'S TAU B = 0.02165 SIGNIFICANCE = 0.3487
 KENDALL'S TAU C = 0.02138 SIGNIFICANCE = 0.3703
 GAMMA = 0.02845
 SOMER'S D = 0.02160

Observations:

Figures in the cross-tabulation do not show any evidence of concentration of upper age groups in the longer period categories of staying in the Capital. A more or less uniform distribution of age groups in all categories of number of years in Baghdad is shown. As an example of this lack of concentration the shortest period of staying in the Capital has almost equal proportions of its members in the youngest and oldest age groups on the project, and the longest period of staying in the Capital has relatively higher proportions of its members in the youngest age group (7.7%) than in the oldest age group (2.6%). The significance test shows a high of around 98% which suggests a uniform distribution of sample and a high resemblance between individual categories and the totals. (The null hypothesis).

Conclusion:

Data suggests the non-existence of age bias in the categories of number of years spent by participants in Baghdad.

Cross-tabulation
No. 2G

Number of years participant stayed in the Capital (VAR.12)	vs.	First order reason for participant's migration (VAR.13)
---	-----	--

This General cross-tabulation is mainly to examine the nature of migration factors given by participants as the major reason for them to leave their rural homes and come to the Capital. Such an examination could be used to see whether or not (among other indices of cross-checking between the two case studies in this Thesis) there is a similarity in the sample characteristics to the Baghdad Migrants Survey Sample (Part III of this Thesis). This will serve to add to the validity of the already proven assertion that the project participants are typical migrants from the migrant population in the Capital settlements of migrants (see p.669).

The objective of this cross-tabulation of date of migration against the main migration factor is to see whether the pattern shown in the Baghdad Migrant Settlements Survey results are also shown in the Reverse Migration Project Survey. In the Time-linked Cross-tabulation No. 3.3.4.3.1 (VAR.03 vs. VAR.27) in the Baghdad Migrant Settlements Survey (Part III, p.517), the migration prior to the 1958 Revolution was mainly due to the influence

of the feudal system oppression, while the migration after that date and since the enactment of the 1958 Agrarian Reform Law was mainly due to the economic factor (land salinity, agricultural problems, deterioration of standards of living in the rural areas, etc.). It was also noted that in the above-mentioned cross-tabulation of Baghdad Migrant Settlements Survey, the feudal system factor persisted long after the enactment of the Agrarian Reform Law of 1958 suggesting a poor implementation and ineffectiveness of that Law. To see whether or not those characteristics of the migration pattern obtained in the analysis of the Baghdad Migrant Settlements Survey could be seen in the present cross-tabulation, let us examine the attached printout of this cross-tabulation.

Observations:

- (1) Around 73.1% of the total migrants leaving under the influence of the feudal system had left their rural homes for the Capital up to 1958. The migrants getting into the Capital up to 1958 mostly migrated under the influence of this factor (64.1% of them).
- (2) The influence of the feudal system as a migration factor extended up to seven years before participants had joined the

FILE NONAME (CREATION DATE = 06/06/77)

***** C R O S S T A B U L A T I O N O F *****
VAR12 YRS. IN BAGHDAD BY VAR13 1ST REASON FOR MIGRATING TO BAGD *****
***** PAGE 1 OF 1 *****

VAR12	COUNT	ISSEK	WDR	PUSH	BY	TRIBAL	F	FOLOW	OT	AGRLAND	PROB	MEMBRS	PROBS	VAR13	ROV
		COL	PCT	IK	LNDLORD	ACTORS	3.001	5.001	6.001						TOTAL
UP TO 3YRS	1.00	13	0	0	0	0	0	3	6						22
		59.1	0.0	0.0	0.0	0.0	0.0	13.6	27.3						20.0
		28.3	0.0	0.0	0.0	0.0	0.0	100.0	25.0						
		11.8	0.0	0.0	0.0	0.0	0.0	2.7	5.5						
3 TO 6YRS	2.00	17	0	0	0	0	0	0	11						29
		58.6	0.0	0.0	0.0	3.4	0.0	0.0	37.9						26.4
		37.0	0.0	0.0	0.0	20.0	0.0	0.0	45.8						
		15.5	0.0	0.0	0.0	0.9	0.0	0.0	10.0						
7 TO 12YRS	3.00	8	7	0	0	0	0	0	1						20
		40.0	35.0	0.0	0.0	10.0	0.0	0.0	15.0						18.2
		17.4	21.9	0.0	0.0	40.0	0.0	0.0	12.5						
		7.3	6.6	0.0	0.0	1.8	0.0	0.0	2.7						
13 YRS AND OVER	4.00	8	25	0	0	0	0	0	6						39
		20.5	64.1	0.0	0.0	5.1	0.0	0.0	10.3						35.5
		17.4	78.1	0.0	0.0	40.0	0.0	0.0	16.7						
		7.3	22.7	0.0	0.0	1.8	0.0	0.0	3.6						
COLUMN		46	32	3	3	5	2.7	21.8	110						100.0
TOTAL		61.8	29.1	6.5	2.7	21.8									

CHI SQUARE = 60.26797 WITH 12 DEGREES OF FREEDOM SIGNIFICANCE = 0.0000
 CRAMER'S V = 0.42735
 CONTINGENCY COEFFICIENT = 0.59494
 KENDALL'S TAU B = 0.07629 SIGNIFICANCE = 0.1187
 KENDALL'S TAU C = 0.07229 SIGNIFICANCE = 0.1315
 GAMMA = 0.09994
 SOMER'S D = 0.07856

***** GIVEN SPACE ALLOWS FOR 3999 CELLS AND 2 DIMENSIONS FOR CROSSTABS *****

CROSSTABS ALL VAR12 BY VAR10/24 BY VAR55.VAR60/25 BY VAR55.VAR60 STATISTICS

project (i.e. 1964), where 35% of those migrating in that period reported that factor as the main factor for migration.

- (3) Migration occurring after 1958 was due mainly to the economic factor (seeking work, agricultural and land problems) with 81.7% of the total sample migrating in that period reporting those factors.

Conclusions:

The main migration reason data for the project participants' survey is highly similar to the pattern shown in the Baghdad Migrant Settlements Survey (Part III of this Thesis). This suggests that as far as the migration pattern is concerned the Project Survey sample is typical of the migrant population in the Capital's Migrant Settlements.

4.10 PROJECT OPERATION - OBSERVATIONS AND COMMENTS

4.10.1 The Profitability Issue

To the Government political leadership, the project was "never" thought to be a profitable operation. Dulaimy⁽¹⁹⁵⁾ stressed the issue when he described the Party's philosophy on the project.

"This is not a profit seeking venture on the Party's or the Government's part. It is a socio-political experiment to breed new ideologies and concepts in the minds of the peasants that migrated leaving their lands under the pre-1968 Revolution conditions of rural negligence and oppression".

To the Peasants Central Bureau of the Arab Baath Socialist Party, the organisation which planned and supervised the Shihamyia experiment, migration control takes second importance as an objective to the socio-political aims of the project. The main objectives of the project* were the elimination of tribal systems and the establishment of work as opposed to unemployment, idleness and non-productivity as a way of life to the peasants. Monetary returns were never part of the setting up process of the project in its planning stage and during its first year or two of operation. It was never in the minds of any officer in charge of the project operation both on the political side, (the Peasants Central Bureau), or the Governmental side, (the Ministry of Agriculture and Agrarian Reform).

(195) L. Al-Dulaimy - 29th May, 1975 - Interview, op. cit.

* See the Project Philosophy, p.576.

To all those who are involved in the project planning monetary returns were only a scale to measure the output of the project and thus the progress of the experience. Subsidies were extended from the political organisation during the three years' experience of the project. It was extended in the beginning of the resettlement process in September, 1971, in the form of grants to encourage the resettled participants. It was again extended at the end of the third agricultural season when hail and frost destroyed the winter 1972 season; and it was again granted when the salinity problem prevented 80% of the resettled participants from cultivation and they were relocated to another part within the project. Subsidies took the form of cash payments, free machinery and agricultural services, and most commonly the cancelling of debts to Governmental Agencies or the combined co-operative for services rendered to the peasants. It is the profitability traditional monetary scale that the project's political organisations object to and this represents the core of the split in opinion between them and the technocrats at the various Governmental offices in charge of agricultural development in Iraq.

4.10.2 The Technocrats versus the Politicians

The highest planning organisation in Iraq which is in charge of development in the agricultural sector is the Supreme Agricultural Council. As has been described in the planning machinery part of this Thesis (see Part I, p. 108), the Agricultural Supreme Council is in charge of planning, monitoring and control of all development activities in the agricultural sector of Iraq's economy. It is forbidden by law to implement any agricultural project without the consent of the Agricultural Supreme Council.⁽¹⁹⁶⁾ The Presidential Office issued in March, 1973, a Decree upholding the Supreme Agricultural Council decision to instruct all subregional administrations and local agricultural councils not to implement any agricultural project without the consent of the Supreme Agricultural Council.⁽¹⁹⁷⁾

The Shihamyia Project planning, implementation and operation was never conveyed, "officially that is", to the Supreme Agricultural Council. In the words of a Senior Member of the Council, "we heard about it!"⁽¹⁹⁸⁾ When the Author put this to Dulaimy⁽¹⁹⁹⁾ he explained

(196) Supreme Agricultural Council, Baghdad, Law No. 116, year 1970 - Article 5, paragraph 4.

(197) Supreme Agricultural Council, Baghdad, Decision No. 13, paragraph A - taken at the 12th Session - 7th December, 1970.

(198) L. Dulaimy - Interview - 29th May, 1975 - Ibid.

(199) Director of the Irrigation and Drainage Bureau of the Agricultural Supreme Council, Baghdad - Interview 14th May, 1975.

that the requirements upon which the Supreme Agricultural Council insist, before approving any project, are too idealistic. They for example criticised the project for not having a drainage network and thus the salinity problem caused a relocation process of a major part of the project's participants, which in the opinion of the technical officers of the Supreme Council, dealt a major blow to the project's progress. Dulaimy reacted on these two issues by pointing out that over 90% of all existing agricultural projects in Iraq are without drainage schemes anyway. It is unfortunate that the salinity problem occurred sooner than expected and resulted in the relocation process but that condition is not entirely due to the project's operation. The 1971/72 Euphrates water shortage and its influence on the Greater Mussayab drainage network (see p.742) helped to bring the salinity problem much faster, but, as the participants are peasants by origin, they are quite familiar with salinity problems. The traditional agriculture in Iraq employing the fallow system is basically devised to tackle the salinity problem.* It was stressed to each participant in the selection process that there were possibilities of difficulties in the project's early stages. According to Dulaimy, the political organisation has to make an early decision and to carry it out very soon. Migration waves from the rural

* These views of L. Dulaimy were upheld by the Analysis of the Survey Data for the project (see Variables Totals Analysis No. 6T, p.742).

areas were not hindered by passing the 1970 Agrarian Reform Law. It needs a basic Governmental step to prove to the peasants the "sincere" intention of the "new" Government to intensify efforts in the agricultural sector. The pressures from the Party Peasants' subregional organisations is mounting and pushing for a radical action as early as possible. The Political Report of the Eighth Regional Congress of the Arab Baath Socialist Party (January, 1974) pointed out this issue under Section 2 of the Report,

"One of the main tasks of the Revolution was to make radical agricultural reform very early on." (200)

Dulaimy added that

"the drainage scheme is now planned and under construction. We may have lost something by rushing in without it, but we feel the loss would have been much more if we had held up the project till the drainage network was completed." (201)

While these views are theoretically correct, the fact remains that project participants' performance - measured in monetary terms as peasants' income - is the key stability factor, and, if participants' income conditions of the past three years of the project operation persist, or worsen, peasant participants - according to Survey Data - are not going to stay on. The Government subsidies are not going to

(200) Arab Baath Socialist Party - "Revolutionary Iraq 1968-1973", op. cit., p. 140.

(201) L. Dulaimy - Interview - 29th May, 1975 - op.cit.

be an endless practice and once it becomes quite obvious that the project is not going to stand on its feet, there is little hope that peasants will continue to be subsidised just to keep them out on the project.

4.10.3 The Three Years' Experience of the Project's Operation - a Critical Analysis

Certainly the most striking finding of the Research Survey on the Shihamya Project undertaken by the Author is the extremely low level of income return for the project participants which averaged 0.596 Iraqi Dinar per capita for the three years' duration 1971-1974 (see Variables Totals Analysis No. 5T, p.724). Data on participants' stability also suggested that it is directly linked to the income level on the project (see Cross-tabulation No. 6S, p.817). While it is true that Government subsidies had so far kept the participants reasonably happy, these subsidies are not going to be a standardised pattern, as pointed out in the end of the previous section, and participants realise that unless their financial position is improved due to vast changes in the project operation and performance, subsidies will not be enough to keep them on the project. In this section of the project operation analysis Governmental data on the project operation will be examined in view of the findings of the Research Survey to identify the possible causes of the low financial return on the project. The Author must stress here that views expressed in this section

are by no means biased to any body or group, and that it is simply the reporting of facts as being collected from various sources and that the analysis carried out is done with only one condition in mind, namely, scientific research creditability. The analysis of the project operation examines the following issues:

(1) Crop cultivation pattern on the project:

According to the Report issued by the Directorate General of Agricultural Projects,⁽²⁰²⁾ the output of the project in its first year of operation (winter 1971 - summer 1972) was as follows: (see p.841)

In that Report, the Project Evaluation Committee commented that

"It is quite clear that productivity in some crops, especially vegetables, is very low. Examples of these are green gram, tomatoes and sesame. Although certain crops cultivation are considered to be a new innovation in the agricultural traditions in the project area, the extremely low productivity figures necessitate - through investigation - that immediate solutions should be found and implemented by the Project Administration."⁽²⁰³⁾

This report (published in June 1974) was part of a technical evaluation of the project conducted late 1972 and was not made public

(202) Ministry of Agriculture and Agrarian Reform, Directorate General of Agricultural Projects, Agricultural Projects Evaluation Committee "Shihamya Project", Baghdad, June, 1974, p.3.

(203) Ibid., p.4.

<u>Crop Type</u>	<u>Area Cultivated in donums</u>	<u>Crop Productivity in kg./donums</u>	<u>Total Crop Output (Tons)</u>	<u>Value of Output in I.D.</u>
Wheat	23,970	252	6,032	168,896
Barley	6,692	232	1,550	23,250
Clover	150	not available	150	3,000
Cotton	1,300	101	131	9,865
Maize	3,760	45	170	6,800
Onions	1,300	438	570	17,110
Tomatoes	2,000	23	45	1,125
Sesame	1,300	8	10	924
Green gram	3,900	18	70	336
Potatoes	50	140	7	356
TOTALS				231,662

until the middle of 1974. This opinion of the Committee regarding the non-familiarity of some products to the participants' agricultural practices was the precise opinion expressed by most participants in their criticism to the project administration as they single it out as the most serious deficiency in the project operation (see Variables Totals Analysis No. 6T, p. 737). With the majority of the participants from Wasit (wheat and barley growing subregion), Qadisya/Muthna (wheat and rice), and Mysan and Thiqr (rice growing subregions) some types of crops they were asked to grow are very foreign to the type of agriculture they are accustomed to. A comparison of productivity of crops per unit cultivated land on the project against the National Average for the same crops shows the severe deficiency in favour of the national figures as shown in Table No. 21, following.

Data on productivity on the project in the 1972/73 and 1973/74 periods, published by the University of Baghdad Special Evaluation Committee of the project,⁽²⁰⁴⁾ showed that

(204) University of Baghdad, Applied Agricultural Research Organisation, "Shihanya Project Team Report No. 3/1", Baghdad, April, 1976 - Table 19, p.57.

Table No. 21

CROPS PRODUCTIVITY ON THE PROJECT IN COMPARISON TO
NATIONAL FIGURES FOR CROPS PRODUCTIVITY
(ALL FIGURES IN KILOGRAMS PER DONUM CULTIVATED LAND)

Crop	Project Productivity kg. per donum (for the year 1971/72)	National figure (for all Iraq) kg./donum (average for 1971-3)
Cotton	101	346.1
Maize	45	333.8
Sesame	8	139.0
Green Gram	18	181.0
Tomatoes	23	2,400
Wheat	252	256
Barley	232	286

Source:

National Productivity Figures:

Ministry of Planning, C.S.O.,
Baghdad, "1973 Annual Abstract
of Statistics"; Tables 49, 50,
51 and 52, pp. 105-119.

Project's Productivity Figures:

Table on p. 841.

despite relative improvement in the per unit land crop productivity of some of the unfamiliar types of crops (for example, green gram up to 81, sesame up to 76 and cotton up to 92) they are still way below the national production figures. The productivity figures reported by the Directorate General of Agricultural Projects for 1971/72 agricultural year represents from the standpoint of soil conditions the best possible fertility and salinity content as it represents the first agricultural utilisation of a fallow system. Thus the fact that the productivity figures are low could not be attributed to salinity or indeed shortage of irrigation water as silting in the project's canals should be at its minimum level in this starting period. It may be safely assumed that the unfamiliarity of the peasants with some of the crops on the project is a main reason for its low productivity. Since productivity figures for crops with which the participants are familiar (such as wheat and barley) are very close to the National figures, it remains to conclude that the persistence of the project administration in pursuing the cultivation of non-familiar crops on the project and the non-adoption of

gradual introduction of these crops is a testimony to the participants' opinion regarding the project's administration. What is even more surprising is the Project's 1975-79⁽²⁰⁵⁾ Development Plan, with its major aim to improve the situation on the project, had suggested significant expansion of most of these crops and the introduction of new ones. Sesame allocation is to go up to 15,000 donums during the Plan's duration, cotton to 20,000 donums and maize to 15,000 donums for the same period. One could only agree with the participants that the two main problems of the project are its administration and the project planning of its agricultural production.

(2) Method of computation of participants' monetary return on the project:

The peculiar aspect of the low income received by participants on the project is clearly shown in the fact that with around 70% of the project agricultural land being utilised for crops, the productivity of which is very close to the National Average (namely, wheat and barley), the participants' income is only a fraction of

(205) Ministry of Agriculture and Agrarian Reform, Directorate General of Agricultural Projects "The Five Year Plan for Shihamya Project, 1975-1979", Baghdad, July 1975, pp.18-20.

the National figures for income of an agricultural family (see p.725). Since marketing for agricultural crops all over the country is done through the State Organisation for agricultural crops marketing, prices the project's participants output should receive is similar to that at any other part of the country. (The same is true of the supply of agricultural production requirements). The project participants suggest that the accounting method used by the project administration is responsible for this disparity. They, the participants, claim that also the combined co-operative charges too much for services it supplies to the participants and that the administration charges them with costs for which they are not responsible. In the 1971/72 (first year of the Project's operation) Annual Accounts for the project, the Project Report gave the following figures of costs and returns for the first year of the project operation: ⁽²⁰⁶⁾ (see following page)

(206) Ministry of Agriculture and Agrarian Reform, Directorate General of Agricultural Projects, "Shihamya Project Report", op. cit., p.11-12.

(a) Cost of Running the Project (for the year 1971/72):

Item:	Cost in Iraqi dinars:
Fodder Materials	90,368
Salaries and wages	54,120
Fertilisers	42,900
Seeds	37,353
Fuel cost	25,931
Machinery and equipment	13,660
Chemicals	5,550
Buildings (Depreciation)	4,173
Maintenance	4,881
	<u>278,936</u>

(b) Value of sales of project output:

Agricultural crops	231,662
Animal products (including 3,780 I.D. in eggs)	<u>101,568</u>
Total value of sales	<u>333,230</u>

Thus the project made 54,294 Iraqi Dinars profit. Distributing this among the 1305* members of the project's agricultural co-operatives (see p.621) the resulting monthly income per household comes to around 3.47 I.D. which is reasonably close to the value suggested by

* Excluding the Ghsaiba Agricultural Co-operative which was added to the project after the first agricultural season 1971/72.

totals of VAR.32 of 4.00 I.D. (p. 707). This finding supports the accuracy of the data on income of participants in the research survey. Thus the picture shown in the research survey of having extremely low per capita income on the project seems to receive support from the official Government figures in the Project Evaluation Report above. In an attempt to examine the method of calculation of participants' income on the project, the following issues had to be answered in the process:

- i. Since there are basically two suggested factors for the low return on the project; one supported by both the peasants and the Ministry of Agriculture and Agrarian Reform Committee for the evaluation of the project and the other is suggested by the participants. The first is the issue of cultivating unfamiliar crops and the other other the method of costing the project expenditures. The question is the extent of the influence of each of these two factors on the participants' income situation.

- ii. For future prospects of participants' income on the project, how valid is the 1975-79 Plan for the project operation especially since this plan had proposed the expansion of the unfamiliar crops cultivation and introducing new ones (such as alfa alfa and oilseeds).
- iii. Accepting the fact that the project is not making a sound economic return, does the examination of the project's costing method and income computation support the participants' accusations that it is the administration of the project and poor agricultural planning which are responsible for the poor showing of the project.

To answer these issues the following procedure is adopted:

1. Using the costs figures given by the Directorate General of Agricultural Projects for the operation of the Shihamya Project in the 1975-1979 Plan (and assumptions based on the Author's observations on the project) to recompute the cost factors included in the 1971/1972 first year Annual Accounts sheet for the project to

estimate whether or not the 1971/72 costing process is valid. It has already been shown (p.847) that the reported profit of 54,294 I.D. would give the participants the monthly income they claimed they received during the first year of the project operation (Research Survey results). In using the 1971/72 Project's accounts figures, the only one available for the project at the time the research was carried out, it will be treated as an example rather than the pattern for all the three years' experience on the project.

2. Using the national crop production per unit cultivated land to recompute the total project output, if the crop production on the project is to match the national pattern. This will establish whether or not the agricultural practices on the project and the consequent low productivity are responsible for the low income or is it the costing procedure adopted by the the administration.

3. Comparing the per unit cost of seeds, fertilisers, chemicals, agricultural operations, etc. between the Shihamya Project and other projects in the 1975-79 overall plan of the Directorate General of Agricultural Projects. This will establish whether or not the project has been overcharged.

4. Using the highest crop productivity figures reported on the project for the 1971-1974 period, the 1975-1979 Plan for the project's agricultural production will be evaluated in monetary terms. This will reflect the future income situation on the project.

(I) On the first two points of this proposed procedure (1 and 2 above), an examination of the participants' income computation based on different costings alternatives and productivity levels is carried out in Appendix No. IV, pp.X-180 to X-186. The following findings are suggested:

(a) if the cost method used by the project administration is revised the participant's per capita income (for the first year on the project) will be more than doubled from the actual 0.460 I.D. to 0.955 I.D.

(b) If the cost method used by the project administration is kept as it is but the project productivity is raised to the national output level of crops cultivated on the project, then the participants per capita income will be over four times the actual one at 2.02 I.D. and come much closer to the national agricultural household per capita income (which was 2.83 I.D. in 1969).

(c) If both the cost method is revised according to the one suggested by this research and the output on the project is brought to the national level, then the actual per capita income on the project will be raised by six fold (to 2.710 I.D.) and almost equal the national agricultural household per capita income.

Thus we may conclude that the costing method used by the project administration may be responsible for one-third of the drop in the possible income the participants may get at their present production level. The low productivity on the project is responsible for the other two-thirds.

This certainly proves the point raised by the participants regarding the inefficiency of the project administration and their doubts regarding the profit computation method used by the project administration.

- (d) One final point on the issue of participant income regarding the fact that they are producing at close to the national crop productivity level in around 70% of the project's cultivated area (which is wheat and barley) yet they are still getting less than half the national figure for agricultural income even if the costing method were revised. This is actually due to the fact that the project productivity in the remaining crops (other than wheat and barley) cultivated in around 32% of the project's cultivated area is extremely low causing a severe deficiency if compared to the national output figure. The difference between the project total agricultural output value of 231,662 I.D. and the project output value computed on national output figures at 517,179 I.D. will show a total loss in output value of 285,817 I.D. divided between crops as follows:

<u>Crop</u>	<u>% Area Allocated</u>	<u>Output Value I.D. Nat. figures</u>	<u>Output Value I.D. Proj. figures</u>	<u>Loss in I.D.</u>	<u>% of Total Loss</u>
Wheat	54%	171,481	168,896	2,585	1%
Barley	15%	28,749	23,250	5,499	2%
Cotton	3%	31,924	9,865	22,059	8%
Maize	9%	53,227	6,800	46,427	16%
Sesame	3%	19,304	924	18,380	6%
Green Gram	9%	3,323	326	2,987	1%
Onion	3%	95,706	17,110	78,596	28%
Tomato	4%	113,466	1,125	112,341	39%
Potato	1%	No data	-	-	-
Clover	3%	No data	-	-	-

Thus the unfamiliar crops of maize, onion and tomato covering around 16% of the cultivated area on the project in 1971/72 season were responsible for 83% of the loss suffered by the participants for low productivity of these crops compared against the National total output - a fact that is strongly in favour of the argument put forward by the peasants as being forced to cultivate strange crops that they have little or no experience of cultivating.

The participants maintained that the amount of effort and cost involved is mainly due to these unfamiliar crops which proved to be a failure and they could have produced familiar crops which may give a comparatively lower monetary yield but which would certainly drop the cost of production significantly. Taking the cost of seeds alone (using the Directorate General of Agricultural Projects Figures for the 1975-1979 Plan), this shows the high cost of these crops compared to the more familiar ones such as wheat and barley:

<u>Crop</u>	<u>Seed Cost I.D./Donum</u>
Maize	2.000
Onion	5.000
Wheat	1.200
Barley	0.682

- (II) On the subject of differentials of costs (point no. 3 of the proposed procedure, p.851) of seeds, fertilizers and of factors of production the Directorate General of Agricultural Projects figures for the 1975-79 Plan show very little variance between Shihanya Project and other projects under the Directorate Administration all over the country. Actually in some

instances the Shihamya unit cost of some seeds like cotton, sesame and barley are lower than the National Average. While chemicals used or planned for the project are slightly higher for Shihamya than the national average, 0.500 I.D. against 0.402 I.D., fertilizers unit cost at Shihamya is much cheaper than the national average reported by the Directorate Plan at 0.395 (Shihamya) versus 1.491 and 1.634 for summer and winter crops for the national average. This suggests that the unit cost of major factors of production is similar at Shihamya to, and in some cases lower than, the national average. This will further suggest that the costing method used by the project administration using more than the unit cost charged is one of the reasons for the high cost suggested by the administration report. Comparing the revised cost estimate suggested in this Thesis (Appendix No. IV, pp. X-180 to X-186) against the project administration estimate one could easily identify the areas where the overcharging is concentrated, namely, staff cost and fertilizers cost. Where in support of the above argument these two items represent over 75% of the total overcharging, as shown, in the following table (listed according to their share of the overcharging):

<u>Cost Item</u>	<u>Revised Cost Estimate*</u>	<u>Project Admin. Cost Figure</u>	<u>Difference (+ or -)</u>	<u>% Total Difference</u>
Staff	19,365	54,120	+ 34,755	43%
Fertilizers	15,965	42,900	+ 26,935	33%
Fuel Cost	16,168	25,931	+ 9,763	12%
Chemicals	650	5,550	+ 4,900	6%
Harvesting and Marketing	19,523	22,714	+ 3,191	4%
Fodder	88,018	90,368	+ 2,350	3%
Seeds	37,353	37,353	0	0%
Totals	197,042	278,936	+ 81,894	100%

* Appendix No. IV, pp. X-180 to X-186

(III) On the subject of the validity of the 1975-79 Plan for the project (point No. 4 of the proposed procedure), let us examine the following table (p.858) which shows the proposed agricultural land allocation (in donums) for different crops for the Plan period against the share of the economic loss each crop cultivated in the project had caused in comparison to the national output figures (see p.854).

<u>Crop</u>	<u>*Agricultural land allocated in donums (1975-1979)</u>	<u>% Agricultural land allocated (1975-1979)</u>	<u>% of loss in 1971-72</u>
Wheat	155,525	52.5%	1%
Barley	32,665	11.0%	2%
Cotton	20,290	6.9%	8%
Maize	15,035	5.1%	16%
Sesame	15,035	5.1%	6%
Green Grams	15,035	5.1%	1%
Tomatoes	15,035	5.1%	39%
Jute	8,250	2.8%	-
Zafaran	5,500	1.9%	-
Onion	5,140	1.7%	28%
Broad beans	4,400	1.5%	-
Alfa Alfa	2,200	0.7%	-
Clover	1,926	0.7%	-
	<hr/> 296,036	100%	

* (See Footnote No. 205, p.845)

Observations:

It is very obvious the Administration Plan persists in proposing the cultivation of unfamiliar crops such as maize, sesame, onions, etc.,; also more "strange" crops are introduced such as jute and zafaran. This pattern

resulted in reduced allocations to the main familiar crops in the 1971/72 allocations such as wheat (from 54% to 52.5%) and barley (from 15% to 11%).

Tomatoes, the major source of economic loss in the project, (according to the table), had its allocation increased from the 4% level of 1971/72 to 5.1% in the Plan. Although the onion and maize allocations have been reduced, this seems to be in order to introduce new crops rather than increasing the proportional allocations of the familiar less losing crops. This shows that the project administration is persisting in the current agricultural policy on the project of cultivating crops which will not produce output high enough to equal the national figures level thus maintaining the low income of the participants for the foreseeable future.

This is an extremely serious forecast in terms of the project participants' stability and the future of the project. Although it may be argued that a major objective of the project is to introduce new industrial crops and to depart from the traditional crops cultivation, this could be accomplished either

through experimentation on a limited scale or using the State farm for this purpose. This will give the project participants the chance of making enough income from cultivating the crops they know best thus staying on which is, as an objective, much more relevant than producing new crops, and at the same time training them to produce such crops in the future.

The Project Plan for the period 1975-1979 also suggests an annual cultivation total of around 59,000 donums, which is, although 30% higher than the 1971/74 level, still well below the 80,000 donums cultivatable land on the project (see p. 621). Land reclamation and drainage network construction (scheduled to be ready by 1978) should make the possibility of full cultivation of the project's agricultural land a viable possibility. In planning to use only part of the available land on the project and disregarding the potentials of such growth due to the drainage network and reclamation, the project administration showed little faith in the project's future.

Summary:

In summary the results of the Analysis of the proposed procedure (p.849) suggests three basic conclusions:

- (1) There are enough indications to suggest that the participants are right in doubting the costing method used by the project administration.
- (2) Unfamiliar crops cultivation on the project is a main factor behind the low income levels of the participants.
- (3) Future agricultural planning for the project has to be revised to take in account the necessity to maintain higher returns for participants and expand the project's land utilisation.

4.10.4 Project's Evaluation Reports

Up to October 1976, when the Author last visited the project, there were three evaluation studies conducted by three different bodies, of the Reverse Migration Project in Shihamya, namely:

- (a) Ministry of Agriculture and Agrarian Reform, Directorate General of Agricultural Projects, Technical Section - Published in June, 1974, but actually conducted late 1972 to early

1973.⁽²⁰⁷⁾ The study report is a main source of most of the costing data for the Project's economic evaluation study (Section 4.11.3) in this Thesis, as it is the product of the Project's higher administration organisation.

- (b) Ministry of Planning, Directorate General of Social and Educational Affairs - Published in January, 1973.⁽²⁰⁸⁾
- (c) University of Baghdad, Applied Agricultural Research Organisation, Shihamya Project Team - Published in July, 1976.⁽²⁰⁹⁾

While the first two evaluation studies were done before this Thesis research survey of the project in May to June, 1975, and were conducted by two Governmental Agencies, the third one was conducted early 1976 and is considered to be by an independent body with reference to the Governmental machine. Thus it may be argued that the third report is more valuable since it looked at the project with an independent view and is free from Governmental influences. Despite the fact that the three evaluation studies agreed in principle in their findings, they all have different objectives in mind when setting out to do the evaluation.

(207) See footnote (202), p.840.

(208) See footnote (176), p.

(209) See footnote (204), p.842

The Technical Section of the Directorate General of Agricultural Projects, addressing their Report to their Minister, were interested in getting reforms in the project's administrative machine and its organisational linkages which could mostly be done by Ministerial decrees. Like the other two evaluation studies, participants were not interviewed - at least in a systematic research form of opinion surveys; only project administration and its records were the basis of their evaluation in addition to evaluation team members own observations. While this method of conducting the evaluation study limits the academic value of these reports, they could be used for comparative purposes with the findings of this research only on an indicative capacity rather than analytical.

The Ministry of Planning evaluation study was geared to test the project performance, mostly in a physical sense (buildings progress and road construction) as part of the economic plan investment programme of which the Ministry is in charge for the whole country. The University of Baghdad study was probably the most detailed and arguably the most efficient of the three studies. Undertaken by a team of 14 University teaching staff members from the College of Agriculture, Engineering, Veterinary and the Institute of Technology. While the study target was to "evaluate the project's State farm, and in particular to diagnose the low

productivity reasons", (210) it failed in ignoring the participants' reactions and attitude when it extended the study scope to include the whole project. As this study is the most comprehensive in nature of the three evaluation studies above, it warrants special consideration to discuss its findings and to comment on its value.

All the three evaluation studies agreed on the following list of deficiencies in the project which are considered top priority improvements to rectify the project's operation and efficiency.

- (1) Shortage of technical staff and efficient administrative personnel.
- (2) Shortage of transport facilities and poor road network.
- (3) Poor irrigation water distribution system.
- (4) Lack of project administration autonomy.
- (5) Poor impact of the agricultural co-operative and peasants organisations.
- (6) Low utilisation level of the project agricultural land.
- (7) Poor training programmes for peasants and the inability of the project administration to

(210) University of Baghdad, Applied Agricultural Research Organisation, op.cit., p.2.

train the participants on the cultivation of new crops and more modern agricultural techniques.

- (8) Poor services levels on the project, specially in schools, health centres, marketing facilities for participants' needs, recreational facilities, etc.

All these were noted in the findings of this Thesis research survey on the Project which supports the validity of the participants' opinions regarding the project operation. It is interesting to note that even the project's higher administration body, i.e. the Directorate General of Agricultural Projects seems to agree that the project administration in its present state is inefficient and urgently requires improvement. This finding of the technical section of the Directorate dates back to late 1972 and was never realised as the project research in 1975 and the University of Baghdad study in 1976 still lists it as a top priority level.

The University of Baghdad Study also listed some more basic deficiencies in the Project operation as follows:⁽²¹¹⁾

(211) University of Baghdad, Applied Agricultural Research Organisation, Ibid., pp.60-61.

- (1) The abrupt and sudden implementation of the co-operative system and collective utilisation of the agricultural land without prior preparation or training for the collectivization methods.
- (2) Poor marketing system for the participants' output, the supply of their domestic needs and the inefficiency of the public sector agencies in charge of this process. This led participants to use the private sector's traditional moneylenders in nearby villages with severe costs to the participants.

Again these two additional points were mentioned in the findings of the project research survey, specially the role of the nearby towns' moneylenders.

Despite its comprehensiveness the University of Baghdad evaluation has, in the opinion of the Author, three major limitations, namely:

- (1) It did not take into consideration the opinion of the participants as it lacks a sample survey type approach to the project operation. The data base of the study were the project records, project administrative officers and study team members' observations. This actually explains the near critical view taken by the study report regarding the participants' efficiency.

- (2) The study adopted a cost-benefit approach to evaluate the project experience. While in economic terms this approach may be quite logical, on the basis of the Reverse Migration philosophy the study fails to appreciate the fact that the majority of the original batch of the reverse migrants are still on the project and that by itself is a major accomplishment of the project.
- (3) According to the project administration, the study team made very few visits to the project site (3 or 4 visits)⁽²¹²⁾ which are not sufficient to make an in-depth investigation of the project operation; also the absence of a representative of the participants within the study team weakens the effectiveness of the study process. Actually the participants on the project were, compared to the organisational and physical elements on the project, a secondary consideration of the study.

(212) Ministry of Agriculture and Agrarian Reform, Directorate General of Agricultural Projects "Comments on the University Evaluation Study of the Shihamya Project", Baghdad - October, 1976, p .1.

4.11 SHIHAMYA REVERSE MIGRATION PROJECT CASE STUDY - SUMMARY OF FINDINGS

4.11.1 Findings of the Testing of the Project Location Criteria

Both the subregional location criteria (Section 4.5.1) and the local selection criteria (Section 4.5.2) seem to be valid in the project situation. Despite the negative influence created by the proximity of the project to the neighbouring Greater Mussayab project main drain (which happened due to unforeseen circumstances of the Euphrates river water shortage problem - Variables Totals Analysis No. 6T, p.742), the locational aspects of the project seem to be correctly implemented. The project's proximity to nearby centres in the region seem to be an added advantage as the poor situation of domestic needs and supply on the project require the participants to look outside the project area for these needs. While it is true that the negative effect of the town moneylenders is a serious factor hindering the future stability of participants, the virtual non-existence of on the project supply facilities of basic family needs makes the proximity of the project to nearby towns, at least at the present time, a necessary objective. Schools above the primary level and health facilities above those supplied on the project are also supplied by nearby towns, notably Namania and Zubaidya.

4.11.2 Findings of the Testing of the Project's Experiment
Applicability as Prototype for Future Similar Projects

- (A) Whether the project's participants are typical rural migrants:

On the basis of age/sex characteristics, family and household size, household structure, age of household head, pattern of household head's migration and occupation of household head in the rural areas before migrating to the Capital and in the Capital, the Project's Participants Research Survey data suggests that:

The sample has similar characteristics of most of the above factors to the Baghdad Migrant Settlements Research Survey Sample analysed in Part III of this Thesis suggesting typical households of rural migrants in the Capital.

This finding is very significant as one of the major objectives of the Case Study Research on Shihamyia Project is to use the findings of this research into planning similar projects for migrant resettlement in the country and it is vital that the sample taken for the purpose of the Case Study research should be typical of the migrant household characteristics which are present in the Capital Migrant Settlements which represent the biggest of its kind in the country.

(B) Project's self-sufficiency:

The project is in urgent need of shopping centres for food, clothes and home appliances.

Poor transportation network with nearby towns makes these needs even more urgently required on the project. Educational services and health services are only available on low level (primary level for schools, health centre for the health facilities).

(1) Supply of basic participants' needs and services on the project:

	<u>available</u>	<u>not available</u>
Foodstuffs	-	yes
Clothes needs	-	yes
Home appliances	-	yes
Health services	yes	-
Educational services	yes	-
Social services	yes	-
Administrative and legal	yes	-
Other services	yes	-

(2) Project's deficiencies as reported by participants:

Administrative efficiency in terms of organisation, structure and procedure has to be urgently revised. The inefficiency of the administration in the project is reflected in poor

planning and implementation of the agricultural cycle leading to delays seriously affecting the project's agricultural productivity. It is also reflected in poor irrigation water distribution, quantity and control. Collective farming - the joint function of the project administration and peasants organisation - is inefficient and seriously needs reorganising. Lack of drainage, and poor public facilities on the project did not seem to command a high priority on the project; also there is evidence to suggest that the efficiency of the Peasants Organisation on the project requires improvement.

4.11.3 Findings of the Testing of the Project Participants' Selection Criteria

(A) The Participants' Income (participants' performance measured on the project)
Cross-tabulation findings:

- (1) Age of selected participant is not related to his income on the project.

Thus the criteria of selection of favouring younger participants is proven invalid.

- (2) Participants who were engaged in skilled jobs seem to have better income characteristics on the project than those who were unemployed or had a non-skilled job at the Capital before joining the project.

Selection of participant criteria favouring unemployed or low paid is proven to be invalid.

- (3) Participants with larger households do not seem to have higher incomes on the project than those with smaller size households.

The selection criteria favouring large household candidates is proven invalid.

- (4) Participants with lower income in the Capital seem to show less income on the project than those with higher income in the Capital.

Thus the selection criteria favouring lower income participants in the Capital is invalid.

- (5) Number of years stayed by participant at the Capital before joining the project which may have caused him to lose interest in going back to the rural areas or may have damaged his knowledge or ability for agricultural work, does not seem to have much effect on his income characteristics on the project.

Upholding the Government selection criteria which neglected that factor when picking candidates for the project.

- (6) Participants who were engaged (before migrating to the Capital) in agriculture (peasants and farmers) have better income characteristics on the project compared to those who were in non-agricultural occupations.

This supports the criteria of selection which prefers candidates who were peasants or farmers over others.

- (7) The social similarity factor and also the crop familiarity factor which is related to the locality from which different participants originated seem to be related to higher incomes on the project.

Participants who have their origin in the project subregion before migrating to the Capital have the highest income on the project. Other subregions seem to follow a descending order of participants' incomes in accordance with their degree of dissimilarity with the project area social and crop characteristics.

This upholds the selection criteria emphasis on social similarity issue.

(B) The Stability Cross-tabulations findings:

- (1) Young participants seem to be the least stable on the project (age 20-30), the favourite age group for the selection panel.

Data on participants' stability seems to disagree with the selection criteria that considers young age as a positive factor. The most stable group are the oldest group on the project.

- (2) Participants who were engaged (before migrating to the Capital) in agriculture (peasants and farmers) are more stable than other participants with different pre-migration occupations.

This supports the selection criteria preference for the previous agricultural occupation participants.

- (3) Data seem to suggest high stability for participants who have not stayed for longer than 3-4 years in the Capital before joining; also the pre-1958 Revolution migrant participants seem to exhibit a strong instability.

This suggests that on the issue of stability the migrant's period of stay in the Capital is an important issue and migrants staying for longer periods have to take second priority to new migrants.

While this factor seemed insignificant in terms of participants' income characteristics, it seemed relevant enough in the stability issue.

- (4) Participants with origin similar to the project's area social character are more stable than those from a more different origin.

On the stability issue the Government social similarity selection criteria is upheld (as in the participants' income analysis).

- (5) No correlation could be obtained when correlating participants' stability with household size.

Thus on that issue the Government selection criteria of favouring large size households cannot be upheld.

- (6) Stability findings support the Government selection criteria of favouring low income (in the Capital) participants for the project over high income candidates.
- (7) Stability data also seems to uphold the Government selection criteria favouring the unemployed and non-skilled over the skilled.
- (8) There is evidence to support the hypothesis that higher stability on the project is linked to higher income. This finding lays significant weight to the assumption that improving participant's income on the project will result in more stability.
- (9) Data shows that until 1975, participants were divided according to the stability issue into: solidly stable (13.6%), moderately stable (38.2%), solidly unstable (44.5%) and unstable for other than poor project performance (3.6%) which reveals a reasonable but

precarious 51.8% versus 48.1%
stability with 86.4% of participants
as potential leavers if conditions
did not improve on the project.

As a supporting (auxiliary) cross-tabulation
it was found that upper age groups do not
concentrate in participants categories of
longer stay periods in the Capital. This
finding is relevant for both the partici-
pants' income and stability cross-tabulations.
There is a more or less uniform distribution
of participants' age groups in all categories
of length of stay in the Capital.

The findings of the research on the criteria
for selection of participants could be
better represented if the findings of both
the participants' income and stability
cross-tabulations tests of validity for
each criterion are combined as in the
following table.

The last column of this table will be
assigned for the suggestions for future
selection criteria as seen by the Author
based on the research findings.

<u>Participants' Selection Criteria</u>	<u>Cross-Tabulations Findings</u>	<u>Suggestions for future Selection Criteria</u>
	<u>Participants' Income</u>	<u>Stability</u>
1. Preferable age of participants is 20-30 years. Younger participants in general are favoured over older ones	Not valid	Not valid
2. Preference for unemployed (in the Capital) and non-skilled over skilled	Not valid	Valid
3. Preference for lowly paid candidates over highly paid (in the Capital)	Not valid	Valid
4. Larger households' candidates are favoured over those with smaller ones	Not valid	Not valid
5. Length of participants' staying period in Capital since migration was not taken as a selection factor	Valid	Not valid
6. Candidates with a peasantry occupation before migration to the Capital are favoured	Valid	Valid
7. Social similarity to project's area is favoured in candidates	Valid	Valid

Both selection criteria should be adhered to in future selection

4.11.4 Project's Attainment of the Government Main Objectives

(A) Project offers "better" employment opportunity:

This is one of the most important objectives of the project experiment, as far as the participants are concerned, which has showed a severe failure in that it failed to give the participants an acceptable level of per capita income.

Participants' monthly per capita income on the project is extremely low by comparison to rural families income (1 : 5) in Iraq, to national per capita income for the whole country (1 : 15) and even if compared to rural income reported by migrants in the Baghdad Survey to be their earnings at their home villages (1 : 2.2). Around 80% of participants made less than one-fifth of their last year monthly income at the Capital before joining.

Government subsidies are the main reason for stability of participants during this period; also with wage earners per household very similar to the capital level and females over the age of 15 share in the agricultural work, the income deficiency on the project becomes even more serious.

(B) Project being viewed as a possible means to stabilize rural population:

With the project's participants' overall stability at the precarious level of 51.9%

against 48.1% in favour of staying and with 86.4% potential leavers if the conditions on the project did not improve soon enough, the project stabilizing influence seems to be a rather weak result of the project experiment. Yet the improvement of conditions on the project is not a very difficult process once a serious effort is deployed for its attainment, keeping in mind that despite the poor stability situation, the majority of the original participants are still there and with the urgently needed improvements maybe taking place soon, chances are that they will be staying on.

It is interesting to note that 97.1% of those who reported the destination to which they would go if they left the project to be Thawra Town, the original migrants' settlement in the Capital from where they came. The significance of this finding is in the sense that if the project fails, migrant participants are not going to any other rural area (say, their original home village) but rather to rejoin the huge migrant population already in the Capital.

- (C) To introduce collective farming, new agricultural techniques and Peasants Organisations:

While the participants' reaction towards the new innovations on the project were mostly indifferent, the efficiency of these new organisations and agricultural techniques were not very high as will be discussed in the Project's Operations findings and the Author's Final Comments on the project experiment.

- (D) To create new relationship between the Government and peasants to replace the traditional mistrust and lack of confidence relationship:

As one of the project's main objectives is to regain the confidence of peasants in the Government that has been lost due to the poor performance of previous Governments, and as the main reason for joining the project by most participants is the promises made by the Government, project failure will result in a major blow to this objective. The currently poor performance on the project, for factors the participants put squarely on the shoulders of the project administration, dealt a severe blow to this objective of the project experiment.

- (E) To introduce new crops to replace the traditional wheat/barley cultivation:

The new crops introduced on the project are considered by most participants as one of the main factors for the low productivity and

consequently low income on the project. Analysis in this research puts considerable doubt on the success of this objective in the project experiment.

4.11.5 Project Operations - Summary of Findings

- (1) The project is thought of as a socio-political experiment to breed new ideologies and concepts into the minds of the peasants to replace traditional tribal customs and pave the way for the socialization of the countryside. Tackling migration is a by-product of the project success and not the major objective, according to the political organisation that created the project.
- (2) Productivity figures for crops cultivated on the project seem to suggest normal productivity (based on national and subregional averages) for customary crops familiar to the peasants and poor figures for the crops which are new to the peasants and to the type of agriculture in the project area region. New crops like maize and sesame and less familiar crops like cotton recorded very low yields during the period. Plans for 1975-1980 prepared by the Administration calls for expansion of these crops.

- (3) While around 70% of the project output is of crops that they get normal productivity figures for, the peasants' income is way below the national average for agricultural families. Peasants blame high overheads charged by the Co-operatives (and project administration) for this condition. Based on the revised cost estimate suggested by the Author and upon comparing project productivity to national output data, it seems that the costing method used by the Administration is responsible for at least over one-third of the drop in the per capita income on the project compared to national agricultural household income. The remaining two-thirds of the drop seems to relate to the low productivity on the project. The latter factor is put by the participants on the shoulders of the Administration.
- (4) Project Evaluation Studies done over the last few years by three different concerns agreed on most points of deficiencies and suggested an almost identical list of improvements. Administrative structure, personnel and procedures, irrigation water system, distribution and control and agricultural

practices have been the major areas of deficiency and naturally the major areas of the suggested improvements. The research done by the Author on the Project which primarily records the reaction of the participants to the experiment of the "Reverse Migration" had in most cases agreed with the Evaluation Studies' findings despite the time difference that exists between them and the research period time.

4.11.6 Final Comments

- (1) With around 80% of the original number of participants landed in the project in its first year of operation still on the project, the project is successful in terms of stability; but the near equal split of participants thinking of leaving (48.1%) and those who are not (51.8%) suggests that if things are not going to improve soon, this precarious stability is not going to continue and a mass exodus of participants back to their migrant homes in the Capital is inevitable.
- (2) While data analysis upholds the regional and local location factors of the project area and most of the participants selection criteria, it seems ironic that the project participants' performance measured by the

participants' monthly per capita income is very poor indeed (in comparison to national figures for rural areas and even in comparison to migrants' rural homes income obtained from the Baghdad Migrant Settlements Survey - Part III of this Thesis). Analysis of data in this research suggests strongly that the "way" the project is run is the major factor for this condition rather than the participants' performance. The most up to date evaluation study (1976) done by a team of experts from the University of Baghdad seems to put the main blame on the shoulders of the participants, despite the study agreement on the factors suggested by this Thesis to be the main factors. In this respect, it is interesting to note the comments by the Project's leading political leader, Mr. Al-Dulaimy, regarding the technocrats versus the politicians argument. For while the technocrats look at the traditional economic argument of cost-benefit analysis, the politicians view the project in a completely "subjective" fashion. To the political leadership rural stabilization with the utilisation of the project as a breeding ground for new ideologies of socialism and abolishment of tribal norms are the main objectives of the project and not

its profitability. While such political views may give in, in the not so distant future, to the economic return approach of the technocrats (such as the University experts or the Supreme Agricultural Council Technical Departments) under the mounting losses of the project, the fact remains that the project's participants, whose departure within the first three years was prophesized by most of the technocrats, are still there. The factors that jeopardize the stability are manageable and may be eradicated with changes in the administrative machinery and procedures with improvements in the agricultural system and practices. The key element of the project operation, which is the participants, is a reasonably successful one, the rest being much less easier to improve.

- (3) The most significant accomplishment of the project experiment is that with proper modification and adjustments in the elements of administrative, planning and operative procedures on the project the experiment could be performed in the larger settlements projects in the southern and central regions. Dujaila Project with a future population close to 250,000 is but one outstanding example of this possibility. Dujaila's

current project area population is less than 2,000 and the balance could be met with both peasants relocated from nearby less successful agricultural areas plus a sizeable mass reverse migration from the Capital or other large urban centres (such as Basrah). The agro-industrial development of Dujaila (plans already approved for the project) could even make use of the slightly improved "sophistication" acquired by Reverse Migrants from urban environments in contrast to their rural counterparts.

- (4) On the issue of the socio-political transformation of the participants, stability plays a major role. Admittedly the project's collective farming and the supposedly "model farming" in the project State farm were not very successful, but this again is attributed to poor administrative and agricultural planning practices rather than to the failure of the ideologies behind them. Proper adjustments, such as those recommended by this research, which are more or less similar to those suggested by various evaluation reports of the project, will improve considerably the performance of these "experimental institutions". On the political education issue, the persistence of the remaining 650 household heads, despite

slow or insignificant improvement of conditions on the project, could largely be attributed to the political convictions most participants reflected in the survey data returns. What helped the peasants to accept these convictions mostly is the widely publicised concept of differentiating between the "Government body" and the "Party body". Thus the participants, while lacking confidence in the poor administrative structure on the project, have unquestioned loyalty and confidence in the "Party Organisation". To them it is a struggle to stay on, aided on numerous occasions, by subsidies from the Party Organisation (directly or through instructing the administration to do so), against a Government Administration desperately in need of reform. They view their role (the participants) as factors of change, aided by their political ideologies, to bring about Socialism both to the rural society and the administrative personnel.

- (5) While the collective farms poor performance on the project might be interpreted as an indication of the low potential for success of the new Governmental policy for agricultural practices in the country, such an assessment

should be viewed in the context of the prevailing problems on the project, most of which are not related to the pattern of agricultural production whether being collective or private. On the contrary the University Evaluation Study and the participants' reaction (Survey) seems to favour strengthening the collective farming trend on the project.

PART V

CONCLUSIONS

MIGRATION CONTROL, POLICIES AND STRATEGIES

5.1 MAJOR INDICATORS

5.2 MIGRATION MOVEMENT CONTROL MEASURES

5.3 CHARACTERISTICS OF THE PREFERRED STRATEGY

PART V

CONCLUSIONS

MIGRATION CONTROL, POLICIES AND STRATEGIES

5.1 MAJOR INDICATORS

I The Agricultural Situation

- (1) Continuous deterioration in agriculture is the main cause of migration.
- (2) The impact of the agricultural deterioration is felt most severely in the Central and Southern Regions.
- (3) The core of the agricultural deterioration in the Central and Southern Regions is the loss of agricultural land to salinity and water logging. The absence of drainage networks is the major reason for soil salinity.
- (4) The Northern Region with its superior soil conditions and rain fed agriculture is the source of less than 13% of the migrants moving to the Capital, and has a more stable population.

Output of major winter crops (per unit land) (which occupy around 85% of the annual cultivated land in the country) is about three times higher in the flow irrigation zone (Central and Southern

Regions) than in the rain fed zone (Northern Region). The Northern Region is the major agricultural region in Iraq with 60-70% of annual areas cultivated in the nation, against 30-40% in the Central and Southern Regions. Since soil conditions and topography do not allow flow irrigation in the Northern Region, prospects for increasing output in the national agricultural sector seem to favour agricultural expansion in the Central and Southern Regions.

- (5) The Government strategy is to adopt "collective farming" both in its public sector hence (State and Government farms) and in a controlled private sector (through collective farms and co-operatives).
- (6) Land reclamation projects and construction of drainage networks, emphasized by the current government planning strategies require 5-10 years to become effective. Meanwhile migration volumes to the Capital are increasing. Government planning organisations are forecasting about 30% increase by 1990.
- (7) The Shihamyia reverse migration strategy experiment met with a reasonable amount of success in stabilizing the population. There is evidence to suggest that the project administration must be improved if the project is to fulfil its objectives.

- (8) The inefficiency of the governmental system in the country, which only a few months ago was the subject of a major national debate, led by the leading party under the motto "Drop of productivity seminars", is a major handicap to any strategy for improving the agricultural sector or for that matter any effective implementation of a planning strategy.
- (9) Existing State farms and Governmental farms only cover a very small portion of the agricultural land in the country; their performance has been poor and they have failed to make a major contribution as models for agricultural development to guide the "illiterate peasants" towards high productivity and diversification of agricultural output. Governmental administrative bureaucracy and inefficiency are thought to be the major reasons for this failure.

II The Migration Pattern

- (1) Rural migrants are agriculturally engaged rural population, the majority of whom are landless peasants.
- (2) The subregions with the highest proportion of the population engaged in agriculture have the largest volume of outmigration.

- (3) The capital subregion currently receives around 70% of the nation's total internal rural migrants and the trend is for the capital's share to increase.
- (4) Push factors are the predominant reasons for migration.
- (5) Northern Region migration currently represents less than 13% of the Capital's total in migration. The Northern migration pattern is self-contained, ethnically controlled and very sensitive to political and social factors. It is also characterised by being a two stage migration to the Capital with the subregional centre as a middle stage before the Capital.
- (6) Migration from the Southern and Central Regions is mainly one-stage migration to the Capital.
- (7) Migration of the rural population is a complete household movement (all members), with the majority of the household heads in the most active labour force age groups.
- (8) There is evidence of emergence of competing "migrant attraction poles" to the Capital in the Northern Region (Kirkuk and Arbil), in the Central Region (Babylon and Kerbela) and in the Southern Region (Basrah).

- (9) Current migrant settlements in the Capital utilize the Government housing projects for previous migrants as their residence areas, reversing the original concept behind the establishment of these housing projects.
- (10) There is evidence of the effectiveness of industrial investment on stabilizing a subregion's out-migration pattern, thus strengthening the competing growth pole concept (e.g. Babylon and Kerbela in the Central Region). This leads to a situation where the subregion's population remains in the local area and its impact on the internal population composition in the subregion is negative as far as the rural depopulation is concerned.

III The Problems for the Future

(a) The Capital in migration, the Southern Region and Central Region outmigration: future prospects:

- (1) The Capital will continue to be the main destination of rural migrants in Iraq in the foreseeable future. Both official projections and data analysis in this research suggest that the volume of migrants to the Capital is going to increase significantly in the future. Even at

about 6% per annum the current population growth rate in the Capital city, the population of the Capital will be over 13.5 millions by the year 2000 and about three times the projected capacity of the city as envisaged by the Master Plan Consultants. Such a prospect represents a serious situation in all aspects of human life in the Capital.

- (2) The Southern and the Central Regions are the main source of migrants to the Capital. Indications are that out migration from these two Regions will increase, particularly in the Southern Region where the only attractive subregion of Basrah is now losing ground to the Capital. In the Central Region, despite the emergence of potential growth poles, the majority of the Central subregions will continue to send migrants to the Capital.

(b) The Northern Region Migration Pattern:

A breakdown of the existing pattern of contained migration is likely with the improvement in education and communication. The ethnic barriers which inhibited the northern migrants in the past will be weakened as education and modern communication

spreads to various parts of the Region. The latest data analysed in this Thesis (1975) seems to support this trend. This will certainly mean an increase in the Northern Region migrants going to Baghdad.

Thus in the short term at least and in the long term if no measures are taken the volume of migrants to Baghdad is likely to increase with consequent problems for the Capital and the rural areas of Iraq.

5.2 MIGRATION MOVEMENT CONTROL MEASURES

5.2.1 Constraints

Before trying to outline any policy alternative to "control" the migration pattern in Iraq the following "constraints" have to be listed, which represent the Author's conclusions regarding the framework of any possible policy in this respect. They are:

- (1) Rural migration cannot be stopped completely, even if the push or the pull factors are completely eradicated. Movement is a basic characteristic of the human being and could be created or stimulated by mobility factors too numerous to control. The migration pattern could be reduced, reversed or directed under deliberate or non-deliberate actions or happenings influencing the population or their living environments.

- (2) In Iraq, the capital city of Baghdad is the recipient of the majority of rural migrants and its share is continuously increasing. It will reach crisis level in the near future, and policies to "reduce, reverse or redirect" such movement towards the capital are urgently needed.
- (3) Rural migration in Iraq is concentrated in the Southern and Central Regions. It is in these two regions that these "migration control measures" are urgently needed.
- (4) Deterioration of the agricultural sector in the country as a whole and in the Southern and Central Regions in particular is the major push factor responsible for the migration movement, while the Capital's relative attractiveness in relation to all the country is the major pull factor responsible for directing the out migrants towards the Capital.
- (5) In the presence of the socialistic ideology that represents the leading party philosophy in the country the public sector led by the various Governmental agencies is the major tool to carry out any proposed strategy or policy for "Migration Control".

5.2.2 Options

As possible alternative "Policy Options", it seems that the following two options represent the main pattern of "Migration Control" for the country.

I Option No. 1: Growth Poles and Industrial Development Strategy, Stages:

- (1) Creation of growth poles other than the capital.
- (2) Development of an urbanisation strategy for the country based on deliberate population redistribution through job creation and services supply to selected growth poles.
- (3) Economic investment distribution according to the urbanisation policy with the reduction of the capital subregion concentration as the main objective.
- (4) Capital region development geared to absorb migration in the period while the above policies are being put into effect.

II Option No. II: Agricultural Development Strategy and Rural Centres Growth:

- (1) Orientation of economic investment primarily towards the agricultural sector with special emphasis on agricultural land reclamation and drainage in the flow irrigation zone.
- (2) Creation of a network (hierarchy) of rural service centres linked to the urban network.

- (3) Severe reduction in the industrial growth of established migrant attraction centres.
- (4) Industrial development to serve the agricultural sector.
- (5) Heavy emphasis on rural areas' physical growth.
- (6) Human resources development strategy for the agricultural sector with the rural settlements as the supporting framework.
- (7) Planning should also be oriented for the improvement of the agricultural administration, agricultural systems of operation (collectives, co-operatives, state farms, etc.), agricultural finance (agricultural bank) and marketing system.

Observations:

- (1) While the policy adopted seems to depend on whether push factors or pull factors are believed to be the major reason for migration, one could term the first policy option as "pull factors control policy" and the second one as "push factors control policy".
- (2) The Thesis research seems to conclude that push factors are the main reason behind

the "decision to migrate", while pull factors are the factors behind "where to migrate to".

- (3) Any of the two policy strategies above, if adopted alone will eventually lead to imbalance in the overall growth of the industrial (urban) sector or agricultural (rural) sector.
- (4) The nature of the growth pattern in the agricultural sector (slow and long term returns) against the nature of the industrial growth (fast and short term returns) seems to suggest a development strategy that is a mixture of both options.

It is necessary as a long term strategy to improve soil conditions in the flow irrigation zone (the predominant migrants source for the country as a whole); it is also necessary to divert the continuous streams of migrants who will continue to flow towards the Capital during the long period needed to deal with the soil salinity problem. The diversion process would mean dealing with the "where to migrate to" factor, which is basically one of attractiveness. The reduction of the relative attractiveness of the Capital would necessarily mean creation of growth poles or improving the attractiveness of the established ones. This step would not in the immediate future reduce the migrants' flow from the

agricultural areas, but it would certainly help to relieve the crisis situation developing in the Capital.

Such a policy will be concerned with two types of influence:-

(A) Direct Measures

Those measures which deal directly with the migration pattern, migrants sources and the migrant population.

(B) Indirect Measures

Those measures which deal with the agricultural sector and the rural area conditions. Agriculture is the main occupation of the absolute majority of migrants, and the rural areas are the home land of these migrants. While it may be in certain instances quite hard to distinguish between what is considered direct and indirect measures, such a distinction is only arbitrary of the same policy mechanisation to deal with the rural migration problem.

In terms of time-scale, the measures could be either:-

(1) Immediate

These are usually limited in scope and dealing with factors that are very obvious and require a legislative or administrative action.

(2) Short and medium range measures

These usually include the majority of the measures dealing with operational structures of the agricultural sector and of the migration control measures spread over the duration of either one or two economic plans (5-10 years). These measures seldom constitute a long term strategy but act either as a preparation stage for such strategies or as parts of them.

(3) Long range measures (strategies)

These basically include measures which represent drastic changes in the philosophy of development or introduction of conceptual changes in the political social or economic characteristics of the problem context - land reclamation, drainage network construction (as indirect strategies for migration control) and growth poles development strategies (as direct strategies). Periods up to 25 years may be used for the implementation of such measures and may include a variety of short and medium range measures.

The following measures are suggested as a control mechanism for internal rural migration in the country.

The majority of the suggested measures are based on the pattern of migration analysis (Part II), the Baghdad Migrant Settlements Case Study findings (Part III) and the Reverse Migration Case Study (Part IV).

5.2.3 Migration Movement Control Measures: Details

I Immediate

(A) Direct (Migration Pattern):

- (1) Police Control
- (2) Civic registration and labour licence control.

Both types were tried mostly in the post-1958 Revolution period at the height of the migration volumes to the Capital. Police patrols on the main roads linking the Capital to the Southern and Central Regions' subregions were unable to exercise any effective control on the migrants. There are too many alternative routes to the Capital to patrol and the police force, in the main influenced by tribal dominance, is ineffectual in controlling the migration of other tribes. Civic registration (which prohibits transfer of family records of households of peasantry occupation from one numeration district to another, except in census years) and labour licence control (which prohibits the employment of peasants without the consent

of the Ministry of Agriculture or currently the Supreme Agricultural Council) also proved to be ineffective since most peasants claimed their civic registration certificates had been lost and the inefficient administrative agencies in most cases were unable to trace their records; also under the pressure of increased employment opportunities and labour-force demand most agencies disregard these "formalities" in the employment of peasants posing as non-skilled labourers.

The most serious deficiency of the direct migrant controls such as the above is that they deal with the "symptom" rather than the "disease". While the author lists them as methods of control in the interest of "comprehensiveness", they are not suggested as a "legitimate" means of "migration control". They may be used in limited cases as part of another more effective scheme to deal with the causes of migration and only on a limited scale or to deal with severe illegal movement.

- (B) Indirect (Agricultural Sector)
- (1) Differential taxation and public services and amenities bills in favour of rural areas.
 - (2) Immediate programmes to deal with the poor living conditions in the rural villages in the fields of housing, public facilities, educational and health services, supply of goods, etc.
 - (3) Immediate measures to alter the Government's salaries regulations for employees working in the rural areas with significant increases in proportion to the degree of deterioration of areas in which they work.
 - (4) Introducing immediate pricing regulations to be used to compensate poor agricultural production for factors outside the peasants' control using an established minimum level for agricultural household income.
 - (5) Giving the governors or administrative authorities in the country's subregions sufficient powers to deal with "hardship" cases without prior approval of the central government. These powers may include subsidies, taxation differentials and salary differentials.

II Short Range and Medium Range Measures

(A) Direct (Migration Pattern)

- (1) Reformed reverse migration projects may be initiated in new agricultural settlement projects such as Dujaila, Dhaghara and Greater Mussayab. The reforming of the project refers to elimination of the problems met by the "Shihamyia" experiment detailed in Part IV of this Thesis.
- (2) The emerged growth poles in the Southern, Central and Northern Regions should be strengthened through economic investments. Caution should be exercised to prevent an inter-subregional rural migration but instead encouraging a stabilizing influence on the subregion's population to remain in the subregion rather than creating employment concentration projects which may influence the stability of the subregion and also the neighbouring subregions. Investments in the Service Sector, the Agro-Industrial Sector and the Agricultural Sector in these growth poles may be effective.
- (3) Current economic planning should be transformed to give greater emphasis on the improvement of living conditions in the

rural villages through short range and medium range development plans to upgrade standards of living in the migrants' origin villages and rural areas. The creation of "rural growth poles" in selected rural towns to act as service centres for the rural areas is one of the major tools for population stability. The role of Namania, Suwaira and Zubiadia as shopping centres for the Shihamyia Project settlers is an example of this principle.

- (4) Strengthening of the political education of the peasants may lead to stability, or at least more endurance in the transition period until the agricultural sector development programmes become effective.
- (5) Current migrant settlements in the Capital and other main centres in Iraq should also be the target of "rehabilitation and amelioration schemes", for the majority of these settlements are below the minimum level of human acceptance and are fast becoming serious social and physical slums. The rehabilitation schemes while seeking to bring about an improvement in physical conditions and social amenities, should not act as an incentive for more migrants to

come in. Social and political guidance programmes should be organised in these settlements to identify potential "reverse migrants", and also to strengthen the "return to rural life and rural homes aspirations". The over-enthusiasm of the post 1958 Revolution Government for migrant housing schemes without a concurrent "return to rural homes" campaign or programme have led to these projects becoming a sanctuary and breeding ground for incoming migrants. A delicate balance has to be created between improvements in these settlements and the intensive socio-political education process for inspiring the migrants to go back. One must emphasize here the fruitlessness of any such efforts without tangible improvements taking place in the rural life of the "home villages" before any such "returning home schemes" are put into effect.

(B) Indirect (Agricultural Sector)

- (1) As the Government Agencies are going to plan the leading role in any present or future development programme for the agricultural sector, then concentrated efforts and comprehensive plans should be drawn to improve the efficiency of such agencies as

a basic pre-requisite of a successful implementation of any programmes.

Training of staff, improving the level and quantity of technical staff and a comprehensive overhaul of the organisational structures and procedures are the top priority elements of the exercise.

Organisational improvement as was suggested in the section dealing with the Shihamya Reverse Migration Project is a good example of such improvement.

- (2) Intensive efforts should also be directed towards reducing the traditional lack of co-operation and spirit of apprehension which existed for generations between the peasants and the government organisations. Peasants sharing in project planning and administration is one way of helping towards that end. Also profit sharing and salaries linked to production levels of various projects' governmental employees will bring about a closer work relationship between these employees and the participating peasants.
- (3) Plans should be drawn to improve the limited number of drainage networks in operation and to embark on expansion and

establishment of such networks as much as possible. While construction and operation of major drainage schemes is a long range measure, their maintenance and the expansion and construction of such limited drainage networks could be considered short and medium range options.

- (4) There should be maintenance and expansion of irrigation networks and the creating and developing of a systematic irrigation water control mechanism. Training and guidance efforts to educate the peasants in techniques of irrigation water utilisation is of great importance for the success of such schemes.
- (5) Improving the operation of model State and Government farms, with emphasis on peasants' training and guidance efforts is necessary. Autonomy of these farms to operate as productive units in isolation from the governmental bureaucracy will help in the success of these farms, provided enough resources are supplied for such an experiment.
- (6) In improving the progress of mechanisation in the agricultural sector operation, a delicate balance has to be observed between the labour-force requirement and the extent and level of mechanisation so as not to

create a labour surplus without agricultural expansion to absorb it. Technician supply (qualitatively and quantitatively) is a basic requirement for such a scheme.

- (7) Improving marketing facilities and operational aspects of agencies in charge of such facilities together with better equipment, finance and better trained personnel with sufficient flexibility and authority to deal freely with problems, are important pre-requisites for success of these agencies.
- (8) Agricultural co-operatives and collective farms control boards should be strengthened through more financial and technical aids. Future autonomy for these organisations is a major impetus for its development. Inflexibility and bureaucracy of the Government Agencies in charge of the operation of agricultural co-operatives are major factors behind their poor role in the current agricultural situation. Combining several agricultural co-operatives to achieve "economy of scale" may be useful, provided that such a combined organisation is adequately supplied with finance, machinery and trained staff and given

autonomy for effective functioning. The co-operatives should also be given a greater role in the decision making process regarding the agricultural production, operation and planning.

- (9) Collectivization under the present Governmental inefficiency and bureaucracy has to be phased until basic development and improvement is carried out to improve the efficiency of the governmental machine. A few projects in limited parts of the country at a time as testing grounds may be much more reasonable than an all-out implementation which may result in serious consequences delaying the recovery strategy of the agricultural sector.
- (10) There should be a strengthening of the role of the peasants union as the only effective body in charge of looking after peasants' interests and rights. Co-operation between the Union and the Government Agencies is urgently in need of encouragement and development to ensure the peasants' co-operation.
- (11) The introduction of high yield seeds, modern technological innovations in the agricultural process and new co-operatives has to be done on an experimental limited scale basis which

limited Government trained staff could effectively supervise to ensure the success of such experiments. Gradual expansion of these experiments has to be phased very delicately to ensure proper training of peasants and to guard against large scale failures which may retard the modernisation of the agricultural sector.

- (12) Agricultural research and experimental stations with emphasis on pest control and production techniques have to be distributed in accordance with agricultural development intensity and needs. The training of peasants in these stations has to be on as large a scale as possible to ensure the effectiveness of coverage of agricultural land in the country with "knowledge of plant protection and improved techniques".
- (13) Possibilities of new trades to be developed through the training of peasants may minimise the dependence of peasants on other sectors of the labour-force. Such trades may be agricultural machinery operation and maintenance, simple training in irrigation systems' operation and maintenance, drainage network operation and maintenance, etc.

- (14) Comprehensive educational campaigns have to be geared to the peasant population to eliminate illiteracy and improve the capability of the peasant to digest agricultural training and guidance. Traditional (urban) education is not suitable for peasants' needs and emphasis has to be placed on the improvement of the peasants' ability to upgrade his environment and production.
- (15) Animal raising and development of animal products' schemes should also be pursued to improve the peasants' income, thus helping stability. Animal raising and products represent a secondary, though significant, part of the peasants' output. It may be a long time before mechanisation is predominant in the agricultural sector, thus for a considerable period animals may still be a major part of the peasants' equipment for agricultural operation.

III Long Range Strategies

(A) Direct (Migration Pattern)

Suggested policies and strategies:

- (1) Drawing an urbanisation policy for the country.

- (2) Rural migrants' stabilisation
- (a) Agricultural sector reform (see next Section)
 - (b) Reduction of development differentials between rural and urban areas.
 - (c) Controlling the Capital migration problem through:
 - i. Northern Region migration to the Capital:
 - Volumes: 13% of Capital's
 - Nature: Two-stage migration
 - Strategy: Growth poles in Arbil, Kirkuk and Ninevah
 - ii. Southern and Central Regions:
 - Volumes: 87% of Capital's
 - Nature: Single stage migration
 - Strategy: Agricultural sector reform
 - iii. The Capital region development options:
 - a. Encouraging the development of adjoining Central Region centres into growth poles to absorb incoming migrants e.g. Hilla (Babylon subregional centre) Kerbela (Kerbela subregional centre).

b. Utilization of the five industrial complexes adopted by the Ministry of Planning around the Capital area, to absorb the waves of migrants until the stage where agricultural sector reform will reach its effective level to "control" migrants.

(B) Indirect (Agricultural sector)

(1) Agricultural land development:

(a) Land reclamation projects

(b) Drainage networks development

(2) Irrigation water resources development:

(a) The Euphrates River reservoirs

(b) Control of irrigation water distribution system and wastage control.

(3) Manpower:

(a) Peasants: Education and training

(b) Government Agencies staff:
Training and upgrading

(c) Agricultural Technicians:
Supply and level of training

- (4) **Control Mechanism:**
Political ideology. Public sector control.
Intensive development programme to improve efficiency and organisational structure and operation.
- (5) **Pattern of agricultural utilization:**
Political ideology.
Collectivization short and medium range measures.
- (6) **Pattern of agricultural production:**
- (a) Diversification of agricultural projects.
 - (b) Emphasis on increasing productivity with balanced agricultural land expansion.
 - (c) Applied technological development to release the agricultural sector from dependence on natural factors.
 - (d) The agricultural sector should receive top priority in long range planning investments with special emphasis on the agricultural service sector in the earlier stages.
 - (e) Strengthening of the role of the agricultural bank for finance with top priority for agricultural co-operatives.

(f) Agro-industries and the "complete project" concept may be introduced in the latter parts of the long range strategies.

(g) Agricultural production in the north has to be dealt with for a long range period through:

- i. Investigating irrigation possibilities for the region
- ii. Improving agricultural techniques for northern specialities of crops (tobacco)
- iii. Improving agro-industries using, for example, the forestry resources of the north
- iv. Placing emphasis on animal products, since the Northern Region has the majority of animal production.

5.3 CHARACTERISTICS OF THE PREFERRED STRATEGY

While the detailed option to be actually implemented for future control over the migration movement in Iraq is left by the Author to the policy makers in Iraq, it seems useful to list some major characteristics of such preferred policy as indicated by this research. These characteristics mainly constitute the following:-

- (a) Past experience suggests that unless strategies are acceptable to the mass of the people considerable problems are likely to hinder implementation, for example, the Agrarian Reform Law of 1958. The Government have been attempting through their socialisation programmes to inculcate in the peasants an understanding of these programmes. This programme is likely to continue - its success is vital. The public sector, recently renamed by the Government as the Socialist sector, is likely to play a major role. Political education of the peasant, State control of the means of production and the priority of national objectives as opposed to private interest are but three of the major issues involved in the formulation of these control policies.
- (b) As the implementation of the preferred policy is obviously going to be entrusted to the public sector, management and implementation efficiency is going to depend entirely on how well the public sector machine is going to function. Past experiences of major strategy implementation such as the Reverse Migration Strategy suggested a strong necessity for reform and upgrading of the Governmental Organisations in charge of such experiments. Such a necessity was more recently

voiced by the country's political leadership in the "Drop of Productivity Seminars" mentioned before in this Part of the Thesis.

- (c) There must be an intensive effort to balance long term and short term objectives of any preferred strategy. The emphasis on the long range objectives, specially in dealing with crucial issues such as land reclamation and rural resettlement, should not, for example, prevent the deploitation of part of the resources for dealing with immediate problems that will act to improve the existing living conditions of the peasants making the long wait for the returns of long range measures that much more bearable. In achieving such an important balance, the efficient utilisation of the Nation's resources, both financial and manpower, must take top priority as this will serve to sustain the momentum of the implementation of the long range strategies which this research emphasises as being the most effective tool for the success of the preferred strategy.

PART VI

APPENDICES AND SELECTED BIBLIOGRAPHY

APPENDIX NO. I

APPENDIX NO. II

APPENDIX NO. III

APPENDIX NO. IV

SELECTED BIBLIOGRAPHY

Pages in this Part of the Thesis are
prefaced by "X" for differentiation
from the rest of the Thesis

APPENDIX NO. I

APPENDIX NO. I

		Page
(A)	THE LAND TENURE AND AGRICULTURAL SITUATION TABLES	
<u>TABLE NO. 1</u>	Agrarian Reform lands distributed between 1959 and 1975 and the number of beneficiaries	X-2
<u>TABLE NO. 2</u>	Regional/Subregional agricultural land utilisation (1971 Agricultural Census)	X-3

TABLE NO. 1
APPENDIX NO. I

AGRARIAN REFORM LAND DISTRIBUTED BETWEEN 1959
AND 1975 AND NUMBER OF BENEFICIARIES:

End of the year totals	Distributed Land (donums)				Total Land Distributed		No. of Beneficiaries		
	Miri (State) Land		Expropriated Land		Donums	% of total	No.	% of total	Donum per ben
	Donums	% of total	Donums	% of total					
1959	36900	1.4%	-	.0%	36900	0.6%	615	0.4%	60.0
1960	59504	2.2%	223925	6.5%	283429	4.6%	7393	4.2%	38.3
1961	198305	7.4%	293726	8.5%	492031	8.0%	9460	5.4%	52.0
1962	67876	2.5%	569647	16.4%	637523	10.4%	11170	6.4%	57.1
1963	203618	7.6%	177161	5.1%	380779	6.2%	6779	3.9%	56.2
1964	149532	5.6%	267452	7.7%	416984	6.8%	9599	5.5%	43.4
1965	27830	1.0%	52852	1.5%	80682	1.3%	1984	1.1%	40.7
1966	26771	1.0%	55422	1.6%	82193	1.3%	2340	1.3%	35.1
1967	60156	2.2%	81281	2.3%	141437	2.3%	3290	1.9%	43.0
1968	149402	5.6%	73846	2.1%	223248	3.6%	3183	1.8%	70.1
1969	54005	2.0%	166673	4.8%	220678	3.6%	3585	2.1%	61.6
1970	230793	8.6%	131334	3.8%	362127	5.9%	15138	8.7%	23.9
1971	429634	16.0%	171409	4.9%	601043	9.8%	17235	9.9%	34.9
1972	191593	7.2%	211016	6.1%	402609	6.5%	12963	7.4%	31.1
1973	315702	11.8%	546164	15.8%	861866	14.0%	35040	20.0%	24.6
1974	331012	12.4%	282553	8.1%	613565	10.0%	23866	13.6%	25.7
1975	146767	5.5%	163727	4.7%	310494	5.1%	11308	6.5%	27.5
Total	2679400	100%	3468188	100%	6147588	100%	174953	100%	35.1

Source: Ministry of Planning, Central Statistical Organization (C.S.O.)
Baghdad - 1975 Annual Abstract of Statistics - Computed from
Table 3/32 p. 96.

TABLE NO. 2
APPENDIX NO. JREGIONAL/SUBREGIONAL AGRICULTURAL LAND UTILIZATION
(1971 AGRICULTURAL CENSUS)

Subregion/ Region	Agr. Holdings and Agr. Pop.		Agr. Land per capita	Winter Crops		Summer Crops		Total Annual Cultivation Millions	
	Agr. Holdg. Millions in donums	Agr.* Pop. (000)		% of total Donums Region Millions cult.	% of total Donums Region Millions cult.	% of total Donums Millions	% of total holgs.		
Ninevah/ Dhok	0.603	420	15.9	4.350	98%	.087	2%	4.437	67%
Sulimania	.676	266	2.5	.385	76%	.124	24%	.509	75%
Arbil	1.661	306	5.4	.871	95%	.043	5%	.914	55%
Kirkuk	2.818	212	13.3	1.620	97%	.049	3%	1.669	59%
<u>Northern Region</u>	11.818	1204	9.8	7.226	86%	.303	14%	7.529	64%
<u>% of Nation- al</u>	<u>55.2%</u>	<u>32.7%</u>		<u>65.2%</u>		<u>20.4%</u>		<u>59.0%</u>	
Diala	1.796	243	7.4	.738	89%	.091	11%	.829	46%
Anbar	.337	168	2.0	.179	75%	.061	25%	.240	71%
Baghdad	1.477	439	3.4	.637	74%	.220	24%	.857	58%
Wasit	1.587	206	7.7	.628	81%	.148	19%	.776	49%
Babylon	1.078	267	4.0	.458	81%	.107	19%	.565	52%
Kerbela	.172	88	2.0	.036	39%	.057	61%	.093	54%
<u>Central Region</u>	6.447	1411	4.6	2.676	80%	.684	20%	3.360	52%
<u>% of Nation- al</u>	<u>30.1%</u>	<u>38.4%</u>		<u>24.2%</u>		<u>46.0%</u>		<u>26.7%</u>	
Qadisya/ Muthna	1.309	304	4.3	.430	65%	.236	35%	.666	51%
Mysan	.605	205	3.0	.243	59%	.170	41%	.413	68%
Thiqr	1.060	322	3.3	.480	87%	.075	13%	.554	52%
Basrah	.173	233	0.8	.024	60%	.020	40%	.044	23%
<u>Southern Region</u>	3.147	1064	3.0	1.177	70%	.500	30%	1.677	53%
<u>% of Nation- al</u>	<u>14.7%</u>	<u>28.9%</u>		<u>10.6%</u>		<u>33.6%</u>		<u>13.3%</u>	
Iraq total	21.412	3679	5.8	11.080	88%	1.487	12%	12.567	59%

*see p.133 (in text)

Source: Computed from Ministry of Planning, C.S.O., Baghdad, 1973 Annual Abstract of Statistics, Table No. 25 p. 73 and Table No. 31, p. 79.

APPENDIX I

<u>THE REGIONAL AND SUBREGIONAL POPULATION GROWTH TABLES:</u>		<u>Page</u>
<u>TABLE NO. 3</u>	Regions Population Composition (1867-1975) by Nomadic/Rural/Urban Components (in 000 pop.)	X-5
<u>TABLE NO. 4</u>	Subregions Registered Population, Urban Percentage and Percentage of National Population (1947-1980) (in 000 pop.)	X-6
<u>TABLE NO. 5</u>	Annual Compound Population Growth Rate (Urban/Rural and Total) for Regions and Subregions for periods 1947-1957, 1957-1965, 1965-1975 and overall period of 1947-1975	X-7
<u>TABLE NO. 6</u>	Subregions and Regions Share of National Population Increases for periods 1947-1957, 1957-1965, 1965-1975 and overall period 1947-1975	X-8
<u>TABLE NO. 7</u>	Subregions Population (1947, 1957, 1965, 1975 (Estimate) and 1980 (Estimate))	X-9

TABLE NO. 3 REGIONS POPULATION COMPOSITION 1867-1975 BY NOMADIC/RURAL/URBAN COMPONENTS (in 000 pop.):
APPENDIX NO. I

	NORTHERN REGION Kirkuk, Sulimania, Arbil and Ninevah/Dhok)				CENTRAL REGION Diala, Anbar, Baghdad, Wasit, Babylon and Kerbela)				SOUTHERN REGION Qadisiya/Muthna, Maysan, Thiqr and Basrah)				IRAQ TOTAL POPULA- TION
	Nomadic	Rural	Urban	Total	Nomadic	Rural	Urban	Total	Nomadic	Rural	Urban	Total	
1867*	70	140	55	265	115	170	200	485	200	215	40	455	1200
% of Region	27%	53%	20%		23%	35%	42%		50%	41%	9%		
% of Iraq				20.7%				33.4%					40.0%
1890*	93	223	85	401	65	340	270	675	275	400	75	750	1520
% of Region	23%	50%	21%		10%	50%	40%		37%	53%	10%		
% of Iraq				22.0%				37.0%					41.0%
1905*	153	254	133	540	70	468	317	855	170	602	83	855	2250
% of Region	28%	47%	25%		8%	55%	37%		20%	70%	10%		
% of Iraq				24.0%				35.0%					35.0%
1930*	82	519	174	775	64	855	531	1450	88	872	103	1063	3288
% of Region	11%	67%	22%		4%	59%	37%		8%	82%	10%		
% of Iraq				23.6%				44.1%					32.3%
1947	*70	947	331	1348	*25	1281	747	2053	*155	1015	250	1420	4820
% of Region	5%	70%	25%		1%	62%	37%		11%	71%	18%		
% of Iraq				27.9%				42.5%					29.0%
1957	0	1230	487	1723	0	1531	1233	2764	0	1340	472	1812	6299
% of Region		72%	28%			55%	45%			74%	26%		
% of Iraq				27.3%				43.9%					28.5%
1965	0	1214	904	2118	0	1508	2373	3881	0	1213	835	2048	8047
% of Region		57%	43%			39%	61%			59%	41%		
% of Iraq				26.3%				48.2%					25.5%
1975 (Estimate)	0	1256	1467	2723	0	1639	4335	5974	0	1145	1252	2427	11124
% of Region		46%	54%			28%	72%			47%	53%		
% of Iraq				24.5%				53.7%					21.5%

Source:

*1867-190 Data plus the nomadic figure of 1947 are from M.S. Hassan's "Economic Development in Iraq" - Asrya Press, Beirut 1965, Table 4, p. 53. The remainder of the table from Table No. 7, Appendix No. I, p. X-11

TABLE NO. 4 SUBREGIONS REGISTERED POPULATION, URBAN PERCENTAGE AND PERCENTAGE OF NATIONAL POPULATION
APPENDIX NO. I 1947-1965 (CENSUS DATA) 1975-1980 (ESTIMATES) (in '000 pop.):

SUBREGIONS	1947 CENSUS			1957 CENSUS			1965 CENSUS			1975 ESTIMATE			1980 ESTIMATE	
	Total	% Urban	Sub-reg. % of Iraq pop.	Total	% Urban	Sub-reg. % of Iraq pop.	Total	% Urban	Sub-reg. % of Iraq pop.	Total	% Urban	Sub-reg. % of Iraq pop.	Total	Sub-reg. % of Iraq pop.
Ninevah/Dhok	595.2	30.6%	12.3%	755.5	31.6%	12.0%	888.5	42.1%	11.0%	1077.0	58.0%	9.7%	1184.8	0.0%
Sulimania	226.4	16.5%	4.7%	304.9	18.4%	4.8%	399.8	31.9%	5.0%	555.0	43.1%	5.0%	653.0	4.0%
Arbil	239.8	15.4%	5.0%	273.4	20.7%	4.3%	356.3	37.7%	4.4%	401.0	49.1%	1.4%	576.0	4.4%
Kirkuk	286.0	25.9%	5.9%	388.8	34.8%	6.2%	473.6	49.0%	5.9%	600.0	60.3%	5.4%	674.0	5.1%
Diala	272.4	11.0%	5.6%	329.8	17.1%	5.2%	397.3	34.0%	4.9%	496.0	45.2%	4.4%	554.0	4.2%
Anbar	193.0	16.5%	4.0%	253.0	22.0%	4.0%	307.0	40.0%	3.8%	387.0	51.4%	3.5%	434.0	3.3%
Raghdad	817.2	62.2%	16.9%	1313.0	64.1%	20.9%	2045.4	78.1%	25.4%	3523.0	84.8%	31.7%	4618.0	34.0%
Wasit	234.9	15.1%	4.9%	295.9	18.4%	4.7%	334.3	30.1%	4.2%	386.0	41.5%	3.5%	414.0	3.1%
Babylon	261.2	21.9%	5.4%	354.8	22.3%	5.6%	448.2	36.7%	5.6%	594.0	48.0%	5.3%	653.0	5.2%
Kerbela	274.3	30.7%	5.7%	217.4	67.0%	3.5%	339.9	73.7%	4.2%	588.0	81.6%	5.3%	773.0	5.8%
Qadisiya/Muthna	378.1	11.8%	7.8%	520.5	20.6%	8.3%	543.2	33.5%	6.8%	568.0	44.4%	5.1%	579.0	4.4%
Mysan	307.0	13.6%	6.4%	329.8	18.3%	5.2%	345.5	30.1%	4.3%	362.0	40.9%	3.3%	371.0	2.5%
Thiqar	371.9	11.1%	7.7%	458.9	16.7%	7.3%	498.9	26.7%	6.2%	550.0	36.4%	4.9%	576.0	4.4%
Basrah	368.8	34.7%	7.6%	503.3	45.3%	8.0%	669.5	12.0%	8.3%	947.0	72.0%	8.5%	1124.0	8.5%
Iraq Total	4826.2	27.7%	100%	6299.0	34.8%	100%	8047.4	51.1%	100%	11124.0	63.7%	100%	13214.0	100%

Source: Table No. 7, Appendix No. I, p. X-0.

TABLE NO. 5 ANNUAL COMPOUND POPULATION GROWTH RATE (URBAN, RURAL AND TOTAL) FOR REGIONS/SUBREGIONS FOR PERIODS
APPENDIX NO. 1 1947-1957, 1957-1965, 1965-1975 AND OVERALL PERIOD OF 1947-1975:

SUBREGIONS	GROWTH RATES 1947-1957			GROWTH RATES 1957-1965			GROWTH RATES 1965-1975			GROWTH RATES OVERALL + PERIOD 1947-1975		
	Urban Pep.	Rural Pep.	Total Pep.	Urban Pep.	Rural Pep.	Total Pep.	Urban Pep.	Rural Pep.	Total Pep.	Urban Pep.	Rural Pep.	Total Pep.
Ninevah/Thek	+2.7%	+2.3%	+2.4%	+7.0%	-1.0%	+2.1%	+4.3%	-0.6%	+1.0%	+4.5%	+0.3%	+2.1%
Sulimania	+4.1	+2.5	+3.0	+10.8	+1.1	+3.4	+6.5	+1.5	+3.3	+6.8	+1.9	+3.3
Arbil	+4.4	+0.7	+1.3	+11.4	-0.3	+3.4	+6.0	+1.2	+3.3	+6.0	+0.8	+2.6
Kirkuk	+6.2	+1.8	+3.1	+7.0	-0.6	+2.5	+4.6	-0.1	+2.4	+5.9	+0.4	+2.6
NORTHERN REGION	+3.9%	+2.0%	+2.5%	+8.0%	0.0%	+2.6%	+5.0%	0.3%	+2.5%	+5.5%	+1.0%	+2.5%
Diala	+6.5%	+1.2%	+1.0%	+11.6%	-0.5%	+2.4%	+5.2%	-0.4%	+2.2%	+7.4%	+0.4%	+2.1%
Anbar	+5.8	+2.0	+2.7	+10.4	-0.9	+2.4	+4.9	+0.2	+2.3	+6.8	+0.6	+2.6
Baghdad	+5.2	+4.3	+4.9	+8.3	-0.6	+5.7	+0.5	+1.8	+5.6	+6.5	+2.0	+5.4
Masit	+4.4	+1.9	+2.3	+8.3	-0.5	+1.5	+4.5	-0.2	+1.4	+5.5	+0.4	+1.9
Babylon	+3.3	+3.1	+3.1	+9.6	+0.4	+3.0	+5.7	+0.9	+2.9	+5.9	+1.5	+3.0
Kerbela*	-	-	-	+7.0	+2.8	+5.7	+6.7	+1.9	+5.6	+6.8	+2.3	+5.7
CENTRAL REGION	-	-	-	+8.5%	0.0%	+4.3%	+6.2%	+0.8%	+4.4%	+6.5%	+0.8%	+3.9%
Qadisiya/Muthanna	+9.2%	+2.2%	+3.2%	+6.8%	-1.7%	+0.5%	+3.8%	-1.4%	+0.5%	+6.4%	-0.0%	+1.5%
Mydan	+3.7	+0.2	+0.7	+7.0	-1.4	+0.6	+3.6	+1.2	+0.5	+4.6	-1.0	+0.6
Thiqr	+6.4	+1.5	+2.1	+7.2	-0.6	+1.0	+4.1	-0.4	+1.0	+5.8	+0.2	+1.4
Basrah	+5.9	+1.3	+3.2	+7.8	-1.0	+3.6	+5.1	+0.4	+3.5	+6.2	+0.3	+3.4
SOUTHERN REGION	+6.3%	+1.4%	+2.4%	+7.4%	-1.3%	+1.5%	+4.4%	-0.6%	+1.7%	+5.0%	0.0%	+1.9%
IRAQ	+5.1%	+2.4%	+2.7%	+8.2%	-0.5%	+3.1%	+5.6%	0.0%	+3.3%	+6.2%	+0.5%	+3.0%

*Except Kerbela which is 1957-1975 rate computed.

†Due to Bedouin's population added to 1947 totals 1947-1957 is eliminated.

Source: Table No. 7, Appendix No. 1, p. X-9.

TABLE NO. 6
APPENDIX NO. I

SUBREGIONS/REGIONS' SHARE OF NATIONAL POPULATION INCREASES
FOR PERIODS 1947-1957, 1957-1965, 1965-1975 AND OVERALL
ESTIMATED INCREASE 1947-1975:

SUBREGIONS	1947-1957		1957-1965		1965-1975		1947-1975	
	Subreg's. share in 000	% of national total increase	Subreg's. share in 000	% of national total increase	Subreg's. share in 000	% of national total increase	Subreg's. share in 000	% of national total increase
Ninevah/Dhok	160.3	10.9%	133.1	7.6%	188.5	6.1%	481.8	7.7%
Sulimania	78.5	5.3%	94.9	5.4%	155.2	5.1%	328.6	5.2%
Arbil	33.6	2.3%	82.9	4.7%	134.7	4.4%	251.2	4.0%
Kirkuk	102.8	7.0%	84.8	4.9%	126.4	4.1%	314.0	5.0%
NORTHERN REGION		25.5%		22.6%		19.7%		21.9%
Diala	57.4	3.9%	67.5	3.9%	98.7	3.2%	223.6	3.6%
Anbar	60.0	3.9%	54.0	3.0%	80.0	2.6%	194.0	3.1%
Baghdad	495.8	33.7%	732.4	41.9%	477.6	48.1%	2705.8	43.0%
Wasit	61.0	4.1%	38.4	2.2%	51.7	1.6%	151.1	2.4%
Babylon	93.6	6.4%	93.4	5.3%	145.8	4.8%	332.8	5.3%
Kerbela			122.5	7.0%	248.1	8.1%	313.7*	7.5%
CENTRAL REGION		52.0%		63.3%		68.4%		72.4%
Qadisya/Muthna	142.4	9.7%	22.7	1.3%	24.8	0.8%	189.9	3.0%
Mysan	22.8	1.6%	15.7	0.9%	16.5	0.5%	55.0	0.9%
Thiqar	87.0	5.9%	40.0	2.3%	51.1	1.7%	178.1	2.8%
Basrah	134.5	9.1%	166.2	9.5%	277.5	9.0%	578.2	9.2%
SOUTHERN REGION		26.3%		14.0%		12.0%		15.9%
IRAQ TOTAL	1472.8	100%	1748.4	100%	3076.6	100%	6297.8	100%

*1957-1975 Period only

Source: Computed from Table No. 7, Appendix No. I, p. X-9.

TABLE NO. 7
APPENDIX NO. 1

SUBREGIONS POPULATION (URBAN, RURAL AND TOTAL) FOR CENSUSES 1947, 1957, AND 1965. POPULATION ESTIMATES FOR 1975 AND 1980 BY MINISTRY OF PLANNING:

SUBREGIONS	(1) 1947 CENSUS in 000 pop.			(1) 1957 CENSUS in 000 pop.			(1) 1965 CENSUS in 000 pop.			(2) 1975 ESTIMATES in 000 pop.			(1950 ESTIMATES in 000 pop.
	Urban	Rural	Total	Urban	Rural	Total	Urban	Rural	Total	Urban	Rural	Total	
Ninevah/Dhok	182.1	413.1	595.2	238.7	516.8	755.5	410.4	478.2	888.6	625.0	452.0	1077.0	1154.5
Sulimania	37.4	189.0	226.4	56.1	248.8	304.9	127.7	272.0	399.8	239.0	316.0	555.0	653.0
Arbil	36.9	202.9	239.8	56.6	216.8	273.4	134.2	222.1	356.3	241.0	250.0	491.0	570.0
Kirkuk	74.1	211.9	286.0	135.3	253.5	388.8	232.0	241.6	473.6	362.0	238.0	600.0	674.0
Diala	30.0	242.4	272.4	56.4	273.4	329.8	135.2	262.2	397.4	224.0	272.0	496.0	554.0
Anbar	31.8	161.2	193.0	55.7	197.3	253.0	123.0	184.0	307.0	199.0	188.0	387.0	434.0
Baghdad	508.3	308.9	817.2	841.6	471.4	1313.0	1596.7	448.7	2045.4	2987.0	536.0	3523.0	4015.0
Wasit	35.5	199.4	234.9	54.4	241.5	295.9	103.2	231.1	334.3	160.0	226.0	386.0	414.0
Babylon	57.2	204.0	261.2	79.1	275.7	354.8	164.5	283.7	448.2	285.0	309.0	594.0	683.0
Kerbela	84.2	190.1	274.3	145.7	71.7	217.4	250.4	89.4	339.8	480.0	108.0	588.0	773.0
Qadisiya/Muthna	44.6	33.5	378.1	107.2	413.3	520.5	181.8	361.4	543.2	252.0	316.0	568.0	579.0
Musan	41.8	265.2	307.0	60.4	269.4	329.8	104.1	241.4	345.5	148.0	214.0	362.0	371.0
Thiqar	41.3	330.6	371.9	76.6	382.3	458.9	133.3	365.6	498.9	200.0	350.0	550.0	576.0
Basrah	128.0	240.8	368.8	228.0	275.3	503.3	415.8	253.7	669.5	682.0	265.0	947.0	1124.0
IRAQ TOTAL	1333.2	3493.0*	4826.2	2191.8	4107.2	6299.0	4112.3	3935.1	8047.4	7084.0	4040.0	11124.0	13214.0

Sources: (1) Census Data - 1947/1957/1965 D.C. of Civic Affairs, Ministry of Interiors, Reprinted in C.S.O. Annual Abstracts of Statistics.

(2) Ministry of Planning, C.S.O., Baghdad, 1975 Annual Abstracts of Statistics "1975/1980 Estimates", Tables 1/2 p. 34 and 2/5 p. 45.

*Includes 250,000 Beduins (see Table No. 13, p.136 in text).

APPENDIX NO. ITHE 1975 C.S.O. DATA:

Between July 1973 and August 1974 a national survey was conducted by the C.S.O. covering just over 1% of the nation's population. The objectives of this survey was:⁽¹⁾

(A) Direct Objectives:

- 1) Birth Rates
- 2) Death Rates
- 3) Infant Mortality Rates
- 4) Marriage and Divorce Rates
- 5) Internal Migration Rates (between rural and urban areas)

(B) Indirect Objectives:

To collect data on:

- 1) Age Structure of the Sample Population
- 2) Fertility, Births and Deaths for the year preceding the survey year.
- 3) Education Status, Economic Activities and Occupational Structure
- 4) Geographic Location Data for Units in the selected sample.

The sample selected was around 120,000 people (final figure was 122,590)⁽²⁾ to be picked at random. Data to be collected in three visits (six months apart). The first visit to establish the identification characteristics of the base population collecting the type of information taken in population censuses together with few

(1) Ministry of Planning, C.S.O., - "Results of the 1973-1974 Vital Rates Survey in Iraq", Baghdad, Sept. 1975, p.1.

(2) *ibid*, p.9.

demographic indicators. The next two visits to follow within the span of a year's time with the first one following the base population first visit by six months. In the two follow-up visits, data on the main objectives of the survey were collected covering aspects of births, deaths, marriages, divorces and internal migration. As the selection of a random sample representative of the nation's population requires a framework, the 1970 House Count Census framework was used for this process. Names and addresses of the sample population households were selected from that framework. In all 120 survey units were selected, 60 in the rural areas and 60 in the urban areas. Average size of each unit was 750-1250 people.⁽³⁾ The following table shows the distribution among the nation's subregions,⁽⁴⁾ together with percentage population in each subregion (added by author):

Subregion	Rural Sampling Units	Urban Sampling Units	Total	% of Total	Pop. % ⁽⁵⁾ (1975)
Ninevah/Dhok	10	6	16	13.3%	9.7%
Sulimania	4	2	6	5.0%	5.0%
Arbil	3	2	5	4.2%	4.5%
Kirkuk	4	3	7	5.8%	5.4%
Diala	5	2	7	5.8%	4.5%
Anbar	2	2	4	3.3%	3.5%
Baghdad	6	23	29	24.2%	31.7%
Wasit	3	2	5	4.2%	3.5%
Babylon	5	2	7	5.8%	5.4%
Kerbela	1	3	4	3.3%	5.3%
Qadisya/Muthna	4	2	6	5.0%	5.1%
Mysan	3	2	5	4.2%	3.3%
Thiqr	6	2	8	6.7%	5.0%
Basrah	3	6	9	7.5%	8.6%
Totals	60	60	120	100.0%	100.0%

(3) *ibid*, p.2.

(4) *ibid*, p.3.

(5) Ministry of Planning, C.S.O., Baghdad, "1975 Annual Abstract of Statistics", Table No. 1/2, p.34.

The above table suggests that the sampling went in proportion to the population percentage as estimated by the C.S.O. At the C.S.O., after the completion of the three stages of the survey process in August 1974, data was compared with the Ministry of Health records for the sampling units to assure correct data recording and accuracy of the enumeration of data on sample.

The C.S.O. further ran another visit to the sampling units in July 1975 to get data on the second year of an additional 1974-1975 survey covering 104 units of the previously 120 units of the 1973-1974 original survey units. A further 25% sample of the 104 units taken in the second year were taken as a sub-sample to test the degree of statistical accuracy of the second year process. The final report published in July 1976⁽⁶⁾ contained the second year 1974-1975 vital survey data together with the sub-sample data.

For the purpose of this thesis the author is fortunate enough to be given the sample matrix of the whole sample population for birth place/residence (registration place) obtained in January 1974 (first visit). The table is unpublished and was considered by the C.S.O. office as "operational" data for the sole purpose of being used for analysis by the organisation's staff. Permission was given to the author to use this matrix (labelled Table 19 by the C.S.O.) together with the other unpublished data solely in connection with his research project. The original table printout is shown next page. It involves basically the distribution of the 122,590 sample population by place of birth/place of residence matrix. Since the 1947-1965 census data was on population total basis, rather

(6) Ministry of Planning, C.S.O., "Results of the Vital Rates Survey 1974-1975", Baghdad, July 1976, p. 2-3.

SAMPLE POPULATION BY GOVERNORATE OF BIRTH AND GOVERNORATE OF USUAL RESIDENCE

BIRTHS GOVERNORATES (SOURCE: MINISTRY OF PLANNING, C.S.O., (BAGHDAD), UNPUBLISHED VITAL

RATES SURVEY DATA, TABLE NO. 19, 1974.

	Total	Basrah		Thiqar		Qadisya		Babylon		Baghdad		Diala		Kirkuk		Ninevah	
	Abroad	Mysan	Muthana	Kerbela	Wasit	Anbar	Arbil	Sulaimania	Dhok								
Dhok																	
Male	1592	1	0	3	2	0	0	0	0	1	0	0	0	6	0	2	75
Female	1524	4	0	5	0	0	0	0	0	0	1	0	0	3	1	3	60
Total	3116	5	0	8	2	0	0	0	0	1	1	0	0	9	1	5	155
Ninevah																	
Male	7026	18	1	0	2	1	0	1	2	2	27	1	3	24	4	0	6855
Female	6745	16	2	1	3	1	0	1	1	4	26	1	3	34	0	0	6576
Total	13774	34	3	1	5	2	0	2	3	6	53	2	6	58	4	0	13431
Sulaimania																	
Male	2907	0	2	0	0	0	0	1	0	0	2	2	1	7	31	2919	2
Female	2897	0	0	0	0	0	0	0	0	0	2	0	0	4	22	2869	0
Total	5804	0	2	0	0	0	0	1	0	0	4	2	1	11	53	5788	2
Kirkuk																	
Male	3715	1	2	2	0	3	0	0	0	2	16	1	6	19	3639	12	12
Female	3535	3	0	0	0	2	0	0	3	0	21	0	12	9	3455	16	14
Total	7250	4	2	2	0	5	0	0	3	2	37	1	18	28	7094	28	26
Arbil																	
Male	2611	0	3	1	0	0	0	0	0	0	7	4	0	2504	14	7	61
Female	2453	18	2	1	0	0	0	0	0	2	5	0	0	2343	9	5	63
Total	5064	24	5	2	0	0	0	0	0	2	12	4	0	4847	23	12	124
Diala																	
Male	3647	0	0	8	1	1	0	14	0	19	80	12	3426	0	77	5	4
Female	3607	0	1	7	0	0	0	14	0	24	93	10	3379	0	67	6	6
Total	7254	0	1	15	1	1	0	28	0	43	173	22	6805	0	144	11	10
Anbar																	
Male	2070	3	0	0	0	0	0	0	0	1	15	2047	0	0	0	0	1
Female	2060	2	0	0	0	0	0	0	0	0	19	2036	0	0	1	0	2
Total	4130	5	0	0	0	0	0	0	0	1	37	4083	0	0	1	0	3
Baghdad																	
Male	15290	25	133	915	389	31	180	274	209	307	11351	382	577	29	181	65	203
Female	14584	45	133	924	355	18	225	282	217	314	10732	343	528	23	154	48	216
Total	29874	73	266	1839	744	49	414	556	426	621	22083	725	1105	52	335	113	419
Wasit																	
Male	2356	0	17	13	58	0	1	1	3	2226	28	1	5	0	1	0	2
Female	2384	0	15	24	65	0	1	3	0	2226	44	0	5	0	0	0	1
Total	4740	0	32	37	123	0	2	4	3	4452	72	1	10	0	1	0	3
Babylon																	
Male	3145	0	8	0	16	0	351	59	2610	16	73	6	3	0	0	0	3
Female	3133	0	7	1	19	1	337	70	2585	14	78	3	6	0	0	0	6
Total	6278	0	15	1	35	1	688	135	5195	30	151	9	9	0	0	0	9
Kerbela																	
Male	2085	5	6	4	5	0	285	1724	34	3	15	0	0	0	2	2	0
Female	2106	10	10	7	4	1	295	1729	30	3	12	0	1	0	2	2	0
Total	4191	15	16	11	9	1	580	3453	64	6	27	0	1	0	4	4	0
Qadisya																	
Male	2928	0	4	15	15	21	2789	13	38	0	23	1	1	0	3	1	4
Female	2914	1	4	15	15	18	2756	13	37	7	36	0	5	0	3	0	4
Total	5842	1	8	30	30	39	5545	26	75	7	59	1	6	0	6	1	8
Muthna																	
Male	1124	0	0	0	2	1113	0	1	6	1	1	0	0	0	0	0	0
Female	1110	0	0	0	0	1103	0	2	2	1	2	0	0	0	0	0	0
Total	2234	0	0	0	2	2216	0	3	8	2	3	0	0	0	0	0	0
Thiqar																	
Male	3906	0	6	0	3883	0	1	1	0	6	5	0	0	0	0	0	0
Female	4009	0	3	0	3991	2	3	0	0	1	8	0	0	0	0	0	0
Total	7915	0	9	0	7874	2	4	1	0	7	13	0	0	0	0	0	0
Mysan																	
Male	2425	0	2	2399	4	0	1	1	0	3	13	0	0	0	0	0	2
Female	2345	0	5	2305	4	0	3	0	0	2	22	0	1	1	0	0	2
Total	4770	0	7	4704	8	0	4	1	0	5	35	0	1	1	0	0	4
Basrah																	
Male	5212	15	4874	124	52	1	9	6	8	12	64	2	0	4	8	1	32
Female	5082	16	4702	137	65	5	9	3	5	11	82	6	0	2	7	1	30
Total	10294	31	9576	261	117	6	18	9	13	23	146	8	0	6	15	2	62
Total Male	62099	74	5058	3454	4429	1171	3626	2096	2910	2599	11723	2459	4022	2593	3960	3014	7256
Total Female	60491	118	4884	3427	4521	1151	3629	2123	2880	2009	11183	2399	3940	2419	3721	2950	7000
Grand Total	122590	192	9942	6911	8950	2322	7255	4219	5790	4608	22906	4858	7962	5012	7681	5964	14256

than sample basis as in the C.S.O. matrix, it was necessary to transfer these sample figures in corresponding population figures using the C.S.O. 1975 population estimate (produced by Dr. M.M. Inman, the C.S.O. Demographer - see p. 127 in text) published in the 1975 Annual Abstract of Statistics, as the closest possible official data published by the C.S.O. (see also sources of data in Table No. 7, Appendix No. I, p. X-9). The matrix given as Table No. 28, Table Type (A), Appendix No. II, p. X-22 in this thesis, is the result of the conversion of the C.S.O.'s Table 19 (first visit) shown on the previous page using population per sample factors (obtained by dividing the 1975 subregion's population by the sample taken from each subregion in the survey). The following table lists the population per sample for each subregion:

Subregion	1975 Pop. in000	Sample taken in the Vital Rates Survey	1975 Pop.per sample
Ninevah/Dhok	1077	16890	63.766
Sulimania	555	5864	94.645
Arbil	491	5064	96.959
Kirkuk	600	7250	82.759
Diala	496	7254	68.376
Anbar	387	4130	93.705
Baghdad	3523	29874	117.929
Wasit	386	4740	81.435
Babylon	594	6278	94.616
Kerbela	588	4191	140.301
Qadisya/Muthna	568	8076	70.332
Mysan	362	4770	75.891
Thiqar	550	7915	69.488
Basrah	947	10294	91.995
Total	11124	122590	90.742

The population per sample figure was then multiplied by the

figures representing the sample resident population of each subregion reporting their birth places across in Table 19 of the C.S.O. (p. X-13). This process of approximating 1974 data into a 1975 population estimation to obtain a 1975 birth place/residence place matrix has to be viewed with the following points in mind:

- 1) Since the total (estimated) registered population in 1975 for each subregion was used together with the sample table given by the C.S.O. as the characteristic of the base population in 1974 for the 1% national sample taken, it could be assumed with reasonable statistical accuracy that it represents the birth place/residence place of the nation's subregions population in 1975.*
- 2) Since the total (estimated) registered population per subregion is used, then the totals given assumes no foreign born and no "no place of birth" reporting in the table. As we have shown in the data of 1947, 1957 and 1965 census analysis (p. 148 in text) that this is not the case and a certain percentage of the population do not report their place of birth together with the existence of foreign born nationals.
- 3) The population per sample factor computed by the author (using the C.S.O. sample total per subregion and the subregions population estimate in 1975) to convert the sample based matrix of the C.S.O. (p. X-13) to Table 28 (Table Type (A), Appendix No. II, p. X-22) of this thesis, varies between the nation's subregions. It varied from a maximum of 140.301 in Kerbela

*Dr. C.L. Choguill, University of Sheffield, Department of Town and Regional Planning - Interview, Dec. 1976.

to a minimum of 63.766 in Ninevah/Dhok. Actually the sample distribution, (Table p. X-14), does not seem to be the cause of this variance, but rather the value of the sampling unit which is set between 750 and 1250, which is more likely to be the reason for it. In general, population per sample figure for 8 of the 14 subregions, is between 63.766 and 82.759, for 4 subregions they are between 91.995 and 96.959 and the remaining two are 117.929 (Baghdad) and 140.301 for Kerbela. Although it seems from the last set of figures, the survey designer tried to keep the subregions sample share in proportion to their population totals and had met a reasonable amount of success.

- 4) The accuracy of the C.S.O. survey was considerably higher with a standard error on the majority of its data below 5% level (migration data even has less than 3% standard error). This suggests reasonably accurate set of data to be used for the purpose of analysis in this thesis.

APPENDIX NO. II

APPENDIX NO. IIINTERNAL MIGRATION TABLES:

	<u>Page</u>
(A) <u>REGIONAL AND SUBREGIONAL</u>	
TABLES TYPE (A) - TABLE NOS. 1, 10, 19 and 28	X-19 to X-22
TABLES TYPE (B) - TABLE NOS. 2, 11, 20 and 29	X-23 to X-26
TABLES TYPE (C) - TABLE NOS. 3, 12, 21 and 30	X-27 to X-30
TABLES TYPE (D) - TABLE NOS. (4, 5, 6) (13, 14, 15) (22, 23, 24) (31, 32, 33)	X-31 to X-42
TABLES TYPE (E) - TABLE NOS. 7, 16, 25 and 34	X-43 to X-46
TABLES TYPE (F) - TABLE NOS. 8, 17, 26 and 35	X-47 to X-50
TABLES TYPE (G) - TABLE NOS. 9, 18, 27 and 36	X-51 to X-54
(B) SUBADMINISTRATIVE UNITS MIGRATION PATTERN TABLES	
NORTHERN REGION TABLES : TABLE NOS. 37 - 40	X-56 to X-59
CENTRAL REGION TABLES : TABLE NOS. 42 - 46	X-60 to X-64
SOUTHERN REGION TABLES : TABLE NOS. 48 - 51	X-65 to X-68
*SUMMARY TABLE (REGIONAL) : TABLE NO. 53	X-69
(C) <u>THE REGIONAL AND SUBREGIONAL INTERNAL MIGRATION PATTERN ANALYSIS FORMS:</u>	
NORTHERN REGION: REGIONAL FORMS NO. REGIONAL I	X-73 to X-74
SUBREGIONAL FORMS NO. SUBREGIONAL I-1 to I-4	X-75 to X-82
CENTRAL REGION: REGIONAL FORMS NO. REGIONAL II	X-84 to X-85
SUBREGIONAL FORMS NO. SUBREGIONAL II-1 to II-5	X-86 to X-95
SOUTHERN REGION: REGIONAL FORMS NO. REGIONAL III	X-97 to X-98
SUBREGIONAL FORMS NO. SUBREGIONAL III-1 to III-4	X-99 to X-106

*Table Nos. 41, 47, and 52 regional summaries for subadministrative movements were replaced by Table No. 53 for all regions.

(A) REGIONAL AND SUBREGIONAL MIGRATION PATTERN TABLES:

TABLE No.1 TABLE TYPE A SUBREGION OF BIRTH VERSUS SUBREGION OF RESIDENCE

(Source: Ministry of the Interior
Directorate General of Civic
Affairs - 1947 Census Data)

1947 Census Data

SUBREGION OF BIRTH

	NINEVAH DHOK	SULIMANIA	ARBIL	KIRKUK	DIALA	ANBAR	BAGHDAD	WASIT	BABYLON	KERBALA	QADISYA MUTHANA	NIYSAN	THIQAR	BASRAH	1947 Census Total Registered
NINEVAH DHOK	573490	647	1785	1355	474	342	2979	219	283	115	96	1896	516	335	584532
SULIMANIA	605	220531	680	3481	183	26	318	32	19	20	9	176	103	28	226211
ARBIL	2137	1256	231980	1517	339	150	557	57	122	25	131	439	218	54	238982
KIRKUK	3698	3245	3270	261952	2361	253	4015	362	491	126	302	1938	993	373	2833379
DIALA	1143	559	195	4611	249635	479	9884	703	711	301	342	1897	731	285	271476
ANBAR	3193	386	338	438	600	172127	4892	571	429	414	413	371	102	189	184463
BAGHDAD	16282	2665	1838	5321	17696	13702	614680	14719	14679	7597	5160	53976	4723	6103	779141
WASIT	760	35	23	267	1589	302	5190	195457	4128	430	5201	7299	2137	493	223311
BABYLON	375	61	56	140	366	364	3552	1286	245824	2776	3860	1095	626	252	260633
KERBALA	198	39	192	106	491	72	3766	387	6453	230883	5313	1293	874	1521	251588
QADISYA MUTHANA	288	112	73	179	371	261	22881	922	4102	4143	359018	1533	2243	455	375981
MYSAN	230	99	24	82	125	73	1699	5619	191	237	235	295480	716	1201	306011
THIQAR	173	63	18	77	101	59	1192	1749	477	438	2035	1509	362274	761	370926
BASRAH	1848	231	192	493	599	232	7799	1154	565	1128	1454	28446	11402	296779	352322
Total Born	504420	229929	240664	280019	274930	188442	662804	223237	278474	248633	383569	397348	387658	308829	4708956

SUBREGION OF RESIDENCE

TABLE No.10

TABLE TYPE A SUBREGIONS OF BIRTH VERSUS SUBREGIONS OF RESIDENCE

(Source: Ministry of the Interior-Directorate General
of Civic Affairs 1957 Census Data)

SUBREGION OF BIRTH

	NINEVAH DOHUK	SULIMANIA	ARBIL	KIRKUK	DIALA	ANBAR	BAGHDAD	WASIT	BABLON	KERBALA	QADSIYA MUTHANA	MYSAN	THIQAR	BASRAH	1957 Census Total Registered
NINEVAH DOHUK	735445	636	3442	1316	421	889	2842	121	177	67	151	1059	517	273	747356
SULIMANIA	1242	289408	3466	6326	395	193	594	42	75	36	46	242	148	37	302250
ARBIL	3658	2619	261323	2555	214	107	609	53	86	24	45	248	169	71	271781
KIRKUK	5494	5353	7290	353322	3708	864	4855	343	313	75	224	1847	995	350	385033
DIALA	859	545	295	2815	313756	375	5551	890	635	295	289	1470	888	225	328888
ANBAR	2781	436	410	573	1105	232402	4117	681	696	886	657	1592	808	909	248053
BAGHDAD	30822	4098	3233	7997	34396	20621	934016	41340	23758	18109	15414	114708	12319	8649	1269480
WASIT	989	55	61	103	983	408	3895	259862	7337	371	6030	12309	1833	250	294486
BABYLON	531	89	65	222	544	459	4088	928	335943	2562	4837	1169	1742	448	353627
KERBALA	133	22	54	88	477	3165	2086	419	4507	181059	10083	706	590	556	203945
QADSIYA MUTHANA	613	77	74	242	441	357	2519	1180	11257	2948	490137	1867	6257	1099	519068
MYSAN	431	61	50	152	157	211	2139	1031	182	161	438	319328	2623	1342	328306
THIQAR	281	29	29	69	179	245	1034	523	390	435	3911	1291	448182	1139	457737
BASRAH	2953	328	163	735	671	517	7322	1133	818	1343	2118	42649	19032	414511	494293
Total Born	786232	303756	279955	376515	357447	260813	975667	308546	386174	208371	534380	500485	496103	429859	6204303

SUBREGION OF RESIDENCE

TABLE No.19

TABLE TYPE A SUBREGION OF BIRTH VERSUS SUBREGION OF RESIDENCE

1965 Census Data - Unpublished

(SOURCE Ministry of the Interiors - Directorate General of Civic Affairs - 1965 Census Data)

	NINEVAH DHOK	SULIMANIA	ARBIL	KIRKUK	DIALA	ANBAR	BAGHDAD	WASIT	BABYLON	KERBALA	QADISYA MUTHANA	MESAN	THIQAR	BASRAH	1965 Census Total Registered
NINEVAH DHOK	860698	867	4529	1869	1155	2309	3405	297	1470	295	614	1233	2134	766	881641
SULIMANIA	12233	351398	12920	4625	2765	646	3003	404	1509	454	961	1672	2471	904	395965
ARBIL	7695	2128	319669	3069	2533	740	3796	678	2682	521	2210	2041	5078	2622	355426
KIRKUK	7814	38913	6505	400738	3286	1226	4957	489	894	235	815	2373	2236	1223	471704
DIALA	928	527	1165	7106	373013	585	6716	860	697	270	301	1775	993	658	395594
ANBAR	2952	663	925	1085	1857	288717	4776	468	836	1262	395	854	810	983	306583
BAGHDAD	64297	7123	7435	14396	50652	81391	1414229	60754	31447	28334	33746	123703	28506	13482	1959495
WASIT	407	198	342	368	1596	123	3994	308379	2202	723	4879	6269	2823	1605	333908
BABYLON	835	565	509	683	469	542	4483	1097	427968	2949	4477	779	1882	601	447839
KERBALA	485	270	225	282	345	151	1920	279	3499	328561	2892	84	217	13	339223
QADISYA MUTHANA	633	894	882	718	452	263	2280	576	3000	3111	522865	1173	4740	1285	542872
MESAN	370	235	309	200	208	114	1616	896	97	131	783	334612	2785	2555	344911
THIQAR	422	482	569	386	252	216	1459	763	574	315	10705	2212	478984	1094	498433
BASRAH	4632	710	1114	1045	1105	772	8686	1392	1049	1344	4843	17680	23062	595896	663330
Total Born	9643654049733	3570984365704	3968837779514653203	77332477924368505590486	496460556721623687										7936924

SUBREGION OF RESIDENCE

TABLE No.28 SUBREGION OF BIRTH VERSUS SUBREGION OF RESIDENCE
 (Source: Ministry of Planning CSO 1975).

	SUBREGION OF BIRTH													1975 C.S.O Estimated Registered Population	
	NINEVAH DHOK	SULIMANIA	ARBIL	KIRKUK	DIALA	ANBAR	BAGHDAD	WASIT	BABYLON	KERBALA	QADISYA MUTHANA	MYSAN	THIQAR		BASRAH
NINEVAH DHOK	1066032	319	4272	319	383	128	3443	446	191	128	128	574	446	191	1077000
SULIMANIA	189	547807	1041	5016	95	189	379	0	0	95	0	0	0	189	555000
ARBIL	12896	1164	472285	2230	0	388	1164	194	0	0	194	194	0	485	491000
KIRKUK	2152	2317	2317	587419	1490	83	3062	166	248	0	414	166	0	166	600000
DIALA	684	752	0	9846	465300	1504	11829	2940	0	1915	68	1026	68	68	496000
ANBAR	281	0	0	94	0	383064	3467	94	0	0	0	0	0	0	387000
BAGHDAD	55780	13326	6132	39506	130312	85496	2612820	73234	50238	65569	54602	216871	87739	31369	3523000
WASIT	244	0	0	81	814	81	5863	362548	244	326	163	3013	10017	2606	386000
BABYLON	852	0	0	0	852	852	14287	2838	491528	12773	65191	95	3312	1419	594000
KERBALA	0	561	0	561	140	0	3788	842	8979	486563	81515	1543	1263	2245	588000
QADISYA MUTHANA	563	70	0	422	422	70	4361	633	5838	2040	548657	2210	2251	563	568000
MYSAN	304	0	76	0	76	0	2656	380	0	76	304	356990	607	531	362000
THIQAR	347	0	0	0	0	0	903	486	0	70	417	0	547152	625	550000
BASRAH	5796	184	552	1380	0	736	13431	2116	1196	828	2208	24011	10763	883799	947000
TOTAL BORN	1146120	566500	486675	646874	599884	472591	2681459	446917	558463	570383	753667	606593	663618	924256	11124000

TABLE NO. (2)
TABLE TYPE (B)

PERCENTAGE DISTRIBUTION OF OUTMIGRANTS FROM SUBREGION OF ORIGIN TO SUBREGION OF DESTINATION
(ONLY OVER 5% OUTMOVEMENTS ARE REPORTED) - (1947 CENSUS) (SOURCE: COMPUTED FROM TABLE NO.1,
TABLE TYPE A, APPENDIX NO. II, P. X-19)

	Subregion of Origin													
	Ninevah/ Dhok	Sulimania	Arbil	Kirkuk	Diala	Anbar	Baghdad	Wasit	Babylon	Kerbela	Qadisiya/ Muthna	Mysan	Thiqar	Basrah
Ninevah/ Dhok	-	6.9%	20.6%	7.5%	0	0	6.2%	0	0	0	0	0	0	0
Sulimania	0	-	7.8%	19.3%	0	0	0	0	0	0	0	0	0	0
Arbil	6.9%	13.4%	-	8.4%	0	0	0	0	0	0	0	0	0	0
Kirkuk	12.0%	34.5%	37.7%	-	9.3%	0	8.3%	0	0	0	0	0	0	0
Diala	0	5.9%	0	25.5%	-	0	20.5%	0	0	0	0	0	0	0
Anbar	10.3%	0	0	0	0	-	10.2%	0	0	0	0	0	0	0
Baghdad	52.6%	28.4%	21.2%	29.5%	70.0%	84.0%	-	53.0%	45.0%	42.8%	21.0%	53.0%	18.6%	50.6%
Wasit	0	0	0	0	6.3%	0	10.8%	-	12.6%	0	21.2%	7.2%	8.4%	0
Babylon	0	0	0	0	0	0	7.4%	5.0%	-	15.6%	15.7%	0	0	0
Kerbela	0	0	0	0	0	0	7.8%	0	19.8%	-	21.6%	0	0	12.6%
Qadisiya/Muthna	0	0	0	0	0	0	5.0%	0	12.6%	23.3%	-	0	8.8%	0
Mysan	0	0	0	0	0	0	0	20.2%	0	0	-	0	0	10.0%
Thiqar	0	0	0	0	0	0	0	6.3%	0	0	8.3%	0	-	6.3%
Basrah	6.0%	0	0	0	0	0	16.2%	0	0	6.4%	5.9%	27.9%	44.9%	-

Subregion of Destination

TABLE NO. (11)
TABLE TYPE (B)

PERCENTAGE DISTRIBUTION OF OUTMIGRANTS FROM SUBREGION OF ORIGIN TO SUBREGION OF DESTINATION
(ONLY OVER 5% DESTINATION SHARES ARE REPORTED) - 1957 CENSUS DATA (SOURCE: COMPUTED FROM
TABLE NO. 10, TABLE TYPE A, APPENDIX NO. II, p. X-20)

	Subregion of Origin													Basrah			
	Ninevah/ Dhok	Sulimania	Arbil	Kirkuk	Diala	Anbar	Baghdad	Wasit	Babylon	Kerbela	Qadisiya/ Muthna	Mysan	Thiqar				
Ninevah/Dhok	-	0	18.5%	5.7%	0	0	6.8%	0	0	0	0	0	0	0	0	0	0
Sulimania	0	-	18.6%	27.3%	0	0	0	0	0	0	0	0	0	0	0	0	0
Arbil	7.2%	18.3%	-	11.0%	0	0	0	0	0	0	0	0	0	0	0	0	0
Kirkuk	10.8%	37.3%	39.1%	-	8.5%	0	11.7%	0	0	0	0	0	0	0	0	0	0
Diala	0	0	0	12.1%	-	0	13.3%	0	0	0	0	0	0	0	0	0	0
Anbar	5.5%	0	0	0	0	-	9.9%	0	0	0	0	0	0	0	0	0	5.9%
Baghdad	60.7%	28.6%	17.4%	34.5%	78.7%	72.6%	-	84.9%	47.3%	66.3%	34.8%	63.3%	25.7%	6.8%	56.4%	0	0
Wasit	0	0	0	0	0	0	9.4%	-	14.6%	0	13.6%	6.8%	0	10.9%	0	0	0
Babylon	0	0	0	0	0	0	9.8%	0	-	9.4%	10.9%	0	0	22.8%	0	0	0
Kerbela	0	0	0	0	0	11.1%	5.0%	0	9.0%	-	0	0	0	0	0	0	0
Qadisiya/Muthra	0	0	0	0	0	0	6.0%	0	22.4%	10.8%	-	0	13.1%	0	7.2%	0	0
Mysan	0	0	0	0	0	0	5.1%	0	0	0	0	-	5.5%	0	8.7%	0	0
Thiqar	0	0	0	0	0	0	0	0	0	0	8.8%	0	-	0	7.4%	0	0
Basrah	5.8%	0	0	0	0	0	17.6%	0	0	5.0%	5.0%	23.5%	39.7%	0	-	-	-

Subregion of Destination

TABLE NO. (20)

PERCENTAGE DISTRIBUTION OF OUTMIGRANTS FROM SUBREGION OF ORIGIN TO SUBREGION OF DESTINATION
(ONLY OVER 5% DESTINATION SHARES ARE REPORTED) - 1965 CENSUS DATA (SOURCE: COMPUTED FROM
TABLE NO. 19, TABLE TYPE A, APPENDIX NO. II, P. X-21)

TABLE TYPE (B)

	Subregion of Origin													
	Ninevah/ Dhok	Sulimania	Arbil	Kirkuk	Diala	Anbar	Baghdad	Wasit	Babylon	Kerbela	Qadisiya/ Muthra	Mysan	Thiqar	Basrah
Ninevah/Dhok	-	0	12.1%	5.2%	0	0	6.7%	0	0	0	0	0	0	0
Sulimania	11.8%	-	34.5%	12.9%	0	0	5.9%	0	0	0	0	0	0	0
Arbil	7.4%	0	-	8.6%	0	0	7.4%	0	5.4%	0	0	0	6.5%	9.4%
Kirkuk	7.5%	72.6%	17.4%	-	5.0%	0	9.7%	0	0	0	0	0	0	0
Diala	0	0	0	19.8%	-	0	13.2%	0	0	0	0	0	0	0
Anbar	0	0	0	0	0	-	9.3%	0	0	0	0	0	0	0
Baghdad	62.0%	13.3%	19.9%	40.2%	76.0%	91.4%	-	88.1%	63.0%	70.9%	49.9%	76.4%	36.7%	48.5%
Wasit	0	0	0	0	0	0	7.8%	-	0	0	7.2%	0	0	5.8%
Babylon	0	0	0	0	0	0	8.8%	0	-	7.4%	6.6%	0	0	0
Kerbela	0	0	0	0	0	0	0	0	7.0%	-	0	0	0	0
Qadisiya/Muthra	0	0	0	0	0	0	0	0	6.0%	7.8%	-	0	6.1%	5.0%
Mysan	0	0	0	0	0	0	0	0	0	0	0	-	0	9.2%
Thiqar	0	0	0	0	0	0	0	0	0	0	15.8%	0	-	0
Basrah	0	0	0	0	0	0	17.0%	0	0	0	7.2%	10.9%	29.7%	-

Subregion of Destination

TABLE NO. (29)
TABLE TYPE (B)

PERCENTAGE DISTRIBUTION OF OUTMIGRANTS FROM SUBREGION OF ORIGIN TO SUBREGION OF DESTINATION
(ONLY OVER 5% DESTINATION SHARES ARE REPORTED) -- 1975 DATA (SOURCE: COMPUTED FROM TABLE NO.
28, TABLE TYPE A, APPENDIX NO. II, P. X-22)

Subregion of Destination	Subregion of Origin													
	Ninevah/ Dhok	Suli- mania	Arbil	Kirkuk	Diala	Anbar	Baghdad	Wasit	Babylon	Kerbela	Qadisiya/ Muthna	Mysan	Thiqar	Basrah
Ninevah/Dhok	-	0	29.7%	0	0	0	0	0	0	0	0	0	0	0
Sulinania	0	-	7.2%	8.4%	0	0	0	0	0	0	0	0	0	0
Arbil	16.1%	6.3%	-	0	0	0	0	0	0	0	0	0	0	0
Kirkuk	0	12.4%	16.1%	-	0	0	0	0	0	0	0	0	0	0
Diala	0	0	0	16.6%	-	0	17.2%	0	0	0	0	0	0	0
Anbar	0	0	0	0	0	-	5.1%	0	0	0	0	0	0	0
Baghdad	69.7%	71.3%	42.6%	66.5%	96.8%	95.5%	-	86.8%	75.1%	78.2%	26.6%	86.9%	75.3%	77.5%
Wasit	0	0	0	0	0	0	8.5%	-	0	0	0	0	8.6%	6.4%
Babylon	0	0	0	0	0	0	20.8%	0	-	15.2%	31.8%	0	0	0
Kerbela	0	0	0	0	0	0	5.5%	0	13.4%	-	39.8%	0	0	5.5%
Qadisiya/Muthra	0	0	0	0	0	0	6.4%	0	8.7%	0	-	0	0	0
Mysan	0	0	0	0	0	0	0	0	0	0	-	-	0	0
Thiqar	0	0	0	0	0	0	0	0	0	0	0	0	-	0
Basrah	7.2%	0	0	0	0	0	19.6%	0	0	0	9.6%	9.2%	9.2%	-

TABLE NO. (3)
TABLE TYPE (C)

1947 REGIONAL MIGRATION PATTERN (SOURCE: TABLE NO. 1,
TABLE TYPE A, APPENDIX NO. II, p. X-19)

	Northern Region	Central Region	Southern Region	National Totals
Total Registered Population	1,333,104	1,970,612	1,405,240	4,708,956
% of National	28.3%	41.8%	29.8%	100%
Total Outmigrants	67,079	167,914	163,853	398,846
% of National	16.8%	42.1%	41.1%	100%
Migrants leaving subregional units but staying within region	23,676	50,136 (excluding Baghdad)	51,990	125,802
Same as % of total regions' outmigrants	35.3%	29.9%	31.7%	31.5%
Same as % of total regions' outmigrants not going to Baghdad	57.8%	50.4%	55.4%	53.7%
Migrants leaving subregional units in region going to Baghdad	26,106	68,393	69,962	164,461
Same as % of all outmigrants in region	38.9%	40.7%	42.7%	
Same as % of national migration to Baghdad	15.9%	41.6%	42.5%	100%
Migrants to Northern Region	-	13,868	7,607	21,475
Same as % of total outmigrants in region	-	8.3%	4.6%	
Migrants to Southern Region	4,182	35,517	-	39,699
Same as % of total outmigrants in region	6.2%	21.2%	-	
Migrants to Central Region (excluding Baghdad)	13,115	-	34,294	47,409
Same as % of total outmigrants in region	19.6%	-	20.9%	

TABLE NO. (12)
TABLE TYPE (C)

1957 REGIONAL MIGRATION PATTERN (SOURCE: TABLE NO. 10,
TABLE TYPE A, APPENDIX NO. II, p. X-20)

	Northern Region	Central Region	Southern Region	National Totals
Total Registered Population	1,706,426	2,698,479	1,799,404	6,204,303
% of National	27.5%	43.5%	29.0%	100%
Total Outmigrants	106,960	239,980	288,669	635,609
% of National	16.8%	37.8%	45.4%	100%
Migrants leaving subregional units but staying within region	43,397	47,460 (excluding Baghdad)	83,766	174,623
Same, as % of total regions' outmigrants	40.6%	19.8%	29.0%	27.5%
Same as % of total regions' outmigrants not going to Baghdad	71.4%	46.6%	60.9%	58.2%
Migrants leaving subregional units in region going to Baghdad	46,150	138,224	151,090	335,464
Same as % of all outmigrants in region	43.1%	57.6%	52.3%	52.8%
Same as % of national migration to Baghdad	13.8%	41.2%	45.0%	100%
Migrants to Northern Region	-	17,103	6,422	23,525
Same as % of total outmigrants in region	-	7.1%	2.2%	3.7%
Migrants to Southern Region	6,216	37,193	-	43,480
Same as % of total outmigrants in region	5.8%	15.5%	-	6.8%
Migrants to Central Region (excluding Baghdad)	11,202	-	47,391	58,517
Same as % of total outmigrants in region	10.4%	-	16.4%	9.2%

TABLE NO. (21)
TABLE TYPE (C)

1965 REGIONAL MIGRATION PATTERN (SOURCE: TABLE NO. 19,
TABLE TYPE A, APPENDIX NO. II, p. X-21)

	Northern Region	Central Region	Southern Region	National Totals
Total Registered Population	2,104,736	3,782,642	2,049,546	7,936,924
% of National	26.5%	47.7%	25.8%	100%
Total Outmigrants	230,503	365,697	334,997	931,197
% of National	24.8%	39.3%	36.0%	100%
Migrants leaving subregional units but staying within region	103,131	42,699 (excluding Baghdad)	72,917	218,747
Same as % of total regions outmigrants	44.7%	11.7%	21.8%	23.5%
Same as % of total regions outmigrants not going to Baghdad	75.1%	37.7%	53.8%	56.7%
Migrants leaving subregional units in region going to Baghdad	93,251	252,578	199,437	545,266
Same as % of all outmigrants in region	40.5%	69.1%	59.5%	58.6%
Same as % of national migration to Baghdad	17.1%	46.3%	36.6%	100%
Migrants to Northern Region	-	39,749	29,353	69,102
Same as % of total outmigrants in region	-	10.9%	8.8%	7.4%
Migrants to Southern Region	13,601	30,671	-	44,272
Same as % of total outmigrants in region	5.9%	8.4%	-	4.8%
Migrants to Central Region (excluding Baghdad)	20,520	-	33,290	53,810
Same as % of total outmigrants in region	8.9%	-	9.9%	5.8%

TABLE NO. (30)
TABLE TYPE (C)

1975 REGIONAL MIGRATION PATTERN (SOURCE: TABLE NO. 28,
TABLE TYPE A, APPENDIX NO. II, p. X-22)

	Northern Region	Central Region	Southern Region	National Totals
Total Registered Population	2,723,000	5,974,000	2,427,000	11,124,000
% of National	24.5%	53.7%	21.8%	100%
Total Outmigrants	172,626	527,867	611,536	1,312,029
% of National	13.2%	40.2%	46.6%	100%
Migrants leaving subregional units but staying within region	34,232	74,428 (excluding Baghdad)	44,390	153,050
Same as % of total regions' outmigrants	19.8%	14.1%	7.3%	11.7%
Same as % of total regions' outmigrants not going to Baghdad	59.1%	61.9%	20.1%	38.1%
Migrants leaving subregional units in region going to Baghdad	114,744	404,849	390,581	910,174
Same as % of all outmigrants in region	66.5%	76.7%	63.9%	69.4%
Same as % of national migration to Baghdad	12.6%	44.4%	42.9%	100%
Migrants to Northern Region	-	12,272	2,953	15,225
% of total outmigrants in region	-	2.3%	0.5%	1.2%
Migrants to Southern Region	9,694	36,318	-	46,012
% of total outmigrants in region	5.6%	6.9%	-	3.5%
Migrants to Central Region (excluding Baghdad)	13,956	-	173,612	187,568
% of total outmigrants in region	8.1%	-	28.4%	14.3%

TABLE NO. (4)
TABLE TYPE (D)

SUBREGION'S SHARE OF TOTAL REGIONAL REGISTERED
POPULATION AND INTER-REGION MIGRANTS (1947 CENSUS
DATA - NORTHERN REGION) (SOURCE: COMPUTED FROM
TABLE NO. 1, TABLE TYPE A, APPENDIX NO. II, p. X-19)

Subregion of Destination	Subregion's Share of Regional Total Reg. Population	Subregion's Share of Inter-Region Migrants
Ninevah/Dhok	43.8%	16.0%
Sulimania	17.0%	20.1%
Arbil	17.9%	20.7%
Kirkuk	21.3%	43.1%
	100.0%	100.0%

TABLE NO. (5)
TABLE TYPE (D)

SUBREGION'S SHARE OF TOTAL REGIONAL REGISTERED
POPULATION AND INTER-REGION MIGRANTS - (1947
CENSUS DATA - CENTRAL REGION) (SOURCE: COMPUTED
FROM TABLE NO. 1, TABLE TYPE A, APPENDIX NO. II, p. X-19)

Subregion of Destination	Subregion's Share of Regional Total Reg. Population	Subregion's Share of Inter-Region Migrants
Diala	22.8%	24.1%
Anbar	15.5%	13.8%
Wasit	18.7%	23.2%
Babylon	21.9%	16.6%
Kerbela	21.1%	22.3%
	100.0%	100.0%

TABLE NO. (6)
TABLE TYPE (D)

SUBREGION'S SHARE OF TOTAL REGIONAL REGISTERED
POPULATION AND INTER-REGION MIGRANTS (1947 CENSUS
DATA - SOUTHERN REGION) (SOURCE: COMPUTED FROM
TABLE NO. 1, TABLE TYPE A, APPENDIX NO. II, p. X-19)

Subregion of Destination	Subregion's Share of Regional Total Reg. Population	Subregion's Share of Inter-Region Migrants
Qadisya/Muthna	26.8%	8.1%
Mysan	21.8%	4.1%
Thiqar	26.4%	8.4%
Basrah	25.1%	79.4%
	100.0%	100.0%

TABLE NO. (13)
TABLE TYPE (D)

SUBREGION'S SHARE OF TOTAL REGIONAL REGISTERED
POPULATION AND INTER-REGION MIGRANTS (1957 CENSUS
DATA - NORTHERN REGION) (SOURCE: COMPUTED FROM
TABLE NO. 10, TABLE TYPE A, APPENDIX NO. II, p. X-20)

Subregion of Destination	Subregion's Share of Regional Total Reg. Population	Subregion's Share of Inter-Region Migrants
Ninevah/Dhok	43.8%	12.4%
Sulimania	17.7%	25.4%
Arbil	15.9%	20.4%
Kirkuk	22.6%	41.8%
	100.0%	100.0%

TABLE NO. (14)
TABLE TYPE (D)

SUBREGION'S SHARE OF TOTAL REGIONAL REGISTERED
POPULATION AND INTER-REGION MIGRANTS (1957 CENSUS
DATA - CENTRAL REGION) (SOURCE: COMPUTED FROM
TABLE NO. 10, TABLE TYPE A, APPENDIX NO. II, p. X-20)

Subregion of Destination	Subregion's Share of Regional Total Reg. Population	Subregion's Share of Inter-Region Migrants
Diala	23.0%	16.3%
Anbar	17.4%	15.8%
Wasit	20.6%	27.4%
Babylon	24.7%	18.1%
Kerbela	14.3%	22.4%
	100.0%	100.0%

TABLE NO. (15)
TABLE TYPE (D)

SUBREGION'S SHARE OF TOTAL REGIONAL REGISTERED
POPULATION AND INTER-REGION MIGRANTS (1957 CENSUS
DATA - SOUTHERN REGION) (SOURCE: COMPUTED FROM
TABLE NO. 10, TABLE TYPE A, APPENDIX NO. II, p. X-20)

Subregion of Destination	Subregion's Share of Regional Total Reg. Population	Subregion's Share of Inter-Region Migrants
Qadisyā/Muthnā	28.8%	11.0%
Mysan	18.2%	5.3%
Thiqar	25.4%	7.6%
Basrah	27.5%	76.2%
	100.0%	100.0%

TABLE NO. (22)
TABLE TYPE (D)

SUBREGION'S SHARE OF TOTAL REGIONAL REGISTERED
POPULATION AND INTER-REGION MIGRANTS (1965 CENSUS
DATA - NORTHERN REGION) (SOURCE: COMPUTED FROM
TABLE NO. 19, TABLE TYPE A, APPENDIX NO. II, p. X-21)

Subregion of Destination	Subregion's Share of Regional Total Reg. Population	Subregion's Share of Inter-Region Migrants
Ninevah/Dhok	41.8%	7.0%
Sulimania	18.8%	28.9%
Arbil	16.9%	12.5%
Kirkuk	22.4%	51.6%
	100.0%	100.0%

TABLE NO. (23)
TABLE TYPE (D)

SUBREGION'S SHARE OF TOTAL REGIONAL REGISTERED
POPULATION AND INTER-REGION MIGRANTS (1965 CENSUS
DATA - CENTRAL REGION) (SOURCE: COMPUTED FROM
TABLE NO. 19, TABLE TYPE A, APPENDIX NO. II, p. X-21)

Subregion of Destination	Subregion's Share of Regional Total Reg. Population	Subregion's Share of Inter-Region Migrants
Diala	21.7%	21.4%
Anbar	16.8%	21.5%
Wasit	18.3%	20.2%
Babylon	24.6%	22.3%
Kerbela	18.6%	14.5%
	100.0%	100.0%

TABLE NO. (24)
TABLE TYPE (D)

SUBREGION'S SHARE OF TOTAL REGIONAL REGISTERED
POPULATION AND INTER-REGION MIGRANTS (1965 CENSUS
DATA - SOUTHERN REGION) (SOURCE: COMPUTED FROM
TABLE NO. 19, TABLE BYPE A, APPENDIX NO. II, p. X-21)

Subregion of Destination	Subregion's Share of Regional Total Reg. Population	Subregion's Share of Inter-Region Migrants
Qadisya/Muthna	26.5%	9.9%
Mysan	16.8%	8.4%
Thiqar	24.3%	19.2%
Basrah	32.4%	62.5%
	100.0%	100.0%

TABLE NO. (31)
TABLE TYPE (D)

SUBREGION'S SHARE OF TOTAL REGIONAL REGISTERED
POPULATION AND INTER-REGION MIGRANTS (1975 DATA -
NORTHERN REGION) SOURCE: COMPUTED FROM TABLE NO.
28, TABLE TYPE A, APPENDIX NO. II, p. X-22)

Subregion of Destination	Subregion's Share of Regional Total Reg. Population	Subregion's Share of Inter-Region Migrants
Ninevah/Dhok	39.6%	14.3%
Sulimania	20.4%	18.2%
Arbil	18.0%	47.6%
Kirkuk	22.0%	19.8%
	100.0%	100.0%

TABLE NO. (32)
TABLE TYPE (D)

SUBREGION'S SHARE OF TOTAL REGIONAL REGISTERED
POPULATION AND INTER-REGION MIGRANTS (1975 DATA -
CENTRAL REGION) (SOURCE: COMPUTED FROM TABLE NO.
28, TABLE TYPE A, APPENDIX NO. II, p. X-22)

Subregion of Destination	Subregion's Share of Regional Total Reg. Population	Subregion's Share of Inter-Region Migrants
Diala	20.2%	24.4%
Anbar	15.8%	4.8%
Wasit	15.7%	9.8%
Babylon	24.2%	42.5%
Kerbela	24.0%	18.5%
	100.0%	100.0%

TABLE NO. (33)
TABLE TYPE (D)

SUBREGION'S SHARE OF TOTAL REGIONAL REGISTERED
POPULATION AND INTER-REGION MIGRANTS (1975 DATA -
SOUTHERN REGION) (SOURCE: COMPUTED FROM TABLE NO.
28, TABLE TYPE A, APPENDIX NO. II, p. X-22)

Subregion of Destination	Subregion's Share of Regional Total Reg. Population	Subregion's Share of Inter-Region Migrants
Qadisya/Muthna	23.4%	11.1%
Mysan	14.9%	3.2%
Thiqar	22.7%	2.3%
Basrah	39.0%	83.3%
	100.0%	100.0%

TABLE NO. (7)
TABLE TYPE (E)

SUBREGIONS INMIGRATION CHARACTERISTICS (TOTALS, PER 000
REG. POP.) AND % OF NATIONAL TOTAL INMIGRATION - 1947
CENSUS DATA (SOURCE: COMPUTED FROM TABLE NO. 1, TABLE
TYPE A, APPENDIX NO. II, p.X-19)

Subregion	Registered Population (000)	Inmigrants Total to Subregion	Inmigrants per 000 Population	% Inmig.of National Total	% Reg's Population of Nation
Ninevah/Dhok	(584)	11,042	(19)	2.8%	12.4%
Sulimania	(226)	5,680	(25)	1.4%	4.8%
Arbil	(239)	7,002	(29)	1.8%	5.1%
Kirkuk	(283)	21,427	(76)	5.4%	6.0%
Diala	(271)	21,841	(80)	5.5%	5.8%
Anbar	(184)	12,336	(67)	3.1%	3.9%
Baghdad	(779)	164,461	(211)	41.2%	16.6%
Wasit	(223)	27,854	(125)	7.0%	4.8%
Babylon	(261)	14,809	(57)	3.7%	5.6%
Kerbela	(252)	20,705	(82)	5.2%	5.4%
Qadisya/Muthna	(376)	16,963	(45)	4.3%	8.0%
Mysan	(306)	10,531	(34)	2.6%	6.5%
Thiqar	(371)	8,652	(23)	2.2%	7.9%
Basrah	(352)	55,543	(158)	13.9%	7.5%
TOTAL	(4709)	398,846	(85)	100.0%	100.0%

TABLE NO. (16)
TABLE TYPE (E)

SUBREGIONS IMMIGRATION CHARACTERISTICS (TOTALS, PER 000
REG. POP. AND % OF TOTAL NATIONAL IMMIGRATION) - 1957
CENSUS DATA (SOURCE: COMPUTED FROM TABLE NO. 10, TABLE
TYPE A, APPENDIX NO. II, p. X-20)

Subregion	Registered Population (000)	Immigrants Total to Subregion	Immigrants per 000 Population	% Inmig.of National Total	% Reg's Population of Nation
Ninevah/Dhok	(747)	11,911	(16)	1.9%	12.1%
Sulimania	(302)	12,842	(43)	2.0%	4.9%
Arbil	(272)	10,458	(39)	1.6%	4.4%
Kirkuk	(385)	31,711	(82)	5.0%	6.2%
Diala	(329)	15,132	(46)	2.4%	5.3%
Anbar	(248)	15,651	(63)	2.5%	4.0%
Baghdad	(1269)	335,464	(264)	52.8%	20.5%
Wasit	(294)	34,624	(118)	5.4%	4.8%
Babylon	(353)	17,684	(50)	2.8%	5.7%
Kerbela	(204)	22,886	(112)	3.6%	3.3%
Qadisya/Muthna	(519)	28,931	(56)	4.6%	8.4%
Mysan	(328)	8,978	(27)	1.4%	5.3%
Thiqar	(458)	9,555	(21)	1.5%	7.4%
Basrah	(494)	79,782	(161)	12.6%	8.0%
TOTAL	(6204)	635,609	(102)	100.0%	100.0%

TABLE NO. (25)
TABLE TYPE (E)

SUBREGIONS INMIGRATION CHARACTERISTICS (TOTALS, PER 000
REG. POP. AND % OF TOTAL NATIONAL INMIGRATION) - 1965
CENSUS DATA (SOURCE: COMPUTED FROM TABLE NO, 19, TABLE
TYPE A, APPENDIX NO. II, p. X-21)

Subregion	Registered Population (000)	Inmigrants Total to Subregion	Inmigrants per 000 Population	% Inmig.of National Total	% Reg's Population of Nation
Ninevah/Dhok	(882)	20,943	(24)	2.2%	11.2%
Sulimania	(396)	44,567	(113)	4.8%	5.0%
Arbil	(355)	35,757	(101)	3.8%	4.5%
Kirkuk	(472)	70,966	(150)	7.6%	6.0%
Diala	(396)	22,581	(57)	2.4%	5.0%
Anbar	(307)	17,866	(58)	1.9%	3.9%
Baghdad	(1959)	545,266	(278)	58.6%	24.7%
Wasit	(334)	25,529	(77)	2.7%	4.2%
Babylon	(448)	19,371	(44)	2.1%	5.7%
Kerbela	(339)	10,662	(31)	1.1%	4.3%
Qadisya/Muthna	(543)	20,007	(37)	2.1%	6.9%
Mysan	(345)	10,299	(30)	1.1%	4.4%
Thiqar	(498)	19,449	(39)	2.1%	6.3%
Basrah	(663)	67,434	(102)	7.2%	8.4%
TOTAL	(7937)	931,197	(117)	100.0%	100.0%

TABLE NO. (34)
TABLE TYPE (E)

SUBREGIONS INMIGRATION CHARACTERISTICS (TOTALS, PER 000
REG. POP. AND % OF TOTAL NATIONAL INMIGRATION) - 1975
DATA (SOURCE: COMPUTED FROM TABLE NO. 28, TABLE TYPE A,
APPENDIX NO. II, p. X-22)

Subregion	Registered Population (000)	Inmigrants Total to Subregion	Inmigrants per 000 Population	% Inmig. of National Total	% Reg's Population of Nation
Ninevah/Dhok	(1077)	10,968	(10)	1.0%	9.7%
Sulimania	(555)	7,193	(13)	0.5%	5.0%
Arbil	(491)	18,715	(38)	1.4%	4.5%
Kirkuk	(600)	12,581	(21)	1.0%	5.4%
Diala	(496)	30,700	(62)	2.3%	4.5%
Anbar	(387)	3,936	(10)	0.3%	3.5%
Baghdad	(3523)	910,174	(258)	69.4%	31.7%
Wasit	(386)	23,452	(61)	1.8%	3.5%
Babylon	(594)	102,471	(173)	7.8%	5.4%
Kerbela	(588)	101,437	(173)	7.7%	5.3%
Qadisya/Muthna	(568)	19,343	(34)	1.5%	5.1%
Mysan	(362)	5,010	(14)	0.4%	3.3%
Thiqar	(550)	2,848	(5)	0.2%	5.0%
Basrah	(947)	63,201	(67)	4.8%	8.6%
TOTAL	(11124)	1312,029	(117)	100.0%	100.0%

TABLE NO. (8)
TABLE TYPE (F)

SUBREGIONS OUTMIGRATION CHARACTERISTICS (TOTALS, PER 000
REG. POP. AND % OF NATIONAL TOTAL OUTMIGRATION) - 1947
CENSUS DATA (SOURCE: COMPUTED FROM TABLE NO. 1, TABLE
TYPE A, APPENDIX NO. II, p.X-19)

Subregion	Registered Population (000)	Outmigrants Total to Subregion	Outmigrants per 000 Population	% Outmig. of National Total	% Reg's Population of Nation
Ninevah/Dhok	(584)	30,930	(53)	7.8%	12.4%
Sulimania	(226)	9,398	(42)	2.4%	4.8%
Arbil	(239)	8,684	(36)	2.2%	5.1%
Kirkuk	(283)	18,067	(64)	4.5%	6.0%
Diala	(271)	25,295	(93)	6.3%	5.8%
Anbar	(184)	16,315	(88)	4.1%	3.9%
Baghdad	(779)	48,124	(62)	12.1%	16.6%
Wasit	(223)	27,780	(124)	7.0%	4.8%
Babylon	(261)	32,650	(125)	8.2%	5.6%
Kerbela	(252)	17,750	(71)	4.5%	5.4%
Qadisya/Muthna	(376)	24,551	(65)	6.2%	8.0%
Mysan	(306)	101,868	(333)	25.5%	6.5%
Thiqar	(371)	25,384	(68)	6.4%	7.9%
Basrah	(352)	12,050	(34)	3.0%	7.5%
TOTAL	(4709)	398,846	(85)	100.0%	100.0%

TABLE NO. (17)
TABLE TYPE (F)

SUBREGIONS OUTMIGRATION CHARACTERISTICS (TOTALS, PER 000
REG. POP. AND % OF TOTAL NATIONAL OUTMIGRATION) - 1957
CENSUS DATA (SOURCE: COMPUTED FROM TABLE NO. 10, TABLE
TYPE A, APPENDIX NO. II, p. X-20)

Subregion	Registered Population (000)	Outmigrants Total to Subregion	Outmigrants per 000 Population	% Outmig. of National Total	% Reg's Population of Nation
Ninevah/Dhok	(747)	50,787	(68)	8.0%	12.1%
Sulimania	(302)	14,348	(48)	2.3%	4.9%
Arbil	(272)	18,632	(69)	2.9%	4.4%
Kirkuk	(385)	23,193	(60)	3.6%	6.2%
Diala	(329)	43,691	(133)	6.9%	5.3%
Anbar	(248)	28,411	(115)	4.5%	4.0%
Baghdad	(1269)	41,651	(33)	6.6%	20.5%
Wasit	(294)	48,684	(165)	7.7%	4.8%
Babylon	(353)	50,231	(142)	7.9%	5.7%
Kerbela	(204)	27,312	(134)	4.3%	3.3%
Qadisya/Muthna	(519)	44,243	(85)	7.0%	8.4%
Mysan	(328)	181,157	(552)	28.5%	5.3%
Thiqar	(458)	47,921	(105)	7.5%	7.4%
Basrah	(494)	15,348	(31)	2.4%	8.0%
TOTAL	(6204)	635,609	(103)	100.0%	100.0%

TABLE NO. (26)
TABLE TYPE (F)

SUBREGIONS OUTMIGRATION CHARACTERISTICS (TOTALS, PER 000
REG. POP. AND % OF TOTAL NATIONAL OUTMIGRATION) - 1965
CENSUS DATA (SOURCE: COMPUTED FROM TABLE NO. 19, TABLE
TYPE A, APPENDIX NO. II, p. X-21)

Subregion	Registered Population (000)	Outmigrants Total to Subregion	Outmigrants per 000 Population	% Outmig. of National Total	% Reg's Population of Nation
Ninevah/Dhok	(882)	103,667	(118)	11.1%	11.2%
Sulimania	(396)	53,575	(135)	5.8%	5.0%
Arbil	(355)	37,429	(105)	4.0%	4.5%
Kirkuk	(472)	35,832	(76)	3.8%	6.0%
Diala	(396)	66,675	(169)	7.2%	5.0%
Anbar	(307)	89,078	(291)	9.6%	3.9%
Baghdad	(1959)	51,091	(26)	5.5%	24.7%
Wasit	(334)	68,953	(207)	7.4%	4.2%
Babylon	(448)	49,956	(112)	5.3%	5.7%
Kerbela	(339)	39,944	(118)	4.3%	4.3%
Qadisya/Muthna	(543)	67,621	(125)	7.3%	6.9%
Mysan	(345)	161,848	(469)	17.4%	4.4%
Thiqar	(498)	77,757	(156)	8.3%	6.3%
Basrah	(663)	27,791	(42)	3.0%	8.4%
TOTAL	(7937)	931,197	(117)	100.0%	100.0%

TABLE NO. (35)
TABLE TYPE (F)

SUBREGIONS OUTMIGRATION CHARACTERISTICS (TOTALS, PER 000
REG. POP. AND % OF TOTAL NATIONAL OUTMIGRATION) - 1975
DATA (SOURCE: COMPUTED FROM TABLE NO. 25, TABLE TYPE A,
APPENDIX NO. II, p. X-22)

Subregion	Registered Population (000)	Outmigrants Total to Subregion	Outmigrants per 000 Population	% Outmig. of National Total	% Reg's Population of Nation
Ninevah/Dhok	(1077)	80,088	(74)	6.1%	9.7%
Sulimania	(555)	18,693	(34)	1.4%	5.0%
Arbil	(491)	14,390	(29)	1.1%	4.5%
Kirkuk	(600)	59,455	(99)	4.5%	5.4%
Diala	(496)	134,584	(271)	10.3%	4.5%
Anbar	(387)	89,527	(231)	6.8%	3.5%
Baghdad	(3523)	68,633	(20)	5.2%	31.7%
Wasit	(386)	84,369	(219)	6.4%	3.5%
Babylon	(594)	66,934	(113)	5.1%	5.4%
Kerbela	(588)	83,820	(143)	6.4%	5.3%
Qadisya/Muthna	(568)	205,010	(361)	15.6%	5.1%
Mysan	(362)	249,603	(690)	19.0%	3.3%
Thiqar	(550)	116,466	(212)	8.9%	5.0%
Basrah	(947)	40,457	(43)	3.1%	8.6%
TOTAL	(11124)	1312,029	(118)	100.0%	100.0%

TABLE NO. (9)
TABLE TYPE (G)

REGIONS AND SUBREGIONS NET MIGRATION FIGURES (PER 000
REG. POP.) - 1947 CENSUS DATA (SOURCE: COMPUTED FROM
TABLE NO. 1, TABLE TYPE A/TABLE NO. 7, TABLE TYPE E/
AND TABLE NO. 8, TABLE TYPE F, APPENDIX NO. II, PP.
X-19, X-43 AND X-47)

Region/Subregion	Registered Population in 000	Immigration		Outmigration		Net per 000 Reg.Pop.
		Total	per 000 Reg.Pop.	Total	per 000 Reg.Pop.	
<u>Northern Region</u>	1333.1	45,151	34	67,079	50	-16
Ninevah/Dhok	548.5	11,042	19	30,930	53	-34
Sulimania	226.2	5,680	25	9,398	42	-16
Arbil	239.0	7,002	29	8,684	36	-7
Kirkuk	283.4	21,427	76	18,067	64	+12
<u>Central Region</u>	1970.6	262,006	133	167,914	85	+48
Diala	271.5	21,841	80	25,295	93	-13
Anbar	184.5	12,336	67	16,315	88	-21
Baghdad	779.1	164,461	211	48,124	62	+149
Wasit	223.3	27,854	125	27,780	124	+1
Babylon	260.6	14,809	57	32,650	125	-68
Kerbela	251.6	20,705	82	17,750	71	+11
<u>Southern Region</u>	1405.2	91,689	65	163,853	117	-52
Qadisya/Muthna	376.0	16,963	45	24,551	65	-20
Mysan	306.0	10,531	34	101,868	333	-299
Thiqar	370.9	8,652	23	25,384	68	-45
Basrah	352.3	55,543	158	12,050	34	+124
<u>TOTAL IRAQ</u>	4709.0	398,846	85	398,846	85	0

TABLE NO. (18)
TABLE TYPE (G)

REGIONS AND SUBREGIONS NET MIGRATION FIGURES (PER 000 REG. POP.) - 1957 CENSUS DATA (SOURCE: COMPUTED FROM TABLE NO. 10, TABLE TYPE A/TABLE NO. 16, TABLE TYPE E/ AND TABLE NO. 17, TABLE TYPE F - APPENDIX NO. II, pp. X-20, X-44 AND X-48)

Region/Subregion	Registered Population in 000	Immigration		Outmigration		Net per 000 Reg.Pop.
		Total	per 000 Reg.Pop.	Total	per 000 Reg.Pop.	
<u>Northern Region</u>	1706.4	66,922	39	106,960	63	-24
Ninevah/Dhok	747.4	11,911	16	50,787	68	-52
Sulimania	302.2	12,842	43	14,348	48	-5
Arbil	271.8	10,458	39	18,632	69	-30
Kirkuk	385.0	31,711	82	23,193	60	+22
<u>Central Region</u>	2698.5	441,441	164	239,980	89	+75
Diala	328.9	15,132	46	43,691	133	-87
Anbar	248.1	15,651	63	28,411	115	-52
Baghdad	1269.5	335,464	264	41,651	33	+231
Wasit	294.5	34,624	118	48,684	165	-47
Babylon	353.6	17,684	50	50,231	142	-92
Kerbela	203.9	22,886	112	27,312	134	-22
<u>Southern Region</u>	1799.4	127,246	71	288,669	160	-89
Qadisya/Muthna	519.1	28,931	56	44,243	85	-29
Mysan	328.3	8,978	27	181,157	552	-525
Thiqar	457.7	9,555	21	47,921	105	-84
Basrah	494.3	79,782	161	15,348	31	+130
<u>TOTAL IRAQ</u>	6204.3	635,609	102	635,609	102	0

TABLE NO. (27)
TABLE TYPE (G)

REGIONS AND SUBREGIONS NET MIGRATION FIGURES (PER 000 REG. POP.) - 1965 CENSUS DATA (SOURCE: COMPUTED FROM TABLE NO. 19, TABLE TYPE A/TABLE NO. 25, TABLE TYPE E/ AND TABLE NO. 26, TABLE TYPE F, APPENDIX NO. II, pp. X-21, X-45 AND X-49)

	Registered Population in 000	Immigration		Outmigration		Net per 000 Reg. Pop.
		Total	per 000 Reg. Pop.	Total	per 000 Reg. Pop.	
<u>Northern Region</u>	2104.7	172,233	82	230,503	110	-28
Ninevah/Dhok	881.6	20,943	24	103,667	118	-94
Sulimania	396.0	44,567	113	53,575	135	-22
Arbil	355.4	35,757	101	37,429	105	-4
Kirkuk	471.7	70,966	150	35,832	76	+74
<u>Central Region</u>	3782.6	641,775	170	365,697	97	+73
Diala	395.6	22,581	57	66,675	169	-112
Anbar	306.6	17,866	58	89,078	291	-232
Baghdad	1959.5	545,266	278	51,091	26	+252
Wasit	333.9	25,529	77	68,953	207	-130
Babylon	447.8	19,871	44	49,956	112	-68
Kerbela	339.2	10,662	31	39,944	118	-87
<u>Southern Region</u>	2049.5	117,189	57	334,997	164	-107
Qadisya/Muthna	542.9	20,007	37	67,621	125	-88
Mysan	344.9	10,299	30	161,848	469	-439
Thiqar	498.4	19,449	39	77,737	156	-117
Basrah	663.3	67,434	102	27,791	42	+60
<u>TOTAL IRAQ</u>	7937.0	931,197	117	931,197	117	0

TABLE NO. (36)
TABLE TYPE (G)

REGIONS AND SUBREGIONS NET MIGRATION FIGURES (PER 000
REG. POP.) - 1975 DATA (SOURCE: COMPUTED FROM TABLE
NO. 28, TABLE TYPE A/TABLE NO. 34, TABLE TYPE E/AND
TABLE NO. 35, TABLE TYPE F, APPENDIX NO. II, pp. X-22,
X-46 AND X-50)

	Registered Population in 000	Immigration		Outmigration		Net per 000 Reg.Pop.
		Total	per 000 Reg.Pop.	Total	per 000 Reg.Pop.	
<u>Northern Region</u>	2723	49,457	18	172,626	63	-45
Ninevah/Dhok	1077	10,968	10	80,088	74	-64
Sulimania	555	7,193	13	18,693	34	-21
Arbil	491	18,715	38	14,390	29	+9
Kirkuk	600	12,581	21	59,455	99	-78
<u>Central Region</u>	5974	1172,170	196	527,867	88	+108
Diala	496	30,700	62	134,584	271	-209
Anbar	387	3,936	10	89,527	231	-221
Baghdad	3523	910,174	258	68,633	20	+238
Wasit	386	23,452	61	84,369	219	-158
Babylon	594	102,471	173	66,934	113	+60
Kerbela	588	101,437	173	83,820	143	+30
<u>Southern Region</u>	2427	90,402	37	611,536	252	-215
Qadisya/Muthna	568	19,343	34	205,010	361	-327
Mysan	362	5,010	14	249,603	690	-676
Thiqr	550	2,848	5	116,466	212	-217
Basrah	947	63,201	67	40,457	43	+24
<u>TOTAL IRAQ</u>	11124	1312,029	118	1312,029	118	0

*** (B) SUBADMINISTRATIVE UNITS MIGRATION PATTERN TABLES:**

		<u>Page</u>
<u>NORTHERN REGION</u>		
Ninevah/Dhok	Table No. 37	X-56
Sulimania	Table No. 38	X-57
Arbil	Table No. 39	X-58
Kirkuk	Table No. 40	X-59
<u>CENTRAL REGION</u>		
Diala	Table No. 42	X-60
Anbar	Table No. 43	X-61
Wasit	Table No. 44	X-62
Babylon	Table No. 45	X-63
Kerbela	Table No. 46	X-64
<u>SOUTHERN REGION</u>		
Qadisya/Muthna	Table No. 48	X-65
Mysan	Table No. 49	X-66
Thiqar	Table No. 50	X-67
Basrah	Table No. 51	X-68
<u>SUMMARY TABLE NO. 53:</u>		X-69

*All data in this section dealing with the Subadministrative Units Migration Pattern are computed by the author from the unpublished matrix of Birth Place/Registration Place on the Qadha level. This matrix was the base for the report published by the Ministry of Municipalities - Directorate General of Planning and Engineering - Regional Planning Department (see p. 150 in text).

TABLE NO. (37) SUBADMINISTRATIVE UNITS OUTMIGRANTS DESTINATION (1965 CENSUS DATA)

REGION: NORTHERN

SUBREGION: MINEVAH/DHOK

(2) No. of Unit on Fig. No. 6	(1) Subadministrative Unit Total Registered Population	Number and Destination of Subadministrative Units Outmigrants (Also as Percentage of Total Units Outmigrants)					Total Number of Outmigrants	% of all Subregion's Units Outmigrants
		To Centre of Subregion	To other Subadministrative Units in Subregion	To Subadministrative Units within Region but outside Subregion	To Subadministrative Units in other Regions	To the Capital Baghdad Subregion		
(1)	Mosul (Subregion's Centre) 388,562	-	15,202 (10.9%)	10,300 (13.5%)	6,542 (9.5%)	44,508 (59.1%)	76,702	42.1%
(2)	Shura 85,427	5,821 (46.0%)	2,200 (18.0%)	1,179 (25.1%)	649 (5.1%)	756 (6.0%)	12,683	7.0%
(3)	Sinjar* 80,289	1,229 (21.0%)	2,043 (52.4%)	662 (11.8%)	545 (9.7%)	240 (4.3%)	5,619	3.1%
(4)	Sheikhan 38,842	7,272 (51.0%)	1,353 (9.5%)	1,405 (9.0%)	365 (2.6%)	3,871 (27.1%)	14,266	7.8%
(5)	Telefar 105,249	2,607 (37.8%)	2,515 (36.4%)	732 (10.6%)	654 (9.5%)	394 (5.7%)	6,902	3.8%
(6)	Mather 44,399	729 (9.6%)	989 (13.1%)	4,894 (44.6%)	801 (10.6%)	159 (2.1%)	7,562	4.2%
(7)	Dhok* 37,158	4,703 (45.0%)	1,562 (15.0%)	1,019 (9.7%)	446 (4.3%)	2,715 (26.0%)	10,444	5.7%
(8)	Amadia* 35,730	10,114 (41.0%)	4,352 (17.6%)	2,630 (10.7%)	849 (3.4%)	6,718 (27.3%)	24,692	13.6%
(9)	Zhako* 33,049	6,215 (49.3%)	1,007 (15.1%)	362 (2.0%)	414 (3.4%)	3,700 (29.3%)	12,618	6.0%
(10)	Akra 39,807	5,047 (56.0%)	608 (6.0%)	2,400 (23.2%)	190 (3.0%)	1,127 (10.0%)	10,618	5.9%
	TOTAL 855,601	44,037 (24.5%)	33,502 (19.6%)	27,700 (15.2%)	11,004 (6.4%)	84,207 (15.3%)	152,100	100.0%
	% of Total							

(*Estimates) See p. 151 in text (footnote)

(1) As the population of subadministrative units are taken from census data tables, they include those who did not report their place of birth or are foreign born. Thus the total subregional population is slightly higher than those used for the migration pattern analysis (regional and subregional patterns) see p. 149 in text.

(2) Figure No. 6, p. 152 in text.

REGION: NORTHERN

SUBREGION: SULIMANIA

No. of Unit on Fig. No.	Name of Sub-administrative Unit	Subadministrative Unit Total Registered Population	Number and Destination of Subadministrative Units Outmigrants (Also as Percentage of Total Units Outmigrants)					Total Number of Outmigrants	% of all Subregion's Units Outmigrants
			To Centre of Subregion	To other Subadministrative Units in Region	To Subadministrative Units within Region but outside Subregion	To Subadministrative Units in other Regions	To the Capital Baghdad Subregion		
(11)	Sulimania* (Subregion's Centre)	160,047	-	9,174 (16.3%)	35,911 (69.0%)	2,931 (5.2%)	5,338 (9.5%)	50,354	65.1%
(12)	Halabcha	76,086	3,923 (41.2%)	2,122 (22.3%)	1,405 (14.5%)	910 (9.0%)	1,158 (12.2%)	9,516	11.0%
(13)	Shahrabaz	48,303	8,095 (84.1%)	575 (6.0%)	362 (3.8%)	335 (3.5%)	204 (2.7%)	9,031	11.1%
(14)	Beshdar	43,003	3,002 (73.6%)	640 (15.4%)	240 (5.8%)	80 (1.9%)	139 (3.3%)	4,161	4.8%
(15)	Rania	46,937	3,447 (77.1%)	58 (1.3%)	738 (16.5%)	129 (2.9%)	102 (2.3%)	4,474	5.2%
(16)	Benjuin	24,732	1,572 (64.8%)	316 (13.0%)	256 (10.6%)	159 (6.6%)	122 (5.0%)	2,425	2.8%
	TOTAL	399,708	20,099 (23.2%)	12,885 (14.9%)	41,912 (48.4%)	4,544 (5.2%)	7,123 (8.2%)	80,563	100.0%
	% of Total								

(Estimates) See p. 151 in text (footnote)

TABLE NO. (39) SUBADMINISTRATIVE UNITS OUTMIGRANTS DESTINATION (1965 CENSUS DATA)

REGION: NORTHERN

SUBREGION: ARBIL

No. of Unit on Fig. No. 6	Name of Sub-administrative Unit	Subadministrative Unit Total Registered Population	Number and Destination of Subadministrative Units Outmigrants (Also as Percentage of Total Units Outmigrants)						% of all Subregion's Units Outmigrants
			To Centre of Subregion	To other Subadministrative Units in Region	To Subadministrative Region but outside Subregion	To Subadministrative Units in other Regions	To the Capital Baghdad Subregion	Total Number of Outmigrants	
(17)	Arbil (Subregion's Centre)	137,761	-	4,488 (22.2%)	10,477 (51.9%)	2,158 (10.7%)	3,053 (15.1%)	20,176	28.3%
(18)	Makhmoor	54,652	10,614 (47.0%)	2,398 (10.6%)	7,402 (32.8%)	769 (3.4%)	1,379 (6.1%)	22,562	31.7%
(19)	Rawanduz *	50,078	4,043 (58.1%)	766 (11.0%)	1,108 (15.9%)	415 (6.0%)	630 (9.0%)	6,962	9.8%
(20)	Zebar	20,188	258 (8.8%)	676 (22.9%)	1,309 (44.4%)	657 (22.3%)	48 (1.6%)	2,948	4.1%
(21)	Qoisanjak *	45,221	2,334 (37.8%)	214 (3.5%)	2,084 (33.8%)	670 (10.9%)	867 (14.1%)	6,169	8.7%
(22)	Shaklawa	48,393	7,277 (58.9%)	681 (5.5%)	1,574 (12.7%)	1,371 (11.1%)	1,458 (11.8%)	12,361	17.4%
	TOTAL	356,293	24,526 (34.5%)	9,223 (13.0%)	23,954 (33.7%)	6,040 (8.5%)	7,435 (10.4%)	71,178	100.0%
	% of Total								

(* Estimates) See p. 151 in text (footnote)

TABLE NO. (40) SUBADMINISTRATIVE UNITS OUTMIGRANTS DESTINATION (1965 CENSUS DATA)

REGION: NORTHERN

SUBREGION: KIRKUK

No. of Unit on Fig. No.6	Name of Sub-administrative Unit	Subadministrative Unit Total Registered Population	Number and Destination of Subadministrative Units Outmigrants (Also as Percentage of Total Units Outmigrants)						% of all Subregion's Units Outmigrants
			To Centre of Subregion	To other Subadministrative Units in Reg	To Subadministrative Region but outside Subregion	To Subadministrative Units in other Regions	To the Capital Baghdad Subregion	Total Number of Outmigrants	
(23)	Kirkuk (Subregion's Centre)	266,413	-	1,293 (6.0%)	5,286 (24.5%)	3,952 (18.3%)	11,016 (51.1%)	21,547	27.0%
(24)	Kifri	58,434	3,854 (31.5%)	314 (2.6%)	866 (7.1%)	5,444 (44.5%)	1,760 (14.4%)	12,238	15.4%
(25)	Chamchamal	37,017	4,367 (55.0%)	935 (11.8%)	1,650 (20.8%)	699 (8.8%)	287 (3.6%)	7,938	10.0%
(26)	Tuz	73,130	9,543 (50.3%)	6,479 (34.1%)	796 (4.2%)	1,216 (6.4%)	945 (5.0%)	18,979	23.8%
(27)	Haweja	38,632	16,011 (84.4%)	1,050 (5.5%)	965 (5.1%)	562 (3.0%)	388 (2.0%)	18,976	23.8%
	TOTAL	473,626	33,775 (42.4%)	10,071 (12.6%)	9,563 (12.0%)	11,873 (14.9%)	14,396 (18.1%)	79,678	100.0%

TABLE NO. (42) SUBADMINISTRATIVE UNITS OUTMIGRANTS DESTINATION (1965 CENSUS DATA)

REGION: CENTRAL

SUBREGION: DIALA

No. of Unit on Fig. No. 6	Name of Sub-administrative Unit	Subadministrative Unit Total Registered Population	Number and Destination of Subadministrative Units Outmigrants (Also as Percentage of Total Units' Outmigrants)						Total Number of Outmigrants	% of all Subregion's Units Outmigrants
			To Centre of Subregion	To other Subadministrative Units in Region	To Subadministrative Region but outside Subregion	To Subadministrative Units in other Regions	To Subadministrative Units in Capital Baghdad Subregion	Total Number of Outmigrants		
(28)	Baquba (Subregion's Centre)	98,928	-	2,225 (7.6%)	757 (2.6%)	2,694 (9.2%)	23,531 (80.6%)	29,207	33.7%	
(29)	Khalis	94,588	4,662 (27.5%)	1,878 (11.1%)	483 (2.9%)	1,303 (7.7%)	8,612 (50.8%)	16,938	19.6%	
(30)	Khanaqin	86,070	829 (6.1%)	912 (6.7%)	1,222 (9.0%)	4,672 (34.3%)	5,988 (44.0%)	13,623	15.7%	
(31)	Mendely	55,848	3,292 (5.6%)	2,705 (15.2%)	1,463 (8.2%)	1,618 (9.1%)	8,747 (49.1%)	17,825	20.6%	
(32)	Moqdadia	61,934	2,362 (26.2%)	1,083 (12.0%)	342 (3.8%)	1,469 (16.3%)	3,774 (41.8%)	9,030	10.4%	
	TOTAL	397,363	11,145 (12.9%)	8,803 (10.2%)	4,267 (4.9%)	11,756 (13.6%)	50,652 (58.5%)	86,623	100.0%	

TABLE NO. (43) SUBADMINISTRATIVE UNITS OUTMIGRANTS DESTINATION (1965 CENSUS DATA)

REGION: CENTRAL

SUBREGION: ANBAR

No. of Unit on Fig. Sp.6	Name of Sub-administrative Unit	Subadministrative Unit Total Registered Population	Number and Destination of Subadministrative Units Outmigrants (Also as Percentage of Total Units' Outmigrants)						Total Number of Outmigrants	% of all Subregion's Units Outmigrants
			To Centre of Subregion	To other Subadministrative Units in Reg	To Subadministrative Region but outside Subregion	To Subadministrative Units in other Regions	To the Capital Baghdad Subregion	Total Number of Outmigrants		
(33)	Ramadi (Subregion's Centre)	137,560	-	6,807 (29.5%)	370 (1.6%)	2,949 (12.8%)	12,939 (56.1%)	23,065	22.7%	
(34)	Faloja	92,494	1,107 (1.7%)	1,368 (2.1%)	249 (0.4%)	2,330 (3.5%)	61,376 (92.4%)	66,430	65.5%	
(35)	Anna	35,116	1,022 (11.5%)	1,406 (15.8%)	711 (8.0%)	322 (3.6%)	5,464 (61.2%)	8,925	8.8%	
(36)	Haditha	23,860	177 (14.6%)	284 (23.4%)	43 (3.5%)	261 (21.5%)	448 (36.9%)	1,213	1.2%	
(37)	Rutba	17,982	104 (5.8%)	75 (4.2%)	28 (1.6%)	424 (23.6%)	1,164 (64.8%)	1,795	1.8%	
	TOTAL	307,012	2,410 (2.4%)	9,940 (9.8%)	1,401 (1.4%)	6,286 (6.2%)	81,391 (80.2%)	101,428	100.0%	

TABLE NO. (44) SUBADMINISTRATIVE UNITS OUTMIGRANTS DESTINATION (1965 CENSUS DATA)

REGION: CENTRAL

SUBREGION: WASIT

No. of Unit on Fig. No.6	Name of Sub-administrative Unit	Subadministrative Unit Total Registered Population	Number and Destination of Subadministrative Units Outmigrants (Also as Percentage of Total Unit's Outmigrants)						% of all Subregion's Units Outmigrants
			To Centre of Subregion	To other Subadministrative Units in Reg	To Subadministrative Units within Region but outside Subregion	To Subadministrative Units in other Regions	To the Capital Baghdad Subregion	Total Number of Outmigrants	
(38)	Kut (Subregion's Centre)	90,873	-	2,045 (6.2%)	1,068 (3.2%)	2,245 (6.8%)	27,716 (83.8%)	33,074	42.4%
(39)	Haai	88,651	1,806 (13.0%)	848 (6.1%)	361 (2.6%)	1,618 (11.6%)	9,289 (66.7%)	13,922	17.9%
(40)	Badra	15,146	840 (13.1%)	873 (13.6%)	200 (3.1%)	513 (8.0%)	3,985 (62.2%)	6,411	8.2%
(41)	Suwaira	87,038	166 (1.6%)	319 (3.1%)	591 (5.8%)	457 (4.5%)	8,655 (85.0%)	10,188	13.1%
(42)	Namania	52,623	621 (4.3%)	1,461 (10.2%)	484 (3.4%)	662 (4.6%)	11,109 (77.5%)	14,337	18.4%
	TOTAL % of Total	334,331	3,433 (4.4%)	5,546 (7.1%)	2,704 (3.5%)	5,495 (7.1%)	60,754 (78.0%)	77,932	100.0%

TABLE NO. (45) SUBADMINISTRATIVE UNITS OUTMIGRANTS DESTINATION (1965 CENSUS DATA)

REGION: CENTRAL

SUBREGION: BABYLON

No. of Unit on Fig. No. 6	Name of Sub-administrative Unit	Subadministrative Unit Total Registered Population	Number and Destination of Subadministrative Units Outmigrants (Also as Percentage of Total Unit's Outmigrants)						Total Number of Outmigrants	% of all Subregion's Units Outmigrants
			To Centre of Subregion	To other Subadministrative Units in Reg	To Subadministrative Units within Region but outside Subregion	To Subadministrative Units in other Regions	To the Capital Baghdad Subregion	Total Number of Outmigrants		
(43)	Hilla (Subregion's Centre)	169,353	-	1,328 (6.3%)	3,373 (16.0%)	4,337 (20.6%)	12,049 (57.1%)	21,087	36.0%	
(44)	Hashimia	91,053	2,476 (20.2%)	710 (5.8%)	1,519 (12.4%)	2,522 (20.6%)	5,024 (41.0%)	12,251	20.9%	
(45)	Hindia	111,930	2,180 (15.4%)	890 (6.3%)	1,282 (9.0%)	2,402 (16.9%)	7,430 (52.4%)	14,184	24.2%	
(46)	Mussayab	75,832	828 (7.5%)	137 (1.25%)	1,060 (9.7%)	2,014 (18.3%)	6,944 (63.2%)	10,983	18.8%	
	TOTAL	448,168	5,484 (9.4%)	3,065 (5.2%)	7,234 (12.4%)	11,275 (19.3%)	31,447 (53.8%)	58,505	100.0%	
	% of Total									

No. of Unit on Fig. No.6.	Name of Sub-administrative Unit	Subadministrative Unit Total Registered Population	Number and Destination of Subadministrative Units Outmigrants (Also as Percentage of Total Units' Outmigrants)						Total Number of Outmigrants	% of all Subregion's Units Outmigrants
			To Centre of Subregion	To other Subadministrative Units in Reg	To Subadministrative Units within Region but outside Subregion	To Subadministrative Units in other Regions	To the Capital Baghdad Subregion	Total Number of Outmigrants		
(50)	Diwania (Subregion's Centre)	131,341	-	2,903 (15.1%)	1,148 (6.0%)	5,446 (28.4%)	9,692 (50.5%)	19,189	19.1%	
(51)	Afaq	70,157	7,309 (39.8%)	1,151 (6.3%)	504 (2.7%)	6,069 (33.0%)	3,351 (18.2%)	18,384	18.3%	
(52)	Abu Sukhair	83,787	1,032 (4.8%)	778 (3.6%)	9,423 (43.7%)	2,176 (10.1%)	8,139 (37.8%)	21,548	21.5%	
(53)	Shamia	114,807	5,612 (27.3%)	4,383 (21.4%)	791 (3.9%)	2,857 (13.9%)	6,877 (33.5%)	20,520	20.4%	
(54)	Samawa	139,772	5,188 (30.2%)	3,912 (22.8%)	2,409 (14.0%)	807 (4.7%)	4,850 (28.3%)	17,166	17.1%	
(55)	Salman	3,364	29 (0.8%)	488 (13.6%)	2,056 (57.1%)	189 (5.3%)	837 (23.3%)	3,599	3.6%	
	TOTAL	543,228	19,170 (19.1%)	13,615 (13.6%)	16,331 (16.3%)	17,544 (17.5%)	33,746 (33.6%)	100,406	100.0%	
	% of Total									

TABLE NO. (49) SUBADMINISTRATIVE UNITS OUTMIGRANTS DESTINATION (1965 CENSUS DATA)

REGION: SOUTHERN

SUBREGION: MYSAN

No. of Unit on Fig. No. 6	Name of Sub-administrative Unit	Subadministrative Unit Total Registered Population	Number and Destination of Subadministrative Units Outmigrants (Also as Percentage of Total Units' Outmigrants)						% of all Subregion's Units Outmigrants
			To Centre of Subregion	To other Subadministrative Units in Reg	To Subadministrative Units within Region but outside Subregion	To Subadministrative Units in other Regions	To the Capital Baghdad Subregion	Total Number of Outmigrants	
(56)	Amara (Subregion's Centre)	118,252	-	9,467 (7.3%)	6,685 (5.1%)	9,943 (7.6%)	104,228 (80.0%)	130,323	73.2%
(57)	Ali Gharbi	34,504	544 (4.3%)	825 (6.6%)	1,545 (12.3%)	2,665 (21.3%)	6,936 (55.4%)	12,515	7.0%
(58)	Qalat Salih	119,031	2,397 (9.4%)	980 (3.8%)	8,326 (32.7%)	3,314 (13.0%)	10,482 (41.1%)	25,499	14.3%
(59)	Meymona	73,680	1,538 (16.0%)	368 (3.8%)	4,509 (46.8%)	1,158 (12.0%)	2,057 (21.4%)	9,630	5.4%
	TOTAL	345,467	4,479 (2.5%)	11,640 (6.5%)	21,065 (11.8%)	17,080 (9.6%)	123,703 (69.5%)	177,967	100.0%

TABLE NO. (53)

SUMMARY OF MAIN MIGRANTS DESTINATION BY REGIONS AS
PERCENTAGES OF TOTAL OUTMIGRANTS FROM SUBADMINISTRATIVE
UNITS (1965 DATA)

Region	Reg'd. Pop.	% of Nat. Pop.	DESTINATION OF OUTMIGRANTS ⁽²⁾				
			I To . Centre of Sub- region	II To other Adm. Unit in Subreg.	III To same Region out of Subreg.	IV To other Regions	V To Baghdad
NORTHERN REGION							
Arabic Zone (Ninevah/Dhok)			24.5%	18.6%	15.2%	6.4%	35.3%
Mixed Zone (Kirkuk)			42.4%	12.6%	12.0%	14.9%	18.1%
Kurdish Subregions			28.3%	14.0%	41.8%	6.7%	9.2%
Total Northern Region	(1) 2,104,736	26.5%	29.3%	15.7%	24.6%	8.1%	22.2%
CENTRAL REGION	(1) 3,782,643	47.7%	6.9%	10.1%	5.5%	10.9%	66.6%
SOUTHERN REGION	(1) 2,049,546	25.8%	12.9%	11.2%	16.3%	14.4%	45.2%
TOTAL NATIONAL	7,936,924	100%	16.6%	12.4%	15.8%	11.2%	44.0%

Source:

(1) Table No. 21 Table Type C, Appendix No. II, p. X-29.

(2) Subregional tables (37-40, 42-46 and 48-51), Appendix No. II, pp. X-75 to X-82, X-86 to X-95 and X-99 to X-106.

*(C) THE REGIONAL AND SUBREGIONAL INTERNAL MIGRATION PATTERN
ANALYSIS FORMS:

*All numbers of tables mentioned in the Analysis Forms are those in Appendix No. II.

INTERNAL MIGRATION PATTERN ANALYSIS FORMS:

	<u>Page</u>
<u>NORTHERN REGION</u>	X-73/X-74
Ninevah/Dhok	X-75/X-76
Sulimania	X-77/X-78
Arbil	X-79/X-80
Kirkuk	X-81/X-82
<u>CENTRAL REGION</u>	X-84/X-85
Diala	X-86/X-87
Anbar	X-88/X-89
Wasit	X-90/X-91
Babylon	X-92/X-93
Kerbela	X-94/X-95
<u>SOUTHERN REGION</u>	X-97/X-98
Qadisya/Muthna	X-99/X-100
Mysan	X-101/X-102
Thiqar	X-103/X-104
Basrah	X-105/X-106

THE NORTHERN REGION:

TABLE No.	1947	1957	Census Data	TABLE No.	1957	Census Data
(9)	-16	(18)	-24	(18)	(18)	-24
(3)	28.3% (Least of the nation's regions)	(12)	27.5% (Least of the nation's regions)	(12)	(12)	27.5% (Least of the nation's regions)
(7)	11.4% (Least of the nation's regions)	(16)	10.5% (Least of the nation's regions)	(16)	(16)	10.5% (Least of the nation's regions)
(8)	16.8% (Least of the nation's regions)	(17)	16.8% (Least of the nation's regions)	(17)	(17)	16.8% (Least of the nation's regions)
(3)	(a) Capital's share of the region's outmigrants (least of the nation's regions) at 38.9%. This represents only 15.9% of the total capital migration. (b) 19.6% to the Central Region and 6.2% to the Southern Region.	(12)	(a) 43.1% although higher than 1947 figure still lowest of the nation's regions and represents only 13.8% of the capital migrants. (b) 10.4% to the Central Region, 5.8% to the Southern Region both less than 1947 figures.	(12)	(12)	(a) 43.1% although higher than 1947 figure still lowest of the nation's regions and represents only 13.8% of the capital migrants. (b) 10.4% to the Central Region, 5.8% to the Southern Region both less than 1947 figures.
(3)	35.3% of the region leaving their subregions (highest of the nation's regions)	(12)	40.6% (highest of the nation's regions)	(12)	(12)	40.6% (highest of the nation's regions)
(9)	Kirkuk (+12 net migration)	(18)	Kirkuk (+22 net migration)	(18)	(18)	Kirkuk (+22 net migration)
(9)	Ninevah/Dhok (-34 net migration)	(18)	Ninevah/Dhok (-52 net migration)	(18)	(18)	Ninevah/Dhok (-52 net migration)
(i)	Pattern in the region suggests a self-confined ethnically controlled movement.	(i)	Pattern continues to be self-confined, ethnically controlled more than the 1947 data.	(i)	(i)	Pattern continues to be self-confined, ethnically controlled more than the 1947 data.
(ii)	Kirkuk receives most of the Inter Region's migration.	(ii)	Weakening links with Central and Southern Regions solidifying the self-contained pattern	(ii)	(ii)	Weakening links with Central and Southern Regions solidifying the self-contained pattern
(iii)	Region shows least interest in the capital of the nation's regions, with Kurdish subregions (Sulimania and Arbil) least in the nation in sending migrants to the capital.	(iii)	Continued to reflect the most stable population condition of the nation's regions with less in-migration and constant outmigration share of the national total compared to 1947 data.	(iii)	(iii)	Continued to reflect the most stable population condition of the nation's regions with less in-migration and constant outmigration share of the national total compared to 1947 data.
(iv)	Existence of "proximity factor type of movement" with neighbouring Central Region.	(iv)	Kirkuk continued to be the most attractive subregion in the region with the Arabic majority subregion of Ninevah/Dhok being the most negative due to the capital effect on this subregion.	(iv)	(iv)	Kirkuk continued to be the most attractive subregion in the region with the Arabic majority subregion of Ninevah/Dhok being the most negative due to the capital effect on this subregion.
(v)	The most stable population condition of the nation's regions.					
(vi)	Ninevah/Dhok the Arabic majority subregion reflects the greatest ties with the capital of the region's subregions. Also has the					

		1965 Census Data		1975 Data	
TABLE No.		TABLE No.		TABLE No.	
(27)	Net Migration(per '000of pop)	-28		(36)	Lower net migration (negative) under the increased impact of the capital.
(21)	% Share of National pop.	26.5%		(30)	Slight drop in the region's share
(25)	% Share of National In Migration	18.4% (Almost double the 1957 figure)		(34)	Significant drop in the region's attractiveness
(26)	% Share of National Out Migration	24.8% (Least of the nation's regions, yet around 50% over the 1957 figure)		(35)	Northern Region share of the outmigration returning to the usual 1947/57 level
(21)	Destination of Out Migrants (Total of Subregions Out Migrants) % To the Capital % To other Regions	(a) 40.5% still least percentage of the nation's regions also lower than the 1957 figure; still low share in terms of capital's migrants total of 17.7% (b) 8.9% to the Central Region and 5.9% to the Southern Region; Central Region figure lower than 1957.		(30)	(a) Higher than the 1965 figure significantly suggesting a more capital influence on the self-confined pattern of the Northern Region. (b) Slightly weakening links with the Central and Southern Regions.
(21)	% Inter Regional Migrants of Total Out Migrants from Subregions	44.7% (Highest of the nation's regions)		(30)	Continued to lead the nation's regions with its higher proportion of inter region movement
(27)	Most Attractive Subregion	Kirkuk (+7/4 net migration, second only to the capital)		(36)	Arbil emerges as the newly established capital of the Kurdish Zone
(27)	Worst Negative Migration Subregion	Ninevah/Dhok (-9/4 net migration)		(36)	Kirkuk losing its position as the most attractive subregion.
(i)	Observations	The obvious and striking influence of the early sixties Kurdish conflict is shown on the migration pattern in the Northern Region with much higher mobility of population of the region.		(i)	The settlement of the Kurdish conflict and the establishment of the "autonomous Kurdish Zone" with Arbil as its capital left strong impact on the region's movement pattern.
(ii)		The pattern in the region stayed self-confined and ethnically controlled.		(ii)	Region's stability of population increased considerably through the Kurdish conflict settlement.
(iii)		Weaker links with the Central Region and strong Kurdish population movement back to the region from other parts of the country under the impact of the Kurdish conflict. Thus boosting immigration figure for the region.		(iii)	Increased capital role in the migration pattern in the region.
(iv)		Capital's share of the region's outmigrants dropped under the effect of the conflict.		(iv)	Emergence of Arbil as possible growth pole for Kurdish Zone.

SUBREGIONAL ANALYSIS FORM NO. 7-1 NINEVAH/DIHK		SUBREGION NORTHERN REGION	
		1947 Census Data	1957 Census Data
TABLE No.		TABLE No.	
(9)	Net Migration(per '000 of pop.)	-34 (Worst in the Northern Region)	-52 (Worst in the Northern Region)
(7)	% Share of National pop.	12.4% (Second largest in the nation)	12.1% (Keeping its place as second largest in the nation)
(7)	% Share of National In Migration	2.8%	1.9% (Second worst in the Northern Region to Arbil)
(8)	% Share of National Out Migration	7.8% (Worst of the Northern subregions)	8.0% (Second worst in the nation to Maysan)
(4)	% Share of Regional pop.	43.8% (Largest of the Northern subregions)	43.8% (Largest of the Northern subregions)
(4)	% Share of Inter-Regions Migration	16.0% (Lowest of the Northern subregions)	12.4% (Lowest of the Northern subregions)
(2)	% Capital Destined Migrants of Total Out Migrants	52.6% (Highest of the Northern subregions)	60.7% (Highest of the Northern subregions)
(2)	Main Recipient Subregion for the Subregion In Migrants (Over 10% of Subregions Out Migrants)	Kirkuk (12.0%) (Northern) Anbar (10.3%) (Central)	Kirkuk (10.8%) (Northern)
(2)	Main Contributing Subregion to the Subregions In Migration (Over 10% of Contributing Subregions Out Migrants)	Arbil (Northern)	Arbil (Northern)
(2)	Proximity Factor Occurance	Anbar (Central) Arbil (Northern)	Anbar (Central) (Slight influence)
(a)	Observations	Represents the Arabic majority subregion in the north. It shows very weak ties with the Kurdish majority zone in the region (Arbil and Sulimaniya)	Continued to show the worst net migration figure in the Northern Region.
(b)		Sends 81.1% of its outmigrants to outside the Northern Region reinforcing the ethnic-controlled character of the Northern Region pattern of migration.	Its already weak links with the Kurdish Zone in the region became ever weaker in 1957 with consequent increase in the proportion of its migrants leaving the Northern Region.
(c)		Leads the region's subregions in the strength of its links with the capital to whom it sends about four times the region's capital destined ratio of outmigrants (It has 62.4% of the Northern Region migrants to the capital)	Strengthened its links with the capital.
(d)		It claimed considerably less than its fair share (based on its population ratio) of the Inter Region migrants national immigrants and to a lesser degree national outmigrants.	Its very low share of the Northern Inter Region migrants based on its population ratio coupled with its weakening links with the other region's non-Arabic subregions supports the ethnic controlled character of the region

MIGRATION PATTERN CHARACTERISTICS	SUBREGIONAL ANALYSIS FORM NO. I-1		SUBREGION	NORTHERN REGION
	1965	Census Data		
Net Migration (per '000 of pop.)	(27)	-9/4 (Continued to be the worst in region)	(36)	Slightly improved, but still worst in region
% Share of National pop.	(25)	11.2% (Continued to be second largest in nation)	(34)	Continued to drop
% Share of National In Migration	(25)	2.2% (Dropped to worst in region)	(34)	Continued to drop
% Share of National Out Migration	(26)	11.1% (Considerable increase over 19/47/57, worst in region)	(35)	Data suggests dropping in level still worst in region
% Share of Regional pop.	(22)	41.8% (Still largest in region, but less proportion than 1957)	(31)	Continued to drop
% Share of Inter-Regions Migration	(22)	7.0% (Worst in the region)	(31)	Share improved; still worst in region
% Capital Destined Migrants of Total Out Migrants	(20)	62.0% (Highest in region)	(29)	Continued to rise
Main Recipient Subregion for the Subregion In Migrants (Over 10% of Subregions Out Migrants)	(20)	Sulimani (11.8%) (Northern)	(29)	Arbil
Main Contributing Subregion to the Subregions In Migration (Over 10% of Contributing Subregions Out Migrants)	(20)	Arbil (12.1%) (Northern)	(29)	Arbil
Proximity Factor Occurance	(20)	Arbil (Northern)	(29)	Arbil
Observations	(a)	Continued to show the worst negative migration pattern in the region with consequent drop of its share of the national (and regional) population.		No basic changes in the subregion's pattern of migration. Increasing share of the capital is suggested. Still the worst subregion in the Northern Region in terms of its net migration, although showing slight improvement mostly due to the Northern Region's new political stability.
	(b)	Maintained its strong links with the capital (increased over 19/47/57 level) despite the Kurdish conflict in the region.		
	(c)	The impact of the Kurdish conflict is shown by improving the ties with the Kurdish subregions but this is mostly true to the Kurdish minority in the subregion and to a rather limited extent.		

MIGRATION PATTERN CHARACTERISTICS

SUBREGIONAL ANALYSIS FORM NO. I-2		SULIMANIA		NORTHERN REGION	
SUBREGION		Census Data		Census Data	
TABLE NO.	1947	TABLE NO.	1957	Census Data	
Net Migration (per '000 of pop.)	(9) -16	(18)	-5	(Improved over the 1947 figure)	
% Share of National pop.	(7) 4.8% (Smallest of the Northern subregions)	(16)	4.9%	(Improved to second smallest in the region to Arbil)	
% Share of National In Migration	(7) 1.4% (Lowest in the nation)	(16)	2.0%		
% Share of National Out Migration	(8) 2.4% (Second lowest in the nation, Arbil is the lowest)	(17)	2.3%	(Lowest in the nation)	
% Share of Regional pop.	(4) 17.0%	(13)	17.7%		
% Share of Inter-Regions Migration	(4) 20.1%	(13)	25.4%	(Second in the region to Kirkuk)	
% Capital Destined Migrants of Total Out Migrants	(2) 28.4% (Second lowest in the region to Arbil)	(11)	28.6%	(Stayed as second lowest in the region to Arbil)	
Main Recipient Subregion for the Subregion In Migrants (Over 10% of Subregions Out Migrants)	(2) Kirkuk (34.5%) Arbil (13.4%) (Northern)	(11)	Kirkuk (37.3%) Arbil (18.3%) (Northern)		
Main Contributing Subregion to the Subregions In Migration (Over 10% of Contributing Subregions Out Migrants)	(2) Kirkuk (Northern)	(11)	Arbil, Kirkuk (Northern)		
Proximity Factor Occurance	(2) Arbil (Northern) Diala (Central)	(11)	Arbil (Northern)		
Observations	<p>(a) Pattern of migration from this Kurdish subregion is typically Northern Region's ethnically controlled with little interest in the out of the region destinations including the capital.</p> <p>(b) Stability of the subregion population is shown in its low out and in-migration share of the national total.</p>		<p>Continued to show stable population with low interest in the capital and stronger ethnic controlled migration pattern. Over two thirds of its outmigrants stayed in the Northern Region, with Kirkuk and Arbil (both non-Arabic subregions with sizable Kurdish population) receiving most of the subregion's outmigrants. The weak link with out of region subregions in 1947 pattern (Diala) is absent in the 1957.</p>		

MIGRATION PATTERN CHARACTERISTICS	SULIMANIA		NORTHERN REGION	
	TABLE No.	1965 Census Data	TABLE No.	1975 Data
Net Migration(per '000 of pop.)	(27)	-22 (Considerable increase over 1947/57 pattern)	(36)	Slight drop is indicated
% Share of National pop.	(25)	5.0%	(34)	No change
% Share of National In Migration	(25)	4.8% (Over double 1957 figure, second highest in region to Kirkuk)	(34)	Considerable drop is indicated
% Share of National Out Migration	(26)	5.8% (Over double 1957 figure second highest in region to Ninevah/Dhok)	(35)	Considerable drop is indicated
% Share of Regional pop.	(22)	18.8%	(31)	Slight increase is indicated
% Share of Inter-Regions Migration	(22)	28.9% (Second to Kirkuk in region)	(31)	Considerable drop is indicated
% Capital Destined Migrants of Total Out Migrants	(20)	13.3% (Least in the nation, considerable drop of 1947/57 pattern)	(29)	Considerable increase is indicated
Main Recipient Subregion for the Subregion In Migrants (Over 10% of Subregions Out Migrants)	(20)	Kirkuk (72.6%) (Northern)	(29)	Kirkuk
Main Contributing Subregion to the Subregions In Migration (Over 10% of Contributing Subregions Out Migrants)	(20)	All other Northern subregions	(29)	None
Proximity Factor Occurance	(20)	Arbil and Kirkuk (Northern)	(29)	Arbil
Observations	<p>Due to the Kurdish conflict in the early sixties the self-confined pattern of the Kurdish Zone in the Northern Region became stronger with Kurdish subregions like Sulimania retaining over three quarters of its outmigrants in the region. The capital share of the subregion outmigrants became ever smaller. Considerable population mobility is shown with higher in, out and net migration figures. Yet it still maintained an overall stable population status.</p>		<p>The impact of the emergence of Arbil as the capital of the Kurdish Autonomous Zone is shown on this region pattern of migration. It lost significantly of its attractiveness in the Inter Regional Migration pattern. Also more stability of its population is suggested due to the political settlement of the Kurdish conflict in 1972.</p>	

SUBREGIONAL ANALYSIS FORM NO. I-3

ARBIL SUBREGION

NORTHERN REGION

MIGRATION PATTERN CHARACTERISTICS	1947 Census Data		1957 Census Data	
	TABLE NO.	1947	TABLE NO.	1957
Net Migration(per '000 of pop)	(9)	-7 (Lowest of the negative migration in the Northern Region)	(18)	-30 (Worsened net migration condition)
% Share of National pop.	(7)	5.1%	(16)	4.4% (Dropped to smallest in the region)
% Share of National In Migration	(7)	1.8% (Second lowest in the nation, Sulimania is the lowest)	(16)	1.6% (Lowest in the region)
% Share of National Out Migration	(8)	2.2% (Lowest in the nation)	(17)	2.9%
% Share of Regional pop.	(4)	17.9%	(13)	15.9% (Dropped to smallest in the region)
% Share of Inter-Regions Migration	(4)	20.7% (Second lowest in the region, Sulimania is the lowest)	(13)	20.4% (Second lowest in the region to Ninevah/Dhok)
% Capital Destined Migrants of Total Out Migrants	(2)	21.2% (Lowest in the region)	(11)	17.4% (Lowest of the nation)
Main Recipient Subregion for the Subregion In Migrants (Over 10% of Subregions Out Migrants)	(2)	Kirkuk (37.7%) Ninevah/Dhok (20.6%) (Northern)	(11)	Kirkuk (39.1%) Ninevah/Dhok (18.5%) Sulimania (18.6%) (Northern)
Main Contributing Subregion to the Subregions In Migration (Over 10% of Contributing Subregions Out Migrants)	(2)	Sulimania (Northern)	(11)	Sulimania, Kirkuk (Northern)
Proximity Factor Occurance	(2)	Ninevah/Dhok and Sulimania (Northern)	(11)	Ninevah/Dhok, Sulimania (Northern)
Observations	Same pattern as its fellow Kurdish subregion of Sulimania, except being the heartland of the Kurdish Region; it shows more control for the ethnic factor and less interest in the capital as a destination for its migrants.		With around 3/4rds of its outmigrants staying in the Northern Region the 1957 pattern of migration for this Kurdish subregion is again very similar to the Sulimania 1957 pattern. It also shows less capital share (least of the nation's subregions), more within the Northern Region migrants destination and stable population (to a less degree than Sulimania).	

MIGRATION PATTERN

SUBREGIONAL ANALYSIS FORM NO. I-3

ARBIL

SUBREGION

NORTHERN

REGION

MIGRATION PATTERN CHARACTERISTICS		1965 Census Data	TABLE No.	1975 Data
Net Migration(per '000 of pop)	(27)	-4 (Considerable improvement over 1947/57 pattern)	(36)	Significant change is suggested, changing to positive
% Share of National pop.	(25)	4.5% (Smallest of the region's subregions)	(34)	No change
% Share of National In Migration	(25)	3.8% (Over double 1947/57 figures)	(34)	Highest of the Northern subregions
% Share of National Out Migration	(26)	4.0% (Over 30% increase over 1957 figure)	(35)	Least of the Northern subregions with significant drop over 1965 figure
% Share of Regional pop.	(22)	16.9%	(31)	Improved slightly
% Share of Inter-Regions Migration	(22)	12.5% (A drop over 1947/57 pattern)	(31)	Significant increase is suggested
% Capital Destined Migrants of Total Out Migrants	(20)	19.9% (Second lowest in the nation to Sulimania)	(29)	Least of the region's subregions
Main Recipient Subregion for the Subregion In Migrants (Over 10% of Subregions Out Migrants)	(20)	Sulimania (34.5%) Kirkuk (17.4%) Ninevah/Dhok (12.1%) (Northern)	(29)	Ninevah/Dhok, Kirkuk (Northern)
Main Contributing Subregion to the Subregions In Migration (Over 10% of Contributing Subregions Out Migrants)	(20)	None	(29)	Ninevah/Dhok (Northern)
Proximity Factor Occurance	(20)	Ninevah/Dhok, Sulimania (Northern)	(29)	Ninevah/Dhok, Sulimania (Northern)
Observations	<p>The impact of the Kurdish conflict of the early sixties is also shown on this Kurdish subregion migration pattern. Being a safer subregion than the rest of the Kurdish Zone, it registered a considerable increase in its immigration share with less spectacular increase in its outmigration share. The improved net migration in the 1965 is mostly due to the increased attractiveness of this subregion's centre as a refuge for the Kurds leaving their villages during the conflict.</p> <p>1975 data suggests the emergence of Arbil as a potential growth pole in the region, especially after the settlement of the Kurdish conflict in 1972 and the assignment of the centre of this subregion (Arbil) as the capital of the 'autonomous Kurdish Zone'.</p>			

MIGRATION PATTERN CHARACTERISTICS	SUBREGIONAL ANALYSIS FORM NO. I-4		KIRKUK	SUBREGION		NORTHERN REGION	
	TABLE No.	1947 Census Data		TABLE No.	1957 Census Data		
Net Migration(per '000 of pop.)	(9)	+12 (Best of the Northern subregions)	(18)	+22 (Best of the Northern Region, third in Iraq)			
% Share of National pop.	(7)	6.0% (Second biggest in the north)	(16)	6.2%			
% Share of National In Migration	(7)	5.4% (Highest of the Northern subregions)	(16)	5.0% (Highest of the Northern subregions)			
% Share of National Out Migration	(8)	4.5%	(17)	3.6%			
% Share of Regional pop.	(4)	21.3%	(13)	22.6%			
% Share of Inter-Regions Migration	(4)	43.1% (Highest of the Northern subregions)	(13)	41.8% (Highest of the Northern subregions)			
% Capital Destined Migrants of Total Out Migrants	(2)	29.5%	(11)	34.5% (Second highest in the region to Ninevah/Dhok)			
Main Recipient Subregion for the Subregion In Migrants (Over 10% of Subregions Out Migrants)	(2)	Sulimania (19.3% (Northern) Diala (25.5%) (Central)	(11)	Sulimania (27.3%) Arbil (11.0%) (Northern) Diala (12.1%) (Central)			
Main Contributing Subregion to the Subregions In Migration (Over 10% of Contributing Subregions Out Migrants)	(2)	Ninevah/Dhok, Sulimania and Arbil (Northern)	(11)	All Northern subregions and Baghdad the capital.			
Proximity Factor Occurance	(2)	All Northern subregions, Diala (Central)	(11)	All Northern subregions, Diala (Central)			
Observations	(a)	As a mixed ethnic zone (Arabic, Kurdish and Turkish) it represents a suitable destination for all three ethnic groups migrants. Together with its oil sector and trade sector as the second main population centre in the north this subregion showed the most attractive northern subregion with its share of the Inter Region migrants considerably in excess of its fair share and third highest net migration figure in the nation.	(a)	Continued to show growing attractiveness and increasing population share.			
	(b)	Its links with the capital (being the closest Northern Region) is a middle case between the Arabic and Kurdish Zones.	(b)	Stronger links with the capital and also continuing of proximity type movement with neighbouring Central subregion of Diala yet this proximity type movement which claimed over a quarter of the subregion's outmigrants in 1947 has significantly dropped in 1957 against an increase within the region type of movement.			

SUBREGIONAL ANALYSIS FORM No. 1-4

KIRKUK SUBREGION

NORTHERN REGION

TABLE No.	1965 Census Data	TABLE No.	1975 Data
(27)	+7½ (Climbed to second in the nation to the capital)	(36)	Data suggests significant drop in the net migration value
(25)	6.0%	(34)	Data suggests significant drop
(25)	7.6% (Second in the nation to the capital)	(34)	Data suggests significant drop
(26)	3.8%	(35)	Data suggests significant increase
(22)	22.4% (Keeping a stable 1947/57 pattern)	(31)	Slight drop is suggested
(22)	51.6% (Highest of the region, considerable change over 1947/57)	(31)	Significant drop is suggested
(20)	40.2% (Continuing increase of the capital share)	(29)	Significant increase is suggested
(20)	Sulimania (12.9%) (Northern) Diala (19.8%) (Central)	(29)	Diala (Central)
(20)	Sulimania, Arbil (Northern)	(29)	Sulimania, Arbil (Northern)
(20)	Sulimania, Arbil (Northern) Diala (Central)	(29)	Sulimania (Northern) Diala (Central)

(a) Made significant gains due to the Kurdish conflict. Being closer to the capital this subregion was considered by the Kurdish population leaving the conflict zone as the safest place in the Northern Region. It received over 51.6% of the Northern Region Inter Regional Migrants with the majority of the Kurdish subregions outmigrants.

(b) Climbed to the second most attractive subregion in the nation. Still keeping in line with the rest of the Northern Region it showed a stable population share.

1975 data suggests severe changes in the subregion's migration pattern losing its position as the region's major attractive subregion to Arbil, the newly assigned Kurdish Zone capital. It showed a negative net migration becoming negative for first time in the 1947/1975 period with significant rise in the capital Baghdad intake of the subregion's outmigrants.

THE CENTRAL REGION:

REGIONAL PATTERN ANALYSIS FORM NO. II

CENTRAL REGION

	TABLE No.	1947 Census Data	TABLE No.	1957 Census Data
Net Migration (per '000 of pop)	(9)	+48 (Highest of the nation's regions)	(18)	+75 (Highest of the nation's regions)
% Share of National pop.	(3)	41.8% (Highest of the nation's regions)	(12)	43.5% (Highest of the nation's regions)
% Share of National In Migration	(7)	65.7% (Highest of the nation's regions)	(16)	69.5% (Highest of the nation's regions)
% Share of National Out Migration	(8)	42.1% (Highest of the nation's regions)	(17)	37.8% (Significantly less than the Southern Region)
Destination of Out Migrants (Total of Subregions Out Migrants)	(3)	(a) 40.7% (Slightly lower than the Southern Region) which represents 41.6% of the total capital migrants. (b) Much higher to the Southern Region (21.2%) than to the Northern Region (8.3%).	(12)	(a) Significant increase of the capital's share of the region's outmigrants to 57.6%, which represents 41.2% of the capital's total migrants. (b) Lower Southern Region share (15.5%) and also to the Northern Region (5.8%)
% To other Regions	(3)	29.9% (Lowest of the nation's regions)	(12)	19.8% (Lowest of the nation's regions)
% Inter Regional Migrants of Total Out Migrants from Subregions	(9)	The capital Baghdad (+149) highest in the nation	(18)	The capital (+231) highest in the nation
Most Attractive Subregion	(9)	Babylon (-68) (may be due to administrative change)	(18)	Babylon (-92)
Worst Negative Migration Subregion	(9)	Babylon (-68) (may be due to administrative change)	(18)	Babylon (-92)
Observations	<p>(i) The capital shows drastic dominance over the migration attraction within the region and the nation as a whole.</p> <p>(ii) Strong "proximity factor movement" exhibited by the region's subregions especially with Southern Region subregions.</p> <p>(i) Increasing the predominant role of the capital over the regions and national migration pattern.</p> <p>(ii) Significant decrease in the "proximity factor movements" especially with the Southern Region under the impact of the 1954 flood on the Central and Southern Regions, which increased the capital role as the most attractive destination for migrants.</p>			

MIGRATION PATTERN		CENTRAL REGION	
REGIONAL PATTERN ANALYSIS FORM NO. II		1965	1975 Data
TABLE No.	Census Data	TABLE No.	Data
Net Migration(per '000of pop)	(27) +73 (Slightly lower than 1957, but still highest of the nation's regions)	(36)	Significant increase in the net migration (positive)
% Share of National pop.	(21) 47.7% (Highest of the nation's regions)	(30)	Continued to increase its share of the nation's population to over half the total
% Share of National In Migration	(25) 68.8% (Highest in the nation's regions)	(34)	Further increase is indicated mostly due to the increase of capital attractiveness
% Share of National Out Migration	(26) 39.3% (Highest of the nation's regions)	(35)	Seems to hold a constant proportion of the national total slightly lower than Southern Reg.
Destination of Out Migrants (Total of Subregions Out Migrants)	(21) (a) Another significant increase of the capital share of the region's outmigrants to 69.1% which represents 46.3% of the capital's total migrants. Both figures highest in the nation.	(30)	(a) The capital's share increased similarly as proportion of region's outmigrants, keeping almost constant share of the national total capital in migrants.
% To other Regions	(b) Increase of Northern Region's share (10.9%) drop of Southern Region (8.4%)		(b) Drop in Northern and Southern Regions share are indicated.
% Inter Regional Migrants of Total Out Migrants from Subregions	(21) 11.7% (Lowest in the nation's regions)	(30)	Slight increase is indicated suggesting emergence of other attraction centres.
Most Attractive Subregion	(27) The capital (+252) highest in the nation	(36)	Further increase in the capital's attractiveness.
Worst Negative Migration Subregion	(27) Anbar (-232)	(36)	Continuous drop in the negative net migration subregions
Observations	(i) The capital continued to dominate the central regional migration pattern. (ii) Impact of the Northern Region's Kurdish conflict on increasing northern destined migrants from the centre. (iii) Improvement of position of Babylon to better net migration (still negative) under the impact of industrial investment in the subregion.		Data seems to suggest two major indicators: (i) The capital continues to dominate the Central Region and the national migration pattern. (ii) Emergence of strong growth poles in the Central Region such as Babylon and Kerbela due to continuous increase of economic investment in these two subregions.

MIGRATION PATTERN CHARACTERISTICS	SUBREGIONAL ANALYSIS FORM NO. II-1		SUBREGION	CENTRAL REGION
	1947	1957		
Net Migration (per '000 of pop)	(9)	-13	(18)	-87 (Second worst in the region to Babylon)
% Share of National pop.	(7)	5.8%	(16)	5.3% (Dropped in comparison to 1947)
% Share of National In Migration	(7)	5.5% (Second highest in the region, the capital first)	(16)	2.4% (Worst in the Central Region)
% Share of National Out Migration	(8)	6.3%	(17)	6.9%
% Share of Regional pop.	(5)	22.8% (Largest of the central subregions excl. the capital)	(14)	23.0% (Dropped to second largest in region to Babylon)
% Share of Inter-Regions Migration	(5)	24.1% (Highest of the central subregions excl. the capital)	(14)	16.3% (Dropped to second lowest in region to Anbar)
% Capital Destined Migrants of Total Out Migrants	(2)	70.0% (Second highest in the region, Anbar is highest)	(11)	78.7%
Main Recipient Subregion for the Subregion In Migrants (Over 10% of Subregions Out Migrants)	(2)	None	(11)	None
Main Contributing Subregion to the Subregions In Migration (Over 10% of Contributing Subregions Out Migrants)	(2)	Kirkuk (Northern), Baghdad the capital	(11)	Kirkuk (Northern), Baghdad the capital.
Proximity Factor Occurrence	(2)	Kirkuk (Northern), Wasit (Central)	(11)	Kirkuk (Northern)
Observations	(a)	With a sizable non-Arabic minority in this subregion it showed strong ties with Kirkuk (Northern)	(a)	The effect of the capital's attraction on this subregion increased significantly causing severe deterioration in its net migration with dropping in its share of the national and regional population.
	(b)	Strong influence of the capital since this subregion's centre is within the capital zone of influence (within commuting distance of the capital). It is one of the few subregions that <u>exchange</u> movement with the capital receiving part of the capital's outmigrants. But the balance of this exchange is severely in favour of the capital causing negative net migration.	(b)	The increase of the capital's share of the subregion's outmigrants seems to cause weakening of the proximity links in the Kirkuk (Northern) and Wasit (Central).

MIGRATION PATTERN CHARACTERISTICS	SUBREGIONAL ANALYSIS FORM NO. I-1		DIALA	SUBREGION	CENTRAL	REGION
	1965	Census Data				
Net Migration(per '000 of pop)	(27)	-112 (Continuation of the worsened net migration)	(36)			Significant drop is suggested by data
%. Share of National pop.	(25)	5.0% (Continued to drop following 1947/57 pattern)	(34)			Continuation of drop is suggested by data
%. Share of National In Migration	(25)	2.4%	(34)			Slightly dropped
%. Share of National Out Migration	(26)	7.2%	(35)			Significant increase is suggested by data (worst in region)
%. Share of Regional pop.	(23)	21.7%	(32)			Slightly dropped
%. Share of Inter-Regions Migration	(23)	21.4%	(32)			Slight increase is suggested by data
%. Capital Destined Migrants of Total Out Migrants	(20)	76.0%	(29)			Data suggests significant increase (highest in region)
Main Recipient Subregion for the Subregion In Migrants (Over 10% of Subregions Out Migrants)	(20)	None	(29)			None
Main Contributing Subregion to the Subregions In Migration (Over 10% of Contributing Subregions Out Migrants)	(20)	Kirkuk (Northern), Baghdad the capital	(29)			Kirkuk (Northern) Baghdad the capital
Proximity Factor Occurance	(20)	Kirkuk (Northern)	(29)			None
Observations	(a)	Continued to show a worsening net migration figure, dropping population share and the strong predominance of the capital share of the subregion's outmigrants.				Similar to 1965 pattern with further deterioration of the subregion's negative net migration. Also significant increase in the capital's share of the subregion's outmigrants.
	(b)	Further weakening of the proximity type Movement.				
	(c)	Impact of the 1958 revolution and the failure of the Agrarian Reform Law may be a major factor in the worsened net migration in this subregion.				

MIGRATION PATTERN CHARACTERISTICS

SUBREGIONAL ANALYSIS FORM NO. II-2 ANBAR

SUBREGION

CENTRAL

REGION

	TABLE No.	1947 Census Data	TABLE No.	1957 Census Data
Net Migration(per '000 of pop.)	(9)	-21 (Second worst net migration figure in the region)	(18)	-52 (Worsened net migration)
% Share of National pop.	(7)	3.9% (Smallest of the nation's subregions)	(16)	4.0%
% Share of National In Migration	(7)	3.1% (Least of the Central Region's subregions)	(16)	2.5% (Second lowest in the region to Diala)
% Share of National Out Migration	(8)	4.1%	(17)	4.5%
% Share of Regional pop.	(5)	15.5% (Smallest of the region's subregions)	(14)	17.4%
% Share of Inter-Regions Migration	(5)	13.8% (Least of the region's subregions)	(14)	15.8% (Kept its position as lowest in region)
% Capital Destined Migrants of Total Out Migrants	(2)	84.0% (Highest of any subregion in the nation)	(11)	72.6%
Main Recipient Subregion for the Subregion In Migrants (Over 10% of Subregions Out Migrants)	(2)	None	(11)	Kerbela (11.1%) (Central)
Main Contributing Subregion to the Subregions In Migration (Over 10% of Contributing Subregions Out Migrants)	(2)	Ninevah/Dhok (Northern), Baghdad the capital	(11)	None
Proximity Factor Occurance	(2)	None	(11)	Kerbela (Central)

Observations

- (a) With this subregion's centre within the capital zone of influence it reflects a similar pattern of movement to that shown by Diala the other central subregion.
- (b) Within the region although none of the central subregions have shown any predominance over the Inter Region Migration pattern, yet Anbar (probably being the smallest) receives least of the Inter Region's migration.

No basic changes is shown in the pattern of migration of this subregion. Worsening of the net migration over its 1947 level, but its population share of the national total stayed almost constant. The capital kept its role as the predominant recipient of the subregion's outmigrants. Pattern also shows evidence of proximity type movement.

SUBREGIONAL ANALYSIS FORM NO. I-2

ANBAR

SUBREGION

CENTRAL REGION

MIGRATION PATTERN CHARACTERISTICS	TABLE No.	1965 Census Data	TABLE No.	1975 Data
Net Migration(per '000 of pop.)	(27)	-232 (Considerable drop to least in the region)	(36)	Slight drop is suggested by data
%. Share of National pop.	(25)	3.9% (Staying as smallest in the nation)	(34)	Slight drop is indicated by data
%. Share of National In Migration	(25)	1.9% (Continuing to drop following 1947/57 pattern)	(34)	Significant drop is suggested by data
%. Share of National Out Migration	(26)	9.6% (Highest of the region)	(35)	Dropped to second highest in region as suggested by data
%. Share of Regional pop.	(23)	16.8%	(32)	Slight drop is suggested by data
%. Share of Inter-Regions Migration	(23)	21.5% (Improved on the 1947/57 pattern)	(32)	Significant drop is suggested by data
%. Capital Destined Migrants of Total Out Migrants	(20)	91.4% (Highest in the nation)	(29)	Slight increase is suggested by data
Main Recipient Subregion for the Subregion In Migrants (Over 10% of Subregions Out Migrants)	(20)	None	(29)	None
Main Contributing Subregion to the Subregions In Migration (Over 10% of Contributing Subregions Out Migrants)	(20)	None	(29)	None
Proximity Factor Occurance	(20)	None	(29)	None
Observations	(a) (b)	<p>(a) Significant increase of the capital's predominance over the subregion pattern of migration alleviating any other destination for the subregion's outmigrants.</p> <p>(b) Due to the severe effect of the capital on the subregion, the relatively small size of the subregion and the high share of the subregion of the nation's outmigrants, its 1965 net migration dropped by around 45 times its 1957 level. Despite that its share of the national inmigration is sufficient to keep its tiny share of the national population constant.</p>		<p>Similar pattern is suggested by data to the 1965 pattern with increased predominance of the capital over this subregion outmigrants, which also indicated a significant loss of its attractiveness in the region.</p>

MIGRATION PATTERN

SUBREGIONAL ANALYSIS FORM NO. II-3

WASIT

SUBREGION

CENTRAL REGION

MIGRATION PATTERN CHARACTERISTICS		TABLE No.	1947 Census Data	1957 Census Data	TABLE No.	1957 Census Data
Net Migration(per '000 of pop.)		(9)	+1		(18)	-47 (Severe drop in net migration)
% Share of National pop.		(7)	4.8% (Second smallest in the nation and in the region)		(16)	4.8%
% Share of National In Migration		(7)	7.0% (Second in the region, the capital is first)		(16)	5.4%
% Share of National Out Migration		(8)	7.0%		(17)	7.7% (Second highest in the region)
% Share of Regional pop.		(5)	18.7%		(14)	20.6%
% Share of Inter-Regions Migration		(5)	23.2%		(14)	27.4%
% Capital Destined Migrants of Total Out Migrants		(2)	53.0%		(11)	84.9% (Highest in the nation)
Main Recipient Subregion for the Subregion In Migrants (Over 10% of Subregions Out Migrants)		(2)	Mysan (20.2%) (Southern)		(11)	None
Main Contributing Subregion to the Subregions In Migration (Over 10% of Contributing Subregions Out Migrants)		(2)	Babylon, Baghdad the capital (Central) Qadisiya/Muthna (Southern)		(11)	Babylon (Central), Qadisiya/Muthna (Southern)
Proximity Factor Occurance		(2)	Mysan, Thiqrar (Southern)		(11)	None
Observations		(a)	Subregion shows a balanced population movement pattern with a low +1 net migration.		(a)	Significant drop in the subregion's net migration figure.
		(b)	It shows a considerable influence of the capital, typical of all central region's subregions, also significant proximity type movement with the Southern Region's subregions.		(b)	The capital share of the subregion's outmigrants rose significantly to the highest share of any subregion's outmigrants in the nation. Most probable reason is the 1954 flood in the Tigris River that hit this subregion (with most of the Central and Southern Tigris River agricultural land).
					(c)	Absence of its strong 1947 proximity type movement.

MIGRATION PATTERN CHARACTERISTICS		SUBREGIONAL ANALYSIS FORM NO. II-3		WASIT SUBREGION		CENTRAL REGION	
TABLE NO.	1965 Census Data	TABLE NO.	1975 Data				
(27)	-130 (Severe drop over the 1947/57 pattern, second worst in region to Anbar)	(36)	Data suggests the continuation of drop of net migration				
(25)	4.2% (Dropping from the 1947/57 level).	(34)	Significant drop is suggested by data				
(25)	2.7% (Considerable drop of 1947/57 level)	(34)	Significant drop is suggested by data				
(26)	7.4% (Second highest in region to Anbar)	(35)	Slight drop is suggested by data				
(23)	18.3% (Dropping to second lowest in region to Anbar)	(32)	Dropped to least in the region				
(23)	20.2% (Considerable drop over 1957 level, second lowest to Kerbela in region)	(32)	Significant drop is suggested				
(20)	88.1% (Second in the nation to Anbar)	(29)	Similar level is suggested by data				
(20)	None	(29)	None				
(20)	None	(29)	None				
(20)	None	(29)	None				
(a)	Continued the 1947/57 pattern of showing worsening net migration figure. The 1965 pattern of migration for this subregion is its worst in the 1947/65 period.						
(b)	Capital share significantly rose over its previous levels. Subregion showed no other destination claiming significant shares of its outmigration.						
(c)	Impact of the 1958 revolution and the agrarian reform experience in this strong feudal system subregion may be the prime factor for the 1965 pattern.						
Observations	Similar pattern to 1965 with further decrease in subregion's attractiveness and the continual dominance of the capital as main destination for the subregion's outmigrants. Net migration continued to worsen.						

SUBREGIONAL ANALYSIS FORM NO. I-4

BABYLON

SUBREGION

CENTRAL REGION

MIGRATION PATTERN CHARACTERISTICS	1947 Census Data		1957 Census Data	
	TABLE NO.	Description	TABLE NO.	Description
Net Migration (per '000 of pop.)	(9)	-68 (Worst of the region's subregions)	(18)	-92 (Continued to be the worst in the region)
% Share of National pop.	(7)	5.6%	(16)	5.7%
% Share of National In Migration	(7)	3.7% (Second lowest in the region, Anbar is lowest)	(16)	2.8%
% Share of National Out Migration	(8)	8.2% (Highest of the region's subregions, excl. the capital)	(17)	7.9% (Highest in the region)
% Share of Regional pop.	(5)	21.9%	(14)	24.7%
% Share of Inter-Regions Migration	(5)	16.6% (Second lowest of the region's subregions)	(14)	18.1%
% Capital Destined Migrants of Total Out Migrants	(2)	45.0%	(11)	47.3% (Least in the region)
Main Recipient Subregion for the Subregion In Migrants (Over 10% of Subregions Out Migrants)	(2)	Wasit (12.6%), Kerbela (19.8%) (Central) Qadisiya/Muthna (12.6%) (Southern)	(11)	Wasit (14.6%) (Central, Qadisiya/Muthra (22.4%) (Southern)
Main Contributing Subregion to the Subregions In Migration (Over 10% of Contributing Subregions Out Migrants)	(2)	Kerbela (Central) and Qadisiya/Muthna (Southern)	(11)	Qadisiya/Muthra (Southern)
Proximity Factor Occurrence	(2)	Wasit and Kerbela (Central) and Qadisiya/Muthna (Southern)	(11)	Wasit (Central) Qadisiya/Muthra (Southern)
Observations	(a)	Most significant characteristic of migration pattern in this subregion is the strong proximity factor type of movement with the surrounding subregions (excl. the capital) claiming around 45% of the subregion's outmigrants.	(a)	Continued to show a poor net migration figure with a drop of its share of national immigration. (Also of its share of national outmigration).
	(b)	Capital attraction is surprisingly low for a subregion within the immediate vicinity of the capital.	(b)	Improved capital share of the subregion's outmigrants, yet still low in comparison to most central subregions most probably due to proximity factor effect.
	(c)	Subregion shows a poor net migration figure.	(c)	Weakening proximity factor type of movement.

MIGRATION PATTERN CHARACTERISTICS		SUBREGIONAL ANALYSIS FORM NO. II-4		SUBREGION		CENTRAL REGION	
		1965 Census Data		BABYLON		- 1975 Data	
		TABLE No.		TABLE No.			
Net Migration (per '000 of pop.)		(27)	-68 (Improved over 1947/57 pattern)	(36)		Significant improvement as data suggests a positive net migration	
% Share of National pop.		(25)	5.7% (Second largest in the region to capital)	(34)		Similar level is suggested by data	
% Share of National In Migration		(25)	2.1% (Continued the dropping pattern of 1947/57)	(34)		Significant increase is suggested	
% Share of National Out Migration		(26)	5.3% (Considerable drop over 1947/57 pattern)	(35)		Similar level is suggested	
% Share of Regional pop.		(23)	24.6% (Climbed to largest in the region excl. the capital)	(32)		Similar level is suggested	
% Share of Inter-Regions Migration		(23)	22.3% (Highest of region's subregions)	(32)		Significant increase is suggested (almost double 1965 data)	
% Capital Destined Migrants of Total Out Migrants		(20)	63.0% (Least in the region)	(29)		Significant increase is suggested (still it is lowest in region)	
Main Recipient Subregion for the Subregion In Migrants (Over 10% of Subregions Out Migrants)		(20)	None	(29)		Kerbela (Central)	
Main Contributing Subregion to the Subregions In Migration (Over 10% of Contributing Subregions Out Migrants)		(20)	None	(29)		Capital Baghdad, Kerbela (Central) Qadisiya/Muthna (Southern)	
Proximity Factor Occurance		(20)	Kerbela (Central) Qadisiya/Muthna (Southern)	(29)		Kerbela (Central) Qadisiya/Muthna (Southern)	
Observations		(a)	Both the increase in the subregion's share of national immigration, and Inter Region's migrants helped the net migration figure to improve significantly over its 1957 poor level.			Continued to improve as indicated by the 1965 pattern, data suggested the (next to the capital) most attractive central subregion with highest share of Inter Regional Migration. Subregion's population continued to hold a stable proportion of the national total, a trend it held over the 1947/75 period. It reflects a good potential on a future growth pole.	
		(b)	The subregion connection with the capital increased with significant rise in its migrants going to the capital (still lowest of the region).				
		(c)	Significant reduction in the quantity of the migrants moving under the proximity factor.				

MIGRATION PATTERNS		SUBREGIONAL ANALYSIS No. II-S		CENTRAL REGION	
CHARACTERISTICS		1947	1957	Census Data	
TABLE No		Census Data	TABLE No	Census Data	
(9)	Net Migration(per '000 of pop.)	+11 (Best of the region's subregions excl. the capital)	(18)	-22 (Despite the negative net migration it is still the second most attractive in the region to the capital)	
(7)	% Share of National pop.	*5.4%	(16)	3.3%	
(7)	% Share of National In Migration	5.2%	(16)	3.6%	
(8)	% Share of National Out Migration	4.5%	(17)	4.3%	
(5)	% Share of Regional pop.	21.1%	(14)	14.3% (Smallest of the region's subregions)	
(5)	% Share of Inter-Regions Migration	22.3%	(14)	22.4% (Second highest in the region to Wasit)	
(2)	% Capital Destined Migrants of Total Out Migrants	42.8%	(11)	66.3%	
(2)	Main Recipient Subregion for the Subregion In Migrants (Over 10% of Subregions Out Migrants)	Babylon (15.6%) (Central) Qadisiya/Muthra (23.3%) (Southern)	(11)	Qadisiya/Muthra (10.8%) (Southern)	
(2)	Main Contributing Subregion to the Subregions In Migration (Over 10% of Contributing Subregions Out Migrants)	Babylon (Central) Qadisiya/Muthra, Basrah (Southern)	(11)	Anbar (Central) Qadisiya/Muthra (Southern)	
(2)	Proximity Factor Occurance	Babylon (Central) Qadisiya/Muthra (Southern)	(11)	Qadisiya/Muthra (Southern)	
(a)	Observations	Like Babylon, this subregion showed in 1947 a strong proximity factor movement accounting for about 40% of its outmigrants' destinations with a rather low value for the capital share of the subregion's outmigrants.	(a)	Despite the significant drop in its net migration it is still better off than all central subregions excl. the capital.	
(b)		Its main attraction is being the site of some of the most important shrines in the Moslim world. This partially explains the strong attraction it commands within the Central Region in claiming more than its fair share of Inter Region grants and a positive net migration.	(b)	Significant rise in the capital share of the subregion's outmigrants.	
			(c)	Continue to claim more than its fair share of the region's internal migrants.	

*(1947 figures for subregion population is over reported, see p. 149 in text)

SUBREGIONAL ANALYSIS NO. II-S		KERBELA		SUBREGION		CENTRAL		REGION	
MIGRATION PATTERN CHARACTERISTICS		TABLE No.	1965	Census Data	TABLE No.	1975	Data		
Net Migration(per '000 of pop)		(27)	-87	(Severe drop over 1957 level)	(36)		A positive net migration figure is suggested		
% Share of National pop.		(25)	4.3%		(34)		A significant increase is suggested		
% Share of National In Migration		(25)	1.1%	(Lowest in the region)	(34)		A huge increase is suggest (around seven times 1965 figure)		
% Share of National Out Migration		(26)	4.3%	(Lowest in the region)	(35)		Significant increase is suggested		
% Share of Regional pop.		(23)	18.6%	(An increase over 1957 level)	(32)		Significant increase is suggested		
% Share of Inter-Regions Migration		(23)	14.5%	(Lowest of the region)	(32)		Significant increase is suggested		
% Capital Destined Migrants of Total Out Migrants		(20)	70.9%	(Continuing the rising pattern of 1947/57)	(29)		Significant increase is suggested		
Main Recipient Subregion for the Subregion In Migrants (Over 10% of Subregions Out Migrants)		(20)	None		(29)		Babylon (Central)		
Main Contributing Subregion to the Subregions In Migration (Over 10% of Contributing Subregions Out Migrants)		(20)	None		(29)		Babylon (Central) Qadisiya/Muthra (Southern)		
Proximity Factor Occurance		(20)	Babylon (Central) Qadisiya/Muthna (Southern)		(29)		Babylon (Central)		
Observations		(1)	Despite a further significant drop in the subregion's net migration it maintained a higher share of the national population (over 1957).		Significant improvement over the 1947/65 pattern with positive net migration figure is suggested by data. Inter regional migration and national inmigration shares of the subregion are significantly increased. Potential for growth pole is suggested by the data.				
		(2)	Capital share of the subregion's outmigrants continued to rise over 1947/57 level.						
		(3)	Maintained (to a lesser degree than before) its proximity type movements.						
		(4)	In general the attractiveness of the subregion seems to drop slightly in the 1965 data in comparison to its level of 1947/57.						

THE SOUTHERN REGION:

MIGRATION PATTERN ANALYSIS FORM NO. III		SOUTHERN REGION	
MIGRATION PATTERN	TABLE No.	1947 Census Data	1957 Census Data
Net Migration(per'000of pop)	(9)	-52 (Worst of the nation's regions)	-89 (Worst of the nation's regions)
% Share of National pop.	(3)	29.8% (Slightly higher than Northern Region)	29.0% (Slightly higher than Northern Region)
% Share of National In Migration	(7)	22.0% (Around 2/3 is Basrah's share)	20.1% (Around 2/3 of which is Basrah's)
% Share of National Out Migration	(8)	41.1% (Slightly lower than Central Region)	45.4% (Highest of the nation's regions)
Destination of Out Migrants (Total of Subregions Out Migrants) % To the Capital	(3)	(a) 42.7% Highest of the nation's regions. This represents 42.5% of the capital's migration. (b) Sends a significant 20.9% to the Central Region (mostly proximity type) and only 4.6% to the Northern Region.	(a) 52.3% still very high proportion of its outmigrants and this represents 45.0% of the capital's migrants (highest of the nation's regions). (b) Slight drop in the Central Region's share of this region's outmigrants to 16.4%. The Northern Region's share dropped further to 2.2%.
% Inter Regional Migrants of Total Out Migrants from Subregions	(3)	31.7% (High figure due to Basrah's influence on the region)	29.0% (Slight drop over 1947 figure mainly due to increased capital attraction).
Most Attractive Subregion	(9)	Basrah (+124 second in the nation)	Basrah (+130 second in the nation)
Worst Negative Migration Subregion	(9)	Mysan (-299 worst in the nation)	Mysan (-525 worst in the nation)
Observations	(i)	Showing the worst negative migration condition of the nation's regions, with its share of the nation's total outmigration exceeds its population share by around 2 : 1 margin.	(i) Further deterioration of the region's negative migration pattern reaching highest outmigration share of the nation's regions.
	(ii)	The capital's share of the region's out-migrants is very high (highest of the nation's regions).	(ii) Weakening of the "proximity type movement".
	(iii)	Basrah strong position within the region caused the region's pattern to suggest slight self-containment but if this subregion's share is removed the Inter Regional Migration total will be severely cut.	(iii) Increased share of the capital from the region's total outmigrants.

REGIONAL PATTERN ANALYSIS FORM NO. III

SOUTHERN REGION

1975 Data

MIGRATION PATTERN	TABLE No.	1965 Census Data	TABLE No.	1975 Data
Net Migration(per '000of pop)	(27)	-107 (Worst of the nation's regions)	(36)	Data seems to suggest worsening negative migration.
% Share of National pop.	(21)	25.8% (least of the nation's regions)	(30)	Data seems to suggest continuation of drop of region's share of national population.
% Share of National in Migration	(25)	12.5% (still Basrah accounts for 2/3rds)	(34)	Significant drop is suggested
% Share of National Out Migration	(26)	36.0%	(35)	Significant increase in region's share is indicated.
Destination of Out Migrants (Total of Subregions Out Migrants) % To the Capital % To other Regions	(21)	(a) Another increase in the capital's share to 59.5% (36.6% of the capital's migrants) (b) While the Central Region's share of the region's outmigrants continued to drop (9.9%) the Northern Region's (due to Kurdish conflict) rose to 8.8%.	(30)	(a) Capital's share continues to indicate a rising trend. (b) Central Region's share indicates a considerable rise (may indicate Central Region's growth pole potential). Northern Region's share dropped considerably.
% Inter Regional Migrants of Total Out Migrants from Subregions	(21)	21.8% (Continued drop mainly due to capital's increased attraction).	(30)	Data indicates considerable drop of Inter Region's Migration.
Most Attractive Subregion	(27)	Basrah (+60)	(36)	Further drop of Basrah's attractiveness.
Worst Negative Migration Subregion	(27)	Mysan (-439 worst in the nation)	(36)	Further deterioration is suggested in Mysan's net migration. Also for all Southern subregions.

Observations

- (i) The continuation of the serious deterioration of the region's negative net migration pushed the region's population to be least of the nation's subregions (At one point of time in Iraq history (1930) the region was highest) (see p.).
- (ii) Continuous increase of capital's share.
- (iii) Basrah started to show significant loss of its attractiveness.

Data seems to suggest further deterioration of the migration of this region with the capital's share increasing to absolute dominance over the migration pattern in the region. Basrah seems to continue to lose its attractiveness.

CHARACTERISTICS	1947		1957	
	Value No.	Census Data	Value No.	Census Data
Net Migration(per '000 of pop)	(9)	-20	(18)	-29 (Best of the Southern Subregions excl. Basrah.)
% Share of National pop.	(7)	8.0% (Largest of the region's subregions)	(16)	8.4% (Largest of the Southern Subregions).
% Share of National In Migration	(7)	4.3% (Second in the region to Basrah)	(16)	4.6% (Second in the region to Basrah).
% Share of National Out Migration	(8)	6.2%	(17)	7.0%
% Share of Regional pop.	(6)	26.8% (Largest of the region's subregions)	(15)	28.8%
% Share of Inter-Regions Migration	(6)	8.1%	(15)	11.0% (Second to Basrah in region)
% Capital Destined Migrants of Total Out Migrants	(2)	21.0% (Second lowest in the nation)	(11)	34.8%
Main Recipient Subregion for the Subregion In Migrants (Over 10% of Subregions Out Migrants) --	(2)	Wasit (21.2%) Babylon (15.7%) Kerbela (21.6%) (Central)	(11)	Wasit (13.6%) Babylon (10.9%) Kerbela (22.8%) (Central)
Main Contributing Subregion to the Subregions In Migration (Over 10% of Contributing Subregions Out Migrants)	(2)	Babylon, Kerbela (Central)	(11)	Babylon, Kerbela (Central) Thiqar (Southern)
Proximity Factor Occurance	(2)	Babylon, Wasit, Kerbela (Central) and Thiqar (Southern)	(11)	Babylon, Wasit and Kerbela (Central) Basrah (Southern)
Observations	(a)	Shows the strongest proximity type movement in the nation in 1947 with almost 80% of its outmigrants going to neighbouring subregions.	(a)	For a usually poor migration status Southern subregion Qadisiya/Muthna showed a slight deterioration of its net migration figure in 1957.
	(b)	The strong proximity type movements are usually associated with low share of the capital of the subregion's outmigrants. In Qadisiya/Muthna 1947 data it shows the second lowest in the nation in capital share figure.	(b)	It showed a growing share of both national and regional population.
	(c)	Due to the predominance of Basrah, all the southern subregions incl. Qadisiya/Muthna show considerably less than their fair share of Inter Region Migrants.	(c)	Slightly improved on its share of Inter Region Migration.
			(d)	Slight drop in its proximity factor type movements (may be due to increased capital share).
			(e)	The 1954 flood that swept across the Tigris and Euphrates had little influence on this Subregion.

SUBREGION

SOUTHERN

SUBREGION

ALUJIBIA/MULHANA

1965

Census Data

1975 Data

REGION

CHARACTERISTICS	Value No.	1965 Census Data	Value No.	1975 Data
Net Migration(per '000 of pop.)	(27)	-88 (Significant drop over 1947/57 pattern)	(36)	Severe drop is suggested in the net migration.
%. Share of National pop.	(25)	6.9% (Considerable drop over 1947/57 pattern)	(34)	Significant drop is suggested
%. Share of National In Migration	(25)	2.1% (Considerable drop over 1947/57 pattern)	(34)	Significant drop is suggested
%. Share of National Out Migration	(26)	7.3%	(35)	Significant increase is suggested
%. Share of Regional pop.	(24)	26.5% (Dropping to second largest in region)	(33)	Significant drop is suggested
%. Share of Inter-Regions Migration	(24)	9.9% (Second lowest in region to Mysan)	(33)	Slight increase is suggested
%. Capital Destined Migrants of Total Out Migrants	(20)	49.9% (Almost double 1947/57 figure)	(29)	Significant drop is suggested
Main Recieplent Subregion for the Subregion In Migrants (Over 10% of Subreglons Oyt Migrants)	(20)	Thiqar (15.8%) (Southern)	(29)	Babylon, Kerbela (Central)
Main Contributing Subregion to the Subregions In Migration (Over 10% of Contributing Subregions Out Migrants)	(20)	None	(29)	None
Proximity Factor Occurance	(20)	Wasit, Babylon (Central) Thiqr and Basrah (Southern)	(29)	Babylon, Kerbela (Central)

(a) As the rest of the Southern Region's subregions (and most of the Central Region's) the 1965 data showed serious deterioration in the migration pattern of this subregion. Much worse net migration, much higher capital share of subregions outmigration and considerable drop in its national population share are the basic characteristics of the 1965 migration pattern for the subregion. The 1958 revolution and the failure of the agrarian reform are the obvious factors.

(b) Continued drop of its links with other subregions and also drop of the proximity factor type of movement.

Severe drop in the subregions net migration figure is suggested by the 1975 data. The effect of the 1971/1972 drought of the Euphrates River may be the main reason, as indicated by the tremendous increase in the subregion's outmigration pattern.

MIGRATION PATTERN CHARACTERISTICS		SUBREGIONAL ANALYSIS FORM NO. III-2		MYSAN SUBREGION		SOUTHERN REGION	
		TABLE No.	1947 Census Data	TABLE No.	1957 Census Data		
Net Migration(per '000 of pop)	(9)	-299 (The worst subregion in the nation)	(18)	-525 (The worst in the nation)			
%. Share of National pop.	(7)	6.5% (Smallest of the region's subregions)	(16)	5.3% (Smallest of the region's subregions)			
%. Share of National In Migration	(7)	2.6%	(16)	1.4% (Worst in the nation's subregions)			
%. Share of National Out Migration	(8)	25.5% (Highest of the nation's subregions)	(17)	28.5% (Highest of the nation's subregions)			
%. Share of Regional pop.	(6)	21.8% (Smallest of the region's subregions)	(15)	18.2% (Smallest of the region's subregions)			
%. Share of Inter-Regions Migration	(6)	4.1% (The lowest of the region's subregions)	(15)	5.3% (Lowest of the nation's subregions)			
%. Capital Destined Migrants of Total Out Migrants	(2)	53.0% (Highest of the region's subregions)	(11)	63.3% (Highest of the region's subregions)			
Main Recipient Subregion for the Subregion In Migrants (Over 10% of Subregions Out Migrants)	(2)	Basrah (27.9%) (Southern)	(11)	Basrah (23.5%) (Southern)			
Main Contributing Subregion to the Subregions In Migration (Over 10% of Contributing Subregions Out Migrants)	(2)	Wasit (Central) Basrah (Southern)	(11)	None			
Proximity Factor Occurance	(2)	Wasit (Central) Basrah	(11)	Wasit (Central) Basrah			
Observations	(a)	As will be shown in all the 1947/1975 data this Southern subregion has the worst condition of population migration of any other subregion in the nation. With its 25.5% share of the national total outmigration almost all migration studies in Iraq suggested this subregion to be the core of the migration problem in Iraq.	(a)	Being one of the worst hit Southern subregions by the 1954 Tigris flood, the already poor migration pattern became even worse. With net migration figure in excess of 525 the worst ever figure in the nation's subregions history. Its share of the national outmigration increased to 28.5%, almost six times its population share and its share of national immigration dropped to just 1.4% worst in the nation.			
	(b)	Outside the capital and Basrah, Mysan has little interest in sending migrants elsewhere.	(b)	Capital share of the subregion's outmigrants went up to 63.3%, Basrah's slightly dropped to 23.5%.			

MIGRATION PATTERN CHARACTERISTICS	SUBREGIONAL ANALYSIS FORM No. III-2		SUBREGION	REGION
	Value No.	1965 Census Data		
Net Migration(per '000 of pop)	(27)	-439 (Worst in the nation despite improvement over the 1957 figure)	(36)	Significant drop is suggested; still worst in the nation
%. Share of National pop.	(25)	4.4% (Smallest in region, continued to drop)	(34)	Significant drop is suggested
%. Share of National In Migration	(25)	1.1% (Worst in the nation)	(34)	Significant drop is suggested
%. Share of National Out Migration	(26)	17.4% (Highest in the nation)	(35)	Continued to increase, worst in the nation
%. Share of Regional pop.	(24)	16.8%	(33)	Continuation of the dropping pattern of 1947-65 is suggested
%. Share of Inter-Regions Migration	(24)	8.4% (Least in the region)	(33)	Significant drop is suggested
%. Capital Destined Migrants of Total Out Migrants	(20)	76.4% (Highest in the region)	(29)	Significant increase is suggested
Main Recipient Subregion for the Subregion In Migrants (Over 10% of Subregions Out Migrants) --	(20)	Basrah (10.9%) (Southern)	(29)	None
Main Contributing Subregion to the Subregions In Migration (Over 10% of Contributing Subregions Out Migrants)	(20)	None	(29)	None
Proximity Factor Occurance	(20)	None	(29)	None
Observations	(a)	Continued to lead the nation in about all the poor characteristics of the migration problem. Its population share of the national total dropped again in the 1965 data and so did its share of the nation's immigration total.		Continued to show the worst conditions of negative migration of any subregion in the nation in the 1975 data. The capital share of the subregion's outmigration is also increasing with the continuation of the diminishing share of the Southern attractive subregion of Basrah from the subregion's outmigrants.
	(b)	The capital share continued to increase and the Basrah's share continued to drop but still between them they claim over 86% of the subregion's outmigrants total.		
	(c)	Proximity factor movement disappeared.		

SUBREGIONAL ANALYSIS FORM No. III-3 THIQAR

SUBREGION SOUTHERN REGION

MIGRATION PATTERN CHARACTERISTICS	1947 Census Data		1957 Census Data	
	TABLE No.	1947	TABLE No.	1957
Net Migration(per '000 of pop.)	(9)	-45 (Second worst in the region to Mysan)	(18)	-84
% Share of National pop.	(7)	7.9%	(16)	7.4%
% Share of National In Migration	(7)	2.2% (Lowest of the region's subregions)	(16)	1.5% (Second lowest in the nation to Mysan)
% Share of National Out Migration	(8)	6.4% (Second highest in the region to Mysan)	(17)	7.5% (Second highest to Mysan)
% Share of Regional pop.	(6)	26.4% (Second largest in the region to Qadisiya/Muthra)	(15)	25.4%
% Share of Inter-Regions Migration	(6)	8.4%	(15)	7.6%
% Capital Destined Migrants of Total Out Migrants	(2)	18.6% (Lowest in the nation's subregions)	(11)	25.7% (Second lowest in the nation to Arbil)
Main Recipient Subregion for the Subregion In Migrants (Over 10% of Subregions Out Migrants)	(2)	Basrah (44.9%) (Southern)	(11)	Basrah (39.7%) Qadisiya/Muthna (13.1%) (Southern)
Main Contributing Subregion to the Subregions In Migration (Over 10% of Contributing Subregions Out Migrants)	(2)	None	(11)	None
Proximity Factor Occurance	(2)	Wasit (Central), Qadisiya/Muthra (Southern)	(11)	Qadisiya/Muthna, Mysan (Southern)
Observations	(a)	Second only to Mysan in the Southern Region This subregion's migration pattern shows also a high deterioration characteristic. Its share of the region's inter migration is very low compared to its regional population share and exhibits a high negative net migration.	(a)	Continued to show poor negative net migration (almost double the 1947 figure) and also continued to claim poor share of the national immigration total and the inter region migrants
	(b)	The most significant characteristic of this subregion's migration pattern is the predominance of the southern subregion of Basrah over the outmigration destination of Thi qar with around 2½ times the capital's share.	(b)	Basrah's share of the subregion's outmigrants despite its predominance had dropped slightly in 1957 against a significant increase in the capital's share.
	(c)		(c)	Similar (to 1947) proportion of proximity type movement as shown in 1957.

MIGRATION PATTERN CHARACTERISTICS		SUBREGIONAL ANALYSIS FORM NO. III-3		SOUTHERN REGION	
		THIQAR		1975 Data	
		1965 Census Data		1975 Data	
	Value No.		Value No.		Value No.
Net Migration(per '000 of pop)	(27)	-117 (Second worst in region to Mysan)	(36)	Significant drop is suggested	(36)
% Share of National pop.	(25)	6.3% (Continued to drop)	(34)	Continuation of drop is suggested	(34)
% Share of National in Migration	(25)	2.1%	(34)	Severe drop is suggested; worst in the nation	(34)
% Share of National Out Migration	(26)	8.3% (Second highest in region to Mysan)	(35)	Similar level is suggested	(35)
% Share of Regional pop.	(24)	24.3% (Dropped to second lowest to Mysan)	(33)	Slight drop is suggested	(33)
% Share of Inter-Regions Migration	(24)	19.2% (Considerable increase over 1947/57 pattern)	(33)	Severe drop is suggested; worst in the region	(33)
% Capital Destined Migrants of Total Out Migrants	(20)	36.7% (Lowest in the region, but continuing to rise)	(29)	Significant increase is suggested	(29)
Main Recipient Subregion for the Subregion In Migrants (Over 10% of Subregions Out Migrants)	(20)	Basrah (39.7%) (Southern)	(29)	None	(29)
Main Contributing Subregion to the Subregions In Migration (Over 10% of Contributing Subregions Out Migrants)	(20)	Qadisiya/Muthna (Southern)	(29)	None	(29)
Proximity Factor Occurrence	(20)	Qadisiya/Muthna (Southern)	(29)	Wasit (Central)	(29)
Observations	(a)	The trend of rising capital's share and dropping Basrah's share continued in the 1965 data.	(a)	Similar pattern to 1965 data is suggested with worsening net migration, reduction of the share of Basrah, increasing share of the capital and decreasing share of the subregion of the Inter Regional Migrants. In terms of immigration the subregion dropped even lower than the traditionally unattractive Mysan.	(a)
	(b)	Another significant drop in the subregion's net migration in the 1965 data, with significant drop in the subregion's share of national population.	(b)		(b)
	(c)	The effect of the Agrarian Reform failure of 1959 and the 1958 revolution is evident in this subregion which has considerable influence of the feudal system.	(c)		(c)
	(d)	Subregion's share of national outmigration continued to increase.	(d)		(d)

CHARACTERISTICS	1947	1957	Census Data	Census Data
Net Migration(per '000 of pop)	(9)	+124 (Second highest in the nation to the capital)	(18)	+130 (Second highest in the nation to the capital)
% Share of National pop.	(7)	7.5%	(16)	8.0%
% Share of National In Migration	(7)	13.9% (Second highest in the nation to the capital)	(16)	12.6% (Second highest in the nation to the capital)
% Share of National Out Migration	(8)	3.0% (Least in the region's subregions)	(17)	2.4% (Second lowest in the nation to Sulimania)
% Share of Regional pop.	(6)	25.1% (Second lowest in the region to Mysan)	(15)	27.5% (Second largest in the region to Qadisiya/Muthna)
% Share of Inter-Regions Migration	(6)	79.4% (Almost ten times its closest rival in the region)	(15)	76.2% (Keeping a huge majority of Inter Region Migration)
% Capital Destined Migrants of Total Out Migrants	(2)	50.6% (Second highest in the region to Mysan)	(11)	56.4% (Second highest in the region to Mysan)
Main Recipient Subregion for the Subregion In Migrants (Over 10% of Subregions Out Migrants)	(2)	Kerbela (12.6%) (Central) Mysan (10.0%) (Southern)	(11)	None
Main Contributing Subregion to the Subregions In Migration (Over 10% of Contributing Subregions Out Migrants)	(2)	Baghdad the capital, Mysan and Thiqar (Southern)	(11)	Baghdad the capital, Mysan and Thiqar (Southern)
Proximity Factor Occurance	(2)	Mysan and Thiqar	(11)	All other southern subregions
Observations	(a)	Basrah's position is the second most attractive subregion in the nation and a strong rival to the capital for the Southern Region's out-migrants. Its attractiveness extends to the Northern Region (Ninevah/Dhok) and even the capital sends 16.2% of its outmigrants to Basrah.	(a)	Improved positive net migration
	(b)	Its predominance within the Southern Region is very strong claiming 79.4% of the Inter Region Migrants.	(b)	Increase of the subregion's share of national population and regional population
	(c)	Its links with the capital which receives over half of the subregion's outmigrants coupled with Basrah's predominance in the Southern Region may suggest an amount of two stage migration to the capital.	(c)	Slight drop in the subregion's predominance over the Inter Region Migrants in the Southern Region coupled with increased share of the capital of the subregion's outmigrants suggests a slight drop in the subregion's attractiveness compared to the capital. The drop of Basrah's share of the national immigration total supports this assertion.

MIGRATION ANALYSIS FORM NO. III-A

SUBREGIONAL ANALYSIS

SOUTHERN REGION

BASRAH

SUBREGION

1975 Data

MIGRATION PATTERN CHARACTERISTICS	TABLE No.	1965 Census Data	TABLE No.	1975 Data
Net Migration(per '000 of pop.)	(27)	+60 (Significant drop over 1947/1957 figures)	(36)	Significant drop is suggested still positive
% Share of National pop.	(25)	8.4% (continuing to rise, becoming largest in region)	(34)	Similar level is suggested
% Share of National In Migration	(25)	7.2% (Dropping from 1957 level)	(34)	Significant drop is suggested
% Share of National Out Migration	(26)	3.0% (Least in the region)	(35)	Similar level is suggested
% Share of Regional pop.	(24)	32.4%	(33)	Significant increase is suggested
% Share of Inter-Regions Migration	(24)	62.5% (Dropped over 1947/1957 level)	(33)	Significant increase is suggested
% Capital Destined Migrants of Total Out Migrants	(20)	48.5% (Dropped from 1957 level)	(29)	Significant increase is suggested
Main Recipient Subregion for the Subregion In Migrants (Over 10% of Subregions Out Migrants)	(20)	None	(29)	None
Main Contributing Subregion to the Subregions In Migration (Over 10% of Contributing Subregions Out Migrants)	(20)	Mysan and Thigar (Southern), the Capital Baghdad	(29)	The Capital Baghdad
Proximity Factor Occurrence	(20)	Mysan and Qadisiya/Muthna (Southern)	(29)	None
Observations	(a)	In 1965 data Basrah's slight deterioration in attractiveness in the 1957 data (over 1947's data) became much more obvious. Reduction in its share of national in-migration, inter region migrants, and its net migration figure (less than half of the 1947/57 level) are proof of this assertion.		Significant drop in the attractiveness of the subregion in the 1975 data. This will suggest the continuation of the 1947/1965 pattern. Its share of national in-migration is significantly dropped with consequent drop of its usually high positive net migration figure. Its attractiveness in the inter region's migration improved mostly due to the deterioration of other southern subregions rather than to improving in the subregion itself.
	(b)	Basrah's position as main attraction centre in the south continued to deteriorate but it is still rising in terms of its population share of the national and regional mostly due to the deterioration of other subregions.		

APPENDIX NO. III

APPENDIX NO. III

X-107

Page

TABLE NO. 1	Subregions growth in number of industrial establishments and industrial employment (1954-1974) as percentage of total Iraq	X-108
TABLE NO. 2	Trade union membership in Iraq by subregions (May/June 1975)	X-109
TABLE NO. 3	Number and cost of building permits by types and subregions (1973)	X-110
TABLE NO. 4	Total amounts of industrial bank loans (in 000 I.D.) and real estate bank loans granted, by subregions in 1973 and 1975 and subregions share of growth in these loans of the national growth total between 1973 and 1975	X-111
TABLE NO. 5	Annually consumed electricity units per 1000 population by subregions (1973) compared against 1947, 1957 and 1965 rates of consumption	X-112
TABLE NO. 6	Domestic pure water distributed annually by subregions in 1000 cubic metres (1969) and per capita annual rate of consumption by subregions in cubic metres (1957, 1965 and 1975)	X-113
TABLE NO. 7	Number of telephones (1973-1974), number of telephones per 1000 population (1975) and share of subregions of 1973/1975 telephones growth in Iraq	X-114
TABLE NO. 8	Number of public sector passenger transport buses (1973-1975) and number of buses per 100,000 population	X-115
TABLE NO. 9	Vehicles population by types for subregions (private ownership only) for 1973 and total vehicle population for 1975 and subregions share of 1973-1975 growth	X-116
TABLE NO. 10	Total number of hospital beds and physicians per subregion (1975), number of population per physician and per hospital bed in subregions (1960, 1965 and 1975)	X-117
TABLE NO. 11	Number of population per physician, number of pharmacists and dentists per million population in Iraq and some other countries during the period 1962-1968	X-118
TABLE NO. 12	Number of kindergartens (1975) by subregion, number of schools (primary and secondary) (1965 and 1975), number of schools per 100,000 population by subregions (1975), vocational schools and university enrollment by subregions (1975)	X-119
TABLE NO. 13	Income tax by subregions, fiscal year 1972/1973	X-120
TABLE NO. 14	Average retail prices in selected food stuffs in centre of subregions (1973) (regional breakdown and Baghdad City) (fils per unit sale kg)	X-121
Baghdad Migrants Settlements Survey Form		X-122
Baghdad Migrants Settlements Survey Coding Form		X-132
Baghdad Migrants Settlements Survey Coding Sheet		X-145
Baghdad Migrants Settlements Survey Variable List		X-146

TABLE NO. 1
SUBREGIONS GROWTH IN NUMBER OF INDUSTRIAL ESTABLISHMENTS AND INDUSTRIAL EMPLOYMENT (1954-1974)
AS PERCENTAGE OF TOTAL IRAQ'S GROWTH (1965 SUBREGIONAL POPULATION AS PERCENTAGE OF TOTAL IRAQ
IS ADDED FOR COMPARISON PURPOSES):

Subregions	Number of Industrial Establishments						Industrial Employment						Subreg. Pop. % of Iraq 1965
	1954		1974		% of Total		1954		1974		% of Iraq		
	% of Total	1974	% of Total	1954-74 Growth	% of Iraq Growth	Net Growth 1954-74	% of Total	1954	% of Total	1974	% of Iraq	Net Growth 1954-74	
Sinevah/Dhek	2470	11.0%	2330	8.4%	Negative	8032	9.3%	14533	8.6%	+6801	7.5%	11.0%	
Sulimania	804	3.0%	1145	4.2%	+341	2774	3.2%	4530	2.5%	+2056	2.3%	5.0%	
Arbil	1404	6.5%	956	3.0%	Negative	2272	2.6%	4418	2.5%	+2146	2.4%	4.4%	
Kirkuk	1325	5.9%	1450	5.4%	+152	2527	2.9%	4918	2.8%	+2391	2.7%	5.9%	
Diala	1100	5.2%	723	2.0%	Negative	2309	2.7%	3016	1.8%	+709	0.8%	4.9%	
Anbar	1009	4.8%	459	1.5%	Negative	415	.5%	2429	1.4%	+2014	2.2%	3.6%	
Baghdad	4700	21.0%	10797	39.9%	+6091	33594	38.8%	87161	50.2%	+53567	59.4%	25.4%	
Basit	1024	4.6%	699	2.5%	Negative	1889	2.2%	5972	3.4%	+4083	4.4%	4.2%	
Babylon	2129	9.5%	1142	4.2%	Negative	6211	7.2%	13238	7.6%	+7027	7.8%	5.6%	
kerbela	2090	9.3%	2595	10.5%	+805	5127	5.9%	9222	5.3%	+4095	4.5%	4.2%	
Qadisiya/Muthina	677	3.0%	1143	4.1%	+400	1960	2.3%	4449	2.6%	+2483	2.6%	6.6%	
Myzan	1303	6.1%	652	3.1%	Negative	2468	2.9%	5357	3.1%	+2889	3.2%	4.3%	
Ihiquar	555	3.9%	693	3.2%	+ 8	2445	2.8%	2263	1.3%	Negative		0.2%	
Basrah	1255	5.7%	1994	7.2%	+709	14519	16.8%	11509	6.6%	Negative		8.3%	
IRAQ	22400		27558		+5158	90291		173617		+90261			

Source: (a) 1954 Data: Dr. J. Hashim, Dr. H. Omar and Dr. A. Alminoufi "Evaluation of Economic Growth in Iraq - 1950-1970", Second Edition, Ministry of Planning, 1972, Table No. 55, p. 255.

(b) 1974 Data: Ministry of Planning, Central Statistical Organisation, 1974 Annual Abstracts of Statistics, Tables No. 4/3, p.130 and No. 4/9, p.142.

(c) 1965 Population Data: Table No. 7, Appendix I, p.8-9.

TABLE NO. 2
APPENDIX NO. (III)
TRADE UNION MEMBERSHIP IN IRAQ BY SUBREGIONS (MAY/JUNE 1975)

Subregion	Subreg. Pop. % of Iraq 1975	Construction/Building Union		Services Union		Transport Union		Agricultural Union		Electricians Union		Foods Union		Textile Union		Mechanics Union		Oil Union		Ports Union		Railroads Union		Post Office Union		All Unions			
		Nos.	%	Nos.	%	Nos.	%	Nos.	%	Nos.	%	Nos.	%	Nos.	%	Nos.	%	Nos.	%	Nos.	%	Nos.	%	Nos.	%	Nos.	%		
Ninevah/Diuk	9.7%	11010	9.6	5130	6.5	17119	23.3	4549	6.4	4027	6.9	2932	5.3	7414	13.7	1724	3.6	4405	10.0	-	-	0	0	1210	6.6	913	5.5	57767	9.7
Sulimania	5.0%	4072	3.0	3535	3.7	1088	2.3	2372	3.3	1319	2.5	4217	7.6	430	.5	402	1.0	100	.2	-	-	0	0	-	0	285	1.7	18926	2.5
Arbil	4.4%	5245	4.0	3100	3.2	1151	1.0	2580	4.1	1398	2.7	1047	2.0	553	1.0	590	1.9	175	.4	-	-	0	0	222	1.3	639	3.5	17689	2.7
Erbil	5.4%	4471	3.9	3115	3.3	1495	2.0	3070	4.3	1535	3.5	1475	2.7	547	1.0	1559	3.3	1005	22.5	-	-	0	0	700	4.0	266	1.6	29041	4.4
Diala	4.4%	2738	2.4	3338	3.5	2402	3.9	3533	4.0	1253	2.4	1255	2.3	615	1.1	943	2.0	497	2.3	-	-	0	0	616	3.5	265	1.6	19220	2.9
Anbar	3.5%	4500	4.0	2394	2.5	2031	3.5	7505	10.7	1112	2.1	553	1.0	194	.4	1034	2.2	502	1.1	-	-	0	0	-	0	335	2.0	20860	3.2
Baghdad	31.7%	33775	29.5	42106	44.0	27021	35.5	21791	30.7	26514	51.3	25140	45.7	29192	53.7	26338	55.6	13417	30.6	-	-	0	0	9738	55.0	9743	56.4	264593	40.1
Mosul	3.5%	2292	2.0	2700	2.9	1140	1.5	6012	8.5	1100	2.1	910	1.7	4912	9.0	100	.2	246	.6	-	-	0	0	-	0	143	.9	19621	3.0
Halabja	5.3%	8181	7.1	4993	5.2	3203	4.2	4249	6.0	1753	3.4	4075	7.4	4400	8.1	6132	13.0	279	.6	-	-	0	0	702	4.0	376	2.3	35349	5.6
Herbela	5.1%	7251	6.3	3559	3.7	2706	3.0	1580	2.7	2072	4.0	2411	4.4	1504	2.9	1330	2.8	958	2.2	-	-	0	0	87	.5	344	2.1	24169	3.7
Jadisiya/Muthna	5.1%	7027	6.1	3572	3.7	1034	2.2	2758	3.9	1405	3.7	700	1.3	184	.3	433	.9	255	.6	-	-	0	0	1388	7.6	356	2.1	20216	3.0
Msan	3.3%	3440	3.0	2071	2.8	1774	2.4	1934	2.7	1303	2.6	2237	4.1	309	.7	454	1.0	552	1.3	400	2.2	400	2.2	-	0	152	.9	15316	2.4
Thiqar	4.4%	4424	3.9	4135	4.3	2052	3.5	2530	4.0	1775	2.7	2752	5.0	1150	2.0	598	2.0	173	.4	802	4.4	802	4.4	1019	5.8	379	2.3	22601	3.4
Basrah	5.5%	15400	13.9	8509	8.9	5752	2.0	5203	7.4	4005	8.0	4349	7.9	2515	4.0	5064	10.7	11803	26.9	17095	93.4	2023	11.4	2484	14.9	54801	12.9		
IRAQ	100.0%	114345		45707		73429		70942		51714		54405		54405		47307		43570		18300		18300		17707		16663		659837	
% of total membership		17.3%		14.5%		11.1%		10.5%		7.5%		7.4%		7.2%		7.2%		6.7%		2.8%		2.8%		2.7%		2.5%		100%	

Source: Computed from "Results of General Census of Workers in Iraq" - Bas Al-Qadim Journal No. 39 Date 22 Nov. 1975 p.40/41
1975 Population Data: Table No. 7, Appendix No. 3, p.3-4.

TABLE NO. 3
APPENDIX NO. III

NUMBER AND COST OF BUILDING PERMITS (IN 000 I.D.)
BY TYPES AND SUBREGIONS (1973)

Subregion	Residential				Commercial and Business				*Total all Buildings			
	No	% No	Cost 000 I.D.	% Cost	No	% No	Cost 000 I.D.	% Cost	No	% No	Cost 000 I.D.	% Cost
Ninevah/Dhok	2294	8.8	3926	9.6	76	13.4	204	15.3	2398	8.9	4236	7.8
Sulimania	584	2.3	995	2.4	22	3.9	56	4.2	606	2.3	1051	2.4
Arbil	862	3.3	1328	3.2	19	3.4	38	2.9	883	3.3	1374	3.2
Kirkuk	972	3.7	1205	2.9	47	8.3	81	6.1	1021	3.8	1286	3.0
Diala	688	2.7	928	2.3	27	4.8	29	2.2	719	2.7	961	2.2
Anbar	405	1.6	562	1.4	15	2.7	39	2.9	425	1.6	631	1.5
Baghdad	12563	48.4	21728	52.9	136	24.0	581	43.5	2745	47.5	22543	52.2
Wasit	643	2.5	912	2.2	12	2.1	24	1.8	657	2.5	936	2.2
Babylon	1105	4.3	1570	3.8	42	7.4	63	4.7	1159	4.3	1680	3.9
Kerbela	1217	4.7	1814	4.4	58	10.2	55	4.1	1438	5.4	2034	4.7
Qadisya/Muthna	792	3.1	856	2.1	19	3.3	20	1.5	815	3.0	878	2.0
Mysan	406	1.6	413	1.0	13	2.3	24	1.8	420	1.6	438	1.0
Thiqar	791	3.1	606	1.5	20	3.5	14	1.0	814	3.0	623	1.4
Basrah	2611	10.1	4245	10.3	61	10.8	108	8.1	2718	10.1	4512	10.4
IRAQ	25933	100%	41088	100%	567	100%	1336	100%	26818	100%	43182	100%

*Includes: Housing (Residential); Commerce and Business; Services; Industrial; Culture and Health.

Source: Computed from - Ministry of Planning, C.S.O. 1973 Annual Abstract of Statistics, Table No. 276, p. 440.

TABLE NO. 4
APPENDIX NO. 111
TOTAL AMOUNT OF INDUSTRIAL BANK LOANS (IN 000 I.D.) AND REAL ESTATE BANK LOANS GRANTED BY SUBREGIONS IN 1973 AND 1975 AND SUBREGIONS SHARE OF GROWTH IN THESE LOANS OF THE NATIONAL GROWTH TOTAL:

Subregions	Subregions Population 1975		Industrial Bank Loans				Real Estate Bank Loans							
	in 000	% of Iraq	1973		1975		1973		1975		Growth 1973-1975			
			in 000 I.D.	% of Iraq	in 000 I.D.	% of Iraq	in 000 I.D.	% of Iraq	in 000 I.D.	% of Iraq				
Ninevah/Dhok	1077	9.7%	110	13.3%	398	10.1%	+252	8.9%	1088	7.0%	2243	8.4%	+1155	10.3%
Sulimania	555	5.0%	4	0.5%	13	0.3%	+	0.3%	353	2.5%	581	2.2%	+198	1.8%
Arbil	491	4.4%	26	3.0%	5	0.1%	Negative	Negative	363	2.4%	834	3.1%	+471	4.2%
Kirkuk	600	5.4%	7	0.8%	18	0.5%	+11	0.4%	342	2.2%	254	1.0%	Negative	Negative
Diala	490	4.4%	106	12.1%	29	0.7%	Negative	Negative	314	2.0%	656	2.5%	+342	3.1%
Anbar	387	3.5%	7	0.8%	35	0.9%	+28	0.9%	138	0.9%	470	1.8%	+332	3.0%
Baghdad	3523	31.7%	417	47.7%	2950	75.2%	+2533	80.4%	9202	60.0%	15295	57.8%	+6093	54.4%
Wasit	386	3.5%	-	0	-	0	-	0	444	2.9%	524	2.0%	+80	0.7%
Babylon	594	5.3%	98	11.2%	137	3.5%	+39	1.2%	531	3.5%	1378	5.2%	+847	7.5%
Karbela	568	5.3%	73	8.3%	110	2.8%	+37	1.2%	821	5.4%	1739	6.6%	+918	8.2%
Qadisiya/Huthma	506	5.1%	1	0.1%	83	2.1%	+82	2.6%	364	2.4%	620	2.3%	+256	2.3%
Musan	302	3.3%	2	0.2%	60	1.5%	+58	1.8%	134	0.9%	199	0.8%	+65	0.6%
Thiqar	550	4.9%	1	0.1%	-	0	Negative	Negative	181	1.2%	353	1.3%	+172	1.5%
Basrah	947	8.5%	17	1.9%	89	2.3%	+72	2.3%	1024	6.7%	1290	4.9%	+266	2.4%
IRAQ	11124	100%	875	100%	3927	100%	+3151	100%	15329	100%	26436	100%	+11195	100%

Sources: (a) 1973 Data computed from: Ministry of Planning, C.S.O. 1973 Annual Abstract of Statistics, Tables No. 155 and No. 159, p. 295.

(b) 1975 Data computed from: Ministry of Planning, C.S.O. 1975 Annual Abstract of Statistics, Tables No. 12/7 p. 269 and No. 12/11 p. 271.

(c) 1975 Population Data from Table No. 7, Appendix No. 1, p. X-9.

TABLE NO. 5 ANNUALLY CONSUMED ELECTRICITY UNITS (1000KWH) PER 000
APPENDIX NO.III POP. (FOR LIGHTING) BY SUBREGIONS (1973) COMPARED AGAINST
1947, 1957 AND 1965 RATES OF CONSUMPTION:

Subregions	1975 Subreg. Pop. (in 000)	% of Iraq	1973			Annual Rate of Elect- ricity Consumption in 1000 KWH per 1000 Population		
			*Total Electricity Units Consumed		Units Per 1000 Pop.	1947	1957	1965
			No. of Units	% of Iraq				
Ninevah/Dhok	1077	9.7%	88471	8.3%	82	5	15	39
Sulimania	555	5.0%	25568	2.4%	46	1	22	41
Arbil	491	4.4%	20564	1.9%	42	1	6	30
Kirkuk	600	5.4%	47945	4.5%	80	8	99	61
Diala	496	4.4%	57616	5.4%	116	1	10	25
Anbar	387	3.5%	35202	3.3%	91	1	6	28
Baghdad	3523	31.7%	564533	53.2%	160	20	55	122
Wasit	386	3.5%	26161	2.5%	68	1	5	26
Babylon	594	5.3%	49628	4.7%	84	2	12	38
Kerbela	588	5.3%	61189	5.8%	104	4	36	79
Qadisya/Muthna	568	5.1%	39676	3.7%	70	1	7	30
Mysan	362	3.3%	19836	1.9%	55	1	7	18
Thiqar	550	4.9%	25650	2.4%	47	1	5	10
Basrah	947	8.5%	error in report- ing	-	-	7	53	error in report- ing
IRAQ	11124	100%	1062039	100%	96	-	-	-

Sources: 1973 Data computed from: Ministry of Planning, C.S.O., 1974 Annual Abstracts of Statistics, Table No. 116, p. 170.

1975 Population Data from Table No.7, Appendix I, p.X-9.

Data for 1947, 1957 and 1965 in: M.M. Al Rawi and A. Raouf - "Analytical Study of Internal Migration in Iraq 1947-1965" op.cit. Table No. 42, p. 59.

*Excluding Basrah which in the late fifties had its own Electricity Board causing data to be inaccurate and cannot be included in 1965 and 1975 Data.

TABLE NO. 6
APPENDIX NO. III

DOMESTIC PURE WATER DISTRIBUTED ANNUALLY BY SUBREGIONS
(1969) (IN 1000 CUBIC METERS). PER CAPITA ANNUAL RATE
OF CONSUMPTION OF PURE WATER BY SUBREGIONS FOR 1957,
1965 AND 1975 (ESTIMATE) (IN CUBIC METERS):

Subregions	Annual Pure Water Quantities			1975 Pop.		Per Capita Pure Water Distributed (cubic meter)		
	1969 Total Distri- buted (in 000 cubic meters)	(1) 1975 (Estimate) for Total Distributed		No. in 000	% of Iraq	1957	1965	1975
		(in 000 cubic meters)	% of Iraq					
Ninevah/Dhok	36933	41143	10.9%	1077	9.7%	10	32	38
Sulimania	8334	9984	2.6%	555	5.0%	7	10	18
Arbil	14173	16979	4.5%	491	4.4%	7	19	35
Kirkuk	36072	41266	10.9%	600	5.4%	Error in Data		
Diala	9582	10847	2.9%	496	4.4%	6	16	22
Anbar	6078	7941	2.2%	387	3.5%	3	12	21
Baghdad	113126	151136	40.0%	3523	31.7%	29	37	43
Wasit	16064	17413	4.6%	386	3.5%	2	11	30
Babylon	8619	10119	2.7%	594	5.3%	7	17	17
Kerbela	13026	17403	4.6%	588	5.3%	13	Error in Data	
Qadisya/Muthna	7557	7784	2.1%	568	5.1%	5	9	14
Mysan	5619	5788	1.5%	362	3.3%	5	14	16
Thiqr	7881	8354	2.2%	550	4.9%	2	9	15
Basrah	25871	31304	8.3%	947	8.5%	21	28	33
Total Iraq	309835	377461	100%	11124	100%	-	-	34

(1) Estimated by author using Population Growth Rate per subregion
(Table No. 5, Appendix No. I, p.X-7)

Sources: 1969 Data computed from: Ministry of Planning, Economic Department,
"Economic Indicators for Development of the Iraqi Economy" - May
1972, Table No. 39, p. 91.

Sources: 1957 and 1965 Data: M.M. Al Rawi and A. Raouf "Analytical
Study of Internal Migration in Iraq 1947-1965" - op.cit.
Table No. 41 p. 60.

1975 Population: Table No. 7, Appendix No. I, p.X-0

TABLE NO.7
APPENDIX NO.III

**NUMBER OF TELEPHONES (1973/1974) AND NUMBER OF
TELEPHONES PER 1000 POPULATION IN SUBREGIONS (1975)
AND SHARE OF SUBREGIONS OF 1973/75 TELEPHONES GROWTH
IN IRAQ**

Subregion	Pop. 1975 in 000	% Pop.	Number of Telephones				1975 Tel. per 1000 popul- ation	No. of Tel's. Growth 1973- 1975	% of Total Growth Iraq
			1973		1975				
			No. of Tel's.	% of Total Iraq	No. of Tel's.	% of Total Iraq			
Ninevah/Dhok	1077	9.7%	10404	8.1%	11215	6.0%	10	+811	1.5%
Sulimania	555	5.0%	1681	1.3%	2773	1.5%	5	+1092	2.0%
Arbil	491	4.4%	1982	1.5%	3082	1.7%	6	+1100	2.0%
Kirkuk	600	5.4%	4320	3.3%	5149	2.8%	9	+829	1.5%
Diala	496	4.4%	1637	1.3%	1760	1.0%	4	+123	0.2%
Anbar	387	3.5%	1597	1.2%	2149	1.2%	6	+552	1.0%
Baghdad	3523	31.7%	84815	65.8%	129016	70.0%	37	+44201	80.1%
Wasit	386	3.5%	1553	1.2%	1927	1.1%	5	+374	0.7%
Babylon	594	5.3%	2784	2.2%	3290	1.8%	6	+506	0.9%
Kerbela	588	5.3%	5186	4.0%	8516	4.6%	14	+3330	6.0%
Qadisya/Muthna	568	5.1%	2767	2.1%	4243	2.3%	7	+1476	2.7%
Mysan	362	3.3%	1260	1.0%	1507	0.8%	4	+247	0.5%
Thiqar	550	4.9%	1227	1.0%	1470	0.8%	3	+243	0.4%
Basrah	947	8.5%	7795	6.0%	8077	4.4%	9	+282	0.5%
IRAQ	11124	100%	129008	100%	184174	100%	17	+55166	100%

Sources: 1973 Data computed from: Ministry of Planning, C.S.O. 1973 Annual Abstract of Statistics, Table No. 335, p. 499.

1975 Data computed from: Ministry of Planning, C.S.O 1975 Annual Abstracts of Statistics, Table No. 14/34, p. 311.

1975 Population Data: from Table No. 7, Appendix No. I, p.X-9.

TABLE NO. 8 NUMBER OF PUBLIC SECTOR PASSENGER TRANSPORT BUSES (1973-1975) BY SUBREGIONS AND NUMBER OF BUSES PER 10000 POP. (1975):
APPENDIX NO. III

Subregion	1975 Subregional Population		Number of Buses				Buses per 100000 pop (1975)
	(in 000)	% of Iraq	1973		1975		
				% of Iraq		% of Iraq	
Ninevah/Dhok	1077	9.7%	116	7.0%	105	7.9%	9.7
Sulimania	555	5.0%	26	1.6%	34	2.5%	6.1
Arbil	491	4.4%	32	1.9%	28	2.1%	5.7
Kirkuk	600	5.4%	52	3.1%	55	4.1%	9.2
Diala	496	4.4%	33	2.0%	41	3.1%	8.3
Anbar	387	3.5%	55	3.3%	62	4.6%	16.0
Baghdad	3523	31.7%	763	45.9%	585	43.7%	16.6
Wasit	386	3.5%	33	2.0%	38	2.8%	9.8
Babylon	594	5.3%	76	4.6%	62	4.6%	10.4
Kerbela	588	5.3%	193	11.6%	108	8.1%	18.4
Qadisya/Muthna	568	5.1%	25	1.5%	28	2.1%	4.9
Mysan	362	3.3%	30	1.8%	43	3.2%	11.9
Thiqar	550	4.9%	48	2.9%	49	3.7%	8.9
Basrah	947	8.5%	180	10.8%	100	7.5%	10.6
IRAQ	11124	100%	1662	100%	1338	100%	12.0

Sources: 1973 Data computed from: Ministry of Planning C.S.O. 1973 Annual Abstracts of Statistics, Table No. 298, p.466.

1975 Data computed from: Ministry of Planning C.S.O. 1975 Annual Abstracts of Statistics, Table 1415, p. 284.

1975 Population Data: Table No. 7, Appendix No. I, p.X-9

APPENDIX NO. III VEHICLE POPULATION BY TYPES FOR SUBREGIONS (PRIVATE OWNERSHIP ONLY) FOR 1973 AND TOTAL VEHICLE POPULATION FOR 1975 WITH SUBREGIONAL SHARE OF 1973-1975 GROWTH:

Subregion	1975 Subregion Population		Saloon Cars		Taxis		Buses		Lorries		(2) Total Veh's. Pop. (1973)		Total Veh's. Pop. (1975)		Veh. Pop. Gr. 1973-1975		No. of Pop. per Vehicle (Total) 1975
	in 000	% of Iraq	Nos.	%	Nos.	%	Nos.	%	Nos.	%	Nos.	%	Nos.	%	Nos.	% of Iraq	
Ninevah/Dhok	1077	9.7	4733	9.0%	1009	0.7	821	7.1	3055	16.4	13773	11.1	14495	9.1	+722	2.0	74
Sulimania	555	5.0	640	1.2	216	.9	15	.1	273	1.5	1639	1.3	1751	1.1	+112	0.3	317
Arbil	491	4.4	925	1.8	600	2.4	149	1.3	376	2.0	2542	2.3	2952	1.8	+110	0.3	100
Kirkuk	600	5.4	2525	4.8	457	1.8	507	4.4	100	.6	7307	5.9	5024	5.0	+717	2.0	75
Diala	490	4.4	1169	2.3	455	2.0	414	3.6	1159	6.2	3005	2.9	3601	2.4	+253	0.7	125
Anbar	387	3.5	475	.9	387	1.6	350	3.0	950	5.2	2977	2.4	3516	2.2	+539	1.5	110
Baghdad	3523	31.3	33632	64.0	15891	64.1	4850	41.6	7144	38.3	64316	51.9	91110	50.8	+26794	73.4	39
Kasit	380	3.5	449	.9	354	1.4	359	3.1	490	2.7	2246	1.8	3033	1.9	+787	2.2	127
Babylon	594	5.3	789	1.5	812	3.3	467	5.0	347	1.9	2742	2.2	4552	3.0	+2110	5.8	122
Karbela	586	5.3	1309	2.5	1025	4.1	1498	12.9	900	5.2	4972	4.0	6977	4.3	+2005	5.5	54
Qadisiya/Muthna	506	5.1	570	1.1	599	2.4	500	4.8	510	2.7	2373	1.9	2812	1.6	+439	1.2	202
Musan	362	3.3	263	.5	270	1.1	116	1.0	273	1.5	953	0.8	1020	0.6	+73	0.2	353
Thiqr	550	4.9	194	.4	432	1.7	439	3.5	156	.8	1334	1.1	1381	0.9	+47	0.1	395
Tasrah	947	8.5	4793	9.1	1599	6.5	1054	9.1	2785	15.0	12885	10.4	14651	9.1	+1766	4.8	65
IRAQ	11124	100%	52512	100%	24505	100%	11601	100%	18020	100%	123967	100%	160441	100%	+30474	100%	69

(1) Public Sector Vehicle Population represents slightly over 16% of Total Vehicle Population in the country in 1975.

(2) Total Vehicle Population also included pick-ups, vans and tippers, etc.

Sources: (a) 1973 figures computed from: Ministry of Planning, C.S.O., 1973 Annual Abstracts of Statistics, Table No. 292, p. 401.

(b) 1975 figures computed from: Ministry of Planning, C.S.O., 1975 Annual Abstracts of Statistics, Table No. 14/2, p. 252 and No. 14/3, p. 253.

(c) 1975 Subregions Population Figures from: Table No. 7, Appendix No. 1, p. X-9.

TABLE NO. 10 TOTAL NUMBER OF HOSPITAL BEDS AND PHYSICIANS PER SUBREGION (1975). NUMBER OF POPULATION PER PHYSICIAN AND PER HOSPITAL BED IN SUBREGIONS (1960, 1965 AND 1975):
APPENDIX NO III

Subregions	1975 Population		(1) No. of Physys. (1975)	% of Iraq	(1) No. of Hospital Beds (1975)	% of Iraq	Population per Physician			Population per Hospital Bed		
	(in 000)	% of Iraq					1960	1965	1975	1960	1965	1975
Ninevah/Dhok	1077	9.7	361	8.8	1619	7.9%	6170	6007	2983	780	657	665
Sulimania	555	5.0	51	1.3	557	2.7	39571	11879	10882	1099	1012	996
Arbil	491	4.4	79	1.9	819	4.0	15491	8273	6215	720	546	600
Kirkuk	600	5.4	153	3.7	791	3.8	9472	6377	3921	938	875	759
Diala	496	4.4	123	3.0	758	3.7	-	7175	4032	1530	1057	654
Anbar	387	3.5	103	2.5	626	3.1	-	7002	3757	713	755	618
Baghdad	3523	31.7	2210	54.0	8807	42.9	2178	2184	1594	256	287	400
Wasit	380	3.5	94	2.3	754	3.7	15436	7833	4106	1766	815	512
Babylon	594	5.3	131	3.2	960	4.7	7862	6419	4534	505	633	615
Karbela	588	5.3	131	3.2	1066	5.2	-	6551	4489	445	568	552
Qadisiya/Muthna	568	5.1	151	3.7	958	4.7	16461	9802	3762	1756	764	593
Mysan	362	3.3	79	1.9	Error in reporting	-	11140	8319	4582	1558	571	-
Thiqaar	550	4.9	97	2.4	731	3.6	20785	10838	5670	1531	1512	752
Basrah	947	8.5	331	8.1	2006	10.1	-	4404	2861	618	555	458
IRAQ	11124	100%	4094	100%	20518	100%	-	4630	2717	-	522	515

Source: 1975 Data computed from: Ministry of Planning, C.S.O. 1975 Annual Abstracts of Statistics, Table No. 17/1, p. 357, and Table No. 17/4, p.360.

1975 Population Data: from Table No. , Appendix No. I, p.X-9.

1960 and 1965 Data: from M.H. Al Rawi and A. Raouf "Analytical Study of Internal Migration in Iraq 1947-1965", op.cit, Table No. 40, p. 50/57.

TABLE NO. 11
APPENDIX NO. III

NUMBER OF POPULATION PER PHYSICIAN, NUMBER OF
PHARMICISTS AND DENTISTS PER MILLION POP. IN
IRAQ AND SOME OTHER COUNTRIES DURING THE PERIOD
1962-1968:

Country	Year	Population per Physicians	Number of Pharmicists per mill.pop.	Number of Dentists per mill.pop.
Iraq	1968	4150	58	30
Egypt	1964	2365	126	42
Turkey	1965	2860	57	62
Yugoslavia	1965	1201	170	182
Sweden	1965	908	330	-
U.S.A.	1965	674	608	480

Source: Ministry of Planning, Economic Department, "Economic Indicators for Development of The Iraqi Economy, May 1972, Table No. 6, p.115.

TABLE NO. 12
APPENDIX NO. 111
NUMBER OF KINDERGARTENS (1975) BY SUBREGIONS, NUMBER OF SCHOOLS (PRIMARY AND SECONDARY) (1965 AND 1975) AND NUMBER OF SCHOOLS PER THOUSAND POPULATION BY SUBREGIONS (1975), VOCATIONAL SCHOOLS AND UNIVERSITY ENROLLMENT BY SUBREGIONS (1975):

Subregions	Subregions Population		Kindergarten (1975)		(1) Primary Schools				(1) Secondary Schools				Vocational Schools (1975)		(2) University Enrollment (1975)				
	In 1965	In 1975	No.	% of Iraq	No.	% of Iraq	No.	% of Iraq	No.	% of Iraq	No.	% of Iraq	No.	% of Iraq	Total Enrollment	% of Total Iraq			
	in 1000	in 1000																	
Ninevah/Diok	668.5	1077	12	5.9	539	11.8	701	11.4	65	9.7	57	9.7	92	8.4	9	1870	8.9	7325	10.8
Sulaimania	399.5	555	2	1.0	113	2.5	95	1.0	18	2.1	12	2.1	26	2.4	5	777	3.7	2289	3.4
Arbil	356.3	491	2	1.0	239	5.2	395	6.4	80	3.4	20	3.4	39	3.5	8	602	3.1	-	-
Kirkuk	473.0	600	14	6.9	322	7.1	459	7.9	82	4.1	24	4.1	69	6.3	12	1546	7.4	-	-
Diala	397.3	496	5	2.5	326	7.2	420	6.6	85	5.6	33	5.6	67	6.1	14	795	3.8	-	-
Anbar	307.0	387	3	1.5	230	5.2	308	5.0	80	4.6	27	4.6	54	4.9	14	795	3.8	-	-
Baghdad	2045.4	3523	67	43.0	1097	24.0	1428	23.1	41	33.7	197	33.7	381	34.7	11	8448	40.2	250128	74.2
Mosit	334.3	386	6	3.0	230	5.0	325	5.3	84	4.3	25	4.3	34	3.1	9	560	2.6	-	-
Babylon	448.2	594	25	13.4	252	5.5	440	7.1	74	5.5	32	5.5	64	5.8	11	894	4.2	-	-
Karbala	339.9	422	10	5.0	160	3.5	258	4.2	44	5.1	30	5.1	54	4.9	9	1026	4.9	-	-
Qadisiya/Muthana	543.2	506	9	4.4	208	5.9	358	5.8	63	5.3	31	5.3	59	5.4	10	840	4.0	-	-
Myaan	345.5	362	6	3.0	200	4.4	242	3.9	67	3.6	22	3.6	28	2.5	8	396	1.9	-	-
Thiqar	496.9	550	5	2.5	231	5.0	306	5.0	56	3.9	23	3.9	31	2.8	6	331	1.6	-	-
Basrah	689.5	947	16	7.9	350	7.7	402	6.5	42	8.9	52	8.9	101	9.2	11	2085	9.9	7835	11.6
IRAQ	8047.4	1001124	202	100	4505	100	6170	100	55	100	585	100	1099	100	10	21025	100	7577	100

(1) In 1975 the capital subregion accounted for 35.1% of the primary school pupils in Iraq and 45.2% of the secondary school pupils

(2) Universities in Iraq are in Ninevah/Diok and Sulaimania subregions (for the Northern Region), in Baghdad subregion (for the Central Region) and in Basrah subregion (for the Southern Region). All these universities are located in the subregions' centres.

Sources: (a) 1965 Data computed from M.H. Al-Ji and A. Raouf "Analytical Study of Internal Migration in Iraq" op. cit, Table No. 37, p.55/56.

(b) 1975 Data computed from: Ministry of Planning, C.S.O., 1975 Annual Abstract of Statistics, Tables No. 19/1 p.393, No. 19/2, p.394, No. 19/4, p.396, No. 19/7, p.399 and No. 19/13, p.405.

(c) 1965 and 1975 Population Data: Table No. 7, Appendix No. 1, p.4-11

TABLE NO. 13
APPENDIX NO. III

INCOME TAX BY SUBREGIONS, FISCAL YEAR 1972/73
(SUBREGIONAL POPULATION AS PERCENTAGE OF TOTAL
IRAQ IS ADDED FOR COMPARISON PURPOSES):

Subregion	Subreg. popula. as % of Total Iraq 1975	Income Tax Govern- ment Employ- ees ID	% of Total	Income Tax Private Sector I.D.	%	Total Income Tax	
						I.D.	%
Ninevah/Dhok	9.7%	104680	7.6%	200625	4.5%	305305	5.3%
Sulimania	5.0%	38293	2.8%	22974	.5%	61267	1.1%
Arbil	4.4%	20455	1.5%	10873	.3%	31328	.5%
Kirkuk	5.4%	34544	2.5%	78441	1.8%	112985	2.0%
Diala	4.4%	No Data	No Data	29401	.7%	29401	.5%
Anbar	3.5%	13407	1.0%	15554	.4%	28961	.5%
Baghdad	31.7%	936297	67.8%	3839510	87.0%	4775807	82.0%
Wasit	3.5%	18905	1.4%	9958	.2%	28863	.5%
Babylon	5.3%	28553	2.1%	41526	.9%	70079	1.2%
Kerbela	5.3%	35571	2.6%	81413	1.8%	116984	2.0%
Qadisya/Muthna*	5.1%	19360	1.4%	29813	.7%	49173	.8%
Mysan*	3.3%	19575	1.4%	23042	.5%	42617	.7%
Thiqar*	4.9%	11805	.9%	13691	.3%	25496	.4%
Basrah	8.5%	99644	7.2%	20532	.5%	120176	2.1%
IRAQ	100%	1381089	100%	4417353	100%	5798442	100%

Source: Computed from Ministry of Planning, C.S.O., 1973 Annual Abstracts of Statistics, Table No. 184, p.326.

1975 Population Data: from Table No. 7, Appendix No. I, p.X-9.

TABLE NO.14
APPENDIX NO. III

AVERAGE RETAIL PRICES OF SELECTED FOODSTUFFS IN
CENTRES OF SUBREGIONS (1973) (REGIONAL BREAKDOWN AND
BAGHDAD CITY) (FILS PER UNIT SALE (KG)):

Item	Unit	Northern Region	Central Region (ex Baghdad)	Southern Region	Baghdad City
Mutton	Kilo	476	468	484	507
Beef	"	456	403	394	453
Chickens (slough fed)	"	491	534	550	524
Fish (Carp)	"	430	387	310	415
Animal Ghee	"	-	671	663	746
Rice (1st Grade)	"	153	147	134	152
Flour	"	45	41	43	41
French Beans (Dried)	"	147	144	140	147
Potatoes	"	61	60	67	60
Onions (Dried)	"	63	61	62	65
Tomatoes (1st Grade)	"	118	132	136	154
Cabbage	"	50	42	43	32
Cauliflower	"	94	70	78	80
Carrots	"	43	36	39	41
Lemons	"	256	208	244	222
Dates (Pressed)	"	53	53	57	60

Source: Ministry of Planning, C.S.O., 1973 Annual Abstract of Statistics,
Table No. 141, p.271.

BAGHDAD MIGRANTS SETTLEMENTS

SURVEY FORM

DIRECTORATE GENERAL OF THE NATIONAL
CENTER FOR SOCIOLOGICAL AND CRIMINALOGICAL
RESEARCH

SERIAL NO

RURAL MIGRATION TO BAGHDAD SURVEY

CONFIDENTIAL NOT TO BE
USED EXCEPT FOR
SCIENTIFIC RESEARCH ONLY

MOHAFADAT:
QADHA:
SECTOR:
RESIDENCE NO:

ENUMERATOR:
LOCATION OF SAMPLE:
DATE:
CHECKED BY:

SECTION I VITAL STATISTICS (Of Household Head)

* 1 PLACE OF BIRTH

Mohafadat:..... Qada:..... Nahiya:.....
 Village:.....

* 2 SEX Male..... Female.....

* 3 MARITAL STATUS PRIOR TO MIGRATION

Single..... Married..... Divorced.....
 Widower.....

* 4 MARITAL STATUS NOW

Single..... Married..... Divorced.....
 Widower.....

5 (IF MARRIED) AGE WHEN MARRIED:..... years

Wife's age when married:..... years

Wife's present age:.....years

6 IF MARRIED TO MORE THAN ONE: STATE:

No. of wives:.....

No. of wives divorced:.....

No. of wives died.....

* 7 EDUCATIONAL STATAS BEFORE MIGRATING

Illiterate.....Reads and writes.....Primary Sch.Cert.....

Secondary School Interim Sch.Cert.....

Secondary School Sch.Cert..... Others.....

* 8 AGE WHEN MIGRATED.....years

DATE MIGRATED TO BAGHDAD.....

* 9 STATE NAMES OF LOCALITIES, TOCONS OR VILLAGES THAT YOU HAVE LIVED IN BEFORE SETTLING IN BAGHDAD (AFTER LEAVING YOUR NTIVE LOCALITY)

1.....2.....3.....4.....

5.....

* 10 STATE SECTOR IN BAGHDAD THAT YOU SETTLED IN FOR THE FIRST TIME

.....

*Questions selected for the thesis research.

- * 11 STATE REASONS) FOR SETTLING IN SAID SECTOR (Q.NO.10) (Enumerator to note order of importance into 1 or 2)
 - Relatives settled their before.....
 - Friends settled their before.....
 - Cheap accommodation available and low cost of living at sector.....
 - Close to my place of work.....
 - Other reasons (specify).....

- * 12 FIRST RESIDENCE TYPE IN BAGHDAD
 - Sarifa (Hut).....
 - Room at a house.....
 - House.....
 - Other (Specify).....

- * 13 HAVE YOY CHANGED THAT RESIDENCE (Q.NO.12)
 Yes..... No.....

- * 14 IN CASE OF YES (Q.NO.13), WHY HAVE YOU CHANGED (Enumerator to note order of importance into 1 or 2)
 - No schools available.....
 - Problems with neighbours.....
 - No people that I know close by.....
 - Far from place of work.....
 - Other reasons (Specify).....

- * 15 STATE SECTORS THAT YOU LIVED IN (SINCE MIGRATING)WITHIN BAGHDAD
 1.....2.....3.....4.....5.....

- * 16 WHEN MIGRATING TO BAGHDAD WERE YOU
 - Alone.....
 - With family.....

*SECTION II VITAL STATISTICS OF HOUSEHOLD MEMBERS

Household Member	Age	Under School Age	Educational Status						Occupation				Monthly Income I.D.			
			Illiterate	Reads & Writes	Interm.	Ibchond.	Institute	University	Postgraduate	Working	Student	Under Age	Unemployed			

1. Wives
2. Sons
3. Daughters
4. Other members

Total No. of Household.

Total Income

SECTION III REASONS FOR MIGRATING TO BAGHDAD

* 17 WHAT ARE YOUR MAJOR REASONS FOR MIGRATING TO BAGHDAD (Enumerator to note order of importance into 1 or 2)

- Economic

- Deteriorated standard of living at village
- High pay for labour in Baghdad
- To escape unemployment in rural areas
- Others (Specify).....

- Social

- Tribe's chief (or landlords) injustice
- Better housing conditions in Baghdad
- Own tribe members migrated to Baghdad
- Others (Specify).....

- Services availability

- Better living conditions in Baghdad
- Health facilities availability in Baghdad
- Educational facilities availability in Baghdad
- Others (Specify).....

*18 DO YOU PREFER STAYING IN BAGHDAD OR RETURN TO RURAL AREAS (STATE REASONS)

- Staying..... Return.....
- Why.....

SECTION IV HOUSING CONDITIONS

* 19 WHAT TYPE OF RESIDENCE YOU HAVE IN YOUR VILLAGE

- Sarifa..... Brick house..... Brick & Mud.....
- Others (Specify).....

* 20 DID YOUR RESIDENCE IN YOUR VILLAGE HAVE

- Running (Tab) Water..... Electricity.....
- W.C..... Bath..... Kitchen.....

* 21 WHAT TYPE OF RESIDENCE YOU HAVE NOW

- Brick house..... Brick and Mud.....
- Mud house..... Others (Specify).....
-

- Number of rooms

1	2	3	4	5	6	7	8	9	10
---	---	---	---	---	---	---	---	---	----

- Does it have

- Running (Tab) Water..... Electricity.....
- W.C..... Bath..... Kitchen.....

- Condition of tenure

- Own.....Rent..... Gov't housing.....
- Others.....

22 IF RENT (Q.NO. 21), SPECIFY MONTHLY RENT

.....I.D.

23 DO YOU OWN (OR HAVE)

Radio.....T.V.....ELECT.FRIDGE.....

Elect.Fan.....Tape Recorder.....

SECTION V ECONOMIC CONDITIONS

* 24 STATE THE SUM TOTAL OF MONTHLY INCOME

At your rural village.....I.D./Month

Now in Baghdad.....I.D./Month

* 25 DOES YOUR INCOME MEET YOUR REQUIREMENTS FOR LIVING

At village (rural): It does.....

It does not.....

Now (in Baghdad): It does.....

It does not.....

26 DO YOU BORROW MONEY

Often..... Sometimes..... Never.....

27 DO YOU HAVE DEBTS OR OUTSTANDING LOANS

Debts.....Loans(outstanding).....

None.....

* 28 HAVE YOU OWNED BEFORE MIGRATING TO BAGHDAD ANY

Agricultural Land: Yes..... No.....

Livestock: Yes..... No.....

29 DO YOU EXTEND ANY HELP TO NEWCOMERS TO BAGHDAD MIGRATING FROM YOUR OLD RURAL VILLAGE

Yes..... No.....

SECTION VI HEALTH CONDITIONS

30 DO YOU (IN CASE OF ILLNESS TO YOU OR TO A MEMBER OF YOUR HOUSEHOLD)

At village: Go to a doctor.....

Go to religious man.....

Go to (others).....

Now (in Baghdad): Go to a doctor (private).....

Go to government doctor or clinic

.....

Use homemade prescription.....

Go to religious man.....

31 IS THERE A SICK MEMBER IN YOUR HOUSEHOLD NOW

Yes..... No.....

(In case of Yes) who.....

Sickness type.....

Type of medication (Q.30 above).....

.....

SECTION VII

32 WHAT, IN YOUR OPINION, IS THE PROPER AGE FOR MARRIAGE

For male..... years

For female..... years

33 DO YOU PREFER FOR YOUR SON/DAUGHTER TO MARRY FROM RURAL/URBAN POPULATION

Son: From rural.....

From urban.....

Not significant.....

Daughter: From rural.....

From urban.....

Not significant.....

34 IS TRIBAL EXCHANGE MARRIAGE

Good..... Bad..... No opinion.....

35 DO YOU CONSULT YOUR WIFE IN FAMILY AND LIVING CONDITION AFFAIRS

Yes..... No.....

36 DO YOU THINK THAT IT IS NECESSARY THAT A DAUGHTER SHOULD HAVE A "SAY SO" IN HER MARRIAGE AFFAIRS

Yes..... No.....

(Questions 37 to 40 only for those who have children)

37 DO YOU WISH YOU HAD MORE CHILDREN THAN THOSE YOU HAVE

I wish..... I do not..... God's will.....

38 HAVE YOU HEARD OF FAMILY PLANNING

Yes..... No.....

39 (IF YES IN 38) DO YOU APPROVE OF IT

Yes..... No..... No opinion.....

40 (IF NO IN 39) WHAT IS THE REASON

Against religion.....

I love children.....

Arrangement by tribal norms for two men to marry each other's sisters in an exchange "deal". Divorce of one marriage will lead to other marriage having to divorce too (Author).

Mother might get sick.....

Other reasons (Specify).....

41 HAVE YOU EVER BEEN ARRESTED SINCE COMING TO BAGHDAD

Yes..... No.....

(If yes) why.....

42 HAVE YOU EVER GOT INTO CONFLICT WITH YOUR NEIGHBOURS

Yes..... No.....

In case of yes, state why:

Children..... Women's disagreements.....

Other reasons.....

43 HOW OFTEN DO YOU RECEIVE GUESTS IN YOUR HOME

Always..... Sometimes.....

Seldom..... Never.....

44 DO YOU EXCHANGE VISITS WITH RELATIVES/FRIENDS IN BAGHDAD

Yes..... No.....

In case of no, state reasons why

Poor relations.....

Do not have time.....

Too far away to visit.....

Other reasons.....

45 YOUR PERSONAL FRIENDS, ARE THEY

From the rural areas.....

From Baghdad.....

From both.....

SECTION VIII LEISURE TIME ACTIVITIES

46 WHERE DO YOU SPEND YOUR LEISURE TIME

In village (rural):

At tribe's guest house.....

At home.....

At cafe.....

At mosque.....

At other places.....

In Baghdad (presently)

At cafe.....

At home.....

At mosque.....

At other places.....

47 DO YOU LISTEN TO RADIO

Very often..... Sometimes.....
 Never,.....

48 DO YOU WATCH T.V.

Very often..... Sometimes.....
 Never.....

49 DO YOU GO TO THE CINEMA

Very often..... Sometimes.....
 Never.....

50 NEWSPAPER READING

I read newspapers personally.....
 Someone else reads them to me.....
 I never read them and nobody reads them to me.....

SECTION IX ASPECTS OF LIFE IN BAGHDAD AS RELATED TO A MIGRANT

* 51 OCCUPATION

At old rural village.....
 Presently (in Baghdad).....

(Enumerator to note
 if it is first job
 taken and if it has
 changed)

* 52 WHAT ARE THE TRADES YOU DO BEST OR BEING TRAINED FOR

.....

* 53 HAVE YOU VISITED BAGHDAD BEFORE MIGRATING TO

Yes..... No.....

* 54 IF ANSWER TO Q.53 IS YES, FOR WHAT PURPOSE DID YOU VISIT BAGHDAD

Visiting relatives.....
 Visiting religious shrines.....
 Other purposes (Specify).....

* 55 DO YOU ADVISE ANY OTHER MEMBERS OF YOUR RURAL VILLAGE TO MIGRATE TO BAGHDAD

I do I do not.....
 No opinion.....

56 WAS YOUR MIGRATION

Personal choice.....
 Forced to.....
 Because of occupation.....

57 IF YOUR MIGRATION WAS A PERSONAL CHOICE HAVE YOU CONSULTED ANYBODY ON SUCH AN ACTION OR WAS IT YOUR OWN DECISION

My own action.....
 Consulted others.....

58 IF CONSULTED SOMEBODY (IN Q.57) WAS IT

- Your guardian.....
- Other member of family (or household).....
- Other person(s) (Specify).....

* 59 WHEN IN BAGHDAD, HAVE YOU CONFRONTED

- Difficulties in finding residence.....
- Difficulties in finding a job.....
- Shortage of funds.....
- Other difficulties, (Specify).....
-

60 DO YOU APPROVE OF EDUCATION FOR

- Yours sons: Yes..... No.....
- Your daughters: Yes..... No.....

61 DO YOU APPROVE OF YOUR SONS GOING TO THE CINEMA

- Yes..... No.....

62 DO YOU SHARE IN TRIBAL ACTIVITIES EXPENSES

- Yes..... No.....

63 IN CASE OF AN ATTACK ON A MEMBER OF YOUR OWN HOUSEHOLD DO YOU PREFER

- Tribal interviewing.....
- Police and court action.....
- Financial penalties on tribal law.....

* 64 WHEN YOU MIGRATED WHAT WAS YOUR FEELING

- Happiness..... Sorrow.....
- Regret..... Indifference.....

* 65 HOW DO YOU FEEL ABOUT LIVING IN BAGHDAD NOW

- Happy..... Sad.....
- Regreted..... Indifferent.....

66 WHAT IS YOUR OPINION REGARDING TRIBE'S MARRIAGE NORMS

- Approve of..... Disapprove of.....
- No opinion.....

67 WHAT IS YOUR OPINION REGARDING THE FEUDING BETWEEN TRIBE'S MEN

- Approve of..... Disapprove of.....
- No opinion.....

* 68 DO YOU STILL KEEP CONTACTS WITH YOUR RURAL VILLAGE FRIENDS

- Yes..... No.....

Tribe's members pay collectively for marriages, penalties due to conflicts with other tribes, feasts expenses, funeral expenses etc.....(Author)

BAGHDAD MIGRANTS SETTLEMENTS SURVEY

CODING FORM

P.S. Questions selected from survey main form for the purpose of this thesis. Some elements were also added as it appeared into the returns of the survey.

BAGHDAD MIGRANTS SETTLEMENT SURVEYCODING FORM

VAR 01: PLACE OF BIRTH OF HOUSEHOLD HEAD *(Question No. 1. in Survey Form)

	<u>Code</u>
Baghdad, Medayen, Rural	100023
Wasit, Kut, Rural	100041
Qadisya, Diwana, Shafia, Rural	100048
Thiqar, Nasiria, Rural	100051
Diala, Baquba, Rural	100084
Wasit, Namania, Ahrar, Rural	100095
Babylon, Hashimya, Medhatia, Rural	100100
Qadisya, Diwania, Meymona, Rural	100104
Qadisya, Afaq, Sumer, Rural	100105
Qadisya, Abusukhair, Meshkab, Rural	100106
Qadisya, Shamiya, Ghamas, Rural	100107
Muthana, Rumaitha, Rural	100108
Thiqar, Sweech, Rural	100110
Thiqar, Refai, Qalatsukar, Rural	100111
Thiqar, Alfhood, Rural	100113
Mysan, Ali Algharbi, Shaikhsaad, Rural	100115
Mysan, Almetmona, Rural	100116
Mysan, Qalat Salih, Kahla, Rural	100117
Others: Central Region (Rural)	100222
Others: Central Region (Urban)	100224
Others: Southern Region (Rural)	100332
Others: Southern Region (Urban)	100334

*Question number on the original survey forms (in this Appendix pp. X-122 to X-131)

	<u>Code</u>
Others: Northern Region (Rural)	100442
Others: Northern Region (Urban)	100444
Other Areas	100555
<u>VAR 02:</u> <u>AGE OF HOUSEHOLD HEAD WHEN MIGRATED</u> (Question No. 8)	
Less than 18 years	001
19-30 years	002
31-40 years	003
41-50 years	004
51-60 years	005
Over 60 years	006
<u>VAR 03:</u> <u>DATE HOUSEHOLD HEAD MIGRATED TO BAGHDAD</u> (000) (Question No. 8)	
<u>VAR 04:</u> <u>MIGRATION ROUTE FROM VILLAGE TO BAGHDAD</u> (Question No. 9)	
Direct (Village to Baghdad)	001
To another rural area then to Baghdad	002
To another town then to Baghdad	003
To another rural area, then another rural area, then to Baghdad	004
To another town/rural area, then another town/ rural area, then to Baghdad	005
More than two stations, then to Baghdad	006
Others	007
<u>VAR 05:</u> <u>LOCALITY IN BAGHDAD SETTLED IN UPON ARRIVAL</u> (Question No. 10)	
Outskirts of Baghdad (near brick kilns)	001
Thawra Town migrant settlement	002
Shula Town migrant settlement	003

	<u>Code</u>
Baghdad Central migrant settlement	004
Baghdad Central deteriorated area	005
Other sectors of Baghdad	006
<u>VAR 06:</u> <u>FIRST PRIORITY REASON FOR SETTLING IN THAT SECTOR (VAR 05)</u> (Question No. 11)	
Own relatives settled there before	001
Own friends settled there before	002
Cheap accommodation available	003
Low cost of living in sector	004
Close to my place of work	005
Government housing opportunity	006
Others	007
<u>VAR 07:</u> <u>SECOND PRIORITY REASON FOR SETTLING IN THAT SECTOR (VAR 05)</u> (Question No. 11)	
Same as VAR 06	
<u>VAR 08:</u> <u>FIRST RESIDENCE TYPE IN BAGHDAD (Question No. 12)</u>	
Sarifa/mud hut	001
Mud house	002
Room at a mud house	003
Government house	004
Room at brick house	006
Brick - mud	007
Others	008
<u>VAR 09:</u> <u>HAS HEAD MOVED FROM THAT RESIDENCE SINCE SETTLING IN</u> (Question No. 13)	
Did not move	001
Moved within sector (to Government house)	002

	<u>Code</u>
Moved outside sector (Government housing)	003
Moved within sector (no Government housing)	004
Moved outside sector (no Government housing)	005
Others	006
<u>VAR 10:</u> <u>IF MOVED (VAR 09), FIRST PRIORITY REASON FOR MOVING</u> <u>(Question No. 14)</u>	
Poor public facilities in the area	001
Problems with neighbours	002
No people I know close by	003
Far from place of work	004
Given a Government housing apartment	005
Bought property	006
Unapplicable	007
Others	008
<u>VAR 11:</u> <u>IF MOVED (VAR 09), SECOND PRIORITY REASON FOR MOVING</u> <u>(Question No. 14)</u>	
Same as VAR 10	
<u>VAR 12:</u> <u>HOUSEHOLD HEAD'S COMPANIONS WHEN MIGRATED</u> (Question No. 16)	
Alone (family followed later)	001
Alone (family stayed at village)	002
With family	003
<u>VAR 13:</u> <u>NUMBER OF FEMALES AGED 0 TO 5 YEARS *(TABLE)</u>	000
<u>VAR 14:</u> <u>NUMBER OF FEMALES AGED 6 TO 15 YEARS (TABLE)</u>	000
<u>VAR 15:</u> <u>NUMBER OF FEMALES AGED OVER 15 YEARS (TABLE)</u>	000
<u>VAR 16:</u> <u>NUMBER OF MALES AGED 0 TO 5 YEARS (TABLE)</u>	000

*Table at Section II of Survey Form p. X-124, in this Appendix

	<u>Code</u>
<u>VAR 17:</u> <u>NUMBER OF MALES AGED 6 TO 15 YEARS (TABLE)</u>	000
<u>VAR 18:</u> <u>NUMBER OF MALES AGED OVER 15 YEARS (TABLE)</u>	000
<u>VAR 19:</u> <u>TOTAL NUMBER OF HOUSEHOLD MEMBERS (TABLE)</u>	000
<u>VAR 20:</u> <u>NUMBER OF BASIC FAMILIES IN HOUSEHOLD (TABLE)</u>	000
<u>VAR 21:</u> <u>RELATION OF HOUSEHOLD HEAD TO MEMBERS (TABLE)</u>	
Father	001
Mother	002
Brother	003
Sister	004
Relative	005
Non-relative	006
Others	007
<u>VAR 22:</u> <u>AGE OF HOUSEHOLD HEAD (NOW)</u>	
Less than 18 years	001
19-30 years	002
31-40 years	003
41-50 years	004
51-60 years	005
Over 60 years	006
<u>VAR 23:</u> <u>CURRENT HEAD'S JOB AT BAGHDAD (Question No. 51)</u>	
Construction labourer (non-skilled)	001
Construction labourer (skilled)	002
Sales and services	003
Mechanical (non-skilled helper)	004
Mechanical (skilled)	005
General (non-skilled)	006
Animal raising	007

	<u>Code</u>
Others	008
Unemployed	009
<u>VAR 24:</u> <u>AVERAGE MONTHLY HEAD'S INCOME (NOW) (Question No. 24)</u>	
Unemployed	001
Less than 5 I.D.	002
6 - 10 I.D.	003
11 - 20 I.D.	004
21 - 30 I.D.	005
31 - 40 I.D.	006
41 - 50 I.D.	007
51 - 60 I.D.	008
Over 60 I.D.	009
<u>VAR 25:</u> <u>NUMBER OF WAGE EARNERS AT HOUSEHOLD (TABLE)</u>	
One (household head)	001
One (household member)	002
Two	003
Three	004
More than three	005
<u>VAR 26:</u> <u>AVERAGE MONTHLY INCOME OF HOUSEHOLD (TOTAL) (TABLE)</u>	
No income	001
Less than 5 I.D.	002
6 - 10 I.D.	003
11 - 20 I.D.	004
21 - 30 I.D.	005
31 - 40 I.D.	006
41 - 50 I.D.	007
51 - 60 I.D.	008

	<u>Code</u>
61 - 70 I.D.	009
71 - 80 I.D.	010
Over 80 I.D.	011
<u>VAR 27:</u> <u>FIRST PRIORITY REASON FOR MIGRATION (Question No. 17)</u>	
Deteriorated standard of living at village	001
High pay for labour in Baghdad	002
To escape unemployment at village	003
Tribes chief or landlord's injustice	004
Better housing conditions in Baghdad	005
Own tribe's members migrated to Baghdad	006
Better living conditions in Baghdad	007
Better health facilities in Baghdad	008
Better educational facilities in Baghdad	009
Other reasons	010
<u>VAR 28:</u> <u>SECOND PRIORITY REASON FOR MIGRATION (Question No. 17)</u>	
<u>VAR 29:</u> <u>THIRD PRIORITY REASON FOR MIGRATION (Question No. 17)</u>	
Same as VAR 27	
<u>VAR 30:</u> <u>DO YOU PREFER STAYING IN BAGHDAD OR RETURN TO RURAL AREAS (Question No. 18)</u>	
Return (if given Government opportunity and aid)	001
Return	002
Staying	003
<u>VAR 31:</u> <u>TYPE OF RESIDENCE AT HOME VILLAGE (Question No. 19)</u>	
Sarifa/Mud Hut	001
Mud house	002
Brick and mud	003

	<u>Code</u>
Brick house	004
Others	005
<u>VAR 32:</u> <u>IF RURAL RESIDENCE HAS RUNNING TAP WATER</u> (Question No. 20)	
It has	001
It has not	002
<u>VAR 33:</u> <u>IF RURAL RESIDENCE HAS ELECTRICITY</u> (Question No. 20)	
<u>VAR 34:</u> <u>IF RURAL RESIDENCE HAS A W.C.</u> (Question No. 20)	
<u>VAR 35:</u> <u>IF RURAL RESIDENCE HAS A BATHROOM</u> (Question No. 20)	
<u>VAR 36:</u> <u>IF RURAL RESIDENCE HAS A KITCHEN</u> (Question No. 20)	
Same as VAR 32	
<u>VAR 37:</u> <u>TYPE OF RESIDENCE NOW</u> (Question No. 21)	
Sarifa/Mud hut	001
Mud house	002
Brick and mud	003
Brick house	004
Others	005
<u>VAR 38:</u> <u>NUMBER OF ROOMS IN PRESENT RESIDENCE</u> (Question No. 21)	
One	001
Two	002
Three	003
Four	004
More than four	005
<u>VAR 39:</u> <u>CONDITION OF TENURE OF CURRENT RESIDENCE</u> (Question No. 21)	
Own	001
Rent	002
Own (Government housing)	003

	<u>Code</u>
Government housing	004
Others	005
<u>VAR 40:</u> <u>AVERAGE MONTHLY INCOME OF HOUSEHOLD AT VILLAGE</u> (Question No. 24)	
Unemployed	001
Less than 5 I.D.	002
6 - 10 I.D.	003
11 - 20 I.D.	004
21 - 30 I.D.	005
31 - 40 I.D.	006
Over 40 I.D.	007
<u>VAR 41:</u> <u>IF HEAD'S INCOME IS ENOUGH FOR FAMILY AT VILLAGE</u> (Question No. 25)	
Yes	001
No	002
<u>VAR 42:</u> <u>IF HEAD'S INCOME IS ENOUGH FOR FAMILY AT BAHDAD</u> (Question No. 25)	
Yes	001
No	002
<u>VAR 43:</u> <u>HOUSEHOLD HEAD'S PERSONAL FRIENDS AT BAGHDAD ORIGIN</u> (Question No. 45)	
From rural areas	001
From Baghdad	002
From both	003
<u>VAR 44:</u> <u>WHERE DO YOU SPEND MOST OF YOUR LEISURE TIME AT VILLAGE</u> (Question No. 46)	
At tribe's guest house	001
At home	002
At cafe	003

	<u>Code</u>
At mosque	004
At other places	005
<u>VAR 45:</u> <u>WHERE DO YOU SPEND MOST OF YOUR LEISURE TIME AT BAGHDAD NOW</u> (Question No. 46)	
At cafe	001
At home	002
At mosque	003
At other places	004
<u>VAR 46:</u> <u>HEAD'S OCCUPATION AT VILLAGE</u> (Question No. 51)	
Farmer (own land)	001
Peasant (landless)	002
Unemployed	003
Sales and services	004
Animal raising	005
Mechanical	006
Labourer (unskilled)	007
Labourer (skilled)	008
Others	009
<u>VAR 47:</u> <u>FIRST JOB HEAD TOOK AT BAGHDAD</u> (Question Nos. 51/52)	
Construction labourer (non-skilled)	001
Construction labourer (skilled)	002
Sales and services	003
Mechanical (non-skilled)	004
Mechanical (skilled)	005
General (non-skilled)	006
Animal raising	007
Others	008
Unemployed	009

	<u>Code</u>
<u>VAR 48:</u> <u>IF VISITED BAGHDAD BEFORE MIGRATING TO CITY (Question No. 53)</u>	
Yes	001
No	002
<u>VAR 49:</u> <u>IF YES (VAR 48), WHAT WAS THE MAIN PURPOSE OF VISIT THEN (Question No. 54)</u>	
Visiting relatives/friends	001
Visiting religious shrines	002
Passing through	003
Shopping	004
Business	005
Pleasure and recreation	006
Others	007
Unapplicable	008
<u>VAR 50:</u> <u>DO YOU ADVISE ANY OF YOUR VILLAGE TO MIGRATE TO BAGHDAD (Question No. 55)</u>	
Yes	001
No	002
No opinion	003
<u>VAR 51:</u> <u>WHEN FIRST ARRIVED AT BAGHDAD, WHAT DIFFICULTIES WERE YOU CONFRONTED WITH (Question No. 59)</u>	
Difficulties in finding residence	001
Difficulties in finding a job	002
Financial difficulties	003
Other difficulties	004
No difficulties	005
<u>VAR 52:</u> <u>WHEN IMMIGRATED TO BAGHDAD, WHAT WAS YOUR FEELINGS (Question No. 64)</u>	
Happiness	001

	<u>Code</u>
Sadness	002
Regret	003
Indifferent	004
Others	005
<u>VAR 53:</u>	<u>HOW DO YOU FEEL ABOUT LIVING IN BAGHDAD (Question No. 65)</u>
Happiness	001
Sadness	002
Regret	003
Indifferent	004
Others	005
<u>VAR 54:</u>	<u>DO YOU STILL KEEP IN CONTACT WITH YOUR RURAL VILLAGE PEOPLE (Question No. 68)</u>
Yes	001
No	002
<u>VAR 55:</u>	<u>IN CASE OF YES (VAR 54) WHAT IS THE FORM THAT THESE CONTACTS TAKE (Question No. 69)</u>
Visiting	001
Helping and visiting	002
Helping only	003
Unapplicable	004
Others	005
Receiving help	006

BAGHDAD MIGRANTS SETTLEMENTS SURVEY

CODING SHEET

**TEXT BOUND INTO
THE SPINE**

01 (VAR01)	C31 (VAR11)	C64 (VAR21)	C19 (VAR30)	C49 (VAR40)	C04 (VAR49)	
02 (VAR02)	C37 (VAR12)	C67 (VAR22)	C22 (VAR31)	C52 (VAR41)	C07 (VAR50)	
03 (VAR03)	C40 (VAR13)	C70 (VAR23)	C25 (VAR32)	C55 (VAR42)	C10 (VAR51)	
04 (VAR04)	C43 (VAR14)	C73 - C80 LABEL BAMG	C28 (VAR33)	C58 (VAR43)	C13 (VAR52)	
05 (VAR05)	C45 (VAR15)	C01 (VAR24)	C31 (VAR34)	C61 (VAR44)	C16 (VAR53)	
06 (VAR06)	C49 (VAR16)	C04 (VAR25)	C34 (VAR35)	C64 (VAR45)	C19 (VAR54)	
07 (VAR07)	C52 (VAR17)	C07 (VAR26)	C37 (VAR36)	C67 (VAR46)	C73 - C80 LABEL BAMG	
08 (VAR08)	C55 (VAR18)	C10 (VAR27)	C40 (VAR37)	C70 (VAR47)		
09 (VAR09)	C53 (VAR19)	C13 (VAR28)	C43 (VAR38)	C73 - C80 LABEL BAMG		
10 (VAR10)	C61 (VAR20)	C15 (VAR29)	C46 (VAR39)	C01 (VAR48)		

BAGHDAD MIGRANTS SETTLEMENTS SURVEY:

VARIABLES LIST

ACCORDING TO YOUR INPUT FORMAT, VARIABLES ARE TO BE READ AS FOLLOWS

VARIABLE	FORMAT	RECORD	COLUMNS
VAR37	F 3.	2	40-
VAR38	F 3.	2	43-
VAR39	F 3.	2	46-
VAR40	F 3.	2	49-
VAR41	F 3.	2	52-
VAR42	F 3.	2	55-
VAR43	F 3.	2	58-
VAR44	F 3.	2	61-
VAR45	F 3.	2	64-
VAR46	F 3.	2	67-
VAR47	F 3.	2	70-
VAR48	F 3.	3	1-
VAR49	F 3.	3	4-
VAR50	F 3.	3	7-
VAR51	F 3.	3	10-
VAR52	F 3.	3	13-
VAR53	F 3.	3	16-
VAR54	F 3.	3	19-
VAR55	F 3.	3	22-

THE INPUT FORMAT PROVIDES FOR 55 VARIABLES. 55 WILL BE READ
 IT PROVIDES FOR 3 RECORDS ('CARDS') PER CASE. A MAXIMUM OF 80 COLUMNS ARE USED ON A RECORD.

OF CASES
 VAR LABELS

- 400
- VAR01. PLACE OF BIRTH OF HHOLD HEAD/
- VAR02. AGE OF HHOLD HEAD WHEN MIGRATED/
- VAR03. DATE HHOLD HEAD MIGRATED TO BAGHDAD/
- VAR04. MIGRATION ROUTE FROM VILAGE TO BAGHDAD/
- VAR05. SECTOR HEAD SETTLED IN 1ST TIME IN BAGD/
- VAR06. 1ST ORDER REASON FOR SETLING IN 1ST SFCT/
- VAR07. 2ND ORDER REASON FOR SETLING IN 1ST SFCT/
- VAR08. TYPE OF 1ST RESIDENCE IN BAGHDAD/
- VAR09. IF HEAD MOVED FROM 1ST RESIDENCE/
- VAR10. 1ST ORDER REASON FOR MOVING FRM 1ST RESD/
- VAR11. 2ND ORDER REASON FOR MOVING FRM 1ST RESD/
- VAR12. HHOLD HEAD COMPANIONS WHEN MIGRATED/
- VAR13. NOS FEMALES AGE 0 TO 5 YRS/
- VAR14. NOS FEMALES AGE 6 TO 15 YRS/
- VAR15. NOS FEMALES AGE OVER 15 YRS/
- VAR16. NOS MAIES AGE 0 TO 5 YRS/
- VAR17. NOS MAIES AGE 6 TO 15 YRS/
- VAR18. NOS MAIES AGE OVER 15 YRS/
- VAR19. NOS TOTAL HHOLD MEMBERS/
- VAR20. NOS BASIC FAMILIES PER HHOLD/
- VAR21. RELATION OF HHOLD HEAD TO MEMBERS/
- VAR22. AGE OF HHOLD HEAD/
- VAR23. CURRENT JOB FOR HHOLD HEAD/
- VAR24. AVG MONTHLY INCOME CURRENTLY FOR HEAD/
- VAR25. NOS WAGE EARNERS PER HHOLD/
- VAR26. TOTAL AVG MONTHLY INCOME CURENTLY HHOLD/
- VAR27. FIRST REASON FOR MIGRATING TO BAGHDAD/
- VAR28. SECOND REASON FOR MIGRATING TO BAGHDAD/
- VAR29. THIRD REASON FOR MIGRATING TO BAGHDAD/
- VAR30. HEAD OPENION TO RETURN TO RURAL AREAS/

VAR31.RESIDENCE TYPE OF HEAD AT HOME VILAGE/
 VAR32.TAP WATER SUPPLY AT HOME VILAGE RESIDCE/
 VAR33.ELECTRICITY SUPPLY AT HOME VILAGE RESIDCE/
 VAR34.W.C. AT HOME VILAGE RESIDENCE/
 VAR35.RATH ROOM AT HOME VILAGE RESIDENCE/
 VAR36.KITCHEN AT HOME VILAGE RESIDENCE/
 VAR37.TYPE OF CURRENT RESIDENCE/
 VAR38.NO OF ROOMS IN CURRENT RESIDENCE/
 VAR39.CONDITION OF TENURE OF CURRENT RESIDENCE/
 VAR40.HEAD AVG MONTHLY INCOME REFOR MIGRATING/
 VAR41.IF HEAD MONTHLY INCOME AT VILAGE SUFFNT/
 VAR42.IF HEAD MONTHLY INCOME AT BAGD NOW SUFFNT/
 VAR43.ORGIN OF HEAD PERSONAL FRIENDS AT RAGD/
 VAR44.LTESURE TIME PLACES FOR HEAD AT VILAGE/
 VAR45.LIFSURE TIME PLACES FOR HEAD AT RAGHDAD/
 VAR46.HEAD OCCUPATION REFOR MIGRATION TO BAGD/
 VAR47.1ST YEAR AT RAGHDAD JOR FOR HHOLD HEAD/
 VAR48.IF HEAD HAVE VISITED RAGD REFOR MIGRAT/
 VAR49.PURPOSE OF HEAD VISIT TO RAGD REFOR MIG/
 VAR50.IF HEAD ADVICE OTHERS AT VILAGE TO MIGR/
 VAR51.HEAD DIFFICULTIES AT ARRIVAL IN RAGHDAD/
 VAR52.HEAD PERSONAL FEELINGS UPON MIGR TO RAGD/
 VAR53.HEAD PRESENT FEELINGS ON LIVING IN RAGD/
 VAR54.IF HEAD KFEPS CONTACTS WITH POP AT VILGE/
 VAR55.FORM OF HEAD CONTACTS WITH POP AT VILAGE/
 VAR01(1)RAGHDAD(2)WASIT(3)QADISYA IUTHNA(4)THIGAR(5)DIALA
 (6)BABYLON(7)MYSAH(8)OTHERS RURAL(9)OTHERS URRAN(10)OTHERS/
 VAR02(001)<1YRS(002)10-30YRS(003)31-40YRS(004)41-50YRS
 (005)51-60YRS(006)>60YRS/
 VAR04(001)DIRECT(002)ANTHR RUR THNRAG(003)ANTHR TUN THNRAG
 (004)RUR RUR THNRAG(005)RUTUN THNRAG(006)>TWO STION THRAG
 (007)OTHERS/
 VAR05(001)RAG SKRTS BRKFLN(002)THAWRA TOWN(003)SHUIA TOWN
 (004)RAGCTR MIGSTHNT(005)BAGCTR DETRAREAS(006)OTHER RAG SECT/
 VAR06(001)REFIATVS STLD RFR(002)FRNDS STLD RFR(003)CHEAP ACCOMDN
 (004)LOW LVNG COST(005)CLOSE WORK PLACE(006)GOVMNT HOUSNG
 (007)OTHERS/
 VAR07(001)RELATVS STLD RFR(002)FRNDS STLD RFR(003)CHEAP ACCOMDN
 (004)LOW LVNG COST(005)CLOSE WORK PLACE(006)GOVMNT HOUSNG
 (007)OTHERS/
 VAR08(001)SARIFA-MUDHUT(002)HUN HOUSE(003)ROOM AT MUDHOUS
 (004)GOVMNT HOUSNG(006)RM AT BRICK HOUS
 (007)MUD+BRICK HOUSF(008)OTHERS/
 VAR09(001)DIDNOT MOVE(002)UTHN SEC GOVHOS(003)OTSD SFC GOVHOS
 (004)UTHN SECT(005)OSTD SECT(006)OTHERS/
 VAR10(001)POOR PUB FACI(002)PROR WTH NIEGBRS(003)NO KNLGE OF POP
 (004)FAR FRM WORK PL(005)GUT GOV HOUSE(006)BOUGHT PROPRTY
 (007)UNAPPLICABLE(008)OTHERS/
 VAR11(001)POOR PUB FACI(002)PROR WTH NIEGBRS(003)NO KNLGE OF POP
 (004)FAR FRM WORK PL(005)GUT GOV HOUSE(006)BOUGHT PROPRTY
 (007)UNAPPLICABLE(008)OTHERS/
 VAR12(001)AIONE FHLV FLOWD(002)ALON FAMILY STAYD(003)WITH FAMILY/
 VAR21(001)FATHFR(002)MOTHER(003)BROTHER(004)SISTER(005)RELATIVE
 (006)NON RELIATIVE(007)OTHERS/
 VAR22(001)<1YRS(002)14-30YRS(003)31-40YRS(004)41-50YRS
 (005)51-60YRS(006)>60YRS/
 VAR23(001)CONSTRN NONSKID(002)CONSTRN SKILD(003)SAIFS+SERVICES
 (004)MECHNCI NONSKID(005)MECHNCL SKILD(006)GNRI NONSKLD
 (007)ANIMAL RAISING(008)OTHERS(009)UNEMPLOYED/
 VAR24(001)UNEMPLOYED(002)<5 I.D(003)6-11 I.D(004)11-20 I.D

VALUE LABELS

(005)21-30 I.D(006)31-40 I.D(007)41-50 I.D(008)51-60 I.D
(009)OVER 60 I.D/
VAR25(001)ONE WHOLD HD(002)ONE WHOLD MEMB(003)TWO(004)THREE
(005)MORE THAN THREE/
VAR26(001)UNEMPLOYED(002)<5 I.D(003)6-11 I.D(004)11-20 I.D
(005)21-30 I.D(006)31-40 I.D(007)41-50 I.D(008)51-60 I.D
(009)61-70 I.D(010)71-80 I.D(011)OVER 80 I.D/
VAR27(001)NTR STD LIVNG(002)HGH LRR PAY BAGD(003)UNFMPMNT RURL
(004)TRR CHFFINJSTCF(005)RTER HOSG BAGD(006)OWN MEMR MIGRTD
(007)BTR LVNG BAGD(008)RTR HTHSVCE BAGD(009)BTR EDCFAC BAGD
(010)OTHERS/
VAR28(001)NTR STD LIVNG(002)HGH LRR PAY BAGD(003)UNFMPMNT RURL
(004)TRR CHFFINJSTCE(005)BTR HOSG BAGD(006)OWN MEMR MIGRTD
(007)BTR LVNG BAGD(008)RTR HTHSVCE BAGD(009)BTR EDCFAC BAGD
(010)OTHERS/
VAR29(001)NTR STD LIVNG(002)HGH LRR PAY BAGD(003)UNFMPMNT RURL
(004)TRR CHFFINJSTCE(005)RTER HOSG BAGD(006)OWN MEMR MIGRTD
(007)BTR LVNG BAGD(008)RTR HTHSVCE BAGD(009)BTR EDCFAC BAGD
(010)OTHERS/
VAR30(001)RTRN GVH LND+ATD(002)RETURN(003)STAY/
VAR31(001)SARIFA OR MUDHUT(002)MUD HOUSE(003)BRICK+MUD
(004)BRICK HOUSE(005)OTHERS/
VAR32(001)HAVE TAP WATER(002)HAVINO TAP WATER/
VAR33(001)HAVE ELFCTRICTY(002)HAVNO ELCTRCITY/
VAR34(001)HAVE W.C.(002)HAVE NO W.C./
VAR35(001)HAVE BATHROOM(002)HAVNO BATH ROOM/
VAR36(001)HAVE KITCHEN(002)HAVNO KITCHEN/
VAR37(001)SARIFA-MUDHUT(002)MUD HOUSE(003)BRICK+MUD
(004)BRICK HOUSE(005)OTHERS/
VAR38(001)NPF(002)TWO(003)THREF(004)FOUR(005)>FOUR/
VAR39(001)OWN(002)RENT(003)OWN GOV HOUSNG(004)GOVT HOUSNG
(005)OTHERS/
VAR40(001)UNEMPLOYED(002)<5 I.D(003)6-10 I.D(004)11-20 I.D
(005)21-30 I.D(006)31-40 I.D(007)>40 I.D/
VAR41(001)YES(002)NO/
VAR42(001)YES(002)NO/
VAR43(001)FRM RURL AREAS(002)FRM BAGHDAD(003)FROM ROTH/
VAR44(001)TRIB GUEST HOME(002)AT HOMF(003)AT CAFF(004)AT MOSQUE
(005)AT OTHER PLACES/
VAR45(001)AT CAFE(002)AT HOME(003)AT MOSQUE(004)AT OTHER PLACES/
VAR46(001)FRMR OWN LAND(002)LANDLESS PESANT(003)UNEMPLOYED
(004)SALES + SERVICES(005)ANIMAL RAISING(006)MECHANICAL
(007)LABOR UNSKLD(008)IAROK SKLD(009)OTHERS/
VAR47(001)CONSTRN NONSKLD(002)CONSTRN SKILD(003)SAIFS+SERVICES
(004)MECHNCI NONSKLD(005)MECHNCI SKILD(006)GNRI NONSKLD
(007)ANIMAL RAISING(008)OTHERS(009)UNEMPLOYED/
VAR48(001)YES(002)NO/
VAR49(001)VATHG RLTVS+FRND(002)VSTNG RELG SHRNS(003)PASSING THRU
(004)SHOPPING(005)BUSINESS(006)PLEASURE(007)OTHERS
(008)UNAPPLICABLE/
VAR50(001)YES(002)NO(003)NO OPENION/
VAR51(001)DFCLTS GETG RESD(002)DFCLTS GETG JOB(003)FINCIAL DFCLTS
(004)OTHER DFCLTS(005)NO DIFICULTIES/
VAR52(001)HAPPINESS(002)SADNESS(003)REGRETNESS(004)INDIFFERENCE/
VAR53(001)HAPPINESS(002)SADNESS(003)REGPETFNSS(004)INDIFFERENCE/
VAR54(001)YES(002)NO/
VAR55(001)VISITING(002)VISITING+HELPING(003)HELPING ONLY
(004)UNAPPLICABLE(005)OTHERS(006)RECIEIVING HFIP/
VAR01(100023=1)(100041-100095=2)(100048,100104 THRU 100108=3)
(100051,100110,100111,100113=4)(10004=5)(100100=6)


```

(100119 THRU 100117=7)(100222,100332,100442=8)
(100224,100334,100444=9)(100555=10)/
VAR02(1=10)(2=25)(3=35)(4=45)(5=55)(6=65)/
VAR03(1=1974)(2=1973)(3=1972)(4=1971)(5=1970)(6=1969)(7=1968)
(8=1967)(9=1966)(10=1965)(11=1964)(12=1963)(14=1961)(15=1960)
(16=1959)(17=1958)(18=1957)(19=1956)(20=1955)(21=1954)(23=1952)
(25=1950)(26=1949)(30=1945)(31=1944)(33=1940)(40=1935)(42=1933)
VAR03(4,5=4)/
VAR22(1=10)(2=25)(3=35)(4=45)(5=55)(6=65)/
VAR24(1=0)(2=2.5)(3=8)(4=15)(5=25)(6=35)(7=45)(8=55)(9=65)/
VAR26(1=0)(2=2.5)(3=8)(4=15)(5=25)(6=35)(7=45)(8=55)(9=65)(10=75)
(11=85)/
VAR40(1=0)(2=2.5)(3=8)(4=15)(5=25)(6=35)(7=45)7
(VAR23 FO 010)VAP47
Z1=VAR24/VAP19
Z1(0 THRU 2.0=1)(2.01 THRU 4.0=2)(4.01 THRU 6.0=3)
(6.01 THRU 32.5=4)
Z1.PER CAPTA MONTH HDINCOM RAG
Z1(1)UP TO 2.0 I.D(2)2.01 TO 4.0 I.D(3)4.01 TO 6.01 I.D
(4)OVER 6.0 I.D
Z2=VAR26/VAR19
Z2(0 THRU 2.0=1)(2.01 THRU 4.0=2)(4.01 THRU 6.0=3)
(6.01 THRU 8.0=4)(8.01 THRU 32.5=5)
Z2.PER CAPTA MONTH INCOME ALLMEMB RAG
Z2(1)UP TO 2.0 I.D(2)2.01 TO 4.0 I.D(3)4.01 TO 6.0 I.D
(4)6.01 TO 8.0 I.D(5)OVER 8.0 I.D
Z3=VAR40/VAR19
Z3(0 THRU .50=1)(.51 THRU 1.0=2)(1.1 THRU 1.5=3)(1.51 THRU 2.0=4)
(2.1 THRU 7.5=5)
Z3.PER CAPTA MONTH HDINCOM VILAGE
Z3(1)UP TO .50 I.D(2).51 TO 1.0 I.D(3)1.1 TO 1.5 I.D
(4)1.51 TO 2.0 I.D(5)2.1 TO 7.5 I.D
Z4=VAR24/VAR40
Z4(0 THRU 1.00=1)(1.01 THRU 2.00=2)(2.01 THRU 4.00=3)
(4.01 THRU 6.00=4)(6.01 THRU 10.00=5)(10.01 THRU 26.00=6)
(VAR40 FO 0) Z4=-99
Z4.RATIO BAG TO VILAGE MONTH HDINCOM
Z4(0)UNEMPLOYED(1)EQUAL INCOMES(2)1.5 TIMES(3)THREE TIMES
(4)FIVE TIMES(5) EIGHT TIMES(6) OVER TEN TIMES
MISSING VALUES VAR01 TO VAR55(0)/74(-99)
PRINT FORMATS VAR01 TO VAR55(0)
CODEBOOK Z1 TO 74
STATISTICS ALL
READ INPUT DATA
    
```

APPENDIX NO. IV

APPENDIX NO. IV

	Page
Shihamya Reverse Migration Project Survey Forms	X-154
Shihamya Reverse Migration Project Survey - Coding Forms	X-160
Shihamya Reverse Migration Project Survey - Coding Sheets	X-170
Shihamya Reverse Migration Project Survey - Variables List	X-172
Shihamya Reverse Migration Project - Case Study Materials for Computation of Participants Income on the Project (Revised Cost Estimate)	X-179

SHIHAMYA REVERSE MIGRATION PROJECT

SURVEY FORMS

SAMPLE SURVEY
SETTLEMENT CHARACTERISTICS
OF
"SHIHAMYA PROJECT"

DEAR FARMER:

THIS SURVEY IS SPECIFICALLY DESIGNED FOR EDUCATIONAL-SCIENTIFIC PURPOSES. TOTAL CONFIDENTIALITY IS AN IMPORTANT ELEMENT OF THIS SURVEY, THUS NO NAMES WILL BE TAKEN TO ENSURE THIS END. THANK YOU FOR YOUR CO-OPERATION.

JUNE 1975

RESEARCH OBJECTIVE:

TO EVALUATE THE CONDITIONS OF SETTLERS AND SETTLEMENTS IN THE SHIHAMYA PROJECT, AS PART OF A THESIS PROJECT TO BE PREPARED BY THE RESEARCHER FOR PH.D. DEGREE IN REGIONAL PLANNING, (GOVERNMENT MISSION).

I VITAL STATISTICS

1.1 AGE-SEX CHARACTERISTICS OF THE HOUSEHOLD

1.1.1. Household members Age 0-5 years

Nos.	
M	F
<input type="text"/>	<input type="text"/>

1.1.2. Household members Age 6-15 years

<input type="text"/>	<input type="text"/>
----------------------	----------------------

1.1.3. Household members Age over 15 years

<input type="text"/>	<input type="text"/>
----------------------	----------------------

1.1.4. Total Nos. of Household members:

<input type="text"/>	<input type="text"/>
----------------------	----------------------

Grand Total

1.2 NUMBER OF BASIC FAMILIES

1.3 RELATION OF HOUSEHOLD HEAD TO MEMBERS

1.4 AGE OF HOUSEHOLD HEADyears

1.5 PLACE OF BIRTH OF HOUSEHOLD HEAD

Mohafadat..... Qadha..... Nahia.....

Rural areas.....

Urban centre.....

1.6 WHEN DID HOUSEHOLD HEAD MIGRATE TO BAGHDAD

year..... Month.....

1.7 REASONS FOR MIGRATION OF HOUSEHOLD HEAD, (MENTION THE THREE MOST SIGNIFICANT REASONS IN ORDER OF IMPORTANCE)

(a).....

(b).....

(c).....

II HOUSEHOLD SOCIO-ECONOMIC CHARACTERISTICS

2.1 OCCUPATION OF HOUSEHOLD HEAD BEFORE MIGRATING TO BAGHDAD

.....

2.2 STATE JOBS TAKEN BY HOUSEHOLD HEAD DURING STAY AT BAGHDAD (LAST 5 YEARS BEFORE COMING TO THE PROJECT)

.....

.....

.....

2.3 *OCCUPATION AT PRESENT AT PROJECT

.....

2.4 FEMALE PARTICIPATION

2.4.1 DOES FEMALES IN THE HOUSEHOLD PRACTICE ANY WORK

Yes..... No.....

2.4.2 IF YES (AT 2.4.1.) STATE THE NATURE OF SUCH WORK

.....

.....

2.5 LAST MONTHLY INCOME (TOTAL ALL SOURCES) EARNED BY HOUSEHOLD HEAD BEFORE COMING TO PROJECT (YEAR IMMEDIATELY BEFORE COMING)

I.D. Monthly.....

2.6 INCOME EARNED BY HOUSEHOLD HEAD DURING STAY AT PROJECT

I.D. First year

I.D. Second year

I.D. Third year

AVERAGE MONTHLY INCOME OVER STAY PERIOD

I.D. /Month

2.7 HOUSEHOLD TOTAL INCOME (IF OTHERS ARE WORKING TOGETHER WITH HEAD)

2.7.1 MONTHLY INCOME AT BAGHDAD (YEAR BEFORE COMING)

I.D.

2.7.2 INCOME EARNED BY HOUSEHOLD AT PROJECT

I.D. First year

I.D. Second year

I.D. Third year

AVERAGE MONTHLY INCOME FOR HOUSEHOLD OVER STAY PERIOD

I.D. per month.....

2.8 HOUSEHOLD STABILITY AT PROJECT

2.8.1 ARE ALL MEMBERS OF HOUSEHOLD STATED ON THE PROJECT SINCE JOINING IN

Yes..... No.....

2.8.2 IF NO (AT 2.8.1) HAVE SOME RETURNED TO BAGHDAD

Yes.....

No (Explain).....

* This question proved to be redundant as all sample replied: Farmer. It was originally placed to pick up non-farmer residents.

*2.8.3 IF YES (AT 2.8.2) STATE AGE, SEX, REASONS FOR LEAVING, AND PERIODS OF STAYING OF THOSE THAT ARE LEFT

<u>Relation to Head</u>	<u>Sex</u>	<u>Age</u>	<u>Period in mon.stayed</u>	<u>Reason(s) for leaving</u>
.....
.....
.....

2.9 SERVICES AT PROJECT

2.9.1 DOES HOUSEHOLD GET ALL LIVING NECESSITIES FROM PROJECT'S FACILITIES

Yes..... No.....

2.9.2. IF ANSWER(TO 2.9.1) IS NO, WHAT ARE THE NECESSITIES YOU OBTAIN FROM OUTSIDE THE PROJECT AND WHERE FROM

<u>Necessities</u>	<u>Place Obtained</u>	<u>Frequency</u>
.....
.....

III OPINIONS REGARDING THE PROJECT

3.1 WHAT (IN THE HOUSEHOLD HEAD'S OPINION) ARE THE MOST IMPORTANT DEFICIENCIES IN THE PROJECT (IN ORDER OF IMPORTANCE)

1.
2.
3.

3.2 DO YOU THINK OF LEAVING THE PROJECT

Yes..... No.....

3.3 IF ANSWER (IN 3.2) IS YES, WHAT AREA DO YOU THINK OF GOING TO

Mohafadat..... Qadha..... Nahiya.....

3.4 WHAT ARE THE REASONS FOR JOINING THE PROJECT (LIST IN ORDER OF IMPORTANCE)

1.
2.
3.

3.5 DID THE PROJECT FULFIL YOUR HOPES AND OBJECTIVES UPON WHICH YOU JOINED

Yes

No (Explain).....

Too early to tell.....

* Proved redundant

**3.6 DO YOU HAVE ANY SPECIFIC SUGGESTIONS THAT YOU THINK ARE
NECESSARY TO IMPROVE PROJECTS OPERATIONS AND WAY OF LIFE
(STATE THREE MOST IMPORTANT SUGGESTIONS IN ORDER OF IMPORTANCE)**

- 1.
- 2.
- 3.

SHIHAMYA REVERSE MIGRATION PROJECT SURVEY

CODING FORM

SHIHAMYA SURVEY CODING FORMS

			<u>Code</u>
VAR 01	<u>No. of female household members</u>	Age 0-5	1-9
VAR 02	<u>No. of female household members</u>	Age 6-15	1-9
VAR 03	<u>No. of female household members</u>	Age over 15	1-9
VAR 04	<u>No. of male household members</u>	Age 0-5	1-9
VAR 05	<u>No. of male household members</u>	Age 6-15	1-9
VAR 06	<u>No. of male household members</u>	Age over 15	1-9
VAR 07	<u>Total number of household members</u>		01-99
VAR 08	<u>No. of basic families in household</u>		1-9
VAR 09	<u>Relation of household head to members</u>		
	Father		(1)
	Mother		(2)
	Brother		(3)
	Sister		(4)
	Relative		(5)
	Non related		(6)
	Others		(7)
VAR 10	<u>Age of household head</u>		
	Less than 18		(1)
	19-30		(2)
	31-40		(3)
	41-50		(4)
	51-60		(5)
	Over 60		(6)
VAR 11	<u>Place of birth of household head</u>		
	Use National Vital Rates Survey Coding Scheme.		<u>3 digits</u>
			<u>numerals</u>
	Rural areas	1) To proceed	
	Urban areas	2) the area code	

VAR 12	<u>Date household head migrated to Baghdad</u>	
	Less than 1 year before joining project	(1)
	1-2 years " " "	(2)
	3-4 years " " "	(3)
	5-6 years " " "	(4)
	7-8 years " " "	(5)
	9-10 years " " "	(6)
	11-12 years " " "	(7)
	13 years or more " " "	(8)
VAR 13	<u>Reasons for migration of household head (listing three in order of importance)</u>	
	<u>First Preference</u>	
	Looking for work	(1)
	Pushed out by landlords	(2)
	Tribal problems and conflicts	(3)
	Attracted by town life	(4)
	Following other members of tribe	(5)
	Land salinity and poor agricultural production	(6)
	Others	(7)
VAR 14	<u>Second Preference</u>	
	Looking for work	(1)
	Pushed out by landlords	(2)
	Tribal problems and conflicts	(3)
	Attracted by townlife	(4)
	Following other members of tribe	(5)
	Land salinity and poor agricultural production	(6)
	Others	(7)
VAR 15	<u>Third Preference</u>	
	Looking for work	(1)
	Pushed out by landlords	(2)
	Tribal problems and conflicts	(3)
	Attracted by town life	(4)
	Following other members of tribe	(5)
	Land salinity and poor agricultural production	(6)
	Others	(7)

VAR 24	<u>Last year average monthly income earned by household head before coming to project</u>	
	Unemployed	(1)
	Less than 10 I.D.	(2)
	11-20 I.D.	(3)
	21-30 I.D.	(4)
	31-40 I.D.	(5)
	More than 40	(6)
VAR 25	<u>Household head's average monthly income during first year at project</u>	
	No income	(1)
	Less than 5 I.D.	(2)
	6-10 I.D.	(3)
	11-20 I.D.	(4)
	21-30 I.D.	(5)
	31-40 I.D.	(6)
	More than 40 I.D.	(7)
VAR 26	<u>Household head's average monthly income during second year at project</u>	
	No income	(1)
	Less than 5 I.D.	(2)
	6-10 I.D.	(3)
	11-20 I.D.	(4)
	21-30 I.D.	(5)
	31-40 I.D.	(6)
	More than 40 I.D.	(7)

VAR 27	<u>Household head's average monthly income during third year at project</u>	
	No income	(1)
	Less than 5 I.D.	(2)
	6-10 I.D.	(3)
	11-20 I.D.	(4)
	21-30 I.D.	(5)
	31-40 I.D.	(6)
	More than 40 I.D.	(7)
VAR 28	<u>Average monthly income for household head during stay on project</u>	
	No income	(1)
	Less than 5 I.D.	(2)
	6-10 I.D.	(3)
	11-20 I.D.	(4)
	21-30 I.D.	(5)
	31-40 I.D.	(6)
	More than 40 I.D.	(7)
VAR 29	<u>Number of wage earners in household (before coming to project)</u>	
	Unemployed	(1)
	One (household head)	(2)
	One (member of household)	(3)
	Two	(4)
	Three	(5)
	More than three	(6)

VAR 30	<u>Number of agricultural contracts in household at project</u>	
	One (household head)	(1)
	One (member of household)	(2)
	Two	(3)
	Three	(4)
	More than three	(5)
VAR 31	<u>Last year average monthly income earned by household (total all members) before coming to project</u>	
	Unemployed	(1)
	Less than 5 I.D.	(2)
	6-10 I.D.	(3)
	11-20 I.D.	(4)
	21-30 I.D.	(5)
	31-40 I.D.	(6)
	41-50 I.D.	(7)
	51-60 I.D.	(8)
	Over 60 I.D.	(9)
VAR 32	<u>Household average monthly income during first year at project (total all members)</u>	
	No income	(1)
	Less than 5 I.D.	(2)
	6-10 I.D.	(3)
	11-20 I.D.	(4)
	21-30 I.D.	(5)
	31-40 I.D.	(6)
	41-50 I.D.	(7)
	51-60 I.D.	(8)
	More than 60 I.D.	(9)
VAR 33	<u>Household average monthly income during second year at project (total all members)</u>	
	No income	(1)
	Less than 5 I.D.	(2)
	6-10 I.D.	(3)
	11-20 I.D.	(4)
	21-30 I.D.	(5)
	31-40 I.D.	(6)
	41-50 I.D.	(7)
	51-60 I.D.	(8)
	More than 60 I.D.	(9)

- VAR 39 Where do household members get some services outside project
(no at VAR 38) : First Preference
- | | | | |
|-----------|-----|---------|-----|
| Zubaidiya | (1) | Azzizia | (4) |
| Namaniya | (2) | Suwaira | (5) |
| Kut | (3) | Others | (6) |
- VAR 40 Same as VAR 39 : Second Preference
- | | | | |
|-----------|-----|---------|-----|
| Zubaidiya | (1) | Azzizia | (4) |
| Namaniya | (2) | Suwaira | (5) |
| Kut | (3) | Others | (6) |
- VAR 41 Do you obtain foodstuffs (other than you grow)
Requirements from outside the project (VAR 39/VAR 40)
- | | |
|-----|-----|
| Yes | (1) |
| No | (2) |
- VAR 42 Do you obtain clothing needs from outside the project
(VAR 39/VAR 40)
- | | |
|-----|-----|
| Yes | (1) |
| No | (2) |
- VAR 43 Do you obtain home appliance needs from outside the project
(VAR 39/VAR 40)
- | | |
|-----|-----|
| Yes | (1) |
| No | (2) |
- VAR 44 Do you obtain health services outside the project (VAR 39/VAR 40)
- | | |
|-----|-----|
| Yes | (1) |
| No | (2) |
- VAR 45 Do you obtain educational services outside the project
(VAR 39/VAR 40)
- | | |
|-----|-----|
| Yes | (1) |
| No | (2) |
- VAR 46 Do you obtain social services outside the project (VAR 39/VAR 40)
- | | |
|-----|-----|
| Yes | (1) |
| No | (2) |
- VAR 47 Do you obtain administrative and legal services outside the
project (VAR 39/VAR 40)
- | | |
|-----|-----|
| Yes | (1) |
| No | (2) |

Land salinity problems and lack of drainage network	(6)
Poor distribution and shortage of irrigation water	(7)
Lack of an efficient farmers organisation	(8)
Others	(9)

VAR 53 Second most important deficiency in the project structure and operation

No deficiencies	(1)
Poor planning	(2)
Lack of good administration	(3)
Delays in agricultural cycles	(4)
Poor services	(5)
Land salinity problems and lack of drainage network	(6)
Poor distribution and shortage of irrigation water	(7)
Lack of an efficient farmers organisation	(8)
Others	(9)

VAR 54 Third most important deficiency in the project structure and operation

No deficiencies	(1)
Poor planning	(2)
Lack of good administration	(3)
Delays in the agricultural cycle	(4)
Poor services	(5)
Land salinity problems and lack of drainage network	(6)
Poor distribution and shortage of irrigation water	(7)
Lack of an efficient farmers organisation	(8)
Others	(9)

VAR 55 Thinking of leaving the project

Yes	(1)
No	(2)

VAR 56 What area you go to if 'yes' at VAR 55

Use national vital rates survey coding scheme	3 digits numerals
Rural areas	1) To proceed
Urban areas	2) the area code

- VAR 57 First most important reason for joining the project
- Government promises and offers (1)
 - Want to go back to my own type of work which is farming (2)
 - Fed up with life in Baghdad (3)
 - To improve my standard of living and income (4)
 - Enjoy living in the countryside (5)
 - Project seems to have all requirements for success (6)
 - My friends and fellow tribesmen joined (7)
 - Others (8)
- VAR 58 Second most important reason for joining the project
- Government promises and offers (1)
 - Want to go back to my own type of work which is farming (2)
 - Fed up with life in Baghdad (3)
 - To improve my standard of living and income (4)
 - Enjoy living in the countryside (5)
 - Project seems to have all requirements for success (6)
 - My friends and fellow tribesmen joined (7)
 - Others (8)
- VAR 59 Third most important reason for joining the project
- Government promises and offers (1)
 - Want to go back to my own type of work which is farming (2)
 - Fed up with life in Baghdad (3)
 - To improve my standard of living and income (4)
 - Enjoy living in the countryside (5)
 - Project seems to have all requirements for success (6)
 - My friends and fellow tribesmen joined (7)
 - Others (8)
- VAR 60 If project fulfilled your hopes and objectives
- Yes (1)
 - No (2)
 - Too early to tell (3)

VAR 61 First most important suggestion to improve project efficiency and way of life

- Improve agricultural cycle implementation and planning (1)
- Improve irrigation water quantities and supply (2)
- Improve administrative procedures and personal (3)
- Increase efficiency of collective farming system on project (4)
- Give more personal freedom for individual farmers (vs. collective) (5)
- Get efficient technician for operating machinery (6)
- Improve services and facilities at villages (7)
- Improve road network inside and outside connection (8)
- Others (9)

VAR 62 Second most important suggestion to improve project efficiency and way of life

- Improve agricultural cycle implementation and planning (1)
- Improve irrigation water quantities and supply (2)
- Improve administrative procedures and personal (3)
- Increase efficiency of collective farming system on project (4)
- Give more personal freedom for individual farmers (vs. collective) (5)
- Get efficient technician for operating machinery (6)
- Improve services and facilities at villages (7)
- Improve road network inside and outside connection (8)
- Others (9)

VAR 63 Third most important suggestion to improve project efficiency and way of life

- Improve agricultural cycle implementation and planning (1)
- Improve irrigation water quantities and supply (2)
- Improve administrative procedures and personal (3)
- Increase efficiency of collective farming system on project (4)
- Give more personal freedom for individual farmers (vs. collective) (5)
- Get efficient technician for operating machinery (6)
- Improve services and facilities at villages (7)
- Improve road network inside and outside connection (8)
- Others (9)

SHIHAMYA REVERSE MIGRATION PROJECT SURVEY

CODING SHEETS

C01 (VAR01)	C31 (VAR11)	C64 (VAR21)	C19 (VAR30)	C49 (VAR40)	C04 (VAR49)	C40 (VAR59)
C04 (VAR02)	C37 (VAR12)	C67 (VAR22)	C22 (VAR31)	C52 (VAR41)	C07 (VAR50)	C43 (VAR60)
C07 (VAR03)	C40 (VAR13)	C70 (VAR23)	C25 (VAR32)	C55 (VAR42)	C10 (VAR51)	C46 (VAR61)
C10 (VAR04)	C43 (VAR14)	C73 - C80 LABEL	C28 (VAR33)	C58 (VAR43)	C13 (VAR52)	C49 (VAR62)
C13 (VAR05)	C46 (VAR15)	C01 (VAR24)	C31 (VAR34)	C61 (VAR44)	C19 (VAR53)	C52 (VAR63)
C16 (VAR06)	C49 (VAR16)	C04 (VAR25)	C34 (VAR35)	C64 (VAR45)	C22 (VAR54)	
C19 (VAR07)	C52 (VAR17)	C07 (VAR26)	C37 (VAR36)	C67 (VAR46)	C25 (VAR55)	C73 - C80 LABEL
C22 (VAR08)	C55 (VAR18)	C10 (VAR27)	C40 (VAR37)	C70 (VAR47)	C28 (VAR56)	
C25 (VAR09)	C58 (VAR19)	C13 (VAR28)	C43 (VAR38)	C73 - C80 LABEL	C34 (VAR57)	
C28 (VAR10)	C61 (VAR20)	C16 (VAR29)	C46 (VAR39)	C01 (VAR48)	C37 (VAR58)	

SHIHAMYA REVERSE MIGRATION PROJECT SURVEY

VARIABLES LIST

STATISTICAL PACKAGE FOR THE SOCIAL SCIENCES SPSSH - VERSION 5.01 PAGE 1
ICL 1900 IMPLEMENTATION - RELEASE 2
THIS VERSION IS DESIGNED TO SAVE PAPER. A NEW CONTROL CARD 'PAGING STANDARD' IS AVAILABLE IF REQUIRED.

RIN NAME SHIMAMVA SURVEY
PAGING STANDARD
VARIABLE LIST
VAR01,VAR02,VAR03,VAR04,VAR05,VAR06,VAR07,VAR08,VAR09,VA10,
VAR11,VAR12,VAR13,VAR14,VAR15,VAR16,VAR17,VAR18,VAR19,VA20,
VAR21,VAR22,VAR23,VAR24,VAR25,VAR26,VAR27,VAR28,VAR29,VA30,
VAR31,VAR32,VAR33,VAR34,VAR35,VAR36,VAR37,VAR38,VAR39,VA40,
VAR41,VAR42,VAR43,VAR44,VAR45,VAR46,VAR47,VAR48,VAR49,VA50,
VAR51,VAR52,VAR53,VAR54,VAR55,VAR56,VAR57,VAR58,VAR59,VA60,
VAR61,VAR62,VAR63
INPUT MEDIUM OTHER
INPUT FORMAT FIXED(10F3.0,F6.0,12F5.0,8X/24F3.0,8X/8F3.0,F6.0,7F3.0,C,FIX)

ACCORDING TO YOUR INPUT FORMAT, VARIABLES ARE TO BE READ AS FOLLOWS

VARIABLE	FORMAT	RECORD	COLUMNS
VAR01	F 3. 0	1	1- 3
VAR02	F 3. 0	1	4- 6
VAR03	F 3. 0	1	7- 9
VAR04	F 3. 0	1	10- 12
VAR05	F 3. 0	1	13- 15
VAR06	F 3. 0	1	16- 18
VAR07	F 3. 0	1	19- 21
VAR08	F 3. 0	1	22- 24
VAR09	F 3. 0	1	25- 27
VAR10	F 3. 0	1	28- 30
VAR11	F 6. 0	1	31- 36
VAR12	F 3. 0	1	37- 39
VAR13	F 3. 0	1	40- 42
VAR14	F 3. 0	1	43- 45
VAR15	F 3. 0	1	46- 48
VAR16	F 3. 0	1	49- 51
VAR17	F 3. 0	1	52- 54
VAR18	F 3. 0	1	55- 57
VAR19	F 3. 0	1	58- 60
VAR20	F 3. 0	1	61- 63
VAR21	F 3. 0	1	64- 66
VAR22	F 3. 0	1	67- 69
VAR23	F 3. 0	1	70- 72
VAR24	F 3. 0	2	1- 3
VAR25	F 3. 0	2	4- 6
VAR26	F 3. 0	2	7- 9
VAR27	F 3. 0	2	10- 12
VAR28	F 3. 0	2	13- 15
VAR29	F 3. 0	2	16- 18
VAR30	F 3. 0	2	19- 21
VAR31	F 3. 0	2	22- 24
VAR32	F 3. 0	2	25- 27
VAR33	F 3. 0	2	28- 30
VAR34	F 3. 0	2	31- 33
VAR35	F 3. 0	2	34- 36

ACCORDING TO YOUR INPUT FORMAT, VARIABLES ARE TO BE READ AS FOLLOWS

VARIABLE	FORMAT	RECORD	COLUMNS
VAR36	F 3. 0	2	37- 39
VAR37	F 3. 0	2	40- 42
VAR38	F 3. 0	2	43- 45
VAR39	F 3. 0	2	46- 49
VAR40	F 3. 0	2	49- 51
VAR41	F 3. 0	2	52- 54
VAR42	F 3. 0	2	55- 57
VAR43	F 3. 0	2	58- 60
VAR44	F 3. 0	2	61- 63
VAR45	F 3. 0	2	64- 66
VAR46	F 3. 0	2	67- 69
VAR47	F 3. 0	2	70- 72
VAR48	F 3. 0	3	1- 3
VAR49	F 3. 0	3	4- 6
VAR50	F 3. 0	3	7- 9
VAR51	F 3. 0	3	10- 12
VAR52	F 3. 0	3	13- 15
VAR53	F 3. 0	3	16- 18
VAR54	F 3. 0	3	19- 21
VAR55	F 3. 0	3	22- 24
VAR56	F 6. 0	3	25- 30
VAR57	F 3. 0	3	31- 33
VAR58	F 3. 0	3	34- 36
VAR59	F 3. 0	3	37- 39
VAR60	F 3. 0	3	40- 42
VAR61	F 3. 0	3	43- 45
VAR62	F 3. 0	3	46- 48
VAR63	F 3. 0	3	49- 51

THE INPUT FORMAT PROVIDES FOR 63 VARIABLES. 63 WILL BE READ IT PROVIDES FOR 3 RECORDS ('CARDS') PER CASE. A MAXIMUM OF 80 'COLUMNS' ARE USED ON A RECORD.

# OF CASES	VAR LABELS
110	VAR01, NOS FEMALE AGE 0 TO 5 YRS/
	VAR02, NOS FEMALE AGE 6 TO 15 YRS/
	VAR03, NOS FEMALE AGE OVER 15 YRS/
	VAR04, NOS MALE AGE 0 TO 5 YRS/
	VAR05, NOS MALE AGE 6 TO 15 YRS/
	VAR06, NOS MALE AGE OVER 15 YRS/
	VAR07, NOS HHOLD MEMBERS/
	VAR08, NOS BASIC FAMILIES PFP HHOLD/
	VAR09, REFLECTION OF HHOLD HD TO MEMBERS/
	VAR10, HHOLD HD. AGE/
	VAR11, BIRTH PLACE OF HHOLD HD./
	VAR12, YRS. IN BAGHDAD/
	VAR13, 1ST REASON FOR MIGRATING TO BAGD/
	VAR14, 2ND REASON FOR MIGRATING TO BAGD/
	VAR15, 3RD REASON FOR MIGRATING TO BAGD/
	VAR16, HD OCCUPATION BEFORE MIGRATION/
	VAR17, 1ST YR JOB AT BAGHDAD/
	VAR18, 2ND YR JOB AT BAGHDAD/
	VAR19, 3RD YR JOB AT BAGHDAD/
	VAR20, 4TH YR JOB AT BAGHDAD/
	VAR21, LAST YS (5TH YR) JOB AT BAGD/

VAR22, FEMAL MEMR AGE>15 WORK IN AGR/
 VAR23, FEMALS AGE>15 TYPE OF WORK/
 VAR24, HD MONTH INCOME LAST YR IN BAGD/
 VAR25, HD MONTH INCOME 1STYR AT PROJ/
 VAR26, HD MONTH INCOME 2NDYR AT PROJ/
 VAR27, HD MONTH INCOME 3RDYR AT PROJ/
 VAR28, HD AVG MONTH INCOME AT PROJ/
 VAR29, NOS WAGE EARNERS HOLD IN BAGD/
 VAR30, NOS AGR CONTRACTS HOLD ON PROJ/
 VAR31, HHOLD TOTAL MONTH INCOME IN BAGD/
 VAR32, HHOLD MONTH INCOME 1STYR AT PROJ/
 VAR33, HHOLD MONTH INCOME 2NDYR AT PROJ/
 VAR34, HHOLD MONTH INCOME 3RDYR AT PROJ/
 VAR35, HHOLD AVG MONTH INCOME AT PROJ/
 VAR36, ALL MEMB STAYED ON PROJ/
 VAR37, DESTINATION OF MEMBERS LEFT PROJ/
 VAR38, HHOLD MEMB GET SERVICES ON PROJ/
 VAR39, 1ST PREF OUTSIDE SERVICE CENTERS/
 VAR40, 2ND PREF OUTSIDE SERVICE CENTERS/
 VAR41, FOOD STUFFS OBTAINED OUTSID PROJ/
 VAR42, CLOTHES OBTAINED OUTSIDE PROJ/
 VAR43, HOME APPL OBTAINED OUTSIDE PROJ/
 VAR44, HEALTH SRV OBTAINED OUTSIDE PROJ/
 VAR45, EDUCAT SERV OBTAINED OUTSIDE PROJ/
 VAR46, SOCIAL SRV OBTAINED OUTSIDE PROJ/
 VAR47, ADH+LEGL SERV OBTAINED OUTSIDE PROJ/
 VAR48, OTHER SERV OBTAINED OUTSIDE PROJ/
 VAR49, FRENCY FOOD STUF OBTND OUTSD PROJ/
 VAR50, FRENCY CLOTHES OBTND OUTSD PROJ/
 VAR51, FRENCY HWM APP OBTND OUTSD PROJ/
 VAR52, 1ST ORDER DEFNCY IN PROJ STR+OPRI/
 VAR53, 2ND ORDER DEFNCY IN PROJ STR+OPRI/
 VAR54, 3RD ORDER DEFNCY IN PROJ STR+OPRI/
 VAR55, POSSBLTY OF LEAVING THE PROJ/
 VAR56, DFSTNTION IF LEAVING THE PROJ/
 VAR57, 1ST ORDER REASON FOR JOINING PROJ/
 VAR58, 2ND ORDER REASON FOR JOINING PROJ/
 VAR59, 3RD ORDER REASON FOR JOINING PROJ/
 VAR60, PROJ FULFLED HOPES AND OBJECTVS/
 VAR61, 1ST ORDER SUGGNTION TO IMRV PROJ/
 VAR62, 2ND ORDER SUGGNTION TO IMRV PROJ/
 VAR63, 3RD ORDER SUGGNTION TO IMRV PROJ/
 VAR07(1) UP TO 5 MEMR(2) 6 TO 7 MEMB(3) 8 TO 9 MEMB
 (4) 10 AND MORE MEMR/
 VAR09(001) FATHER(002) MOTHER(003) BROTHER(004) SISTER
 (005) RELATIVE(006) HON RELATIVE(007) OTHERS/
 VAR10(001) <18YRS(002) 19-30YRS(003) 31-40YRS(004) 41-50YRS
 (005) 51-60YRS(006) >60YRS/
 VAR11(1) WASIT(?) BAGD DIALA BABLN(3) QADISIYA MUTHNA(4) THIQAR
 (5) HYSAN/
 VAR12(1) <1YR BFR PROJ(2) 1-2YRS(3) 3-4YRS(4) 5-6YRS(5) 7-8YRS
 (6) 9-10YRS(7) 11-12YRS(8) 13YRS OR MORE/
 VAR13(001) SFEK WORK(002) PUSH BY LNDLORD(003) TRIBAL FACTORS
 (004) TOWN ATTRACTION(005) FOLLOU OTHR MEMBS(006) AGR+LAND PROBS
 (007) OTHERS/
 VAR14(001) SEEK WORK(002) PUSH BY LNDLORD(003) TRIBAL FACTORS
 (004) TOWN ATTRACTION(005) FOLLOU OTHR MEMBS(006) AGR+LAND PROBS
 (007) OTHERS/
 VAR15(001) SEE WORK(002) PUSH BY LNDLORD(003) TRIBAL FACTORS
 (004) TOWN ATTRACTION(005) FOLLOU OTHR MEMBS(006) AGR+LAND PROBS

VALUE LABELS

(007)OTHERS/
VAR16(01)PEASANTARY OCCIP(2)NON PEASANTARY/
VAR17(001)H.SKILD CONSTRN(002)SKILD CONSTRN(003)SALES+SERVICES
(004)H.SKILD MECHANCL(005)SKILD MECHANCL(006)N.SKILD GENERAL
(007)OTHERS(008)UNEMPLOYED(009)JOINED PROJ/
VAR18(001)H.SKILD CONSTRN(002)SKILD CONSTRN(003)SALES+SERVICES
(004)H.SKILD MECHANCL(005)SKILD MECHANCL(006)N.SKILD GENERAL
(007)OTHERS(008)UNEMPLOYED(009)JOINED PROJ/
VAR19(001)H.SKILD CONSTRN(002)SKILD CONSTRN(003)SALES+SERVICES
(004)H.SKILD MECHANCL(005)SKILD MECHANCL(006)N.SKILD GENERAL
(007)OTHERS(008)UNEMPLOYED(009)JOINED PROJ/
VAR20(001)H.SKILD CONSTRN(002)SKILD CONSTRN(003)SALES+SERVICES
(004)H.SKILD MECHANCL(005)SKILD MECHANCL(006)N.SKILD GENERAL
(007)OTHERS(008)UNEMPLOYED(009)JOINED PROJ/
VAR21(001)YES(002)NO(003)NO FEMALE(004)DISABLED/
VAR22(001)HOUSPHOLD(002)SALES+SERVICES(003)OTHERS(004)UNAPPLICABL/
VAR23(001)UP TO 20 I.D(002)21 TO 40 I.D(003)OVER 40 I.D/
VAR24(001)NO INCOME(002)<5 I.D(003)6-10 I.D(004)11-20 I.D
(005)21-30 I.D(006)31-40 I.D(007)>40 I.D/
VAR25(001)NO INCOME(002)<5 I.D(003)6-10 I.D(004)11-20 I.D
(005)21-30 I.D(006)31-40 I.D(007)>40 I.D/
VAR26(001)NO INCOME(002)<5 I.D(003)6-10 I.D(004)11-20 I.D
(005)21-30 I.D(006)31-40 I.D(007)>40 I.D/
VAR27(001)NO INCOME(002)<5 I.D(003)6-10 I.D(004)11-20 I.D
(005)21-30 I.D(006)31-40 I.D(007)>40 I.D/
VAR28(001)NO INCOME(002)<5 I.D(003)6-10 I.D(004)11-20 I.D
(005)21-30 I.D(006)31-40 I.D(007)>40 I.D/
VAR29(001)UNEMPLOYED(002)ONE HHLD MMB(003)ONE HHLD MEMB
(004)THREE(005)THREE(006)>THREE/
VAR30(001)ONE HHLD MMB(002)ONE HHLD MEMB(003)THREE(004)THREE
(005)>THREE/
VAR31(001)UNEMPLOYED(002)<5 I.D(003)6-10 I.D(004)11-20 I.D
(005)21-30 I.D(006)31-40 I.D(007)41-50 I.D(008)51-60 I.D(009)>60/
VAR32(001)NO INCOME(002)<5 I.D(003)6-10 I.D(004)11-20 I.D
(005)21-30 I.D(006)31-40 I.D(007)41-50 I.D(008)51-60 I.D(009)>60/
VAR33(001)NO INCOME(002)<5 I.D(003)6-10 I.D(004)11-20 I.D
(005)21-30 I.D(006)31-40 I.D(007)41-50 I.D(008)51-60 I.D(009)>60/
VAR34(001)NO INCOME(002)<5 I.D(003)6-10 I.D(004)11-20 I.D
(005)21-30 I.D(006)31-40 I.D(007)41-50 I.D(008)51-60 I.D(009)>60/
VAR35(001)NO INCOME(002)<5 I.D(003)6-10 I.D(004)11-20 I.D
(005)21-30 I.D(006)31-40 I.D(007)41-50 I.D(008)51-60 I.D(009)>60/
VAR36(001)YES(002)NO/
VAR37(001)TO BAGHDAD(002)TO HOME VILLAGE(003)OTHERS(004)UNAPPLICABL/
VAR38(001)YES(002)NO/
VAR39(001)ZURATDIYA(002)NAHANIYA(003)KUT(004)AZZIZIA(005)SUWAIIRA
(006)OTHERS/
VAR40(001)ZURATDIYA(002)NAHANIYA(003)KUT(004)AZZIZIA(005)SUWAIIRA
(006)OTHERS/
VAR41(001)YES(002)NO/
VAR42(001)YES(002)NO/
VAR43(001)YES(002)NO/
VAR44(001)YES(002)NO/
VAR45(001)YES(002)NO/
VAR46(001)YES(002)NO/
VAR47(001)YES(002)NO/
VAR48(001)YES(002)NO/
VAR49(001)DAILY(002)WEEKLY(003)SEMI MONTHLY(004)MONTHLY
(005)SEMI ANNUALY(006)ANNUALY(007)AS NEEDED(008)UNAPPLICABLE/
VAR50(001)MONTHLY(002)SEMI ANNUALY(003)ANNUALY(004)AS NEEDED
(005)UNAPPLICABLE/
VAR51(001)WEEKLY(002)SEMI MONTHLY(003)MONTHLY(004)SEMI ANNUALY
(005)ANNUALY(006)AS NEEDED(007)UNAPPLICABLE/

VAR LABEL
 COMPUTE
 VAP LABEL
 COMPUTE
 VAP LABEL
 IF
 IF
 IF
 IF
 MISSING VALUES
 PRINT FORMATS
 CROSSTAB
 STATISTICS
 READ INPUT DATA

Z6,PER CAPITA INCOME HDINCOME AVG ON PROJ/
 Z7=VAR31/VAR07
 Z7,PER CAPITA INCOME ALLHOLD LAST YP BAGD/
 Z8=VAR35/VAR07
 Z8,PER CAPITA INCOME ALLHOLD AVG ON PROJ
 (VAR07 EQ 0) Z5=-99
 (VAR07 EQ 0) Z6=-99
 (VAR07 EQ 0) Z7=-99
 (VAR07 EQ 0) Z8=-99
 VAP01 TO VAR63(0)/Z5 TO Z8 (-99)
 VAR11(0)
 VAR07 BY VAR55/VAR07 BY VAR10
 ALL

SHIHAMTA REVERSE MIGRATION PROJECT - CASE STUDY MATERIALS FOR
COMPUTATION OF PARTICIPANTS INCOME ON THE PROJECT (REVISED COST
ESTIMATE)

APPENDIX NO. IVCOMPUTATION FOR ANALYSIS OF PARTICIPANTS INCOME ON THE PROJECTSECTION 4.11.5I Revised Cost Estimate for 1971/72 Agricultural Output on the Project.

The Project Administration Report gave the following figures for items of cost for the project (see Part IV, p.847):

(1) Fodder Materials 90568 I.D.

The report gave the value of output of animal products as follows:

Milk (sheep)	10560 I.D.
Wool (sheep)	8840 I.D.
	19400 I.D.

The State farm has 1854 sheep which represents

$$1854 \div 136210 = 13.6\% \text{ of total sheep population on project}$$

Sheep output of State farm =

$$13.6\% \times 19400 = 2638 \text{ I.D.}$$

Total animal products value of project = 101568 I.D.

State farm sheep output represents

$$2638 \div 101568 = 2.6\% \text{ of total animal project output}$$

Thus it is estimated that the Fodder Materials that may be charged to the peasants should not include the Fodder cost of the State farm estimated as its proportion of project animal output at 2.6%

$$\text{Fodder to be charged to Peasants} = 90368 \times 97.4\% = \underline{\underline{88018 \text{ I.D.}}}$$

(2) <u>Staff salaries and wages</u>		<u>54120 I.D.</u>
(broken down into):	I.D.	
Engineers	1368	
Agricultural Guidance staff	414	
Agricultural Superintendents	13392	
Administrative staff	2863	
Technicians	19365	
Non-skilled labourers and temporary labourers	<u>16727</u>	

Of this list the only logical part to be charged to the peasants is that of the technicians which is actually being charged by an hourly rate as needed by the agricultural co-operatives of the participants in need of technical services; also part of their time is either idle or doing work for the State farm or Project Administration Housing or Offices, but for simplicity let us assume their whole cost is carried by participants:

Technicians salaries	=	<u><u>19365 I.D.</u></u>
----------------------	---	--------------------------

(3) Seeds Cost 37353 I.D.

As the seeds cost does not include the value of seeds held up by the resident peasant families (around 500 families) which became part of the project after it started, the seeds requirement given by the Directorate General for Agricultural Projects in their 1975-1979 Plan for Shihamya cannot be used since it will give high estimate since it does not assume the presence of seeds

kept from previous season by peasants. The seeds cost reported by the Project Administration is to be used.

Seeds Cost = 37355 I.D.

(4) Fertilizers 42900 I.D.

Given by the 1975-1979 Plan as 0.395 I.D./Donum

Total agricultural area cultivated in 1971/72 =

44420 donums - 4000 donums (State farm)

Fertilizer cost = 40420×0.395 = 15965 I.D.

Actually the 1975-1979 Directorate General of Agricultural Projects Plan gives 1979 costs as 0.779 I.D. suggesting an annual increase in cost of fertilizer at 19.4% (due both to soil needs more fertilizer and inflation), thus the 1971/72 cost may be considerably less, but for approximation it is accepted.

(5) Chemicals 5550 I.D.

According to the 1975-1979 Plan it applies only to broad beans, cotton and zafram. In 1971/72 only 1300 donums of cottong cultivated cost

according to 1975-79 Plan = 0.500 I.D./donum

Chemical cost = 0.500×1300 = 650 I.D.

(6) Fuel Cost 25931 I.D.

1975-1979 Plan suggests an average of around 0.400 I.D./Donum cultivated

Fuel cost = 40420×0.400 = 16168 I.D.

(7) Building Depreciation and Maintenance

Building Depreciation	4173 I.D.
-----------------------	-----------

Maintenance	4881 I.D.
-------------	-----------

Both should not be carried by participants since they are supposed to be supplied by free services as citizens (such as education, health, recreation) and the maintenance of machinery and equipment is the responsibility of the Administration since the participants are paying for harvesting services and ploughing cost and marketing. Participants housing is not yet ready thus no depreciation or maintenance is involved there.

(8) Machinery and Equipment 25931 I.D.

As participants are paying for cost of services they get from the combined co-operatives for harvesting, ploughing and marketing, this item of machinery should be charged to harvesting, agricultural operation and marketing. Cost of buying or maintaining machinery should not be charged to the peasants since they are paying for the time they use this machinery and equipment. Harvesting and marketing cost per donum according to the 1975-79 Plan (data from estimates for State farms)

1975	0.966 I.D. /donum
------	-------------------

1979	0.869 I.D. /donum
------	-------------------

As the harvesting, ploughing process in the project

at Shihamya is mostly carried out by the peasants themselves with the aid of hired machinery from the project it may be safe to assume that at least 50% of the cost of harvesting, ploughing and marketing in State farms figures above will be affected, so at around 0.483 I.D./donum the total 1971/72 cost will come to

$$40420 \times 0.483 = \underline{\underline{19523 \text{ I.D.}}}$$

<u>Total Revised Cost</u>	<u>I.D.</u>
(1) Fodder Materials	88018
(2) Technical staff	19365
(3) Seeds cost	37353
(4) Fertilizers	15965
(5) Chemicals	650
(6) Fuel Cost	16168
(7) Building Depreciation and Maintenance	-
(8) Harvesting, Ploughing and Marketing	<u>19523</u>
<u>TOTAL</u> Project Cost to be charged to participants	<u>197042</u>

Project output as reported by the Directorate General of Agricultural Projects:

Animal Products	97788	
Less State farm output	<u>2638</u>	95150 I.D.
Eggs		3780 I.D.
Agricultural output	231662	
Less $\frac{4000}{44420}$ = 9% share of State farm	<u>20850</u>	210812 I.D.

Total output for participants	309742 I.D.
Less Revised Cost	197042 I.D.
<u>Revised Profit</u>	<u>112700 I.D.</u>

which is more than double the Directorate General

of Agricultural Projects reported profit of 54294 I.D.

Divided among the 1305 members of the Agricultural Co-operatives at the end of the 1971/72 agricultural year (see p.847) the income per household head will be 7.20 I.D. which is over 80% higher than the household head monthly income reported by the project participants in the Research Survey (Total of Variable No. 32) at 4.00 I.D.

II To find out if the low income on the project is attributed to poor agricultural national production figures are used for the crops cultivated on the project to check the output charge:

Crop	Area Allocated in donums	*National Output Figures (ID/dnm)	Total Project Output I.D. based on Nat.Figs.
Wheat	23970	7.154	171481
Barley	6692	4.296	28749
Cotton	1300	24.557	31924
Maize	3760	14.156	53227
Sesame	1300	14.849	19304
Green Grain	3900	0.852	3323
Onion	1300	73.62	95706
Tomato	2000	56.733	113466
Clover	50	No data	356) Proj.
Potato	150	No data	3000) Fig.

*Computed from National Output Data for crops, Ministry of Planning, C.S.O., Baghdad, Annual Abstracts of Statistics, pp.105-119, against prices quoted from Project Report.

Total project output based on National output figures	517179 I.D.
Less cost reported by Directorate General of Agricultural Projects	<u>278936 I.D.</u>
<u>Project Profit</u>	<u>238243 I.D.</u>

This will give a household head monthly income of 15.21 I.D.
Using the Revised Cost of (I) above in combination with the
project output value based on national output figures,

Profit = 320137 I.D.

Income = 20.44 I.D.

To summarize the income estimate of (I) and (II) above:

- (1) Household head monthly income based on the project
administration costing method (actual) will be = 3.47 I.D.
or per capita income (at 7.54 size household) = 0.460 I.D.
- (2) Household head monthly income based on revised
cost of running the project in (I) above will be = 7.20 I.D.
or per capita income = 0.955 I.D.
- (3) Household head monthly income based on the project
administration costing method and using national
output figures will be = 15.21 I.D.
or per capita income = 2.02 I.D.
- (4) Household head monthly income based on the revised
cost of running the project in (I) above and using
National output figures = 20.44 I.D.
or per capita income = 2.71 I.D.

The national figures for per capita income of an
agricultural family in 1969 = 2.83 I.D.

(see Part III, p.437)

SELECTED BIBLIOGRAPHY

- ABBED, DR. M. AND OTHERS - "Development of Human Resources in Iraqi Rural Areas" - Committee Report. Proceedings of the Conference on Utilizing Scientific Methods in Development of Agriculture in Iraq, Ministry of Agriculture and Agrarian Reform, Baghdad, May 1975. (Arabic)
- ABU-LUGHOD, JANET L. - "Urbanization in Egypt: Present State and Future Prospects", Economic Development and Cultural Changes, Vol. XIII, No. 3, Apr. 1965, pp. 313-343.
- ACOSTA, M. AND HARDOY, J.E. - "Urbanisation Policies in Revolutionary Cuba" in G. Geisse and J.E. Hardoy (Eds), "Latin America Urban Research", Volume 2 (Beverly Hills; Sage Publications), 1972, pp. 167-178.
- ACRAWI, B.L. - "Land use and Agricultural Production in Iraq, 1954-1965", National Seminar on Agrarian Reform in Iraq, Baghdad, April 1967, mimeographed, FAO Mission, Baghdad, Iraq.
- ADAMS, DORIS G. - "Current population trends in Iraq" - Middle East Journal, Vol. X, No. 2, Spring 1956.
- _____, "Iraq's People and Resources", University of California Press, Berkely, 1958.
- ADAMS, WARREN E. - "The pre-revolutionary Land Reform in Iraq", Economic Development and Cultural Change, Vol. XI, No. 2, April 1963, pp. 267-288.
- ADHAMI, M.B. - "Housing Policy for the Marshes of Southern Iraq for the year 2001", M.A. Thesis, University of Nottingham, 1972.
- AL-ANSARI, F. - "The Population of Iraq", Damascus, 1970, University of Damascus, (Arabic).
- AL-ALWAN, ABDUL SAHIB H. - "The process of Economic Development in Iraq with special reference to land problems and policies", Ph.D. Thesis, University of Wisconsin, 1956, Wisconsin, U.S.A.
- _____, "Studies in Agrarian Reform", Aswaq Al-Tijaria Press, Baghdad, 1961, (Arabic).
- AL-ATIA, DR. A.H. AND OTHERS - Committee Report on "Current Agricultural Production Practices and Advantages of Large-scale Production" Proceedings of the Conference on utilizing scientific methods in development of agriculture in Iraq, Ministry of Agriculture and Agrarian Reform, Baghdad, May 1975, (Arabic).
- AL-ATTAR, M.E. - "Population of Mohafadats Centres and Selected Towns in Iraq - Projections to 1985", U.N. Demographic Expert to the Iraqi Government, Report No. 5, Ministry of Municipalities, Baghdad, Nov. 1974.
- AL-BADRY, M.A. - "Trends in Population - Iraq", Demography, Vol. 2, 1965, pp. 140-186.

- AL-BARAZI, NOORI KHALIL - "Geographic and Ecological Factors in the Growth and Development of Baghdad", Iraqi Geographical Journal, Iraqi Geographical Society, Baghdad, 1964, No. II, pp. 5-38.
- ALCOCK, A.R. - "Low Cost Housing in Iraq", Report prepared for the Iraqi Government, U.N. Commission for Technical Assistance, Baghdad, Feb. 1964.
- AL-DAHIRI, DR. A.M. - "Development of Agricultural Production in Iraq and its impact on National Development", Al-Thawra Al Ziraia Journal, No. 19, Baghdad, January 1976, p. 19, (Arabic).
- _____, "The Introduction of Technology into Traditional Societies and Economies using Iraq as a Case Study", Baghdad, Al-Ani Press, 1958, (Arabic).
- AL-DULAIMY, - "Peasants Conditions and the Pre-request of the Reverse Migration", Dar Al Zaman Press, Baghdad, 1971, (Arabic).
- AL-DOURI, ABDUL AZIZ - "Baghdad" in Bernard Lewis, C.H. Pekkert and J. Schacht (Eds) "Encyclopedia of Islam", Vol. I, (London, Luzac, 1965), p: 898.
- AL-FEEL, MOHAMMED RASHID - "Iraq: Geographical Study of Social and Economic Development", Ministry of Culture and Guidance, Baghdad, 1964.
- AL-HADITHI, MOHAMED S.O. - "Land Use and Rural Settlement in the Mussayab District of Iraq, special reference to New Development Area", Ph.D. Thesis, Reading University, 1968.
- AL-HILALI, A.B. - "Migration of Rural Folks to Towns in Iraq", Baghdad, Al Najah Press, 1st Edition, 1958, (Arabic).
- ALI, HASSAN MOHAMED - "Land Reclamation and Settlement in Iraq", Baghdad Printing Press, Baghdad, 1955, (Arabic).
- AL-JALILI, NAMAN - "Urban Rural Development Policies for Iraq", Ph.D. Thesis, University of Pennsylvania, 1965.
- _____, "National Development and the need for Comprehensive Regional Planning in Iraq", paper submitted to the International Seminar on Physical Planning for Urban, Regional and National Development, Bucharest, Rumania, Sept. 1969.
- AL-KHALAF, J.M. - "The Natural, Economic and Human Geography of Iraq", Cairo, Dar Al-Maarif Press, 1965, (Arabic).
- AL-KUBAISI, M. - "Salinity in Iraqi Soils", Thawra Al-Zeraia Journal, No. 14, Baghdad, August 1975, p. 18, (Arabic).
- AL-SAAADI, DR. A.H. - "Population Re-distribution and Internal Migration in Iraq 1947-1965", Cairo Demographic Centre, Cairo, 1973, (Arabic).

- AL-WARDI, ALI - "A Study in the Society of Iraq", Al Ani Press, Baghdad, 1965, (Arabic).
- THE ARAB BAATH SOCIALIST PARTY - "Revolutionary Iraq 1968-1973 - The Political Report adopted by the Eighth Regional Congress of the Arab Baath Socialist Party, Iraq", Baghdad, January 1974.
- _____, The Central Peasants Bureau - "Expected outcome of the Reverse Migration Experiment at Shihanya", Sout Al Falah Journal, 23rd August, 1971, Baghdad, p. 4, (Arabic).
- AREIM, ABDUL JABBAR - "Communities, Class System and Caste in Iraq", Bulletin of College of Arts, Vol. 6, April 1963, pp. 14-22, Baghdad, (Arabic).
- ATRUSHI, SIDDIK - "Geographic Regions of Iraq", M.A. Thesis, Clark University, Worcester, Massachusetts, U.S.A., 1950.
- AWNI, J. AND THIAB, F. - "General Economic Evaluation for the Agricultural Sector in Iraq", Ministry of Planning, The Economic Section, Baghdad, May 1971, (Arabic).
- AZIZ, DR. M.M. - "Geographical Aspects of Rural Migration from Amara Province, Iraq, 1955-1964", Ph.D. Thesis, Durham University, April 1968.
- BAALI, FUAD - "Relationship of Man to the Land in Iraq", Rural Sociology, Vol. 31, No. 2, June 1966, pp. 171-181.
- _____, "Social Factors in Iraqi Rural-Urban Migration", American Journal of Economical and Sociological Research, Vol. 25, No. 4, Oct. 1966, pp. 359-364.
- BAWDEN, EDWARD - "The Marsh Arabs in Iraq", Geographical Magazine, London, Vol. 17, 1944-1945, pp. 282-293.
- BENET, F. - "The Ideology of Islamic Urbanization", International Journal of Comparative Sociology, Vol. 4, No. 2, Sept. 1963, pp. 211-226.
- BERNSTEIN, HENRY (Ed.) - "Underdevelopment and development: the third world today, selected readings", Harmondsworth: Penguin Books, 1973.
- BOESCH, HANS H. - "El Iraq" - Economic Geography Journal, Vol. 15, No. 4, Oct. 1939, pp. 326-361.
- BONNE, ALFRED - "State and Economics in the Middle East", 2nd Edition, Rutledge and Kegan Paul, London, 1955.
- BROWNING, HARLEY L. - "Migrant Selectivity and the Growth of Large Cities in Developing Societies", in "Rapid Population Growth" - Vol. II. Research papers published by the National Academy of Science, Baltimore, Johns Hopkins Press, 1972.

- BROWNING, H.L. AND FEINDT, W. - "Selectivity of Migrants to a Metropolis in a Developing Country: a Mexican Case Study", Demography, Vol. 6, (1969), pp. 347-357.
- BRITISH PARLIAMENTARY PAPERS - No. LXVII, (1867), p. 278.
- COMMITTEE FOR AGRICULTURAL PLANNING IN IRAQ - "Report submitted to the 1975 Conference on Utilizing Scientific Methods in Development of Agriculture in Iraq", Ministry of Agriculture and Agrarian Reform, Baghdad, May 1975, (Arabic).
- COSTELLO, V.F. - "Urbanisation in the Middle East", Cambridge University Press, Cambridge, 1977.
- CRITCHLEY, MICHAEL A. - "Observations on a Sciomedical Survey in Iraq", Journal of the Iraqi Medical Profession, Baghdad, Vol. 4, June 1956, pp. 71-72.
- DAVIS, KINGSLEY - "Urbanisation and the Development of pre-Industrial Areas", Economic Development and Cultural Change, Vol. 3, 1954-1955, pp. 6-24.
- DAVIES, D. HYWEL - "Observations on Land Use in Iraq", Economic Geography, Vol. XXXIII, No. 2, April 1954, pp. 122-134.
- DEWEY, RICHARD - "The Rural-Urban Continuum: Real but Relatively Unimportant", American Journal of Sociology, No. 66, July 1960, pp. 60-66.
- DORNER, PETER - "Land Tenure, Income Distribution and Productivity Interactions", Land Economics, Vol. XL, (1964), pp. 247-254.
- DOWSON, SIR ERNEST - "An Inquiry into Land Tenure and Related Questions; Proposal for the Initiation of Reform" - A report submitted to the Iraqi Government, Letchworth, England, Garden City Press, 1931.
- DOXIADIS ASSOCIATES - "A Regional Development Program for Greater Mussayab - Iraq", Eskistics, 1958, Part 2, pp. 149-186.
- _____, "Housing and Community Development in Iraq", Ekistics, 1958, Part 2, pp. 107-109.
- _____, "The National Housing Program of Iraq", Ekistics, 1959, Part 1, pp. 504-510.
- _____, "The Sarifa Dwellers of Baghdad", Document No. DOX-QBE-1, July 1958, prepared for the Republic of Iraq, Development Board and Ministry of Development, Technical Section No. 5, Baghdad.
- _____, Other reports in the Ministry of Public Works and Housing Library, Baghdad:-
- _____, "Report on the Development of Baghdad", 1959.

- _____, "Future of Kirkuk", 1958.
- _____, "Housing in Baghdad", 1956.
- _____, "Housing in Mosul", 1956.
- DWYER, D.J. (Ed.) - "The City in the Third World", Macmillan, London, 1974.
- DORIS, MANTHOS; GUNTEASCHWAGNER, GERALD AND INTRIDIS, MEDETRIOUS - "Ekistics and Metropolitan Planning in the Near and Middle East", Ekistics, 1961, Part 1, pp. 373-386.
- EAMES, E. - "Urbanisation and Rural-Urban Migration in India", Population Review, Jan.-July 1965, pp. 38-47.
- EDMOUNDS, C.J. - "Kurds, Turks and Arabs Politics, Travel and Research in Near East Iraq 1919-1925", Oxford Univ. Press, 1957.
- FARMAN, S. - "Migrants Settlement Survey", Report submitted to the Iraqi Government, Ministry of Social Affaires, Baghdad, August 1957.
- FERNEA, R.A. - "Land Reform and Ecology in Post-Revolutionary Iraq", Economic Development and Cultural Change, Vol. 17, No. 3, 1968-1969, pp. 356-381.
- _____, "Immigration and Social Organisation Among the El-Shabana: A Group of Tribal Cultivators in Southern Iraq", Ph.D. Thesis, University of Chicago, 1959.
- FISK, BRAD - "Dujaila: Iraq's pilot project for land settlement", Economic Geography, Vol. XXVII, (1952), pp. 343-354.
- FLINN, W.L. AND CONVERSE, J.W. - "Eight Assumptions concerning Rural Urban Migration in Columbia", Land Economics, Vol. 46, (1970), pp. 456-466.
- GABRIEL, BAER - "Population and Society in the Arab East", Rutledge and Kegan Paul, London, 1964.
- GILBERT, A.G. - "Latin American Development, a geographical perspective", Harmondsworth: Penguin, 1974.
- GRIFFIN, KEITH - "Policy Options for Rural Development", Oxford Bulletin of Economics and Statistics, Vol. 35, No. 4, pp. 239-274, Oxford, Nov. 1973.
- GRASSMUCK, GEORGE - "Selected Materials on Iraq and Jordon", American Political Science Review, Vol. 51, 1957, pp. 1067-1090.
- HAMDI, NEJIA A. - "Some Aspects of Social Change in Saydiya: a semi-Industrial Village near Baghdad", M.A. Thesis, American University, Cairo, 1964.

- HARRIS, J.R. AND TODARO, M.P. - "Migration, Unemployment and Development", The American Economic Review, Vol. 60, 1970, pp. 126-142.
- HASHIM, DR. J. - "Comments on Planning and the Plan in Iraq 1951-1972", Ministry of Planning, Baghdad, 1973, (Arabic).
- HASHIM, DR. J., DR. H. OMAR AND DR. A. AL-MINUFI - "Evaluation of Economic Development in Iraq 1950-1970", Ministry of Planning, Part I and Part II, Baghdad 1972, (Arabic).
- HASSAN, M.S. - "Economic Development in Iraq", Asrya Press, Beirut 1965, (Arabic).
- _____, "Growth and Structure of the Iraqi Population 1867-1947", Bull. Oxford Inst. of Stat., Vol. XX, 1958, pp. 339-352.
- HAUSER, PHILIP M. AND SCHNORE, LEO F. (Eds.) - "The Study of Urbanization", John Wiley and Sons, N.Y. 1965.
- HOSELITZ, BERT F. - "Rural-Urban Relationships and the Development of Rural Areas in Developing Countries", in Raanan Weitz (Ed.) "Rural Development in a changing world", MIT Press, MIT, 1971, Part One, pp. 172-183.
- INTERNATIONAL BANK FOR RECONSTRUCTION AND DEVELOPMENT - "The Economic Development of Iraq", Baltimore, The Johns Hopkins Press, 1952.
- ISMAIL, ADEL A. - "Origin, Ideology and Physical Patterns of Arab Urbanisations", Ph.D. Thesis, Faculty of Architecture, University of Karlsruhe (T.H.), W. Germany, 1969.
- ISMAIL, TARIQ Y. - "Problems of Modernization in the Middle East", American University in Beirut, Middle East Forum, Vol. XLV, No. 2, Beirut, 1969.
- JACOBY, ERICH - "Agrarian Reform Planning, Implementation and Evaluation" in Raanan Weitz (Ed.) "Rural Development in a changing world", MIT Press, MIT, 1971, Part One, pp. 268-282.
- JACKSON, J.A. (Ed.) - "Migration", Cambridge University Press, Cambridge, 1969.
- JOHNSON, G.E. - "Urban-Rural Income transfer in Kenya", Economic Development and Cultural Change, Vol. XXII, pp. 473-479, 1974.
- KHORSHEED, M.M. - "A Study in Planning and Development of newly-created settlements in Iraq", Ministry of Planning Press, Baghdad, January 1973, (Arabic).
- _____, "Report on housing problems in Iraq and the need for planning", Ministry of Planning, Baghdad, 1970, (Arabic).

- LANGLEY, KATHLEEN M. - "The Industrialization of Iraq", Harvard University Press, Cambridge, 1961.
- _____, "Iraq: Some Aspects of the Economic Scene", Middle East Journal, Vol. XVIII, (1964).
- LASSNER, J. - "The Topography of Baghdad in the Early Middle Ages", Detroit, Wayne State University Press, 1970.
- _____, "The Caliph's Personal Domain, the city plan of Baghdad re-examined", in A.H. Hourami and S.M. Stern (Ed.), "Islamic City" 1970, Oxford, Cassiers, pp. 103-118.
- LEATHERDALE, D. - "The Material Background of Life in Northern Iraq", Journal Royal Central Asiatic Society, Vol. 35, pp. 66-73, London, (1948).
- LEBON, J.H.G. - "Population Distribution and Agricultural Regions of Iraq", Geographical Review, No. 43, 1953, pp. 104-109.
- _____, "Recent Research on the Land Potential of Iraq", Geographical Review, Vol. 54, 1964, pp. 104-109.
- _____, "The Islamic City in the Near East", Ekistics, No. 182, January 1971, pp. 64-71.
- LLOYD, SETON - "Twin Rivers", London: Oxford University Press, (1947).
- LONGRIGG, S. HEMSLEY - "Four Centuries of Modern Iraq", Oxford: Clarendon Press, (1925).
- _____, "Iraq, 1900 to 1950, a political, social and economic history", Oxford University Press, London, (1956).
- _____, "Prospects for Iraq", Geographical Magazine, Vol. XXVI, 1953, pp. 276-290.
- MAKZOMI, J. - "Some Aspects of Urbanisation Process in Iraq", M.A. Thesis, Yale University, U.S.A., 1975.
- MCCRARY, J. AND SAED M. - "The social characteristics of the population of Iraq", Bulletin of College of Arts, No. 11, University of Baghdad, 1968, pp. 69-124.
- MINISTRY OF AGRICULTURE AND AGRARIAN REFORM, Directorate General of Agricultural Projects, Statistics Section, "Shihamya Project Report", Baghdad, June 1974, (Arabic).
- _____, "The Five Year Plan for Shihamya Project, 1975-1979", Baghdad, July 1975, (Arabic).
- _____, "Buildings in Directorates Projects", Baghdad, Jan. 1975, (Arabic).

- _____, "Comments on the University Evaluation Study of the Shihamya Project", Baghdad, Oct. 1976, (Arabic).
- _____, Directorate of Publications and Guidance, - "The Agricultural Sector, July 1968 up to July 1974", Baghdad, July 1974, (Arabic).
- MINISTRY OF INTERIORS, Directorate General of Civic Affaires, Baghdad, "1947 National Census Data", 3 Vol.
- _____, "1957 National Census Data", 2 Vol. (Arabic).
- _____, "1965 National Census Data", (Unpublished).
- MINISTRY OF MUNICIPALITIES, Directorate General of Planning and Engineering, Department of Regional Planning - "Internal Migration in Iraq 1947-1965 - Trends and Values", Baghdad, Nov. 1973.
- _____, "A report on Al-Iskenderia Industrial Project", Baghdad, August 1973.
- _____, "Laws Collection", First vol. (Arabic) and Second vol. (Arabic), Baghdad, 1970.
- MINISTRY OF PLANNING, C.S.O., Dept. of National Accounts - "National Income in Iraq, 1964-1971", Baghdad, December 1973, (Arabic).
- _____, "Household budget survey 1971/1972", Baghdad, Jan. 1972.
- _____, "Preliminary Summary of 1970 Population Count", Baghdad, October 1972, (Arabic) - Unpublished.
- _____, "1965 National Census Data", Baghdad, 1973, (11 Tables only).
- _____, "Results of the Vital Rates Survey 1974-1975", Baghdad, July 1976.
- _____, "1960 Annual Abstract of Statistics", Same: 1961 through 1976.
- _____, Economics Department - "Economic Indicators for the Development of the Iraqi Economy", Baghdad, May 1972, (Arabic).
- _____, EDUCATIONAL AND SOCIOLOGICAL DEPARTMENT, Services Planning Section - "Analysis of Health Services pattern in the Rural Areas", Study No. 4, Baghdad, July 1974, (Arabic).
- _____, REGIONAL PLANNING UNIT - "Migration to Baghdad, 1947-1973", Baghdad, Dec. 1974, (Arabic).
- _____, "Regional Planning and Social Development", Minutes of the Workshop held in Baghdad, April 1971.

- MITCHEL, J. CLYDE - "Urbanisation, Decentralization and Stabilization in Southern Africa: A Problem of Definition and Measurement", Report of the International African Institute, London (1956), Prepared under the auspices of UNESCO, "Social Implications of Industrialization and Urbanization in Africa South of the Sahara", Paris: UNESCO, 1956, pp. 693-711.
- MOHAMED, A. - "Internal Migration in Iraq, Causes and Remedies", Ministry of Planning, Baghdad, Oct. 1971, (Arabic).
- MOSELEY, M.J. - "The Impact of Growth Centers in Rural Regions", Regional Studies, Vol. 7, (1973), pp. 57-94.
- NIE, N.H., GENT, D.H. AND HULL, C.H. - "SPSS - Manual - Version 5.5", McGraw Hill Co., 1970.
- NELSON, PHILIP - "Migration, Real Income and Information", Journal of Regional Science, Vol. 1, No. 2, Spring 1959, pp. 43-73.
- PHILLIPS, D.G. - "Rural to Urban Migration in Iraq", Economic Development and Cultural Change Journal, Vol. VII, 1959, pp. 405-421.
- POLES SERVICE - BAGHDAD CITY MASTER PLAN CONSULTANTS - "Comprehensive Development Plan for Baghdad 2000", Report submitted to the Municipality of Baghdad, August 1973.
- POWERS, W.L. - "Soil and Land Use Capabilities in Iraq - a preliminary report", Geographical Review, Vol. 44, No. 3, July 1954, pp. 373-380.
- QUBAIN, FAHIM K. - "The reconstruction of Iraq, 1950-1957", New York, Praeger, 1958.
- QUINT, MALCOLM - "The Idea of Progress in an Iraqi Village", Middle East Journal, Vol. XII, (1958).
- RIEW, J. - "Migration and Public Policy", Journal of Regional Science, Vol. 13, No. 1, April 1973, pp. 65-76.
- ROBERTS, BRYAN AND LOWDER, STELLA - "Urban Population Growth and Migration in Latin America: Two Case Studies", Centre for Latin American Studies, The University of Liverpool, Monograph Series No. 2, 1969.
- SABAHI, AZIZ - "6000 Years of Estate Ownership for Land", Al Thawra Journal, Baghdad, 4th July 1976, p. 3, (Arabic).
- _____, "Structure of Agricultural Production in Iraq and the role of mass production in its development", Proceedings of the Conference on Utilizing Scientific Methods in Development of Agriculture in Iraq, Ministry of Agriculture and Agrarian Reform, Baghdad, May 1975, (Arabic).

- SAID, ALPHONSE M. - "The Growth and Development of Urbanization in Egypt", Cairo Social Research Center, American University, Cairo, 1960.
- SALTER, LORD J.A. - "The Development of Iraq: A Plan for Action", Caxton, Report submitted to the Iraqi Development Board, 1955.
- SHAFI, S.S. - "Planned Development of Baghdad and its Environs - Some Policy Considerations", A report submitted to the Government of Iraq, Ministry of Municipalities, Baghdad, Jan. 1974.
- _____, "On recent development of Baghdad", A progress report submitted to the Government of Iraq, Baghdad Municipality, Baghdad, April 1973.
- _____, "Urban Planning in Iraq - Problems and Prospects", Report submitted to Baghdad Municipality, Baghdad, 1972.
- SIMMONS, ALAN B. - "Opportunity Space, Migration and Economic Development: A critical assessment of research on migrants characteristics and their impact on rural and urban communities", in A.G. Gilbert's (Ed.) "Development Planning and Spatial Structure", John Wiley, London 1976, Chapter 3, pp. 47-76.
- SIMMONS, JOHN L. - "Agricultural Development in Iraq Planning and Management Failures", Middle East Journal, Vol. 19, Spring 1965, pp. 131-132.
- THOMAS, BRINLEY - "Migration and Urban Development", Methuen & Co. Ltd., London, 1972.
- THOMAS, DOROTHY S. - "Migration Tendencies and Occupational Choice in relation to Education, Intelligence and Social Background", Population Index, Vol. 29, April 1963, pp. 125-129.
- TUMA, ELIAS H. - "Agrarian Reform and Urbanization in Middle East", Middle East Journal, Vol. 24, No. 2, Spring 1970, pp. 163-177.
- UEDA, K. - "Report on Revised Estimates of Population by Urban and Rural for Iraq for 1975-1980", Ministry of Planning, Baghdad, July 1970.
- UNITED NATIONS - "Studies on Selected Development Problems in Various Countries in the Middle East 1968", Publication No. E/45H, UNESOB, Beirut, 1968.
- _____, "Studies on Selected Development Problems in Various Countries in the Middle East, 1969", Publication No. E/4638, UNESOB, Beirut, 1969.
- _____, "Studies on Selected Development Problems in Various Countries in the Middle East, 1971", Publication No. ST/UNESOB/8, Beirut, 1971.

- _____, "Principal Indicators of Industrial Development in Iraq", UNIDO, 3rd Conference on Industrial Development for Arab States, Tripoli, Libya, 7-14 April 1974.
- _____, "Administrative Problems of Rapid Growth in Arab States", United Nations Economic and Social Office, Beirut, Report of United Nations Workshop held in Beirut, Lebanon, March 1963, pp. 11-22.
- UNIVERSITY OF BAGHDAD, Applied Agricultural Research Organisation - "Evaluation Study - Shihamya Project", Baghdad, July 1976, (Arabic).
- WARRINER, DOREEN - "Economics of Peasant Farming", Second Ed., Frank Cass & Co. Ltd., London, 1964.
- _____, "Employment and Income Aspects of Recent Agrarian Reform in the Middle East", International Labour Review, Vol. 101, 1970, pp. 605-625.
- _____, "Land Reform and Development in the Middle East: A Case Study of Egypt, Syria and Iraq", First Edition, Royal Institute of International Affaires, London, 1957.
- WEERASINGHE, OLIVER - "Report on Regional Planning in Iraq", UNDP., Baghdad, Dec. 1971 (limited circulation).
- WEITZ, RAANAN (Ed.) - "Rural Development in a changing world", MIT Press, MIT, 1971.
- _____, "From Peasant to Farmer - A revolutionary strategy for development", Columbia University Press, New York, 1971.
- WILKENING, EUGENE A. - "Some Perspectives on Change in Rural Societies", Rural Sociology, Vol. 29, March 1964, pp. 1-17.
- WILLIS, KENNETH G. - "Problems in migration analysis", (Farnborough), Saxon House, (1974).
- WIRTH, EUGEN - "Die Lehmhuttensiedlungen der Stadt Baghdad", Erdkunde, Band VIII, pp. 309-316.