# The potential impact of climate change on rural-urban migration in Malawi

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**Abstract**

Climate change is one of the most pressing concerns facing the twenty-first century. As natural environments change, their ability to support productive and sustainable natural-resource-dependent livelihoods is affected. More specifically climate stresses create continuous pressures on rural households and shocks may create dangerous living conditions. As such, migration to areas that can support human survival and aspirations for a stable existence emerges as a possible consequence. In a rapidly urbanising world, a more stable existence may be found outside of the countryside and in a town. If rural dwellers choose to settle permanently in urban centres then urbanisation will occur.

This study examines how the stresses and shocks associated with climate change affect rural-urban migration in Malawi. More specifically, the study develops a theoretical framework that examines Malawi's migration system through a 'capabilities' and 'aspirations' lens. Using an aspirations and capabilites framework can help explain some key questions of migration system theory including how patterns of movements are determined; what situations may encourage or discourage the rate of movement between the rural area and the city, including stresses and shocks; and, how a rural individual becomes a permanent city dweller.

The findings suggest that rural-urban migration aspirations may increase as rural life gets harder and, at the same time, young rural dwellers are exposed to alternative urban lifestyles. However, stresses reduce the migration capabilities that are needed to move to town. This has repercussions across the migration system, which results in fewer people who are able to leave the village. Following shocks, migration aspirations are at their lowest. This is because those who would have once migrated to town now feel an obligation to remain in the village where they are able to help their rural family overcome the shock. At the same time, regional level shocks affect the ability of urban migrants to maintain their urban livelihoods with implications for return migration.

The research was approved though the University of Leeds Ethical Review Team and was conducted under the ethical guidelines agreed during the review.

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| | |
|---|---|
| AEDO | Agricultural Extension Development Officer |
| AfDB | African Development Bank |
| AIDS | Acquired Immune Deficiency Syndrome |
| CA | Capabilities Approach |
| DFID | Department for International Development |
| EPA | Extension Planning Area |
| FAO | Food and Agricultural Organisation (of the United Nations) |
| GoM | Government of Malawi |
| HDI | Human Development Index |
| HIV | Human Immunodeficiency Virus |
| IFRC | International Federation of Red Cross and Red Crescent Societies |
| IMI | International Migration Institute |
| IOM | International Organisation for Migration |
| IPCC | Intergovernmental Panel on Climate Change |
| NGO | Non-Governmental Organisation |
| NSO | National Statistics Office (of Malawi) |
| SSA | Sub-Saharan Africa |
| SLF | Sustainable Livelihoods Framework |
| UN | United Nations |
| UNDESA | United Nations Department of Social Affairs |
| UNDP | United Nations Development Programme |
| UNEP | United Nations Environment Programme |
| WFP | World Food Programme |
| WHO | World Health Organisation |

# Chapter 1. Introduction

## 1.1 Background to research

Climate change is one of the most pressing concerns facing the twenty-first century. As natural environments change, their ability to support productive and sustainable natural-resource-dependent livelihoods is affected. As such, migration to areas that can support human survival and aspirations for a stable existence emerges as a possible consequence. In a rapidly urbanising world, a more stable existence may be found outside of the countryside and in a town. However, understanding how communities who live in changing rural environments will respond, including if they will migrate, where they will migrate to, and how long they will stay is far from simple. This is because the decision a person, or a family, takes to migrate is a complex process. People migrate for a host of reasons many of which are particular to the individual context they find themselves in. Therefore, a careful examination of current migration and migration theory is necessary to build up a better understanding of how or why climate change may affect migration patterns. This requires contextually grounded empirical research within climate-affected communities.

The impact of climate change on livelihoods is especially pertinent in sub-Saharan Africa (SSA) (Boko et al., 2007). This is because the livelihoods of the majority of people in SSA countries are extremely dependent on productive natural environments for sustenance, income and general well-being (Bryceson, 1996, Nelson, 2009). But as the climate changes, high temperatures, inconsistent rainfall, droughts, flooding and land degradation are likely to have serious environmental impacts with equally serious societal consequences (Parry, 2007, Boko et al., 2007, Conway, 2009). For example, agriculture is the main productive activity in SSA and supports the livelihoods of 80% of the African population (AfDB 2010). For those dependent on agriculture, temperature increase and drought pose a serious risk to productivity and in turn to income generation and food security (Collier et al., 2008). Climatic changes also threaten to create outright dangerous living conditions. For example, increased rainfall that leads to flooding can destroy life, property and infrastructure; affect access and quality of household water supplies; and exacerbate health risks, particularly diarrhoea, cholera and malaria (Few et al., 2004, Boko et al., 2007). Due to the likely severity of climate impacts, high profile climate-migration debates emerged in the 1990s predicting that millions of people would become 'climate refugees' forced to flee from their homes. For example, the Executive Director for the United Nations Environment Programme warned that 50 million people could become

environmental refugees if sustainable development was not properly addressed (Tolba, 1989). Similarly, the First Assessment Report of the Intergovernmental Panel on Climate Change (IPCC 1990) warned that migration could be the single greatest consequence of climate change with millions of people likely to be affected by flooding and drought. Perhaps most infamous are the predictions of Myers (1993, 1997, 2002, 2005) who predicted that by 2050 up to 200 million people would become refugees forced to flee their homes as a result of climate change.

The mass migration predictions of the 1990s have largely been criticised and dismissed (Black, 2001, Castles, 2002). It is unlikely that millions of people will simply flee their homes never to return. Instead, the decisions people take to leave or stay in their rural homes are complex, and often country and context specific (Brown, 2007b, Black et al., 2011). Migration decisions will also be based on the ability of communities to sustain their livelihoods in the face of adversity (Lonergan, 1998, McLeman and Smit, 2006). Throughout history, rural households and communities in SSA have built up a range of coping/adaptation strategies to deal with unfavourable environments (Tyson et al., 2002, Smit and Wandel, 2006, Cooper et al., 2008, Davies et al., 2009). These strategies focus on intensifying agricultural production, diversifying livelihoods, and seasonal migration (often to another rural area) for work and income generation (Scoones, 1998). However, given the potentially unprecedented nature of current climate change, the IPCC states with 'high confidence' that these adaptations "may not be sufficient for future changes of climate." (Boko et al., 2007: 435). At this point the move towards non-farm livelihood incomes repeatedly surfaces in the literature as a likely adaptation option (Ellis, 2000, Barrett et al., 2001, Bryceson, 2002, Haggblade et al., 2010). In this way, instead of 'fleeing' dangerous living conditions, rural dwellers may choose to respond to off-farm income opportunities, which will increasingly be found in urban centres where many may settle permanently (Adamo, 2010, Warner, 2010b, Parnell and Walawege, 2011). This is expected to lead to an overall reallocation of labour from rural to urban areas (Barrios et al., 2006, Collier et al., 2008). Many non-governmental organisations (NGOs) operating within the region report that this is already happening: for example, ActionAid (2006: 2) argue that "climate-related droughts and floods are already swelling the tide of rural-urban migration across Africa". However, we currently lack sufficient empirical evidence to understand the extent to which rural-urban migration is influenced by climate change, including the overall impact on urbanisation (Lilleør and Van den Broeck, 2011).

As a result of this gap in the literature, the overall objective of this thesis is to examine the factors that influence migration, with a focus on rural-urban migration, in the context of climate change using a case study from Malawi. In this introductory chapter, I provide the contextual background to this research objective and briefly discuss the structure of the thesis. Firstly, I will detail how climate change is expected to manifest in SSA, and more specifically Southern Africa where this research takes place. Secondly, I will provide an overview of trends and theories pertaining to rural-urban migration and urbanisation for the region. Thirdly, I introduce the case study country (Malawi) where I undertook fieldwork, detailing its suitability for this research. Fourthly, I will state the specific aims of the research. Finally, I will point out the original contribution made, and then present the structure of the rest of the thesis.

## 1.2 The impact of climate change on rural livelihoods in SSA

### *1.2.1 Climate change*

The Fourth IPCC Assessment Report (2007) unambiguously warns that changes to the Earth's climate system are 'unequivocal' and that our climate is changing at an unprecedented rate. The Earth's average temperature has risen by 0.8 °C over the past century and 11 of the 12 years between 1995 - 2006 were among the warmest on record (Solomon et al., 2007). These small temperature changes translate to large and potentially dangerous shifts in climate and weather. As these shifts become more pronounced in the coming decades they will present substantial challenges to environment and society.

In Southern Africa, where the field work for this thesis took place, it is likely that the climate changes will include increased variability; a temperature increase of up to 4°C; a 15% decline in precipitation; and more frequent droughts and floods (Conway, 2009). Exactly how the climate will change over the next decades is not fully understood partly because of a poor understanding of the complex interactions between the drivers of the African climate and partly due to a severe lack of local weather data (Conway, 2009, Jones et al., 2009). However, climatic changes are already being observed and patterns are being analysed (Hulme and Arntzen, 1996, Tyson et al., 2002, Boko et al., 2007, Jones et al., 2007).

Temperature observations for the region show that annual minimum and maximum temperatures have increased at an average rate of 0.057°C per decade and 0.046°C per decade between 1901 and 2009 (Davis, 2011). Temperatures are expected to keep increasing and are

expected to be between 1.1°C to 6.3°C higher by the end of the century[1] (Solomon et al., 2007). Precipitation changes have also been observed but no long term trends have emerged (Boko et al., 2007). This is partly because rainfall records for the region tend to be poor (Davis, 2011). Where good records do exist, there has been a noticeable increase in the number of heavy rainfall events across Southern Africa (especially, Malawi, Angola, Namibia, Mozambique and Zambia) (Usman and Reason, 2004, Solomon et al., 2007) with an increase in the average rainfall intensity (New et al., 2006). For South Africa, Mason et al. (1999) found that 70% of the country experienced a significant increase in the intensity of extreme rainfall events between 1931 and 1990. At the same time, data suggest that there has been an increase in the length of the dry season (New et al., 2006) and more widespread droughts have been reported (e.g. Richard et al., 2000, Fauchereau et al., 2003). These alternating patterns of above-normal/below-normal rainfall periods illustrate the inter-annual variability in Southern Africa's rainfall cycles (Tadross et al., 2005, New et al., 2006, Davis, 2011). For example, between 1970 and 1998, Mozambique experienced 11 serious floods and over 16 drought events (de Wit and Norfolk, 2010). As climate change progresses, this variability is expected to become more extreme (Davis, 2011).

The impacts of these climatic changes are likely to be wide ranging and will affect many aspects of everyday life throughout SSA (Boko et al., 2007, Collier et al., 2008). However, there is complexity in understanding exactly how climate changes could affect rural households, particularly in terms of migration decision making. The sustainable livelihoods literature provides one way to understand how climate change may affect livelihoods by creating or exacerbating slow onset 'stresses' and rapid onset 'shocks' (see Chambers and Conway, 1992a, McDowell and De Haan, 1997, Ellis, 2003).

### *1.2.2 The impact of stresses and shocks on sustainable rural livelihoods*

The sustainable livelihoods concept provides a way of linking ecological and socio-economic considerations into rural poverty reduction strategies (Scoones, 1998, Krantz, 2001). More specifically, in their seminal paper, Chambers and Conway (1992a: 7) defined a sustainable livelihood as one that "comprises the capabilities, assets (stores, resources, claims and access)

[1] The projection of 1.1°C is based on a best case scenario where anthropogenic emissions of greenhouse gases (GHG) fall over the coming years. Conversely, the projection of 6.3°C is based on a "worst case" scenario, where emissions continue to increase at a rapid rate.

and activities required for a means of living: a livelihood is sustainable which can cope with and recover from stress and shocks..."

A stress is a continuous or slowly increasing pressure such as rising populations or soil degradation (Turner et al., 2003). Climate change could exacerbate stresses even further. For example, agriculture, Africa's primary livelihood activity, is already under stress as a result of population increase, poverty, insufficient agricultural inputs and land degradation (Reardon and Vosti, 1995, Dorward et al., 2004, Sachs et al., 2004). A combination of creeping temperature rise, late onset rains, gradual degradation of ecosystems, and a loss of biodiversity are likely to compound agricultural stresses, which could have a gradual and cumulative effect on agricultural productivity (Gregory et al., 2005, Dai, 2011, Wheeler and von Braun, 2013). For example, Lobell et al. (2011) found that for each 'growing degree day' spent at a temperature above 30°C, yields decreased by 1%, even under normal rainfall conditions. Over time, if predictions are correct, agricultural yields may fall by up to 30% (Parry et al., 2004, Lobell and Field, 2007). This will have severe repercussions for food security. At the same time, precipitation and temperature changes are likely to exacerbate chronic water stresses across the region (Zhao and Running, 2010, Gosling and Arnell, 2013). Even in the absence of climate change, a growing population and increased demand for water suggest that many countries in SSA will exceed the limits of their "economically usable, land-based water resources before 2025" (Ashton, 2002: 236). The Stern Report (2007) suggests that temperature rise alone will lead to a 20% to 30% decrease in water availability in regions such as Southern Africa. Again, this will have significant consequences for agriculture and in particular, the ability to create and maintain irrigation systems that may help mitigate some of the impacts of erratic rainfall on rainfed agriculture systems (Hanjra and Qureshi, 2010, Taylor et al., 2012).

One way to relieve the mounting pressure on households that is created by chronic stresses is to engage in temporary labour migration (McDowell and De Haan, 1997, Roncoli et al., 2001, Brown, 2007a, McLeman and Hunter, 2010). Current understandings of this form of movement suggest that it does not result in permanent relocation from rural to urban centres (Hampshire and Randall, 1999, McLeman and Smit, 2006). Instead, temporary labour mobility is often viewed as a rational and planned strategy for coping with unfavourable rural environments (Brown, 2007a). However, under climate change, stresses may gradually erode livelihoods changing "the incentives to 'stick it out' in a particular location" (Brown, 2007b: 17). At this point, labour migration may become permanent (Adamo, 2010, Warner, 2010b, Parnell and

Walawege, 2011). (The impact of stresses on migration is explored in more detail in the literature review, specifically Chapter 2, Section 2.6).

Migration can also occur as a result of shocks, which unlike stresses, can be intense, dramatic and often unpredictable (Turner et al., 2003). These include sudden flooding and intense periods of drought. Globally, around 20 million people were displaced in 2008 due to climate-related disasters (as cited in Laczko and Aghazarm, 2009). There is some overlap between shocks and stresses and the boundaries between the two are not always clear cut (Marschke and Berkes, 2006). As highlighted above, gradual temperature rise can slowly and continuously affect crop yields in a linear fashion, but there is also some evidence that after a threshold is passed, yields will suddenly drop off dramatically, creating a shock. For example, in temperatures that exceed 35°C, maize pollen cannot survive and an essential photosynthesis enzyme is destroyed (Rosenzweig et al., 2001, Sinsawat et al., 2004, Barnabás et al., 2008). This will have serious consequences for the following harvest. Similarly, a persistently low rainfall can build-up until a threshold is reached and a socio-ecological system rapidly reorganises into a new 'drought' regime (Foley et al., 2003, Biggs et al., 2011). These new regimes are typically unfavourable (Renaud et al., 2010). An example of this is the shift from a 'wet Sahel' to a 'dry Sahel' that happened in Ethiopia in 1969 (Foley et al., 2003). This resulted in "massive losses of agricultural production and livestock; loss of human lives to hunger, malnutrition and diseases; *massive displacements of people* [emphasis added] and shattered economies" (Kandji et al., 2006: vii).

Aside from drought, flooding is likely to become more frequent and intense, leading to loss of household assets, damage to property and risk to human life. For example, in February 2000, heavy rainfall followed by Cyclone Eline led to widespread flooding throughout the Zambezi Basin (specifically, Malawi, Mozambique, South Africa, Zimbabwe, Botswana and Namibia) (Vaz, 2000). The floods claimed the lives of 700 people, left over half a million homeless and destroyed around US$1billion of infrastructure (Wamukonya et al, 2001 as cited in Gwimbi, 2009). Similar floods following heavy rain in south-eastern Africa in early 2008 flooded the low-lying river areas along the Zambezi River in Central Mozambique and displaced up to 80,000 people, prompting the government to consider a planned migration policy aimed at communities who live on flood plains (Lumbroso et al., 2008, Stal, 2011). (The impact of shocks on migration is examined in more detail in Chapter 2, Section 2.6).

In exploring where those who leave rural areas will go, Reuveny (2007: 658) argues "they choose the [destination] that provides the largest net benefit." Another consideration is that

rural out-migration may become difficult as shocks and stresses undermine the capability to migrate (McLeman and Hunter, 2010, Government Office for Science, 2011). Where rural opportunities are slowly declining, and people are able to leave, urban areas may be seen to offer a better life (Barrios et al., 2006, Collier et al., 2008, Adamo, 2010, Warner, 2010b, Parnell and Walawege, 2011). Even in refugee movements, it has been noted that migrants are drawn to towns by livelihood opportunities and the possibility of greater security than can be offered in camps or other villages (Jacobsen, 2006, Pavanello et al., 2010).

### 1.3 Migration flows and urbanisation in SSA

In very simple terms rural-urban migration represents a societal transformation "in which people move from generally smaller, mainly agricultural communities to larger, mainly non-agricultural communities" (Mabogunje, 1970: 2). Typically, rural-urban migrants leave the village for town in search of non-farm employment opportunities (Todaro, 1997, Reardon, 1997, Bryceson, 2000, Haggblade et al., 2010). When migrants remain in urban areas permanently, thus increasing the proportion of the population who live in towns in relation to the proportion who live in villages, urbanisation is said to have occurred (Parnell and Walawege, 2011, Potts, 2012b).

In order to establish how rural-urban migration, and consequently urbanisation, may alter with climate change it is necessary to examine the extent to which current patterns of migration lead to permanent urbanisation. The literature on this reveals a huge range of opinions out of which three general themes can be discerned. First are those authors, mostly consisting of agencies such as the World Bank, who argue that Africa is urbanizing quickly, and this is due to people from the rural areas moving into the cities (e.g. UNDESA, 2011). Second, are the researchers who argue that urbanisation is not rapid, and rural-urban migration does not significantly contribute to urbanisation as it is mostly temporary and circular (Englund, 2002b, Clark et al., 2007, Potts, 2009, 2010, 2012b). Finally, are those who point out that migration in SSA tends to be more often rural - rural as people move much as they always have, around the landscape following seasonal or socio-cultural pathways and networks (Lipton, 1980, Adepoju, 1995, Ezra and Kiros, 2001, Tacoli, 2001) . Understanding the dynamics of these three positions is vital in anticipating the impact of climate change on migration patterns. Hence this section proceeds by examining the evidence for each of these three positions.

The first position, put forward by organisations such as the agencies within the United Nations, argues that Africa is urbanising quickly, and this is partly, or even primarily, a result of rural-urban migration. Recent population data from the United Nations Department of Economic and Social (UNDESA, 2012), shows that African cities are growing. From a base of almost no cities before the advent of Colonialism (Coquery-Vidrovitch, 2005), there are now 44 cities with a population of 500,000 to 1 million, and 40 cities with a population of 1 – 5 million (UNDESA, 2012). The UNDESA data also shows that SSA is also home to a 'mega city'[2]; Lagos, Nigeria, has a population of 10,578,000. Furthermore, UNDESA (2012) expects African urbanisation to rapidly increase over the next few decades. By 2025, there are expected to be over 70 cities with a population of 500,000 to 1 million, and another 71 cities with a population between 1 - 5 million. Overall, the urban population is likely to more than triple reaching over 1 billion by 2050 (see Figure 1.1).

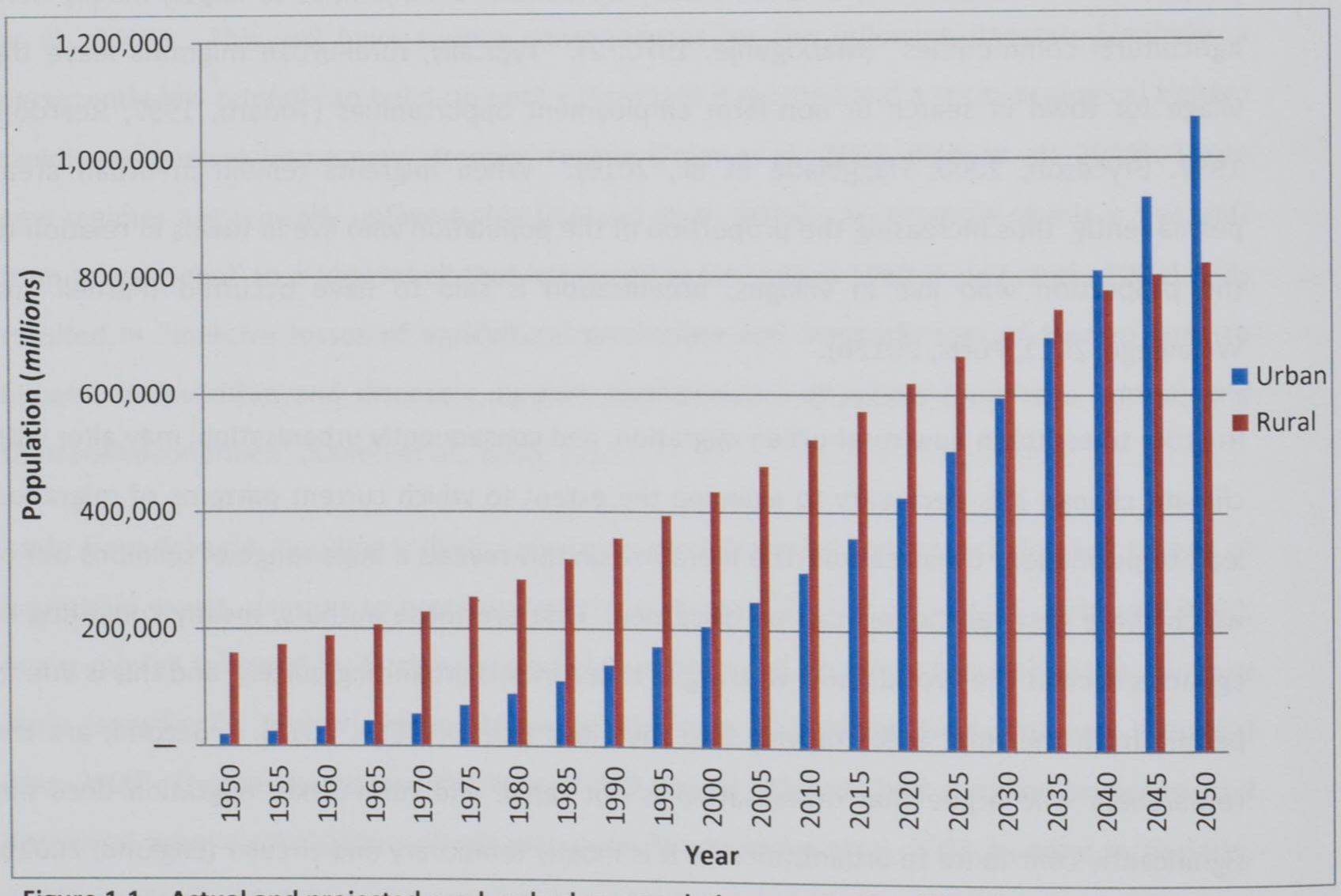


**Figure 1.1 – Actual and projected rural and urban population growth (in millions) across Sub-Saharan Africa from 1950 – 2050 (Source: UNDESA, 2012)**

According to the UN, migration from rural to urban areas continues to be an important component of city growth (UNDESA, 2011). The UN regularly states this in reports on the state of African development. For example, in the UNEP's third Global Environment Outlook report

[2] A mega-city is a city with more than 10 million people (New Scientist, 2006)

(UNEP, 2002: 248), it was explicitly stated that "Africa's high urban growth rate is a result of rural-urban migration..." This view is also shared by the UK government. In their Foresight Report on migration and global environmental change (Government Office for Science, 2011), the growth of cities in developing countries was attributed to increasing rural–urban migration trends. Furthermore, the report directly attributes some rural-urban migration to rural environmental change. Such views on the speed and causes of urbanisation are significant as they form the basis for many countries' policies on urbanisation and migration (Potts, 2012a).

The second position is that rural-urban migration in Africa is not a great contributor to urbanisation. The process of urbanisation is more complex than a simple rush of migrants from rural to urban areas; it can include natural growth from within a city (births) and redrawing of rural and urban boundaries (Beauchemin and Bocquier, 2003). Furthermore, Potts (2009, 2012b) questions the entire perception that rapid urbanisation, or indeed any urbanisation, is occurring. She argues that there was a decline in the urbanisation level of 11 mainland countries[3] in sub-Saharan Africa between 2001 and 2010, and negligible growth in many other countries. Although Potts (2010) agrees that rural-urban migration does take place, she suggests that it is largely circular and not permanent. Circularity of migration is a pervasive view amongst migration scholars, especially in relation to African migration. Potts (2012b) also argues that within SSA the flow of rural-urban migrants is substantially countered by that of urban-rural migrants, and the average length of time spent in towns has decreased. Details of circularity and permanent settlement migration are explored in greater detail in Chapter 2, and an examination of the duration of urban moves forms part of the thesis' first objective, which is to develop a better understanding of rural-urban migration in Malawi.

Finally, the third position is taken by those who point out that migration in SSA is dominated by rural-rural migration as people move much as they always have, around the landscape following seasonal or socio-cultural pathways and networks (Lipton, 1980, Collinson and Wittenberg, 2001). This position does not necessarily deny the existence of rural-urban migrants; it simply argues that rural-rural migration is more prevalent. In terms of labour migration (i.e. migrants moving to look for work) there is little difference between urban-rural and rural-rural moves. As Posel and Casale (2003) point out, rural-rural African migration accounts for just over half (54%) of moves by those seeking work. Just less than half of all labour migrants (46%) move to towns (*ibid.*).

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[3] Tanzania, Uganda, Benin, the Central African Republic, the Republic of Congo, Equatorial Guinea, Guinea Bissau, Lesotho, Mauritania, Niger and Senegal

## 1.4 Malawi

To explore the nexus between climate change, migration and urbanisation, the research uses a case study from Malawi (the case study country and the issues presented in this section are explored in greater depth in Chapter 3). Malawi is a small landlocked country in Southern Africa (see Figure 1.2) where the majority of the country's population are subsistence farmers who depend on rainfed subsistence agriculture. More specifically, of Malawi's 13 million citizens, around 81.2% are farmers who live in the countryside (NSO, 2008). Around 74% of the country's population lives below the poverty line of US $1.25/day (World Bank, 2010). The deep poverty in Malawi was highlighted in the 2013 Human Development Index (HDI), compiled by the United Nations Development Programme; Malawi scored lower than the average for SSA coming 170th out of 187 countries (UNDP, 2013b).

One of the reasons Malawi is an excellent place to explore the interplay between climate and migration is that rural livelihoods are predominantly based around a climate sensitive crop, maize (Dorward and Chirwa, 2011). Over 90% of farming households rely on maize for food and income (Fisher and Mazunda, 2011). In rural areas, smallholder farmers devote almost 70% of their land to maize cultivation, and maize availability in the country defines Malawi's food security (Chirwa et al., 2011). However, average maize productivity is low and most families in Malawi operate below subsistence (GoM, 2006, Denning et al., 2009). The chronic stresses that are caused or exacerbated by climate change could significantly affect the ability of rural populations to achieve and maintain subsistence. More specifically, agricultural production, and consequently food security and income generation, are entirely dependent on a favourable climate (Leichenko and O'Brien, 2002, Pauw et al., 2010). If the climate becomes more variable, as scientists suggest it will, this will impact on the maize harvest (as described in section 1.2) and in turn the rural economy will be affected. Climate change is also likely to create greater and more frequent shocks in Malawi, especially more frequent floods and intense and prolonged droughts (GoM, 2006, UN-HABITAT, 2011). Stresses and shocks already have a significant effect on Malawi - it is estimated that at the national level, Malawi loses 1.7% of its GDP on average every year due to the combined effects of droughts and floods. This is equivalent to almost US$22 million in 2005 prices (Pauw et al., 2010).

Against a backdrop of chronic stresses, a declining rural economy and frequent shocks and stresses, and despite the assertion of Potts (2010, 2012b) that urbanisation is a myth, many local experts, international researchers and NGOs suggest that Malawi is becoming increasingly urbanised (UN-HABITAT, 2007, Manda, 2007, NSO, 2008, UN, 2010, 2011).

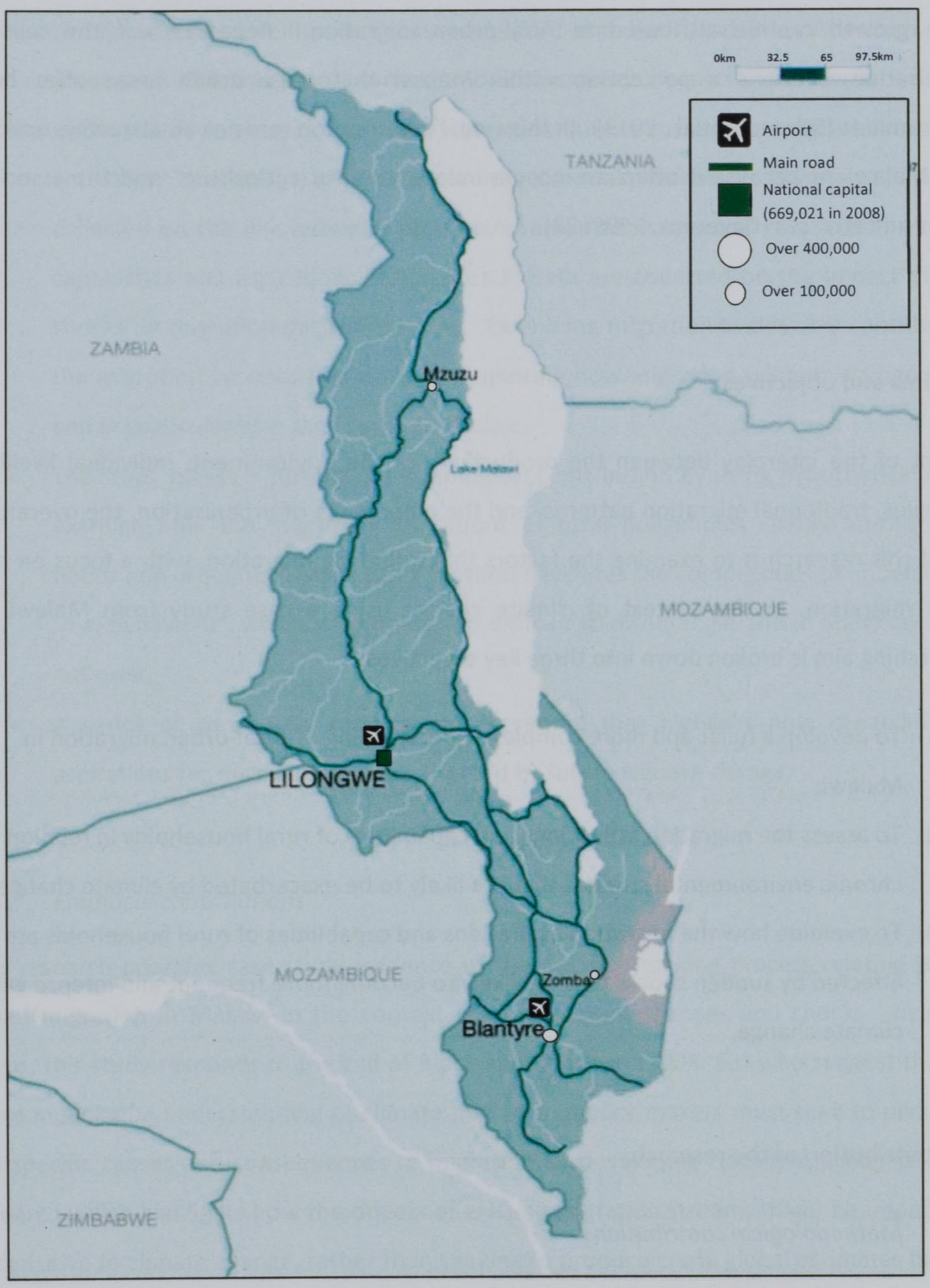


**Figure 1.2 – Map of Malawi in relation to Southern Africa**
**(Source: AfDB, , 2012)**

Given Potts' (2010, 2012b) arguments around the drivers of urbanisation, it is unlikely that all urban growth can be attributed to rural-urban migration. Regardless of the cause of urbanisation, there is a perception within Malawi that large urban areas offer better opportunities (Schensul et al., 2013). In this way, "urbanisation remains an attractive option to rural Malawians because it offers an income independent of agriculture" and the associated shocks and stresses (Devereux, 1999: 22).

## 1.5 Aims and objectives

In light of the interplay between the productivity of the environment, individual livelihood strategies, traditional migration patterns, and the emergence of urbanisation, the overarching aim of this research is to examine the factors that influence migration, with a focus on rural-urban migration, in the context of climate change using a case study from Malawi. The overarching aim is broken down into three key objectives;

(1) To develop a fuller and more complex understanding of rural-urban migration in Malawi;
(2) To assess the migration aspirations and capabilities of rural households in relation to chronic environmental stresses that are likely to be exacerbated by climate change;
(3) To examine how the migration aspirations and capabilities of rural households are affected by sudden shocks that are likely to become more frequent and intense with climate change.

## 1.6 Contribution of the research

### *1.6.1 Methodological contributions*

This study develops a theoretical framework in which data on a person's migration aspirations (the extent to which they want to leave the village) and their migration capabilities (the extent to which they are able to leave the village) are examined in the context of a migration system (which links together rural 'sending' regions, and urban 'receiving' regions). More specifically, the following methodological contributions are made;

- In Chapter 4, a method for examining migration systems that combines theory from the Sustainable Livelihoods Framework (SLF) and the Capabilities Approach (CA) is presented. This framework forms the basis for data collection and analysis.
- In Chapter 5, data are collected on what constitutes a rural-urban migration capability, and what constitutes a rural-urban migration aspiration. In Chapter 6, data are collected on the link between rural environmental change and rural-urban migration capabilities and aspirations. In Chapter 7, data are collected on the impact of urban shocks on migration decision making. Examining migration in this way contributes to the migration systems literature, by exploring how migration systems change in time and in particular how they come to decline.
- The study makes a further methodological contribution by using hypothetical data to examine how the migration aspirations of rural households change during severe floods and droughts. Using such a method navigates the complexities of understanding 'real behaviour', which is complex and difficult to disentangle and in many cases does not exist.
- A series of conceptual models are presented that highlight how capabilities and aspirations for migration may be affected by future climate change.

### *1.6.2 Empirical contributions*

This research provides case study evidence of the decision making process relating to rural-urban migration in Malawi in the context of environment stresses and shocks. In general terms, this study responds to the call of Black and Kniveton (2008: 63) who suggest that for a more meaningful understanding of climate migration, policy makers must seek to understand the specific causes and consequences of migration by developing "locally-specific, case study research which highlights how the drivers of existing migration streams might be impacted by, or sensitive to climate change, rather than seeking to produce crude global estimates based on delineation of affected areas." More specifically, the following empirical contributions are made;

- In Chapter 5, data are collected on rural-urban migrants' current duration in town, their long term intentions relating to where they want to live and the relationship they retain with their rural home. These findings provide new contextual evidence that contrast with the current literature on circular migration and remittances. The

findings are particularly relevant to understanding urbanisation in the context of climate change.

- In Chapters 5 and 6, data are collected on the capital assets that constitute a migration capability. The data begins to challenge the 'empirical regularity' that it is the poorest and richest who are the least likely to migrate.
- In Chapter 6, data on perceptions of the city are collected from non-migrant households who remain in the rural areas of Malawi. This contributes to nascent literature on African 'cityness' and specifically, how perceptions of the city contribute to the decision to leave or stay in the village.
- In Chapter 7, data are collected on planned responses to future rural shocks highlighting the importance of government and NGOs in adaptation. This feeds into the literature on responses to shocks in the global South, which at present is lacking in consensus. In particular, the findings of this research suggest that shocks are unlikely to cause migration away from rural homes.
- Overall, this study finds that the potential impact of climate change on rural-urban migration in Malawi is not likely to be significant and is unlikely to lead to increased urbanisation. More precisely, the research finds that rural stresses do increase the urban aspirations of young rural dwellers who recognise an alternative life outside of farming. However, rural stresses also erode migration capabilities making migration unlikely. As a result of a reduced capacity to migrate, people come to terms with life in the village and environmental stress is normalised into everyday life. Following a shock, rural-urban migration aspirations are low even for those who previously harboured a desire to move to. This is partly because the rural household requires young and able family members to be at home in the aftermath of a shock to help re-establish household security. Furthermore, it is potential migrants consider it to be too risky to look for work in town as shocks impact urban areas too.

## 1.7 Structure of the thesis

In Chapter 2, I review the literature on the relationship between climate change, rural-urban migration and urbanisation. I briefly present literature that explores the theories of rural-urban migration, including the theory of 'migration systems' as a way of understanding how and why rural-urban migration takes place. I then explore the development of rural-urban migration systems in SSA and I examine how personal aspirations and capabilities to migrate

help inform these systems. Finally, I examine the literature on environment and migration in order to understand how climate change may alter migration systems.

In Chapter 3, the case study country, Malawi, is presented. In particular, I present details of how the country's migration system developed as a result of Malawi's varied political history. I then present details of how migration currently operates in the country. Using the available literature, I begin to map out how climate change may affect livelihoods and migration in the future. Finally, a rationale for study site selection is presented along with details of the six study areas.

In Chapter 4, I present the research design and methods. The theoretical frameworks (migration systems, and the Capabilities Approach (CA) and the Sustainable Livelihoods Framework (SLF)) are presented and synthesised. An explanation of how the framework was operationalized in the field is given, along with details of fieldwork logistics and the research team. My ethics and positionality as a cross-cultural field researcher is also reflected on. I then detail specific methods of data collection briefly stating how data were analysed.

In Chapter 5, I present the results of the thesis' first objective, to develop a fuller and more complex understanding of rural-urban migration in Malawi. In particular I present data on the demographics of the urban migrant population in Malawi. I then present data on migrants' capabilities at the time of leaving their village. I also explore what informed their aspiration to move to town. Finally, I present data on rural-urban linkages, including migrants' future intentions regarding where they would like to live, and how these intentions may be affected by environmental shocks.

In Chapter 6, I present the results of the thesis' second objective, to assess the migration aspirations and capabilities of rural households in relation to the chronic environmental stresses that are likely to be exacerbated by climate change, such as soil degradation and water stress. In this chapter, I present data on stresses in each rural study site. I then explore data on migration aspirations and migration capabilities, linking each to environmental stresses.

In Chapter 7, I present the results of the thesis' third objective, to examine how migration aspirations and capabilities of rural households are affected by the sudden shocks that are likely to become more frequent with climate change, such as flooding and drought with acute food shortages.

I conclude the thesis in Chapter 8 by revisiting the research objectives. I then provide a synthesis of the key findings along with conceptual charts of how migration aspirations and capabilities are likely to be affected by climate change. I discuss the relevance of the findings beyond Malawi before presenting the policy implications of the research.

# Chapter 2. Linking rural-urban migration, urbanisation and climate

## 2.1 Introduction

The aim of this chapter is to examine the literature on migration and climate change. The chapter is divided into three sections. In the first section, I examine the literature on the theories of rural-urban migration. More specifically, I examine the classical theories of economic migration that have shaped current conceptualisations of rural-urban migration and urbanisation. I then examine the literature on the role of individual agency in the migration decision before I present the theory of 'migration systems' as a way of understanding how and why rural-urban migration takes place. In the second section I explore Southern Africa's 'migration system', including how the system formed under colonial rule, and how the system now operates in a post-colonial world. A particular emphasis is placed on circulation, gender, rural poverty, rural-urban linkages, and the role of individual agency. Finally, in the third section I explore the literature on environmental migration and livelihoods in Africa and how climate stresses and shocks may influence migration.

## 2.2 Theorising migration

### *2.2.1 Neo-classical theories of economic migration*

The first scholarly contribution to migration theory consisted of two articles by the nineteenth century geographer Ravenstein (1885, 1889), in which he formulated his "laws of migration" using British census data. He saw rural-urban migration in Britain as an inseparable part of development, and he asserted that the major causes of migration were economic. Importantly, migration was seen as a choice "which arises from the *desire* inherent in most men to better themselves in material respects" (Ravenstein, 1889: 286). Migration patterns were assumed to be influenced by factors such as income differentials and population densities in sending and receiving locations (Skeldon, 1997: 19). More specifically, people's perceptions of what the city could offer, rather than reality was the important factor and this explained 'irrational' moves toward economically unstable environments (Harris and Todaro, 1970). Importantly, migration was viewed as a consequence of the desire for money and betterment.

Migration was presumed to occur when the promise of a life in a new destination outweighed the current life at home. This idea formed the basis of the push-pull migration theories of which Lee's (1966) theory is the best known (see Figure 2.1). Lee (1966) assumed that migration resulted from a combination of 'push' factors in the origin and 'pull' factors in the destination. Push factors include "poverty, unemployment, landlessness, rapid population growth, political repression, low social status, poor marriage prospects" and pull factors include the perception of "better income and job prospects, better education and welfare systems, land to settle and farm, good environmental and living conditions, political freedom etc" (King, 2012: 13). In this conceptualisation, push and pull factors were modified by the effect of intervening obstacles, such as transport costs or visa restrictions. Lee (1966: 51) assumed that the balance of positive and negative push and pull factors "must be enough to overcome the natural inertia which always exists". However, it has been pointed out that there is no evidence to support the idea of a 'natural inertia' any more than a 'natural wanderlust' (Richmond, 1993).

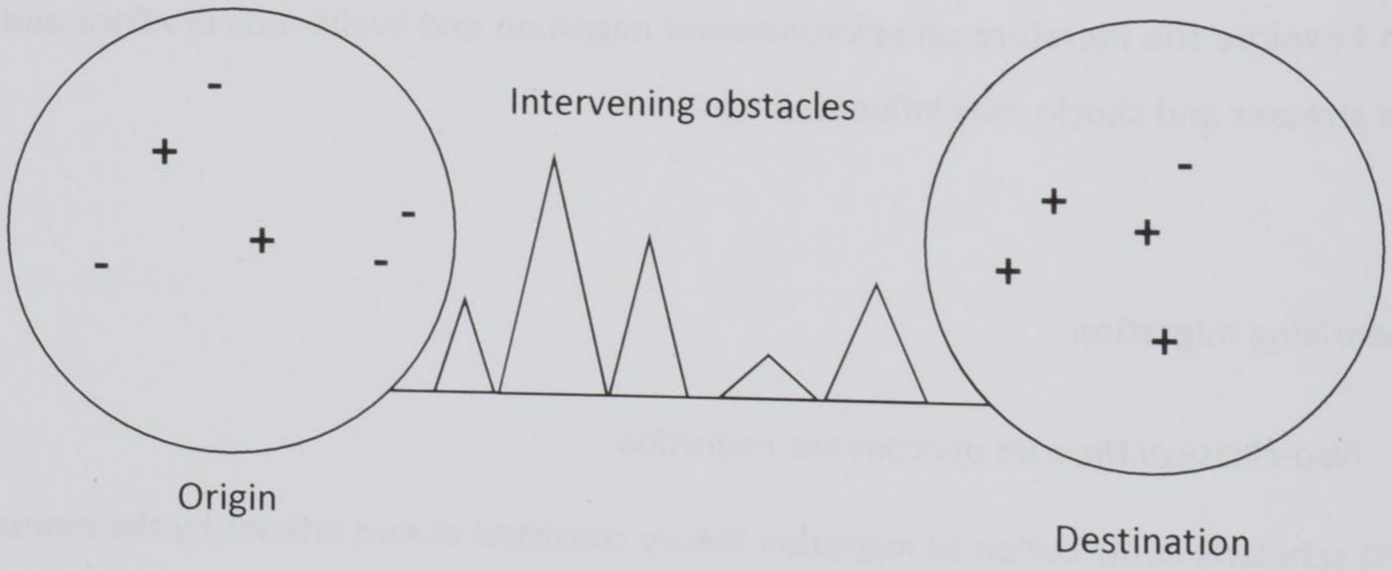


**Figure 2.1 – Lee's (1966) push-pull framework**
**Each 'plus' or 'minus' sign indicates either a positive or negative condition in the place of origin or destination. People will migrate if negatives push them from their origin and positives pull them to their destination. Intervening obstacles may hinder migration.**

Lee's (1966) model is an adequate starting point in understanding migration and has formed the basis of important contemporary works that examine the specific causes, or drivers of migration (for example, Zolberg, 1989, Massey et al., 1993, Portes, 1997, Boyle et al., 1998, Arango, 2004). However, push and pull factors cannot be understood in isolation, and must be put into context. Crucially, as Black et al. (2011: 435) state, "the devil is in the detail: each of the particular push, pull, and intervening factors that may apply in one circumstance may not apply elsewhere, whilst the different factors may interact in different ways." Furthermore,

push-pull models such as Lee's focus mostly on endogenous factors. These are factors from within a migration system (which is dealt with more thoroughly in Section 2.2.3) and include the flows of people, money and ideas that connect origin and destination (Lee, 1966).

The role of exogenous (or contextual factors), which are factors outside the migration network, such as the environment, politics or culture of the sending and receiving communities are equally as important as endogenous factors. Not everyone will respond to contextual factors in the same way. As de Haas (2008: 10) points out "whether migration occurs, crucially depends on the skills and knowledge of migrants and conditions in the specific economic sectors where they are likely to find employment both at the origin and destination." In other words, whether someone migrates is based on a person's individual circumstances. These personal circumstances include "aspirations", which have long been argued as "central to an understanding of the ways in which the stimulus from the environment is transmitted to individuals" (Mabogunje, 1970: 11, see also de Haas, 2008).

### *2.2.2 The role of the individual: agency, aspirations and capabilities*

Migration aspirations refer to how desirable an individual views migration "be it as a glamorous dream, the lesser of two evils, or as an instrumental means to an end" (www.imi.ox.ac.uk, 2013). However, aspirations are only part of the story, as without a capability to migrate, movement is unlikely (Carling, 2002, de Haas, 2008). De Haas (2011: 8) argues that the "fragmented insights [into migration] can be integrated in one framework through conceptualizing virtually all manifestations of (internal and international) migration as a function of *capabilities* and *aspirations*". This puts individual agency at the heart of understanding migration.

Agency is the "*ability* to define one's own *goals* and act upon them" (Kabeer, 1999: 438). Where an individual is unable to define and act upon their own migration goals they can be said to lack agency. For example, an individual who has no aspirations to migrate, but who has little control over their relocation may be classed as a forced migrant or refugee. Forced migrations, or refugee movements, have become a feature of Southern African population movements (Crisp, 2000, Rutinwa, 2002). Conversely, an individual who has strong aspirations to migrate but lacks the capability to do so may be 'trapped' in their present location. The UK government's Foresight report (Government Office for Science, 2011) on migration and global

environmental change suggests that it is those people who are unable or unwilling to migrate that will be most at risk from environmental change.

Evidence points to a continuum of agency relating to migration decision making (Richmond, 1993, Bates, 2002, Bakewell, 2010). This continuum is expressed in Figure 2.2. People who have no control over their relocation represent the left of the continuum. Moving to the right across the continuum are people with more control over the decision to migrate. At the far right of the continuum, voluntary migrants include only those who maintain control over every decision in the migration process. Using this continuum, it is easy to see that sometimes migrants may be neither entirely forced or entirely voluntary. Bates (2002) points out that some migrants may be 'conceptually sandwiched' between forced and voluntary. For example, 'anticipatory refugees' move away from their homes before a local situation deteriorates into an emergancy (Kunz, 1973).


**Figure 2.2 – Simple conceptualisation of a continuum of migration decision making (Source: Author's own)**

Within the migration literature, forced migrants or refugees are often considered beyond the scope of migration theory (Bakewell, 2010). As De Jong and Fawcett (1981b: 45) point out "forced migration is of course a topic of considerable interest and significance, but not with respect to individual decision making". However, in reality, forced migrants do make choices, but within a narrower range of possibilities (Van Hear, 1998). De Haas (2009b: 24) argues that even those who are usually characterised as forced migrants exercise a degree of agency in the face of appalling circumstances, and "even in the case of labour recruitment or conflict-induced migration there is usually some degree of agency and destination choice involved." For example, in a study of Somalian, Burundi and Mozambican war refugees to urban Dar es Salaam, Tanzania, Sommers (1999) found that the refugee population had actively made a choice to move to a town, as opposed to a refugee camp. For these reasons, Bakewell (2010) suggests that discussions of agency and aspirations are appropriate for all migrants despite some migrants' very limited room for manoeuvre. This involves an acceptance that migrants are not passively reacting to macro-forces (de Haas, 2010). Instead, people make a decision to

migrate (or to assist others in migrating) thereby activly engaging their agency and choice (Schiller et al., 1995).

### *2.2.3 Migration systems*

One way of conceptualising rural-urban migration that takes into account endogenous and contextual factors, whilst also accounting for individual agency, is through the notion of a "migration system". This approach was introduced in a seminal paper by Mabogunje (1970) who outlined a migration systems theory specifically for rural-urban moves within the African continent. His theory has been described as "the most comprehensive attempt at integrating both first (endogenous) and second order (contextual) migration system feedbacks so far" (de Haas, 2008: 10, and see Table 2.1). Bakewell et al., (2011) suggest that 'implicitly or explicitly', many migration scholars still use Mabogunje's approach.

**Table 2.1 – Endogenous and contextual dynamics of migration processes (Source: De Haas, 2008)**

| Type | Level | Domain | | |
|---|---|---|---|---|
| | | *Social* | *Economic* | *Cultural* |
| **Endogenous** | Intermediate – (migrant groups) | Migrant networks: 'migration industry' | Remittance-financed migration | Transfers of migration-related ideas and information |
| **Contextual** | Origin community | Social stratification and relative deprivation | Income distribution, productivity and employment | Social remittances; culture of migration |
| | Destination community | Patterns of clustering, integration and assimilation | Demand for migrant labour generated by clusters of migrant business | Transnational identities, demand for marriage partners |

Mabogunje (1970: 4) defined a migration system as "a complex of interacting elements" that include a set of places linked by flows and counterflows of people, goods, services, and information. He saw the movement of people as connected to and reinforced by flows of goods, capital (e.g. remittances), ideas and information through migrant networks (Massey, 1998). Moving beyond a solely endogenous examination of migration networks, Mabogunje (1970) suggested that the size of the pool of potential migrants in a sending region is affected by social practices, customs, community organisation, and inheritance laws. Furthermore, changing wages and job opportunities in the region determine whether individuals in the pool

of potential migrants would actually migrate. The theory specifically focused on why "any person from any village would want to migrate to the city" (Mabogunje, 1970: 11), and why they would become a permanent urban dweller (Bakewell et al., 2011), thus leading to urbanisation.

Migration system theory can even help explain the choices made by refugees/forced migrants as these choices are not entirely independent of prior connections between sending and receiving areas (Portes and Böröcz, 1989, Richmond, 1993). Findlay (2011) has suggested that environmentally-driven migrants prefer to go to places where they already have ties that allow them to more easily and profitably exchange their human, social and cultural capital. Where ties exist in urban areas, refugee migration can lead to urbanisation. In 1990s Somalia, for example, rural people affected by civil war were reported to be "flocking to urban areas" (Rogge, 1993: 24). Some of this migration was internal but the majority of rural-urban refugees fled to Eastleigh, a densely populated area of Nairobi in neighbouring Kenya where social networks were strong (Campbell, 2006). In doing this, they created what Bakewell et al.(2011) refer to as a 'critical mass'. Critical mass leads to community formation and the establishment of 'ethnic' businesses. Indeed, Eastleigh became known as 'Little Mogadishu' and was characterised by a high demand for ethnically (i.e. Somali) specific labour in Somali run businesses (Campbell, 2006). Such businesses help to fuel further migration and are an example of the interface between 'endogenous' factors and 'contextual' factors as social networks (endogenous factors) have created a new context under which migration takes place (Bakewell et al., 2011).

The central proposition within the migration system is that a change in one part of the system, such as the creation of new businesses in a receiving region, or an environmental event in a sending region, will have repercussions throughout the entire system (Mabogunje, 1970, DeWaard et al., 2012, Bakewell, 2013b). Following a change in one part of the system, the 'flows and counterflows' that connect places interact to reinforce migration amongst some pathways and to discourage it amongst others (Mabogunje, 1970:12). According to De Haas (2009a) established migration systems can self-perpetuate, re-structure or decline. In terms of the latter, feedback mechanisms may counteract the self-reinforcing internal dynamics and over time can weaken an established migration system.

## 2.3 The Southern African migration system

In this section, I take the ideas presented in the previous section and apply them to the Southern African context. Firstly, in order to provide contextual background to the rest of the thesis, I examine how Southern Africa's migration system came into existence during colonial times, and to what extent this led to urbanisation. This is important as, to a great extent, the migration system of the colonial era is still at play today (Potts, 2010). I then examine Southern Africa's migration system from a postcolonial perspective, with a particular focus on gender and circulation. Malawi's migration system is explored in greater detail in Chapter 3.

### *2.3.1 Urbanisation and migration system formation under colonial rule*

Broad structural factors associated with colonialism, such as immigration policies, labour recruitment and economic development played a significant role in setting the conditions for migration system formation in Southern Africa (Massey et al., 1993, Castles and Miller, 2003, Bakewell et al., 2011, and see Box 2.1). Bound by a duty to pay 'hut tax' to the colonial government, male members of rural households sought out waged employment in town where the colonists required workers for "public infrastructure (runway, railway, ports), administration (soldiers, clerks) or various private services (maids, etc.)" (Beauchemin and Bocquier, 2003: 4). Further opportunities for employment were created through the discovery of minable minerals. For example, in Zambia, migration and urbanisation were largely driven by the discovery of copper along the Copperbelt in the 1920s (Ferguson, 1999).

The labour migrant system was highly regulated during the colonial era – this was partly in response to the colonial government's need to maintain a clear picture of where everyone was for "the collection of taxes, the imposition of colonial law, and the provision of government services" (Bakewell, 2008: 7). Furthermore, concerns by Europeans about the moral implications of large scale rural-urban migration meant that colonists wanted to keep migrant labourers in their home villages until they were needed in town (Bryceson, 1999). For example, missionaries were worried about changes to rural traditions; some colonial officers were concerned over potential decreases in agricultural productivity; and social anthropologists were worried about detribalisation – not least because tribes provided a new and interesting area of study (Potts, 2005). Migration soon became a major pre-occupation for colonial governments and policy makers (Bakewell and de Haas, 2007).

**Box 2.1 – Africa as a labour reserve for the colonists**

In 1883, the Scottish theologian Henry Drummond set off to south-east Africa to make a biological and geological survey of the area now known as Malawi. It is likely that Drummond, arrived at the beginning of succession of good harvest years as he described a rich and fertile land, inhabited by farmers who could be "assured of a crop which never fails, which is never poor, and will last him till the rains return again" (Drummond, 1890: 59). With ease of farming and guaranteed food security as his starting point, Drummond described the population as;

> *A fine looking people quiet and domestic, their life history from the cradle to the grave is of the utmost simplicity... the staple food is a small tasteless millet seed which they grow in gardens, crush in a mortar, and stir with water into a thick porridge. His one occupation is to grow this millet... But a few weeks off and on are required for these operations, and he may go to sleep till the rains are over... Between the acts he does nothing but lounge and sleep..."*

Malawi represented an untapped labour resource. Drummond wrote "the only reason that the African is an incorrigible idler is that there is nothing for him to do...[but] there is nothing in the soil, the products, the climate, or the people of Africa to forbid its joining even at this late day in the great march of civilisation" (Drummond, 1890: 66). The belief that Africa could be compared to and perhaps even become like the West (along with a desire for money and empire) help to inform the colonists' policy making. The British government declared Nyasaland its Protectorate in 1891 and the desire to use the untapped labour, and to profit from it, was no secret. Writing in 1896, the colonial administrator Sir Harry Johnson reported back to the Foreign Office;

> *Given the abundance of cheap Native labour, the financial security of the Protectorate is now established...A gentle insistence that the Native should contribute his fair share to the revenue of the country by paying tax is all that is necessary on our part (As cited in, Read, 1942: 608)*

Throughout Southern Africa, the government developed a sophisticated legal framework to encourage the temporary employment of single males (but not females) in the expanding urban areas. For example, in South Africa 'Pass laws', designed to segregate and restrict the movement of the non-white population, allowed rural men to stay in town only for the duration of employment (Barnes, 1997). It was mandatory for all employed urban Africans to register with the local authorities; unregistered and unemployed urban Africans were sent back to the village. More broadly, across Southern Africa, urban accommodation mainly comprised of all male hostels where women and children were not welcome (Andersson, 2001). This meant that during the colonial system migration became deeply gendered (Crush et al., 2005). Some scholars attribute this to the way in which the Colonists projected their own European views of family onto African society (Rodet, 2007, Akyeampong and Fofack, 2013). For example, Rodet (2007) suggests that female immobility in West Africa was a construct of the French colonial administration who did not acknowledge that women already were engaged in labour migration. The administrators' understanding of migration was based on the prevailing ideals of the nineteenth century bourgeois European family, where the woman's role was at home with her family.

The colonists' task of ensuring migrants return to the village was made easy by the traditional moral code at play in many rural areas. This code ensured that men felt bound to their homes and sent money back from town to the rural family (Posel, 2002). For example, in their study of migration among the Xhosa in South Africa, Mayer and Mayer (1971: 93) noticed that "filial piety, fear of ancestors, and love of home [were] all invoked to rub in the lesson that town is 'bad' and absconding an ultimate sin". Migrants were also encouraged to visit home as often as they could, an event that was "associated with pleasures" (*ibid.*: 96). By doing this, the good life was created at home in the village and permanent settlement migration was discouraged.

Although colonial migrant labour was undoubtedly constricted, Wright (1995) argues that households still had a level of agency relating to how they paid their hut tax. Individual responses to market opportunities in town and on other colonial projects were an important factor in the shaping of the African colonial migrant labour system. Wright (1995) points out that urban labour migration grew at a time when households had other cash sources open to them, for example, selling fuel wood and agricultural produce to colonial officials. In other words, some Africans living under colonialism had some degree of choice over whether or not to become urban labour migrants (Bakewell, 2010). Similarly, writing about migration in colonial Zimbabwe, Yoshikuni (2007) argues that African rural households were selective and discretionary in supplying labour to the colonists. Households would only send labour if necessary, and when they did they sent their most junior, male members. Interestingly, some scholars suggest that the different household responses to market opportunities were the cause of colonial era social stratification in rural Africa (Wood, 1968, Mayer, 1980). According to Marks and Rathbone, (cited in Wright 1995: 778) this shows that the migrant labour system was "never the conspiratorially planned solution of mining capital to the problem of labour costs" but the result of different actors taking advantage of opportunities as they arose.

The effect of colonial constraints on mobility was that men who became part of the Southern African migrant labour system would return to their rural home village at regular intervals to see their wives and children and renew their social bonds with the community (Bryceson, 1999). This led to the practice of circulation between rural and urban areas that many researchers claim is still in play throughout post-independence Africa (Englund, 2002b, Clark et al., 2007, Potts, 2009, 2010, 2012b).

### *2.3.2 Postcolonial perspectives: circularity and gender*

According to Potts (2010: 29) "circular migration between rural and urban areas remains a crucial, and adaptable, aspect of urbanization processes in sub-Saharan Africa...". However, this may not necessarily lead to increased urban growth as circular migrants do not stay permanently in towns; their movement back to the village plays a role in reducing urban growth (Potts, 2012b). In the absence of restrictive colonial policies, it was assumed that migrants would choose to move toward the city permanently. For example, in the 'new South Africa' (i.e. post-apartheid) it was assumed that rural dwellers would choose not to be labour migrants but would migrate and settle permanently away from their homes (Posel, 2004). According to Posel (2003) this assumption may help explain why the coverage of labour migration on the South Africa censuses and other surveys declined during the 1990s, and then stopped altogether in 2000. Support for these assumptions comes from a study by Barrios et al., (2006) who, using aggregate migration data for SSA showed that urbanisation increased after restrictive policies were lifted. However, despite the lifting of restrictions, many scholars argue that migration patterns are very similar to the colonial era (e.g. Potts, 2010). For example, a study by Collinson et al.(2007: 6) examined circular labour migration in South Africa and concluded that the pattern of labour migration created during the colonial and apartheid eras "established the social networks, cultural acceptance, transport systems, etc. to facilitate the temporary migration of both men and women" that still exist today. In other words, even in the absence of restriction (such as the colonial era policies) social norms surrounding migration play a role in defining behaviour. Because circulation is still considered the norm in Southern Africa, it is often argued that rural-urban migration does not always lead to urbanisation as migrants do not remain permanently in town (Potts 2012).

There is no single definition of post-colonial circulation. Zelinsky (1971: 225-6) makes the distinction between permanent migration as "any permanent or semi-permanent change of residence" and circulation as "a great variety of movements, usually short term, repetitive or cyclical in nature, but all having the lack of any declared intention of a permanent or long lasting change in residence". This definition does not explicitly specify a length of time to be spent in town after which a migrant could be considered permanent. For example, in her seminal study of migration in Mali, Findley (1994) found that most rural-urban circular migrants stayed in town for durations of less than a year and return to help with the farm work. She also found that many 'permanent' migrants were actually long-cycle circulators, with the migrant absent two to three years at a time. Similarly, Henry et al. (2004) found that cross-border migrants in Burkina Faso returned home within two years. In their study of

circular migrants to the slums of Nairobi, Kenya, Beguy et al., (2010) state that circular migrants spend an average of fewer than three years in town. Finally, in Malawi, Lewin et al. (2012) defined long-term migrants as people who had moved between one and five years ago. Once someone had been resident in their current location for five years or more, they were seen to have assimilated and were classed as non-migrants.

As with other dichotomies in migration there is a considerable blurring with overlap between permanent, temporary and circular migration (King, 2002). Hugo (1996) has argued that an important concept when considering the difference between permanent and temporary migration is that of commitment. He argues that all migrants can be located along a commitment continuum according to the degree of commitment that they have to their origin and that to which they feel toward the destination. Someone with waning commitment to their origin and a growing commitment to their destination may eventually become a permanent migrant. In Southern Africa, commitment to the village generally remains strong (Englund, 2002b). When commitment to the city is stronger, it could be expected that migrants will become permanent (Hugo, 2009).

Robinson (2002, 2006) argues that because we lack a rounded conceptualization of African "cityness" due to a scholastic pre-occupation with development (improving the city) rather than modernity (understanding cultural experiences in the city), it is difficult to ascertain whether the absence of permanent settlement migration is partly due to the idea that the "good life" cannot be found in town. There is very little literature on the cultural experience of urbanities in an African city. In a paper on African cityness, Pieterse (2010: 1) states that knowledge and "assumptions about the urban nature of African cities and towns are so paper-thin" that it is impossible to formulate realistic understanding. Often, urban experiences are presented in a negative light. For example, Simone (2004: 4) claims that for many residents of African cities "...life is reduced to a state of emergency." Similarly, Shoumatoff (1988: xiv) described "detribalized young men, lost souls wandering in the vast space between the traditional and the modern worlds, ... howling in the streets of downtown Nairobi in the middle of the night..." And Jamal (2003) describes a South African city as being home to routinized violence and gang rape. There is even less literature on how African cities are perceived by rural dwellers, and how this affects their aspiration to migrate. Understanding how perceptions of urban places affect the migration aspirations of rural dwellers, and how urban perceptions are affected by imperfect village conditions (i.e. impacts of climate change, rural poverty etc.), form part of the analysis within this thesis.

The issue of permanence is complicated by the process of "step migration", which has been described as migration involving a sequence of moves from smaller to larger places, rather than a single leap from village to metropolis (Conway, 1980, Adepoju, 2000). In a recent UN-HABITAT (2010) report on the state of African cities, stepwise migration was described as 'common'. In her study of circular migrants in Harare, Zimbabwe, Potts (2010) found that 20% had migrated from another town. Similarly, Bakewell and Johnson (2011) suggest that most of the respondents in a study of migration in Ghana had moved into long-distance travel through stepwise migration, starting with their first journeys to other cities and towns in Ghana, before moving to trading destinations outside Africa. Stepwise migration from rural areas to smaller cities to the larger metropolises is considerable in South Africa (Collinson et al., 2007). This suggests that circulation is not simply a case of rural-urban-rural movement. However, even step-wise migration can be considered circular, if journeys begin and end in the rural home.

Aside from the idea that circular migration journeys begin and end in the rural home, circulation is also characterised by continued links between a migrant's rural and urban home. Due to the links that rural and urban households maintain, some scholars argue that any households who pursue a rural-urban circular migration strategy are split across two geographical areas (rural and urban) (de Haan, 1999, Ellis, 2003). By 'straddling' the rural-urban divide, they do not have to relinquish their roots on either side (Tacoli, 1998). The flow of money, or 'remittances', sent by urban migrants to their rural families is a good example of urban-rural connections. Unlike international remittances, relatively little is known about internal remittances and there are no estimates for Southern Africa (Pendleton et al., 2011). This is partly because tracking internal remittances is not necessary for national accounting and because internal transfers are usually sent through informal channels such as giving money to a friend who is travelling back to the home village (Freund and Spatafora, 2008).

Regardless of the size of remittances, their flow between urban and rural regions indicates that both parties (the urban migrant and their rural family) have a clear interest in maintaining their relationship despite their physical distance(Stark and Bloom, 1985, Stark and Lucas, 1988, Stark and Taylor, 1991). Economic theories of labour migration explore what motivates a migrant to stay in contact with their rural house, as opposed to severing ties and retaining the urban earnings for themselves. More specifically, three motives for remittances can be discerned; (1) altruistic feelings for the family; (2) the desire to be eligible for family inheritance, usually land or cattle; (3) co-insurance, so that the migrant is also 'insured' by their rural family whilst they remain in town (Lucas and Stark, 1985, Hoddinott, 1994, De la

Briere et al., 2002). While the first two motives are investigated empirically, the last motive is rarely part of empirical analysis. This forms part of the analysis in Chapter 5, Section 5.5.

Although remittances are usually seen as one-way transfers, there is some evidence that shows that reverse remittances are possible. For example, Mobrand (2007) suggests that in South Korea reverse remittances take place between rural households and their sons who are studying in town. He suggests that this is can be attributed to the fact that massive permanent urban migration was not preceded or accompanied by short-term circulation, and consequently migration was poorly integrated into rural economic activities. This is obviously not the case in SSA where migration has long been part of rural economic activities. However, Mazzucato (2009) showed that international reverse remittances between Ghana (the sending country) and the Netherlands (the receiving country) do take place, which suggests that reverse remittances in SSA are possible.

The notion that remittances (whatever their direction) reinforce the link between rural and urban households relies on the idea that someone remains in the village. As highlighted in Section 2.2, women and children are the ones who are seen to stay behind. For example, in their study of migration and rural-urban ties in Cameroon, Geschiere and Gugler (1998: 310) wrote that "children and women may stay [in the village], to cultivate the land...The village's 'sons' and 'daughters' in the city... function as a kind of bridgehead to the outside world: they are supposed to receive, feed and lodge their fellow villagers when they come to the city to look for a job, to attend school, to undergo medical treatment or to deal with the authorities." However, the idea that 'women and children stay in the village' has been challenged recently; in contemporary SSA the literature discusses increasing numbers of female migrants who move to urban areas for work as a means of meeting their own economic needs (Casale and Posel, 2002, Beauchemin and Bocquier, 2003, Beguy et al., 2010). The 'feminisation of migration' is commonly used to explain this increase in women engaging in migration based earnings outside the home community (Camlin et al., 2013). Using data from South Africa, Posel and Casale (2003) point out that between 1993 - 1999 there was little change in the proportion of rural African men who were reported as labour migrants. However, the proportion of migrant women increased leading to an overall shift in migrant gender composition. As of 2003, women accounted for 41% of labour migrants to urban areas across SSA (see Table 2.2).

**Table 2.2 – The destination of labour migrants in SSA by gender (Source: Posel and Casale, 2003)**

| Proportion of labour migrants located in: | All labour migrants % | Male labour migrants % | Female labour migrants % |
|---|---|---|---|
| **Urban areas** | 46.0 | 48.4 | 41.0 |
| **Rural areas*** | 54.0 | 51.6 | 59.0 |

*Note that rural areas also include urban peripheries

Although more women migrate than before, there are still differences between male and female migration. For example, in South Africa, there is some evidence that female labour migrants stay closer to home than male migrants (Lurie et al., 1997). And, Casale and Posel (2002) report that women are more likely than men to find work in the informal sector, and they often make work for themselves. Furthermore, the fact that more women migrate than before has been related to the failures in rural household food production and the difficulties of men trying to support a household entirely on their own wages (Cross et al., 2006). In this way, it could be seen that broader societal changes have emerged as a result increasing poverty in the sending region. It could also be argued that a possible negative consequence of this is that when women do migrate they do so out of necessity. However, Posel and Casale (2003) highlight that the increase in female migration coincides with a reported decline in marital rates among African women which means women have more freedom to move (as well as an increased economic need). This idea is supported by a study of migration into South Africa from Lesotho, Mozambique and Zimbabwe where it was reported that "women are more likely to be subject to the will of a male parent or partner in determining whether they will migrate" (Dodson, 2000: 142). Similarly, in her study of migration into the urban area of Natal, South Africa, Todes (2001, as cited in Posel and Casale, 2003: 7) argues that "women's mobility varied according to their position in the household. Married women could not move at will...Unmarried women were freer to move, but this depended on... their roles as caregivers, responsibility for children, the sick and disabled and for old parents."

The idea that people migrate out of economic necessity when rural livelihoods are failing is the subject of disagreement within the poverty and migration literature (see de Haan and Yaqub, 2009). For example, in her study of rural-urban migrants in Mali, Findley (1994: 540) found that it was "especially those from poorer families, [who] go to nearby cities where they work as petty traders, helpers or at other low status, low paid jobs." Similarly, literature on migration in Malawi has been heavily influenced by the 'underdevelopment school' of the 1970s which theorised a causal link between increasing migration and rural poverty (Chirwa, 1997).

However, De Haas (2005: 18) points out for migration to take place "people need both the human, financial and social resources as well as aspirations to do so". This means that is it unlikely that poor households who lack human, financial and social capital will be able to migrate. For example, because migration requires a financial investment (e.g. transport costs) a certain threshold of wealth is necessary, making it difficult for the poorest to move (de Haas, 2007). Altogether, the literature on poverty and migration is limited and mixed (Waddington and Sabates-Wheeler, 2003), however there appears to be a general "empirical regularity" that the poorest and richest are the least likely to migrate (de Haan and Yaqub, 2009).

## 2.4 The possible role of climate on migration patterns

The effects of various structures including political, economic, demographic, socio-cultural, and environmental, change the conditions in which the migration system begins, operates and ends (Bakewell et al., 2011). These factors can change (and are changed by) the migration system (Mabogunje, 1970). In this way, climatically induced environmental stress (such as soil erosion and chronic drought) and shocks (such as floods and droughts with acute food shortages) are likely to alter current migration systems by changing the dynamics in both the sending and receiving region. As outlined above, this does not necessarily mean that migration systems will be undermined, indeed they may be strengthened. For example, Findlay (2011) suggests that environmentally-driven migrants prefer to go to places where they already have ties that allow them to more easily and profitably exchange their human, social and cultural capital.

### *2.4.1 Environmental stresses in sending regions*

According to Warner et al.(2010) slow-onset stresses will give environmental push factors an increasingly important position in the migration decision. Slow onset environmental changes can negatively affect rural livelihoods and contribute to migration pressures in the long term, however, underlying environmental factors are slow and difficult to observe (Warner, 2010a) therefore it is hard to conceptualise the influence of slow-onset change and stress on migration.

Hunter (2005) calls on classic migration theorists (including Wolpert, 1966, De Jong and Fawcett, 1981a) to suggest that the environment gradually influences migration by slowly creating a "threshold of dissatisfaction" after which a person may consider residential relocating. In this way, an individual may consider migration when environmental degradation has a major impact on personal well-being (Koubi et al., 2012). Migration occurs when the costs of staying are greater than the costs of leaving. Communities and families may increasingly see migration (to urban areas or across borders) as offering more attractive possibilities to worsening life quality in areas affected by slow-onset environmental change (Warner, 2012). For example, Feng et al. (2012) found a statistically significant relationship between changes in net outmigration and climate-driven changes in crop yields in the US Corn Belt. They estimated that a 1% decrease in yields led to a 0.17% net reduction of the area's youth population through migration to urban areas.

Migration out of areas that are prone to stresses may also be anticipatory. For example, circular migration has long been understood as an important livelihood diversification strategy that can protect against rural environmental change (see Jónsson, 2010). Ellis and Harris (2004: 6) argue that "risks are reduced by diversifying livelihoods, and mobility is the main, but not only means of doing this". Households that generate income from geographical areas that are not linked in to the rural economy in the home village may be more secure (Massey et al., 1993). For example, Lindley (2009) found that migrants in urban Somalia remit more money back home when their rural family have a poor harvest.

Migration can be a strategy for confronting periods of environmental stress. In communities where circular migration is the norm, there is evidence that mobility increases during prolonged stresses. For example, Findley (1994) noted that around half of the households she interviewed in rural Mali used circularity to cope with a prolonged drought. During long droughts in western Sudan, older male members of households leave for the capital, Khartoum, where they seek wage labour (McLeman and Smit, 2006, quoting research by Afolayan and Adelekan, 1998). Similarly, in the West African Sahel migrants who leave villages after harvest have been referred to as "those who eat the dry season" (Rain, 1999, Brown, 2007a).

Established migration systems are an important prerequisite for migration to take place. If a community has no previous history or tradition of migration, it is unlikely that they will be able to facilitate migration during environmental stresses (Faulkingham and Thorbahn, 1975, Bassett and Turner, 2007). Where a community has a tradition of circular migration to an

urban area, increased rural-urban migration as a result of environmental stress may be expected (Tacoli, 2009). Potts (1995) suggests that the gradual decline of rural livelihoods in response to prolonged stress such as slowly occurring droughts has affected city growth in Sahelian countries. For example, during a prolonged drought and the associated loss of rural livelihoods in Mauritania, the population in the capital city, Nouakchott, is estimated to have increased fortyfold between 1965 and the end of the 1980s (Hardoy and Satterthwaite, 1989). However, Potts (1995) argues that permanent migration to Nouakchott, was rare, and usually restricted to very poor households, or large complex households that were not functioning well.

### *2.4.2 Environmental shocks in sending regions*

Rapid-onset shocks, such as floods, storms, as well as acute periods of famine are linked with environmentally induced displacement and migration (Warner et al., 2009). A common-sense line of reasoning assumes that climate change will lead to out migration from the affected area (Perch-Nielsen et al., 2008 and see Figure 2.3). According to this, those affected by shocks may have no choice other than to abandon uninhabitable homes and to avoid physical harm or loss of life (see McLeman and Smit, 2006). Somewhat undermining this argument is the fact that shocks can destroy livelihoods, crops, and livestock or other productive assets that are important for migration to take place. Whilst some immediate migration may be essential to avoid the worst of the shock (e.g. to avoid rising flood waters), this may be temporary and the loss of assets may reduce the opportunity to migrate further. For example, during the Irish potato famine (1845 to 1850) out-migration was the lowest in the areas most affected by the famine as people were too poor to escape and had to survive on their own 'wasted lands' (Fraser, 2003).

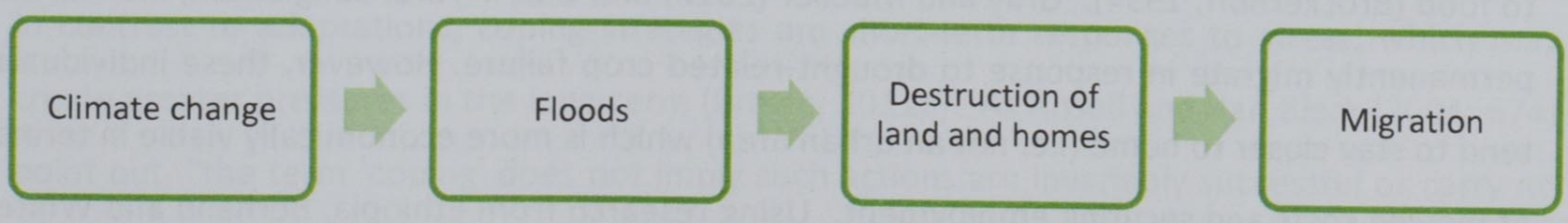


**Figure 2.3 – The 'common-sense line of reasoning' (Source: Perch-Nielsen et al., 2008)**

There is conflicting empirical evidence on whether natural disasters promote migration, especially migration to urban areas where the associated costs are high (Naik, 2009). Some researchers find evidence that sudden shocks such as floods and tornados do encourage urban migration. For example, in Mozambique, Stal (2011) found that 40% of the rural-urban migrants he interviewed in the capital Maputo had moved there following a major flood in 2008. Outside of SSA, Kaye (1994, as cited in Hugo, 1996) reported that when a fifth of China's uplands were affected by floods, a mass migration to urban areas in search of work took place. Similarly, in Bangladesh, Rayhan and Grote (2007) conducted a household survey two weeks after the 2005 flood that affected four districts. They found that rural-urban migration was a common strategy for households seeking to replenish asset values damaged by the flood. Moves were often funded by taking loans from money lenders. Similarly, in a study of floods and cyclones in Bangladesh, it was found that fathers migrate to urban centres in order to work and send remittances back home (Poncelet, 2009). Conversely, Paul (2005) used survey data in eight Bangladeshi villages following a 2004 tornado. He reported that not one of the 291 respondents he spoke to had migrated to town, or to anywhere else.

The empirical evidence for migration during drought and acute food shortages is equally as conflicting. For example, Afifi (2009) reports that following a complete loss of rural livelihoods in rural Niger as a result of drought, rural communities were left with no choice other than to migrate. In Ezra's (2001) study of drought-prone rural areas of Ethiopia, he found out-migration was the highest during the 1984 famine, although it is unclear where this migration was to. Potts (1995:246-7) points out that drastic famines have played a part in displacing rural people to urban areas, "often in the very same countries where there has been long-term war, which may be the root cause of the famine or prevent appropriate government responses to short-term droughts." When mass migrations take place during famines, other issues are often at play. For example, Murdoch and Sandler (2002) suggest that in countries undergoing a civil war, migration to cities increases as people seek safety and try to escape famines in well-supplied urban areas. Those who do migrate to urban centres have often lost all entitlements to food (Brockerhoff, 1994). Gray and Mueller (2012) find that in rural Bangladesh, individuals permanently migrate in response to drought-related crop failure. However, these individuals tend to stay closer to home (i.e. not an urban area) which is more economically viable in terms of moving costs and securing employment. Using research from Ethiopia, Berhanu and White (2000: 101) find that "contrary to expectation, famine does not appear to generate a permanent flow to the cities."

Despite the conflicting evidence relating to post-disaster migration, Naik (2009: 266) argues that the question is not whether migration post-disaster happens but "what its scope and form [is]". Black et al. (2011) suggest that event-driven migration is usually short-lived, and people commonly return to the source location once the event has receded, often after only a short time has elapsed. However, temporary displacement from natural catastrophes can lead to permanent migration, as illustrated by Hurricane Katrina in New Orleans, U.S.A. The hurricane ultimately caused about 1.5 million people to be displaced temporarily and an estimated 500,000 people permanently (Grier, 2005). Similarly, according to Warner and Laczko (2008) temporary mass displacement along the Zambezi River is taking on the characteristics of permanency.

### *2.4.3 Non-migratory responses*

Migration is not the only strategy for confronting environmental problems. Reuveny (2007: 657) argues that "people can adapt to environmental problem in three ways: stay in place and do nothing, accepting the costs; stay in place and mitigate the changes; or leave affected areas". To avoid migration, a household may mitigate against changes by deploying a variety of adaptations and/or coping strategies. Adaptations to climate stresses are already being observed across Africa (Boko et al., 2007). For example, households may participate in local savings schemes that they are able to draw on in times of stress (Hellmuth et al., 2007, Meze-Hausken et al., 2009). Households may also diversify their livelihoods to increase resilience to stress (Ellis, 2000). For example, by engaging in craftwork, herbal medicine, or construction households can open up new income sources (Osbahr et al., 2008). Households are also able to make adaptations on their farms, for example, by being more flexible with traditional planting times, or changing them all together (Stringer et al., 2009). Similarly, agricultural intensification, which may include the use of natural fertilisers, soil and water conservation, can increase farm productivity (Mortimore and Adams, 2001).

In contrast to adaptations, coping strategies are short-term responses to stress, which may create greater pressures in the long-term (Brown, 2011b). As Ansell and Van Blerk (2004: 674) point out, "the term 'coping' does not imply such actions are invariably successful or carry no costs [and] the term 'strategy' does not imply the implementation of a carefully prepared plan". For example, farmers may have no alternative other than to commit more of the household's labour to the farm in the hope of boosting productivity. However, labour-led

intensification, characterised by increased time and effort, may be erosive in the long term as resources are directed away from other household duties (Reardon et al., 1999). Other coping strategies include selling assets, such as livestock (Devereux, 1993); eating less at meal times, skipping meals altogether, or eating wild foods (Corbett, 1988, Devereux et al., 2010); and, removing children from school (Grimm, 2011).

A major problem arises when coping mechanisms are exhausted by the extended duration of resource scarcity (Brown, 2011b). Furthermore, given the severity of climate change impacts household adaptations may not be sufficient to retain sustainability (Boko et al., 2007). It is for these reasons that some authors suggest that negative changes in rural environments may result in a situation where rural out-migration is more difficult as the capital needed to successfully migrate is undermined (e.g. McLeman and Hunter, 2010, Government Office for Science, 2011). Disinvestment strategies are particularly likely to do this as they erode the household's capital. For example, Henry et al. (2004) found that migration to urban centres decreased in response to declining rainfall. This is because urban migration was seen to be 'high cost' and more likely to take place after normal rainfall (i.e. not in reaction to poor rainfall when resources are stretched).

For households who are unable to cope, adapt or migrate, humanitarian support may become necessary. For example, emergency food/cash-for-work programmes are a common response by the international community and governments to food shortages (Ellis et al., 2009). Such programmes have important implications for migration when those who take part are required to retain a local base (WFP, 2005). By setting wages low, cash/food-for-work programmes are often self-targeted at the poor (Barrett et al., 2002). As the poorest households may lack the capability to migrate, the impact of cash/food-for-work programmes on migration may not be significant. Aside from cash/food-for-work programmes, free distribution of food may also take place and is also usually targeted at the poorest households (Jayne et al., 2002). Depending on where distribution points are located, households may be able to travel a short distance to access food, or they may have to travel far and bear significant transport costs further eroding their capability to migrate to town (WFP, 2006).

Humanitarian intervention is also important following a flood. Between 2000 and 2012 there were 26 flood appeals across Southern Africa, with assistance provided to more than 13 million people (Holloway et al., 2013). Aid often includes practical items, such as tents, blankets, cooking utensils, buckets and mosquito nets, which aim to enable households to function (IFRC, 2013). However, the length of time it takes help to arrive at an affected area

may also influence decisions about leaving. For example, following a series of floods and landslides in Eastern Uganda, Doocy et al. (2013) found that 77.8% of 400 surveyed households felt the government had not been prepared enough for an immediate and effective response, although it is unclear how many people left as a result of this. Conversely, by using medium-to-long-range climate forecasts, the International Federation of Red Cross and Red Crescent Societies (IFRC) was able to reach flood affected households in rural West Africa in a matter of days rather than weeks as had previously been the case (Braman et al., 2013) . As well as preventing further loss of life and illness, the IFRC was able to prevent serious setbacks to livelihoods that may have prompted migration decisions (*ibid.).*

### *2.4.4 Environmental impacts in urban receiving regions*

In the context of a migration system, in which events at both the sending and receiving region affect migration, a consideration of urban impacts of climate change is appropriate. An increasing body of literature suggests that urban areas of low and middle income countries will be affected by climate change (e.g. Parnell et al., 2007, Simon, 2010, Romero Lankao and Qin, 2011). Flooding is a particular issue. A recent report by Action Aid (2006) identified four main types of urban flooding; (1) heavy rainfall events that lead to localised flooding, which is made worse by a lack of drainage; (2) heavy rainfall events that lead to flooding of small streams that pass through urban areas. This is a particular problem when steams pass though culverts that have become blocked; (3) urban growth over floodplains leads to issues when rivers rapidly rise; and, (4) rain and river water combine to raise the levels of water in swamps in lowland or coastal areas. This is made worse by dumping of waste beneath dwellings.

As the climate changes, and as urbanisation increases, urban populations become increasingly vulnerable (Government Office for Science, 2011). For example, Douglas et al. (2008) describe how, in 2000, heavy rain and cyclones led to the worst flooding in Maputo, Mozambique for 50 years with over a million people affected. This is a particular issue for new urban migrants who tend to concentrate in environmentally hazardous districts of cities and thus are the most vulnerable to environmental change (Government Office for Science, 2011). For example, in Dakar, Senegal, 40% of new migrants moved to zones with high flood potential and immigrant populations in Mombasa, Kenya, suffer disproportionate impacts from local flooding and winds (Satterthwaite et al., 2007). Similarly, Action Aid (2006) report that migration has led to more homes being built next to the river in the Maili Saba slum area of Nairobi. The combination of

regular flooding and houses made from weak, inadequate building materials leads to widespread disruption.

## 2.5 Chapter summary

This chapter has explored the literature on migration and climate change. More specifically, the chapter presented literature that conceptualises migration as the movement of people (and their goods and information) between a rural sending region and an urban receiving region. The decision to move from a sending to a receiving region is seen as a function of an individual's *capabilities* (i.e. the resources they possess to make a move happen) and their *aspirations* to be a migrant. To this end, Mabogunje's (1970) idea of a 'migration system' provides a useful way of understanding a person's migration as a response to endogenous factors (e.g. flows of people, money and ideas that connect origin and destination) and contextual factors (e.g. social practices, customs, community organisation, and inheritance laws). More precisely, the theory centres on "why any person from any village would want to migrate to the city" (Mabogunje, 1970: 11), and why they would become a permanent urban dweller (Bakewell et al., 2011), thus leading to urbanisation.

Using the migration system as the point of departure, the chapter explored how migration patterns formed throughout colonial Southern Africa, and importantly, how migration flows operate today in contemporary Africa. Circulation emerges as the defining feature of Southern African population movements. More precisely, the literature suggests that Southern African migration is characterised by a repeated cycle of short stays (of fewer than five years) in the receiving region followed by a return to the sending region. A person is said to become a permanent migrant once they feel more commitment to their destination than their origin. Links between rural and urban homes continue to play an important role in migration with urban-rural remittances cementing the bond between the migrant and their rural home. The 'feminisation of migration' means that women are increasingly migrating to towns. Importantly, there appears to be a general "empirical regularity" that the poorest and richest are the least likely to leave the village (de Haan and Yaqub, 2009).

The final section of the chapter examined the literature on the possible impact of climate change on migration. In terms of chronic stresses, the literature generally points to the idea that slow-onset changes negatively affect livelihood systems and contribute to migration pressures in the long term. However, it is recognised that migration patterns under chronic

stresses are slow and hard to observe. In terms of shocks, there is conflicting empirical evidence on whether floods and acute famines promote migration, especially migration to urban areas where the associated costs are high. Furthermore, it may be the case that when migration following a shock takes place, it is short lived.

The following chapter applies the concepts explored here to the case study country, Malawi. The chapter also introduces the sending and receiving regions that were used in the research.

# Chapter 3. Case study country – Malawi

## 3.1 Introduction

The aim of this chapter is to examine the links between migration and climate in Malawi. This chapter is split into three sections. In the first section, I explore the formation of Malawi's migration system and how this has led to the current system that operates within the country today. I also explore urbanisation in Malawi and to what extent the literature suggests that this is a function of rural-urban migration. In the second section, I examine how livelihood stresses, such as soil degradation and water stresses, and shocks, such as floods and droughts that lead to acute food shortages, affect Malawian households and I link this back to the migration system. In the third section, I introduce the rural sending regions and urban receiving regions where data collection took place. A rationale for the selection of the sites is provided along with a detailed description of each study location. Exactly how and what data was collected in each site is discussed in Chapter 4, along with an explanation of the theoretical framework that was used to guide data collection.

## 3.2 Migration systems in Malawi

### *3.2.1 Migration system formation*

Over the last two centuries, migration in Malawi has undergone significant changes in response to driving forces that include policies designed to constrict international and domestic mobility (Englund, 2002a). This has meant successive generations of Malawians have had widely different experiences of migration, all of which have contributed to the current migration system which is described in more detail in the following section (Section 3.3).

Population movements in the forty years before 1891, when the British established colonial rule in Nyasaland[1] (the area containing present day Malawi), were largely a result of an exceptionally unstable, violent period in the region's history (McCracken, 2012). Like the rest of Africa, movement was associated with warfare, natural disasters and the search for farm land or colonisation (Adepoju, 1995). At the same time, the East African slave trade was expanding throughout the region (Lovejoy, 2011). As a result of both slavery and instability,

[1] More specifically, Nyasaland was part of the Federation of Rhodesia and Nyasaland. This area includes present day Zambia, Zimbabwe and Malawi.

migration was often unstructured and the migrants were demographically undifferentiated (Adepoju, 1995). Slavery in particular resulted in forced migration and severely disrupted the local agrarian economy (Bryceson, 2006). Perhaps unsurprisingly, mobility during the pre-colonial period has been described as the rule rather than the exception (Englund, 2002a).

When the British arrived in Southern Africa in the late 19th century, they were 'dismayed' at the level of mobility and saw it as a threat to stability (Ferguson, 1999). To some extent, the restrictive mobility rules imposed by the colonial powers (see Chapter 2, Section 2.3) paved the way for a certain level of peace and stability throughout the region and forced/unplanned migrations came to an end (Adepoju, 1998). The colonist also imposed new geographical boundaries meaning that migration could not be as fluid as before as borders became less porous (Byerlee, 1974). Restrictive policies based on race were also put in place; for example, the Land Tenure policy classified urban areas as 'white only', meaning that labour migrants were only allowed to stay in town until they were not needed (Kamete, 2003). This was partly why Malawi experienced minimal urban growth during colonial times (*ibid.*). Furthermore, policy ensured that Malawi was prevented from becoming an economic centre in its own right as national labour was needed in mines and plantations elsewhere in Southern Africa (Lucas, 1987). As such, Malawi became an international exporter of labour with a migration system based on circular international labour migration (Lucas, 1987, Adepoju, 2003). In 1936, a government report showed that only 49,000 Malawians were in waged employment within the country compared to 120,000 abroad (Christiansen and Kydd, 1983). About 63% of those abroad were thought to be in current day Zimbabwe (then Rhodesia) and 17% were thought to be in South Africa (*ibid.*).

Following independence from colonial rule in 1964, political events drastically altered the macro-contextual environment of Malawi's migration system. The 'Life President Dr Hastings Kamuzu Banda' was elected as the first independent leader. Banda cast himself as a wise and all-knowing leader and the appointed saviour of the Malawian people (Chirambo, 2010). He was the supreme authority; his word had the force of law and was ruthlessly enforced (Brown, 2008 ). Around him he created a cult of personality and was followed by a coterie of women dancing, singing and praising him (Chirwa, 2001). Banda ruled the nation through a highly arbitrary and personalised system. Opposition parties were banned, heavy censorship placed on books and music, men were forbidden to grow their hair and women had to wear long skirts (Carver, 1990). Thus, in 1974 when Banda recalled over 120,000 migrants from the

South African mines[2], people returned and labour migration to South Africa stopped (Chirwa, 2001, Bryceson, 2006). Following the recall and restriction of migrants to South Africa, Malawi integrated migrant labour into the domestic economy (Christiansen and Kydd, 1983). The need for cheap local labour in the wake of international migration restrictions has been described by Englund (2002a) as more than a coincidence.

Cheap local labour was supplied to the estate sector, which was mostly focused on tobacco and cotton (Orr and Mwale, 2001, Ellis et al., 2003). The estate sector had grown rapidly since independence as government policies favoured large-scale agriculture over smallholder agriculture affording the former preferential access to land, investment and credit (Harrigan, 2003). This provided rural migration opportunities (Orr and Mwale, 2001). At the same time, a series of economic, political and social anti-urbanisation measures were introduced by the Banda government with the aim of preventing an urban movement that could jeopardize Banda's absolute leadership (Kydd and Christiansen, 1982, Potts, 1986, Rohregger, 2006). However, by 1979 the estate sector had started to decline and then stagnate due to environmental shocks and a transition to smallholder-led growth (Lea and Hanmer, 2009). For example, the liberalisation of the burley tobacco trade in 1992 lifted the bar on smallholders growing tobacco on their own land and farmers no longer had to migrate to a plantation estate to participate in the cash-crop economy (Orr and Mwale, 2001, Van Donge, 2002).

As rural-rural circular migration declined, private trade and the urban informal sector grew rapidly thus stimulating rural-urban circular migration (Orr and Mwale, 2001). Englund (2002a) also points out that there was a rapid increase in rural-urban migration in 1994 after Banda was defeated in Malawi's first democratic elections. Englund (2002a) attributes this to the new government's encouragement of small-scale entrepreneurship that gave everyone the right to conduct business anywhere in the country. Consequently, urban centres became "bustling marketplaces, where vendors and various service providers are very visible." (Englund, 2002a: 264). During the 1990s, Malawi's urban population grew at about three times the rate of the rural population (Dropplemann et al., 2012, and see Figure 3.1). At this point, internal rural-urban circular migration became the dominant form of labour migration (Englund, 2002a, Potts, 2008).

[2] The recalled followed a plane crash that killed 73 Malawian miners who were flying to South Africa.

### *3.2.2 Current migration in Malawi*

In contemporary Malawi, internal migration remains the dominant type of migration (Anglewicz, 2012, Lewin et al., 2012). Lewin et al.(2012) estimate that international migration only accounts for around 3% of migrations of household heads; the remainder of all migration is internal. Using a sample of 1760 internal migrants[3] from Malawi's Integrated Household Survey (IHS) (NSO, 2004), Lewin et al. (2012) showed that 74.6% of migrations by household heads were rural (see Figure 3.1). Using data from Malawi's censuses, Digby (2000) suggests that three types of area in Malawi can be classed as urban. These are (1) the country's four cities, Lilongwe, Blantyre, Mzuzu and Zomba; (2) townships such as Liwonde (see Section 3.4.4); and (3), *bomas*, which are the administrative centres of each district. This classification is based on administrative criteria and it does not take into account the level of infrastructure or services available. Rural areas, which still comprise the majority of Malawi's land, are defined as anywhere that is not urban (*ibid.*) Despite rural-rural migration being the most common form of migration in Malawi, rural-urban migration (including migration to townships and *bomas*) is still significant as it accounts for over a quarter (25.4% ) of all migrations (Lewin et al., 2012).

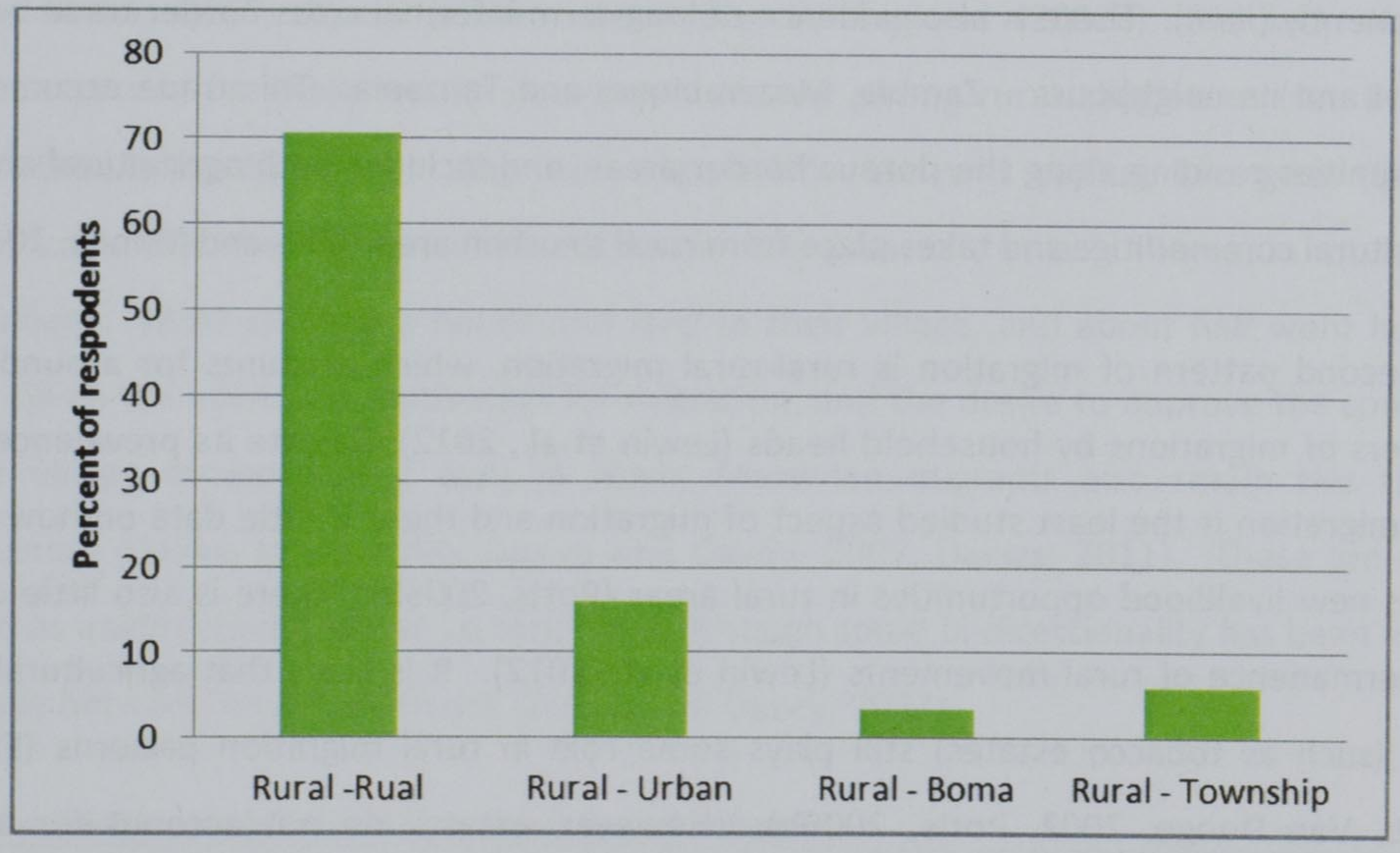


**Figure 3.1 – Origin and destination of 1730 internal migrants in Malawi**
**(Percent of respondents per migration category n=1760 – all respondents are household heads)**
**(Data from NSO, 2004 and Lewin et al. 2012)**

[3] The Malawi Integrated Household Survey (IHS) (2004/5) only records migration data for household heads. It is acknowledged that this may obscure the true picture of migration as movements are likely to be different based on an individual's position within a household.

As outlined in Section 3.2.1, changes that affect one type of migration pattern (e.g. rural-rural, rural-urban and international) can stimulate or restrict other types of migration pattern. For example, the restrictions imposed on international migration during the Banda years led to increased rural-urban migration. As such, it is important to outline the different migration patterns in Malawi. As highlighted in Figure 3.1, these migration patterns are international migration, rural-rural migration and rural-urban migration.

The first pattern of migration is international migration, which accounts for around 3% of migrations of household heads (Lewin et al., 2012). Despite being 'international', this type of migration usually takes place on a relatively local scale i.e., over neighbouring borders. For example, labour shortages can be severe in Mozambique and neighbouring Malawians are well placed to take advantage of opportunities for work (Stringer et al., 2009). The IHS does not provide data on the duration of international migrations, however there is some evidence that they are not permanent. For example, it has been documented that migrants entering South Africa from surrounding countries, including Malawi, continue to see themselves as circular migrants, rather than as immigrants (McDonald et al., 2000). Migrants move to South Africa in search of paid opportunities for a definite period and have little interest in staying permanently (*ibid.*). There is also evidence of long-term informal cross-border trade between Malawi and its neighbours – Zambia, Mozambique, and Tanzania. This trade occurs among communities residing along the porous border areas, and includes both agricultural and non-agricultural commodities and takes place from rural to urban areas (Ellis and Manda, 2012).

The second pattern of migration is rural-rural migration, which accounts for around three-quarters of migrations by household heads (Lewin et al., 2012). Despite its prevalence, intra-rural migration is the least studied aspect of migration and there is little data on how people access new livelihood opportunities in rural areas (Potts, 2006b). There is also little data on the permanence of rural movements (Lewin et al., 2012). It is likely that agricultural estate work (such as tobacco estates) still plays some role in rural migration patterns (Englund, 2002b, Van Donge, 2002, Potts, 2006b). However, estates do not account for all rural migration, especially following the shift from estate-led farming to smallholder-led farming (Potts, 2006b, Lewin et al., 2012). Furthermore, under-used estate land in the Southern Region has been redistributed to land-constrained households under Malawi's Land Reform Program Implementation Strategy (2003-2007) (see Mueller et al., 2012). Given this context, it is likely that most rural-rural migration in Malawi is for cultural reasons, such as marriage, rather than for employment opportunities on estates.

The third pattern of migration, and the focus of this thesis, is rural-urban migration, which accounts for over a quarter of migrations by household heads (Lewin et al., 2012). Rural dwellers access urban opportunities in district administrative towns or in one of the country's four major cities, Lilongwe, Blantyre, Mzuzu, and Zomba (NSO, 2008). Although there is little data to suggest exactly why rural-urban migrants move to towns, economic factors are likely to be a major reason (Englund, 2002b, Anglewicz, 2012). For example, Englund (2002b) found migration to Lilongwe was motivated by a desire to improve the conditions in the village by generating cash in town. There is a gendered element to economic opportunity with men able to access greater economic opportunities than women (Mukherjee and Benson, 2003). Furthermore, Reniers (2003) studied the links between divorce and migration among adults in Malawi, and found that divorced women are more likely to migrate than non-divorced women. Overall though, both men and women migrate to Malawi's towns (Beegle and Poulin, 2013). Regardless of gender, most income opportunities for migrants are found in the country's large, rapidly expanding and 'vibrant' informal sector (Kayuni and Tambulasi, 2009).

Like the rest of Southern Africa, it is often stated that in Malawi most rural-urban migration is circular and not permanent (Orr and Mwale, 2001, Englund, 2002b, Bryceson and Fonseca, 2006b, Mtika, 2007, Potts, 2010). According to Englund (2002b), the lack of urban permanence can be explained by possession of very strong rural allegiances (see Box 3.1). After interviewing 600 adults who had migrated to Malawi's capital, Lilongwe, (Englund, 2002b) found that the majority of his respondents expressed a strong interest in returning to their village. Most still had a house and land in their village, and about half went home to farm. Given the economic motivation for migration, and the desire to improve the conditions in the village by generating cash in town, Malawian migrants also retain ties through remittances (Davies et al., 2006, Davies and Davey, 2007, Davies, 2011). These are usually viewed as unidirectional (urban to rural) and although some bi-directionality has been noted it is usually between rural households (Davies and Davey, 2007).

**Box 3.1 – *Kodi ku mudzi ndi kuti?*, where is (your) village?**

> *Kodi ku mudzi ndi kuti?*, 'where is (your) village?', a stranger is likely to be asked after receiving the Chichewa greeting in Malawi's urban areas. The answer is expected to include the name of the district, followed, upon further queries, by the names of the chieftaincy and the village where the stranger claims to come from. *Mudzi* translates not only as 'village' but also as 'home', the ultimate 'our place' (*kwathu*), an idiom imbued with affection and moral sentiment. To admit that one does not have a *mudzi* is to reveal a grave social predicament.
>
> (Englund, 2002b: 137)

Against the backdrop of rural-urban migration, Malawi is undergoing an urban transformation (UN-HABITAT, 2007, Manda, 2007, NSO, 2008, UN, 2010, 2011 and see Figure 3.2 and Figure 3.3). Malawi's 2008 population census (NSO, 2008) shows inter-censual annual growth in the four major cities. Annual growth in Lilongwe was 4.3%; Mzuzu grew by 4% each year; Zomba grew by 2.9%, and Blantyre by 2.8%. All of Malawi's four cities are predicted to have significant population rises over the coming years (see Figure 3.3).

Despite the prevailing view that rural-urban migration is predominantly circular and therefore not responsible for urbanisation, migration is a major concern for the Malawian government. As such, the government have designed regulations in urban areas aimed to discourage migration. For example, in Malawi's 2006 Growth and Development Plan (GoM, 2006) the government explicitly stated its aim to reduce rural-urban migration[4]. Furthermore, the government have made moves toward decentralised urbanisation and aim to encourage movement to small towns in predominantly rural areas, such as Liwonde in the Southern Region (see Section 3.4.4). This is mostly through the Malawi Secondary Centres Development Programme (SCDP), the German funded implementation programme of Malawi's national strategy of decentralised urbanisation (Manda, 2007).

Although it has not been made explicit, the anti-urban migration policies in Malawi tend to focus on restricting access to employment in the informal sector (Kayuni and Tambulasi, 2009). In this way, would be migrants may be discouraged from moving to town to look for work. For example, minibus-calling[5] was an easily accessible activity that provided income and reduced the vulnerability of many people who would otherwise have been excluded economically (Tambulasi and Kayuni, 2008). These people may include low-skilled migrants with few other opportunities available to them. However, in 2008 the Government declared minibus-calling illegal and anyone found participating was subsequently arrested (*ibid.*). On a more positive note, the government have attempted to improve the domestic living conditions of those already in the city. For example, to cope with increasing urbanisation in the capital city in the 1990s, Lilongwe City Council changed its urban policy toward 'upgrading'. In reality this meant that informal housing areas were simply legalised and incorporated into the city (Rohregger, 2006). A housing provision scheme promoted by international donors, the 'sights and services

[4] Anti-urban migration policies are also in place in the majority of low- and middle-income countries. The proportion of countries that have policies to influence migration grew from 51% to 73% between 1996 and 2003 (Tacoli, 2009)

[5] Mini-bus drivers employ 'callers' to generate business by calling out the bus's destination to potential passengers

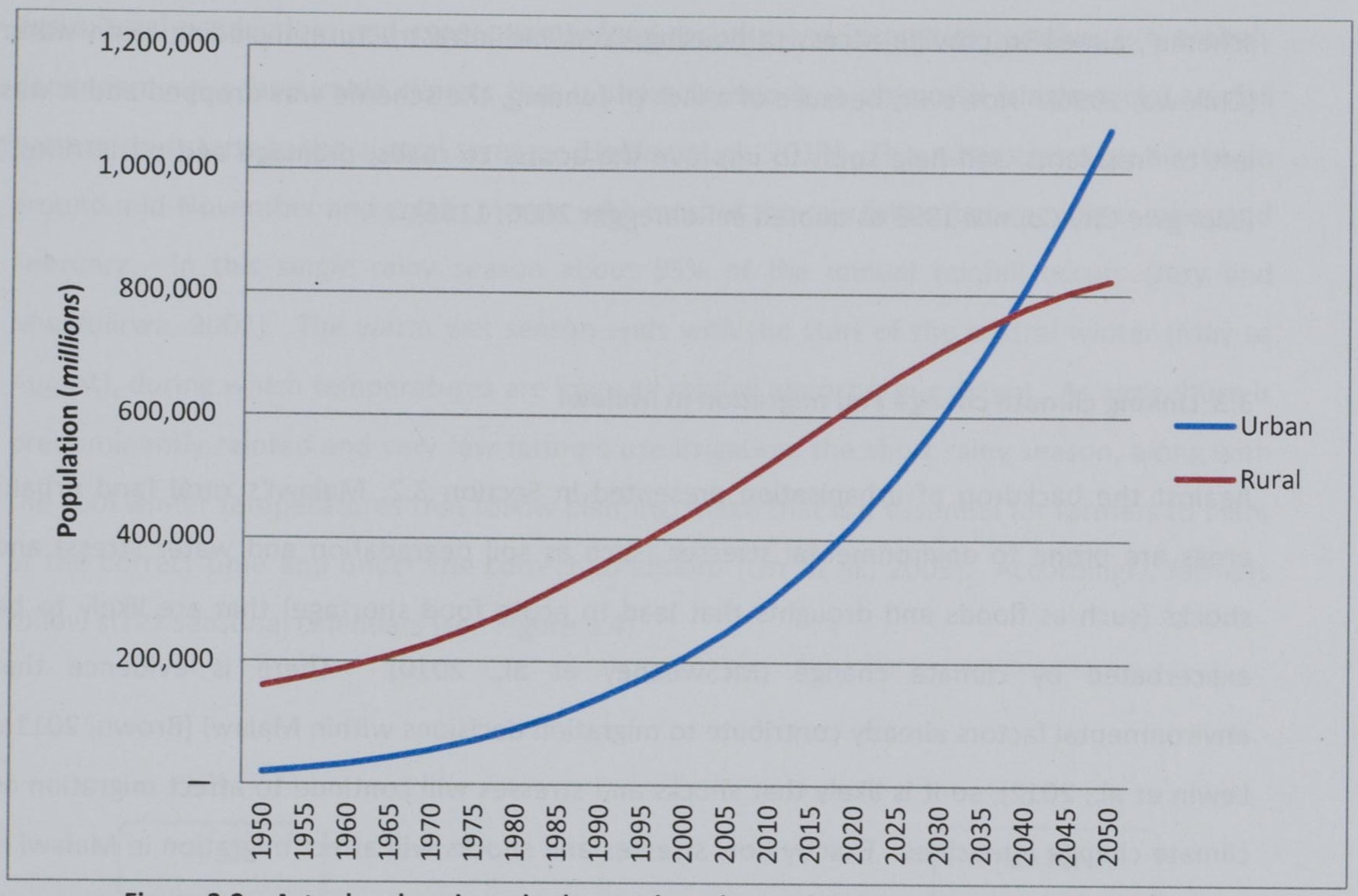


**Figure 3.2 – Actual and projected urban and rural growth in Malawi from 1950-2050 (Data from UNDESA, 2012)**

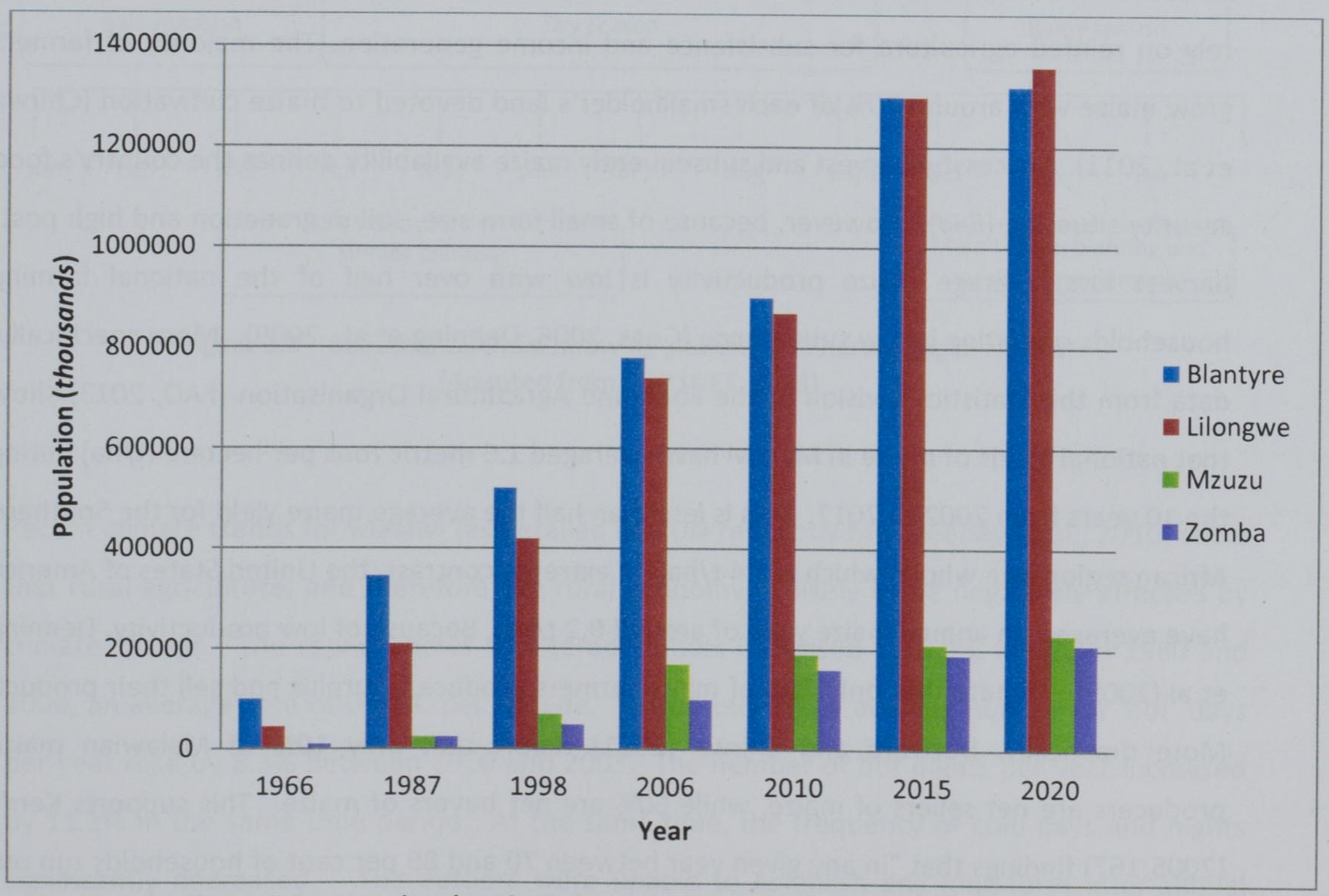


**Figure 3.3 – Actual and projected population in Malawi's four major cities (Data from NSO, 2008)**

scheme', aimed to provide access to housing, land and infrastructure, including clean water (Chilowa, 1996). However, because of a lack of funding, the scheme was dropped and it was left to "residents' self-help spirit to improve the access to roads, drainage and pit latrines." (Lilongwe City Council 1993 as quoted in Rohregger 2006: 1166).

### 3.3 Linking climate change and migration in Malawi

Against the backdrop of urbanisation presented in Section 3.2, Malawi's rural (and urban) areas are prone to environmental stresses (such as soil degradation and water stress) and shocks (such as floods and droughts that lead to acute food shortage) that are likely to be exacerbated by climate change (McSweeney et al., 2010). There is evidence that environmental factors already contribute to migration decisions within Malawi (Brown, 2011a, Lewin et al., 2012), so it is likely that shocks and stresses will continue to affect migration as climate change intensifies. Exactly how stresses and shocks will affect migration in Malawi is not clear and the available evidence is conflicting.

As outlined in Chapter 1, the majority of Malawians in rural areas are subsistence farmers who rely on rainfed agriculture for subsistence and income generation. The majority of farmers grow maize with around 70% of each smallholder's land devoted to maize cultivation (Chirwa et al., 2011). Successful harvest and subsequently maize availability defines the country's food security situation (*ibid*). However, because of small farm size, soil degradation and high post-harvest loss, average maize productivity is low with over half of the national farming households operating below subsistence (GoM, 2006, Denning et al., 2009). More specifically, data from the Statistics Division of the Food and Agricultural Organisation (FAO, 2013) show that national yields of maize in Malawi have averaged 1.6 metric tons per hectare (t/ha) during the 10 years from 2002 to 2012. This is less than half the average maize yield for the Southern African region as a whole, which is 3.4 t/ha. In extreme contrast, the United States of America have averaged an annual maize yield of around 9.2 t/ha. Because of low productivity, Denning et al.(2009) estimate that only 20% of maize farmers produce a surplus and sell their product. More drastically, Dorward and Chirwa (2011) report that only 10% of Malawian maize producers are net sellers of maize, while 60% are net buyers of maize. This supports Kerr's (2005:167) findings that "in any given year between 70 and 85 per cent of households run out of food stocks several months prior to the next harvest".

Agricultural production, and consequently food security and income generation, are entirely dependent on a favourable climate that is characterised by a unimodal (single cycle) rainfall pattern that starts in the austral summer (Holden et al., 2012). This means rains usually begin around mid-November and end in March, with most of the rain falling between December and February. In this single rainy season about 95% of the annual rainfall occurs (Jury and Mwafulirwa, 2002). The warm wet season ends with the start of the austral winter (May to August), during which temperatures are low and rainfall almost non-existent. As agriculture is predominantly rainfed and very few farmers use irrigation, the short rainy season, along with the cool winter temperatures that follow planting, mean that is it essential for farmers to plant at the correct time and under the correct conditions (Orr et al., 2009). Accordingly, farmers follow strict seasonal calendars (see Figure 3.4).

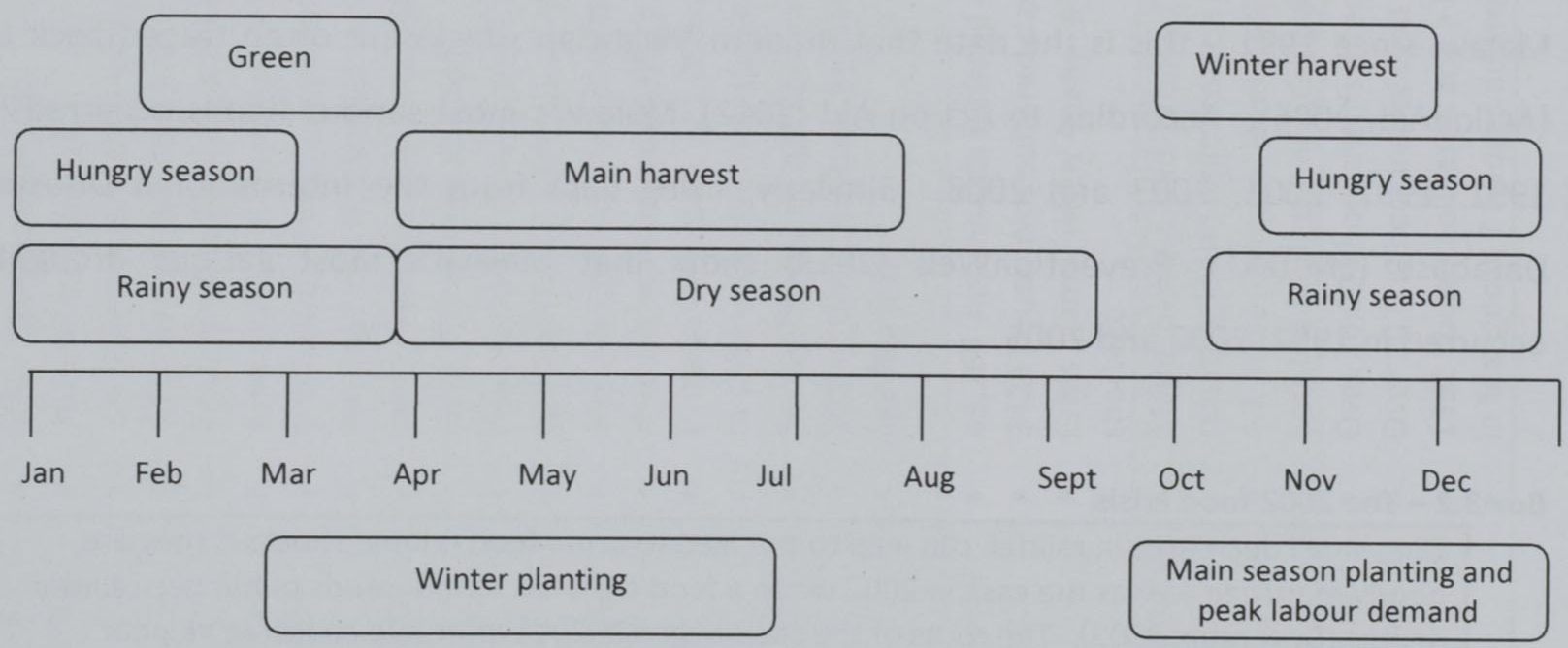


**Figure 3.4 – Seasonal calendar showing planting and harvesting in Malawi (Adapted from FEWSNET, 2013)**

Recent climate trends for Malawi (as detailed in a UN reoprt by McSweeney et al., 2010) show that rural agriculture, and therefore the rural economy, is likely to be negatively affected by climate change. The report shows that temperatures increased by 0.9°C between 1960 and 2006, an average rate of 0.21°C per decade. Furthermore, the average number of 'hot' days per year rose by 8.3% between 1960 and 2003. The number of hot nights per year increased by 11.1% in the same time period. At the same time, the frequency of cold days and nights significantly decreased. The authors were unable to establish any long-term inter-annual rainfall variability trends but they pointed to evidence of decreased rainfall around the time when planting takes place. The same report details projections of future climate change for

Malawi based on global climate models. The mean annual temperature is projected to increase by 1.1 to 3.0°C by the 2060s, and 1.5 to 5.0°C by the 2090s. All projections indicate substantial increases in the frequency of days and nights that are considered 'hot'. Furthermore, the models consistently project increases in the proportion of heavy rainfall events in the wet seasons. Overall this means that floods and drought will become more common.

Climate shocks, such as floods and acute food shortages resulting from droughts (or mismanagement of droughts – see Box 3.2), are already part of the Malawian landscape. Flooding, for example, is an annual occurrence in Malawi, particularly in the Southern region. Between 1967 and 2003, 18 floods were recorded killing at least 570 people, rendering 132,000 homeless, and affecting a total of 1.8 million people (UNDP, 2013a). Severe droughts are also an issue, and between 1967 and 2003, the country experienced six major droughts, affecting over 21 million people in total (GfDRR, 2009). Table 3.1 details the main shocks in Malawi since 1991 – this is the date that modern Malawian shocks are often traced back to (ActionAid, 2006). According to Action Aid (2012), Malawi's most serious floods occurred in 1991, 1997, 2001, 2003 and 2008. Similarly, using data from the International Disaster Database (EM-DAT), PreventionWeb (2013) show that Malawi's most serious droughts occurred in 1992, 2002 and 2005.

**Box 3.2 – The 2002 food crisis**

Even small decreases in rainfall can lead to can lead to acute food related shocks if they are poorly managed as was the case in 2002 when a food crisis led to thousands of hunger-related deaths (Devereux, 2009). The roots of the crisis began in 2001 after two consecutive poor growing seasons were followed by abnormally high rainfall resulting in localised flooding and waterlogging of fields. Despite reduced maize yields, this in itself should not have been enough to cause the intense food crisis that ensued – 30% of the population needed emergency support (Devereux, 2002a). Although a food shortage existed, the situation was exacerbated by a gross mismanagement of grain reserves, which in turn led to a 'maize gap'; the demand for food outweighed the supply (Stevens et al., 2002). Where maize was available its price rose dramatically (by about 360%) to the point where purchasing food was beyond the reach of the majority of Malawians (Devereux, 2002a). Instead of responding to the crisis by providing food aid and calming the market, it is reported that the Malawian government failed to acknowledge the situation in time (Stevens et al., 2002, Devereux, 2002a, Devereux, 2002b). As a result a crisis rapidly developed.

Given their experience with shocks and stresses, Malawian farmers have developed numerous innovations and adaptations to deal with the pressures they face (Potts, 2006b). Reuveny (2007: 657) argues that "people can adapt to environmental problem in three ways: stay in

**Table 3.1– Floods and droughts in Malawi since 1991**

| Year | Event | Impact | Source |
|---|---|---|---|
| **1991** | Heavy and continuous rains in March resulted in serious floods and landslides in Mulanje in the Southern Region. River Phalombe burst its banks destroying villages on each side. | • 85,000 - 100,000 people affected<br>• 700 - 1,000 people died<br>• 30,000 ha crops lost<br>• 2 villages completely destroyed<br>• 1,650 houses washed away<br>• Infrastructure (including bridges and schools destroyed | (UNDHA, 1991) |
| **1992** | Poor rainfall led to widespread drought and very low yields resulting in significant food shortage. | • Around 6.1 million people affected by lack of food<br>• Production of maize declined by around 60%<br>• Food aid was distributed throughout the country | (Clay et al., 2003) |
| **1997** | Heavy February rains caused severe flooding in southern Malawi. | • 66,074 families were affected<br>• Over 400 villages affected<br>• Destruction to houses, roads and bridges as well as crops and livestock.<br>• Approximately 9,000 ha. of maize, cotton, rice and sorghum were lost | (ACT, 1997) |
| **2001** | Flash floods hit a huge area in the Lower Shire River Valley of southern Malawi. | • 600 villagers from the district fled to higher grounds in neighbouring Mozambique<br>• **International media 60,000 people in southern Malawi were 'displaced'**<br>• In Nasanje District, 112,000 out of 194,000 people lost property or land<br>• In Chikawawa District, 10,000 houses collapsed; 4,000 farming families lost crops | (BBC, 2001, IFRC, 2001) |
| **2002** | Erratic rain throughout the country (early rains in some regions, late rains in others). Dry spell in February (during the rainy season). | • Severe food shortage (famine) occurred<br>• 30% of the population needed support<br>• See Box 3.2 | (Stevens et al., 2002, Devereux, 2002a) |
| **2003** | Following torrential rain (associated with tropical depression Delfina), President Muluzi declared a state of national disaster and called for international assistance. | • 49,268 households suffered damage to crops<br>• 3429 households suffered damage to houses<br>• **Crisis came when many Malawians were dealing with previous year's food** shortage | (BBC, 2003, UNOCHA, 2003) |
| **2005** | **Drought in January and February 2005 'rendered a terrible blow to the country'.** | • Maize harvest had dropped 30% from the previous year—itself a poor year—resulting in the worst season in 10 years.<br>• 4.2 million people, (over 34%) of the population unable to meet their food needs (most in Southern and Central region) | (FAO, 2005, IDA, 2009) |
| **2008** | In October 2007, experienced early and unusually heavy rains began across Southern Africa. By 2008 a crisis had occurred. | • Over 20,000 households affected<br>• Over 10,000 hectares of food crops destroyed<br>• 1392 houses collapsed and a further 2143 families displaced<br>• In Mangochi, 2 bridges destroyed rending parts of the area inaccessible | (IFRC, 2007) |

place and do nothing, accepting the costs; stay in place and mitigate the changes; or leave affected areas". In other words, when faced with stresses or shocks, households can cope, adapt or migrate. Each strategy has benefits and disadvantages.

The first strategy, to stay in place and accept the costs, requires that a household cope with the pressures they face. Coping can take multiple forms (Brown, 2011b, and see Chapter 2, Section 2.4). In Malawi, these include diverting income toward food and selling assets such as livestock (Devereux, 1999, Harrigan, 2008). Rationing meals is also a common coping strategy and was prevalent in following the poor harvest of 2005 (see Table 3.1) when household throughout the country were forced to limited their food consumption (Devereux, 2007). For some households it may be possible to purchase food on credit, for others, turning to wild foods, such as okra or edible fruit, is the only option (Maxwell et al., 2008). Furthermore, some households may send children to live with relatives in another area to reduce the number of people who require food (Ansell and Van Blerk, 2004).

A critically important coping strategy for many rural Malawians is *ganyu* labour. *Ganyu* describes "a range of short term rural labour relationships, the most common of which is piecework weeding or ridging on the fields of other smallholders or on agricultural estates." (Whiteside, 1999: 3). *Ganyu* has been the main form of inter-household labour exchange between peasant households through much of the 20th century, involving the exchange of labour for specified goods or services in kind or for cash (Englund, 1999, Bryceson, 2006). The traditional view is that *ganyu* labour is supplied by poorer households who are struggling to meet food security needs (Whiteside, 1999). By engaging in *ganyu*, poorer households neglect production on their own fields in order to supply low-paid labour to generate crucial income, thus they are pushed into a poverty trap (Devereux, 1997). As Dimova et al. (2010: 3) point out "this perception of *ganyu* has long been stylised in the literature and has become a starting point of a number of studies on poverty in Malawi." However, *ganyu* has long been an under-researched component of Malawian livelihoods (Whiteside, 1999). New studies suggest that the relationship between *ganyu* and poverty may be more complicated than previously thought (Orr et al., 2009, Dimova et al., 2010) but few studies doubt the basic principle that *ganyu* is most commonly used by poor households to survive bad times (Bryceson and Fonseca, 2006a).

The second strategy, adaptation, has been the focus of much literature that focuses on the global south (for example, Adger et al., 2003, Smit and Pilifosova, 2003, Thomas et al., 2007, Paavola, 2008, Stringer et al., 2009, Stringer et al., 2010). Potts (2006b: 307) argues that in

Malawi "people's livelihoods and farming systems are ceaselessly adapting..." and we should not underestimate the "role of innovation and adaptation..." For example, in the Southern Region, farmers have used intercropping to transform and intensify agricultural systems (Peters, 2006). Stringer et al. (2009) synthesize work from a number of authors (Orr and Mwale, 2001, Ellis et al., 2003, ActionAid, 2006, Bryceson, 2006, Potts, 2006b, Mkwambisi, 2009) and suggest that local agricultural adaptations include shortening the growing season (e.g. by planting maize in December instead of November), cultivation of burley tobacco as a cash crop, and changing the types of crops cultivated (e.g. replacing drought intolerant beans with pigeon peas). Livelihood diversification away from farm-based activities also emerges as a key income source.

However, adapting to change is limited by household resources (Adger et al., 2009). For example, diversifying away from maize toward a new crop is often an option available only to better-off households. The chief cash crop available to farmers in Malawi is burley tobacco (Ellis et al.2002). However, because there is a certain amount of risk involved in tobacco growing (including annual price fluctuations), 'poorer' households who can barely achieve food security from maize production typically do not diversify into tobacco (Orr, 2000, Ellis et al., 2003). Furthermore, the speed of current climate change is feared to exceed the limits of adaptation in Africa (Boko et al., 2007). This is likely to push more households into poverty (Sachs and McArthur, 2005, Stern, 2007), making them less able to pursue adaptive strategies that can mitigate the worst effects of climate change.

The third strategy, is to deal with stresses and shocks through migration (either rural-urban migration, or rural-rural migration) (Stringer et al., 2009, Stringer et al., 2010). Research from Malawi shows that rural-rural migration can help a household adapt to environmental constraints, particularly declining land availability and climatic variability (Potts, 2006b, Lewin et al., 2012). However, climate change may alter the dimensions of rural-rural migration. There is evidence to suggest that intra-rural moves are influenced by the environmental conditions in the potential destination. By using aggregate data, Lewin et al. (2012: 202) observed that Malawian migrants are "less likely to move into communities that suffered droughts in the last five years or had relatively high rainfall variability during the last 10 rainy seasons". Similarly, Christiansen (1984) suggests that in Malawi previous rural-rural migrations have been influenced by low population density in destination areas, and therefore, the availability of land for poor people seeking to cultivate. The sensitivity of rural-rural population movements to local environmental conditions, including land availability and

rainfall, poses the question of what potential rural migrants would do if large regions are affected by the stresses and shocks climate change is likely to bring. Brown (2011a) suggests that migrants will be most likely to move to town. He states that recent urbanisation in Malawi can already be attributed to rural out-migration from push factors, such as "diminishing land holdings among smallholder farmers, lack of off-farm economic opportunities, natural disasters and environmental degradation" (Brown, 2011: 942).

If urban areas are seen to offer a better way of life than rural areas, as Schensul et al. (2013) suggest is the case for many Malawians, then urbanisation will take place. As Devereux (1999: 22) points out "urbanisation remains an attractive option to rural Malawian because it offers an income independent of agriculture". In other words, urban areas are seen to offer a more predictable, less climate-dependent livelihood. However, as explored in Chapter 2, Section 2.4.4, urban areas are not immune from climate impacts. This means that against a backdrop of rural and urban climate change, a potential migrant may leave a sending region (the village) for a receiving region (a town) when their perception is that town can offer them a better way of life than the village.

## 3.4 Study sites

### *3.4.1 Site selection*

To understand how and why people move between rural sending regions and urban receiving regions, two rural study sites (Chikamana and Hinnock) and three urban sites (Lilongwe, Liwonde and Chitedze) were selected (see Figure 3.5). (The study sites are explored in more detail in the following sub-sections, and are summarised in Table 3.2).

The rural sites of Chikamana and Hinnock were chosen based on two criteria. The first criterion was based on the rate of net migration that occurred at the district level between the 1998 and 2008 censuses (see Figure 3.6). The second criterion was based on the frequency and type of environmental shock and stress that occurred at the village level. Accordingly, Balaka District was selected to represent a district that has experienced increased out-migration between the censuses, and Lilongwe District was selected to represent a district that had experienced insignificant or static migration. To select the villages within each district, interviews with local experts from Bunda College of Agriculture at the University of Malawi, and interviews with experts at the village level, including extension officers, took place (details

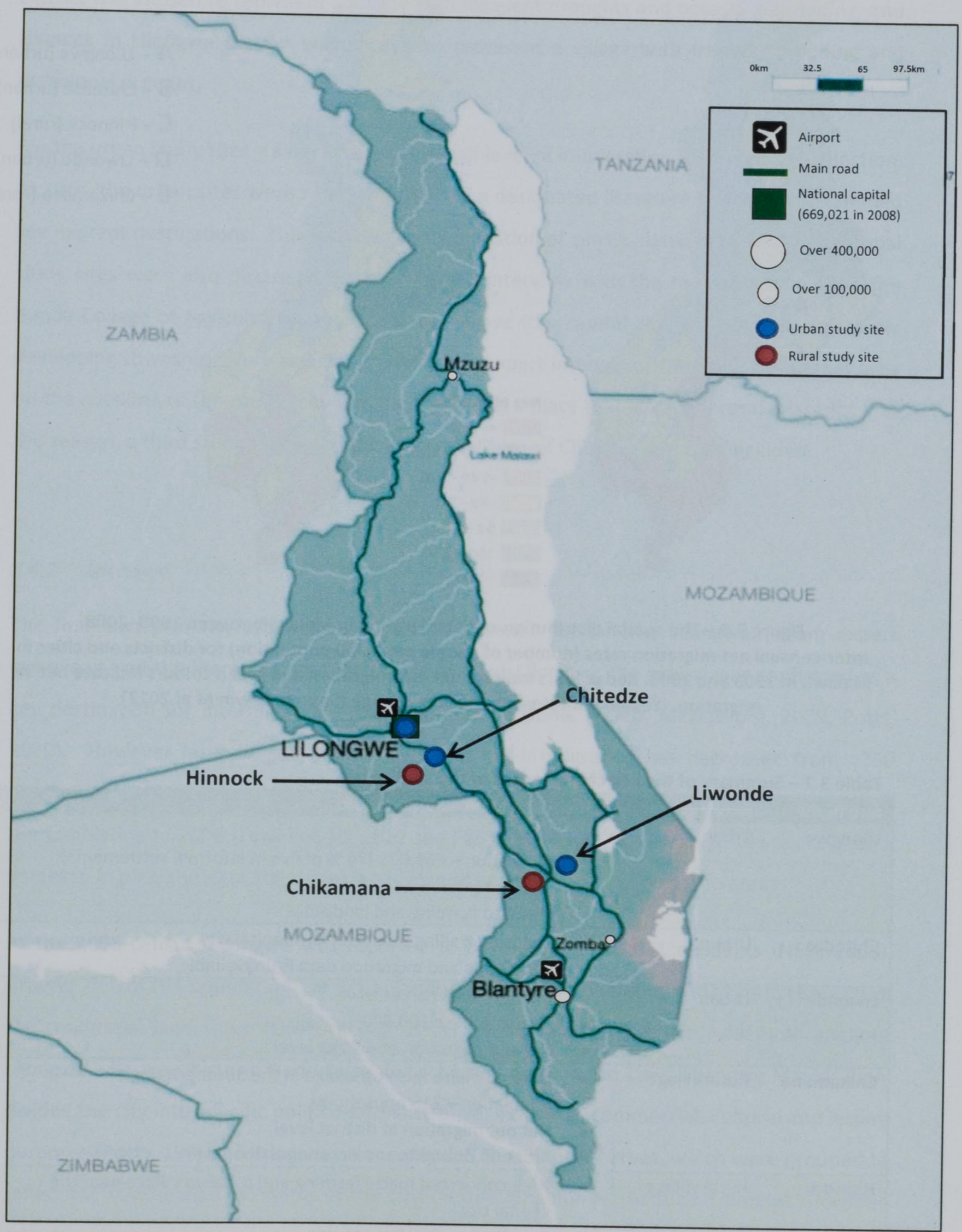


**Figure 3.5 – Map of the rural and urban study sites**
**(Map adapted from AfDB, 2012)**

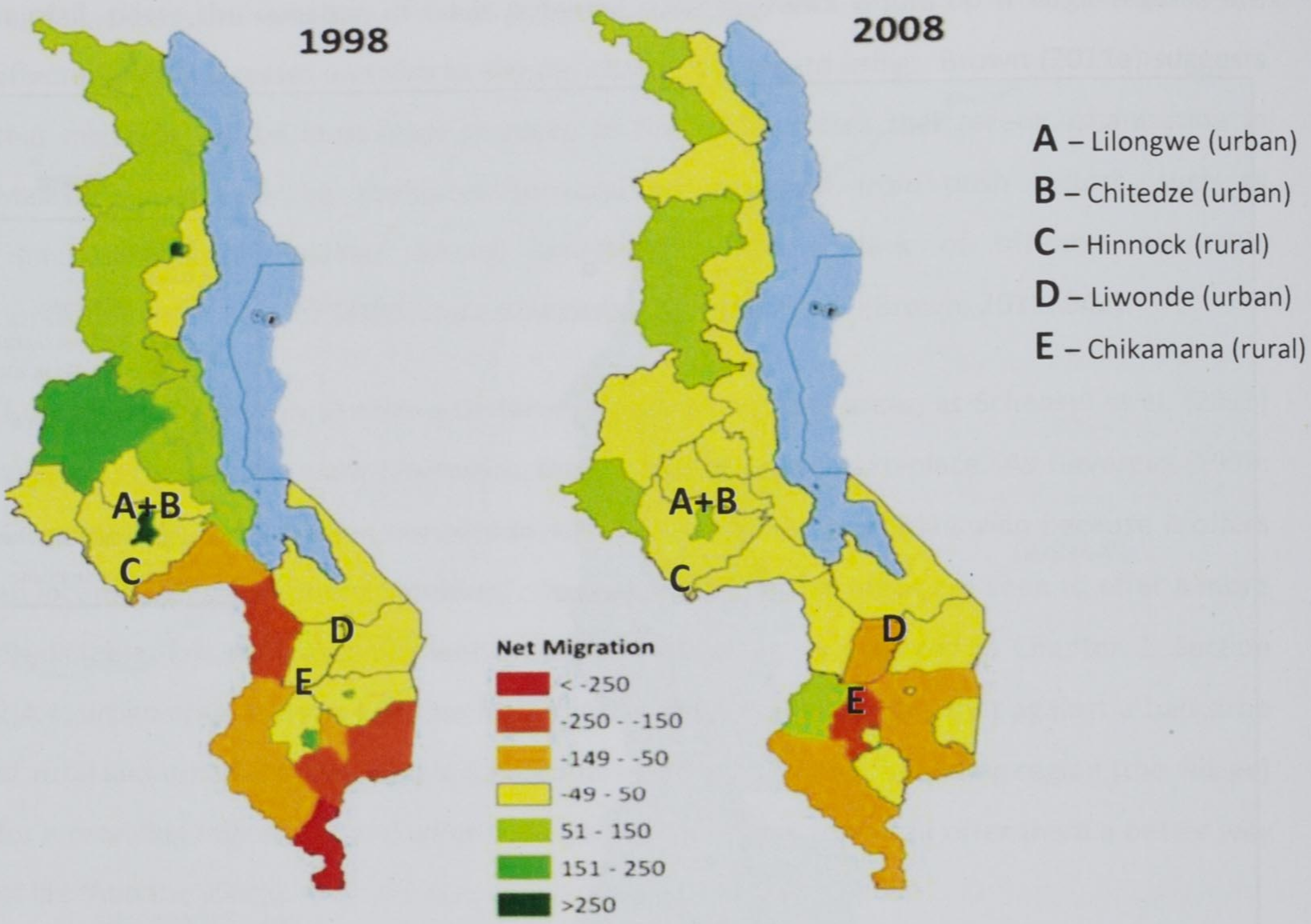


**Figure 3.6 – The spatial distribution of net migration in Malawi between 1998–2008. Inter-censual net migration rates (number of people per 1,000 population) for districts and cities in Malawi, in 1998 and 2008. Red colours indicate net out-migration and green colours indicate net in-migration. Yellow indicates no effective change (Source: Lewin et al.2012)**

**Table 3.2 – Summary of the key characterises of the study sites**

| Site name | Rural/urban | Socio-economic characteristics |
|---|---|---|
| **Lilongwe** | Urban | • Capital city<br>• Population – 669,021 (76 % of live in informal settlements)<br>• Net in migration<br>• Prone to flooding and landslides |
| **Chitedze** | Urban | • Roadside trading area near the capital city<br>• Population and migration data is unavailable |
| **Liwonde** | Urban | • Medium size market town.<br>• Population – c.100,000<br>• Net-out migration at district level |
| **Chikamana** | Rural village | • Isolated maize farming village in the Southern Region<br>• Population – 216 households<br>• Net out migration at district level<br>• Prone to droughts and occasional flooding |
| **Hinnock** | Rural village | • Well-connected maize farming and tobacco village near the capital city<br>• Population – 280 households<br>• Static outmigration at district level<br>• Prone to flooding and drought |

of interview methods can be found in Chapter 4, Section 4.6). As such, Chikamana in Balaka District was chosen to represent a village with frequent droughts and occasional flooding, and Hinnock in Lilongwe District was chosen to represent a village with frequent flooding and occasional drought.

For the urban study sites a single criterion, a high level of in-migration, informed site selection. As such, the urban sites were selected following a desk-based literature review that examined key migrant destinations. This included an examination of census data (NSO, 2008). Potential study sites were also discussed using an expert interview with the representative from the Bunda Collage of Agriculture. Accordingly, Lilongwe (the capital city) and Liwonde (a rapidly developing township) were selected. During the expert interviews, the roadside market area on the outskirts of the capital city was highlighted as a place that attracted rural migrants. For this reason, a third study site, the roadside market area of Chitedze was also included.

### *3.4.2 Lilongwe*

The first, and primary, urban study site was Malawi's capital city, Lilongwe. From expert interviews and the literature on migration in Malawi, Lilongwe, the capital was confirmed as a key destination for internal rural-urban migrants (Englund, 2002b, Mkwambisi, 2009, Potts, 2010). However inter-censual data shows that net-in migration has decreased from >250 people per 1000 members of the population in 1998 to 50-150 people per 1000 members of the population in 2008 (Lewin et al., 2012 see Figure 3.6 point A). Although this represents a decrease in pace the data still shows a net gain of people from outside of the area.

At the 2008 census, Lilongwe was reported to have around 669,021 residents (NSO, 2008). Around 76% of the population live in unplanned, informal settlements, which comprise 73% of the residential land share (UN-HABITAT, 2011). Spatial inequalities are evident throughout Lilongwe where an historic land use zoning scheme based on the 1968 'Lilongwe Master Plan' divided the city into specific politico-administrative, industrial, commercial, cultural and leisure purposes (Potts, 1986). Zoning was also extended to residential areas, which were grouped to reflect the socio-economic status of the city's future inhabitants. As such, Lilongwe is divided into low-density, high-income areas; medium-density, medium-income areas, and; high-density, low-income areas (Chilowa, 1996). The majority of rural-urban migrants live in the high-density, low income areas (Englund, 2002b). In these areas living conditions are poor,

with badly built houses, little or no access to social infrastructure and basic services, and high vulnerability to disasters such floods and landslides (*ibid.*).

**Figure 3.7 – Informal trading on a flea market in Lilongwe**

Around two-thirds of Lilongwe's residents generate their main income from the informal economy (Mkwambisi et al., 2011). Informal producers and traders dominate the informal economy, the visible manifestation of which is street vending (Davies and Thurlow, 2010). Vending is highly visible throughout the city; however, efforts are underway to regulate this (as described in Section 3.2). For example, since April 2006, all street vendors in Lilongwe were relocated to newly built flea markets (Kayuni and Tambulasi, 2009, and see Figure 3.7).

Evidence of climate impacts in Lilongwe within the literature is lacking. As such, two expert interviews in Lilongwe collected data on environmental events and how they affected urban dwellers. Given the importance of the socio-economic and environmental context of the receiving region (i.e. town) in influencing and facilitating rural-urban migration (see Chapter 2) and given the likelihood of environmental shocks in Malawi's cities (see Section 3.3), this is an important step.

A representative from the UNDP explained that a combination of heavy rains and poor quality housing had led to the collapse of houses and shops in the slum areas and informal markets. It was pointed out that the materials used to build dwellings in Malawi's urban settlements were of relatively good quality compared to other slum areas in sub-Saharan Africa; however,

buildings were poorly put together and did not meet national standards. Given that 76% of Lilongwe's population live in informal settlements (NSO, 2008), shocks could affect a significant proportion of Malawi's urban population. Aside from destroying property, the UNDP representative explained how heavy rains exacerbated problems around access to clean water. Water is usually purchased from communal water kiosks, which are booths that sell improved water to people in settlements without piped water. However, during heavy rains kiosks close and at this point people were often faced with collecting water from the river, or other unsanitary sources. Furthermore, in the rainy season, poor drainage combined with inadequate sanitation (i.e. the lack of sewage pipes) results in the spread of serious illnesses such as cholera. The UNDP expert explained;

*"Right now, because it is the rainy season, we have an issue with cholera in the slums in Lilongwe. This year alone, around 40 people have died from this disease. This is a bad year."*

(Expert interview with representative from UNDP)

The UNDP expert also explained how water kiosks closed, or provided a limited service during the dry season. In some informal housing areas, residents often only had access to water for an hour during the night. Because of this, many residents were forced to use unprotected water sources, or to buy water from the black market.

During the second expert interview, an urban environment expert at Bunda Collage of Agriculture, University of Malawi, provided more detail on the location of the informal settlements. Many informal settlements were built on marginal land, such as watercourses and river banks that were prone to flooding (see Figure 3.8). In Lilongwe, one of the central markets where many rural-urban migrants trade is split in two by a river. This means that when the river floods, traders are affected.

Furthermore, land in the high-density informal settlements had been cleared to make way for houses and market stalls. Where trees and vegetation once provided a natural protection from flooding, the ground was now bare. This led to diminished water ground water supplies during the dry season, and increased run-off from flooding during the rainy season. The urban environment expert also provided more details on the issue of household water access. It emerged that in densely populated communities, some residents had installed illegal boreholes. The water quality was never checked during construction and was not monitored afterward. According to the expert, this had contributed to the 2010 rainy season's particularly severe cholera epidemic.

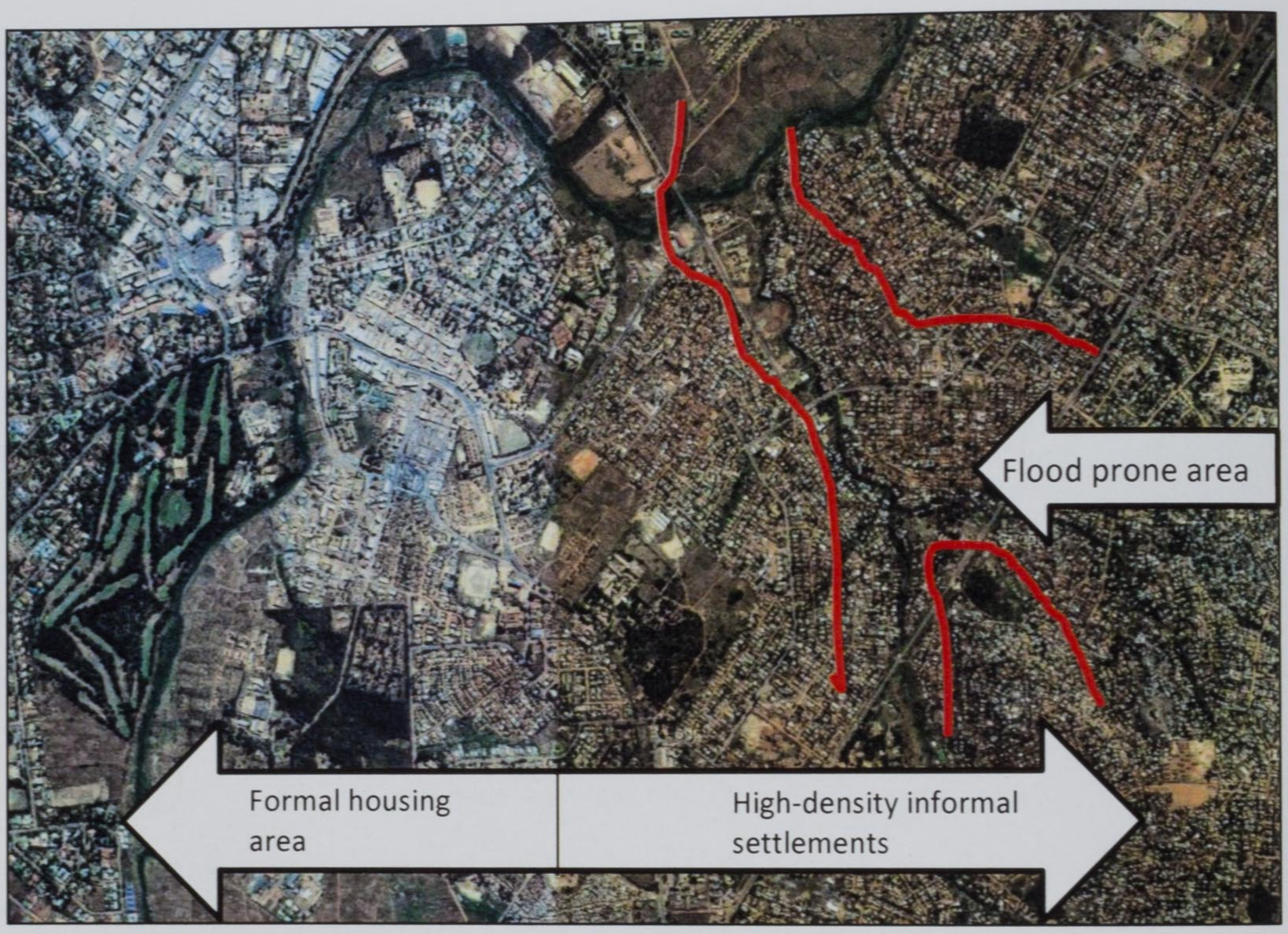


**Figure 3.8 – Aerial image of Lilongwe showing formal and informal housing areas along with a flood prone area**
**(Source: Google Maps and expert interview)**

### *3.4.3 Chitedze*

The roadside market area of Chitedze is around 16km west of the capital city, Lilongwe (see Figure 3.6, point B). There is little literature on the socio-economic profile of Chitedze, but to compensate for this an in-depth interview with an expert from Bunda Collage of Agriculture, University of Malawi took place. The interview revealed that the area is dominated by Chitedze Agricultural Research Station (CARS) where researchers from Lilongwe and beyond conduct investigations into plant genetics and food security. The majority of this highly skilled workforce live on site, or make a short commute from Lilongwe. Lower skilled workers who serve the highly skilled population live in very informal housing and many 'camp out' (sleep rough) in the area behind the market. No statistics were available on the precise number of residents, although the expert felt it likely that a few hundred people make a living by working along a 20km stretch of road. Chitedze's position along the main road (the Lilongwe-Mchinji road), which runs from the capital to Zambia, generates a good passing trade making the area along the roadside an excellent position from which to sell agricultural produce (see Figure 3.9).

### *3.4.4 Liwonde*

Liwonde is a small but growing township located in Malawi's Southern Region. Exact data on migration into the town is missing. Data at district level suggests out-migration is increasing – inter-censual data shows net out-migration increased from insignificant losses in 1998 to a loss of 50-149 people per 1000 members of the population in 2008 (see Figure 3.6, point D). However, Liwonde is in a predominantly rural area and an expert from Bunda Collage of Agriculture suggested it was likely net out-migration from rural areas masked net in-migration to Liwonde. The majority of Liwonde is located in Machinga District, with the west portion of the town located in Balaka District. To the east of the town lies Liwonde National Park. The boundary between the park and the town is very abrupt and the human population of around 100,000 people is concentred in a relatively small town area (GoM, 2008). Despite the prevalence of tourism in Liwonde National Park, there are very few opportunities for local people (Novelli and Scarth, 2007). This means that most of Liwonde's population look for opportunities in town on the market (see Figure 3.10).

Data on Liwonde town is sparse, but the grey literature gives some insight into the town's development. The Malawi Secondary Centres Development Programme (SCDP) notes that as of 2004, major investors in the town included specialists in hospitality, agriculture, housing, tourism, financial and banking industries such as Malawi Rural Finance Company, National Bank of Malawi, New Building Society, Farmers World, Central Eastern African Railways, tourist hotels and the informal micro business sector (GoM, 2004). According to the SCDP, investors were attracted by construction opportunities as urban infrastructure was modernised through the development of roads, a commercial area, a bus station, a slaughter-house, restaurants, vending platforms, and water and toilet facilities. This suggests that economic opportunities are increasing.

### *3.4.5 Chikamana village, Balaka District, Southern Region*

The first rural study site was Chikamana village in Balaka District in Malawi's Southern Region. District level data shows that out-migration has increased over the last decade (see Figure 3.6, point E). Between the 1998 and 2008 censuses out-migration from the region increased from a stable or insignificant base in 1998 to a loss of ≤149 people per 1000 members of the population by 2008 (Lewin et al., 2012). The district is also prone to environmental shocks and stresses (these are explored in greater detail at the village level in Chapters 6 and 7). Situated

Figure 3.9 – Roadside trading in Chitedze

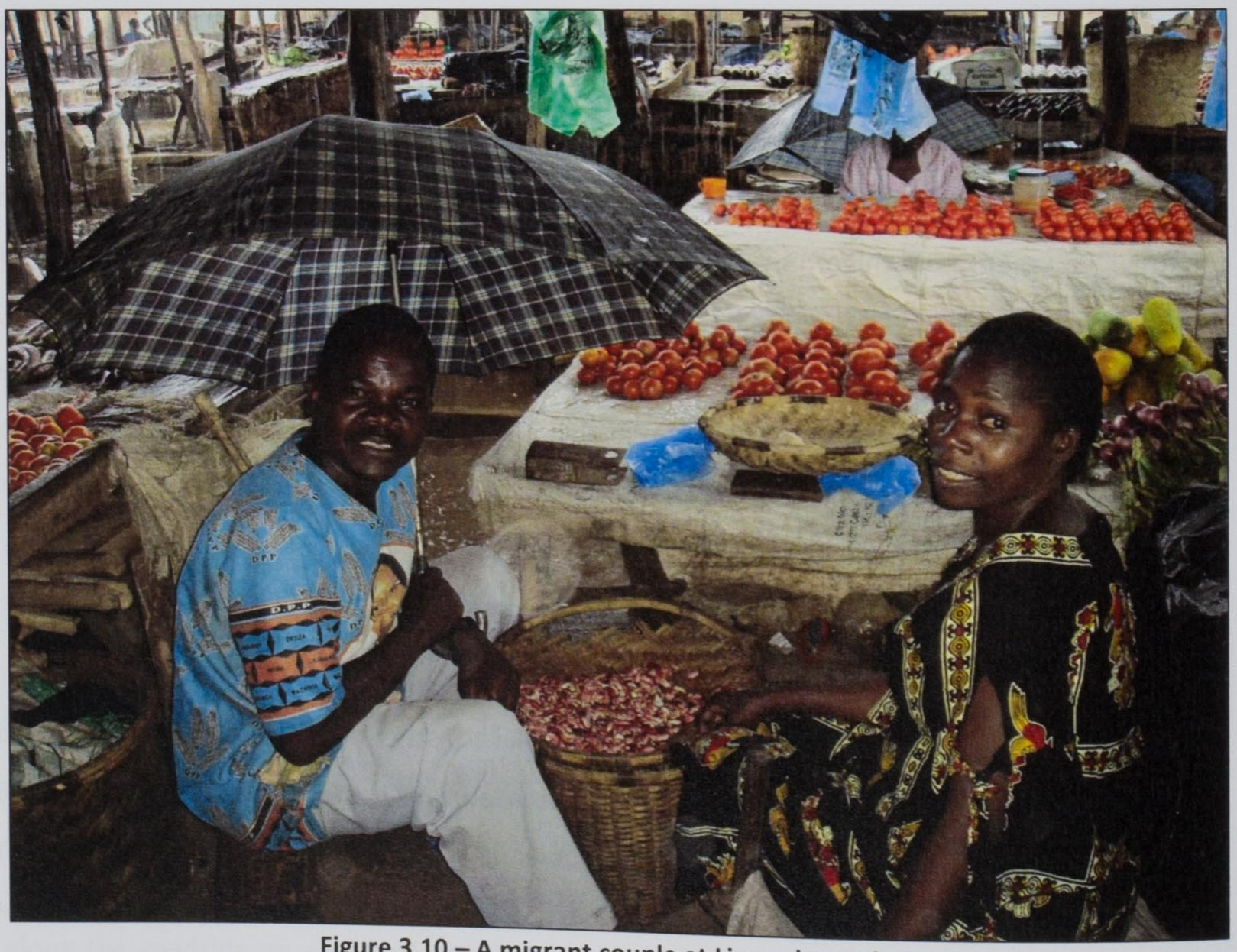

Figure 3.10 – A migrant couple at Liwonde market

in Malawi's 'rain shadow'[7](see Mangisoni et al., 2011), households in Balaka are affected by hot, dry spells and severe droughts. The district experiences 800mm of rain per year, which is low as the average for the country is 1181mm per year (World Bank, 2013a).

Furthermore, maximum temperatures in the district reach 32°C, which is higher than the national high of 27°C (McSweeney et al., 2010). The frequent dry spells (and droughts) have been intensifying as the average growing season temperatures has increased by 0.2°C every ten years between 1971 and 2008 (Mangisoni et al., 2011). In 2011, mid-season dry spells led to food insecurity throughout the region and humanitarian food aid programmes were left to provide help to 23,363 food insecure people in the district (USAID, 2011). The district is also prone to severe flooding from occasional extreme rainfall events. For example, in 2003 heavy rains associated Tropical Storm Delfina burst local river banks and caused widespread flooding throughout Balaka; 225 homes were destroyed and 5,876 households lost crops (UNOCHA, 2003). In 2008, the Malawi Meteorological Services reported that the Congo Air Boundary (CAB) (see Chapter 1) was 'trapped' over Malawi's Northern region whilst the Inter-Tropical Convergence Zone (ITCZ) was 'stuck' over the Southern Region (GoM, 2008). This anomaly led to heavy rains and flooding of low-lying areas throughout Balaka with around 288 homes in the district affected (*ibid.*)

To gain more detail on the socio-economic status of the district, an interview with an Agricultural Extension and Development Officer (AEDO) was held. According to the AEDO, the district has 532 villages and a total population of 314,000 people. The representative revealed that about half of the district's land was cultivatable[8]. The informant also revealed that nearly all of the households own land[9]. Unlike Malawi's Central and Northern Regions, most communities in Balaka follow a matrilineal kinship and lineage system, and residence following marriage is usually matrilocal (Peters, 2010). This means land is passed down the woman's lineage and husbands move into their wife's village.

In collaboration with the AEDO a study village was selected that was representative of Balaka in terms of general socio-economic status, high out-migration, as well as frequent dry spells, droughts and floods. Accordingly, Chikamana village was selected. Chikamana village is around 6km from a tarmacked road. The nearest town is Liwonde, which is around 15km away

[7] A rain shadow is a dry area on the lee back side of a mountainous area.
[8] This is confirmed through the literature. Balaka has a total area of 211,716 hectares (ha), of which less than half (96,557 ha) is cultivable (Mangisoni et al., 2011).
[9] Again, this was conformed through the literature; 94% of the households own land, which is typically acquired through purchase or inheritance; the average land hold is around 0.8 ha (*ibid.*)

(see Figure 3.5). According to the village head, the site has 216 farm families with 117 female headed households and 99 male households. The village has about 60 orphans, although it was unclear as to how many child-headed households there are. Smallholder farming is the major occupation; maize, cassava, cotton and sunflower are the main crops grown by smallholders. Since the liberalisation of burley tobacco production in 1996 (see Section 3.2.2), a few households have been growing burley tobacco on their smallholdings. Cotton is the major cash crop, although in recent years after a series of price fluctuations, the crop has lost its appeal and fewer farmers grow it. Crop production is often poor and the region was hit particularly badly during the 2002 food crisis. Markets are easily accessible for most farmers; merchants from Liwonde enter the villages to buy produce, although for some of those who trade in the market areas lengthy walks are required

### *3.4.6 Hinnock village, Lilongwe District, Central Region*

The second rural study site was Hinnock village in Lilongwe District in Malawi's Central Region (see Figure 3.11). Net out-migration from Lilongwe District remained relatively stable between the 1998 and 2008 censuses at -49 to +50 people per 1000 members of the population per year (see Figure 3.6, point C). According to a report by Scotland-Malawi Partnership (2006), Lilongwe District gets 900mm of rainfall per year, which is lower than average. The district is also revives high temperatures that can rise to 39°C in summer. Drought occurs every one to ten years (SMP, 2006). Despite lower than average rainfall, short periods of intense rain are frequent occurrences that can result in waterlogging on farm land, with consequences for crops loss (VAC, 2005). Similarly, wash-aways (of crops) that occur after intense rain have been described as a 'localised phenomenon' (*ibid.*). Finally, tobacco dominates the cash crop economy and is grown on small scale (VAC, 2005).

To gain more detail on the on the socio-economic status of the district, an interview with an Agricultural Extension and Development Officer (AEDO) was held. The AEDO confirmed that Lilongwe district covers an area of 6,159 km² (2,403 square miles), although details on the size of the population could not be confirmed[10]. It was also confirmed that around a quarter of households are in a food production deficit and rely on local agricultural labour (ganyu) for roughly 6 months of the year. The AEDO also detailed how a recent flood (in 2010) had affected multiple households across the distinct and in one riverside area in particular. This

[10] Officially, the district has a population of 1,346,360, although 669, 021 reside in the city of Lilongwe (NSO, 2008). This means the population of the district, excluding the city, is likely to be 677,339.

area contained the interconnecting villages of Hinnock, Chilije, Chipinyika, Saguga and Matchaka. As such these villages were chosen for the study.

**Figure 3.11 – Three of the five village chiefs in Hinnock (along with the female AEDO).**

Hinnock, Chilije, Chipinyika, Saguga and Matchaka (henceforth: Hinnock) were about 20km outside of Lilongwe Town, and about 3km from the Lilongwe-Mchinji road (see Figure 3.5). The AEDO explained that the five villages had been part of a single larger village until the 1990s when they split to qualify for more government support (i.e. fertiliser coupons and NGO support). The fertiliser subsidy programme distributed vouchers on a per village basis, rather than on a per household basis. This meant it was in the interests of a large village to split itself into smaller sub-villages each with its own name and village chief. Although each village was technically independent of the others, the five village chiefs tended to make decisions as a team. According to a village informant, the villages had a combined total of 280 households. The villages were involved with various development organisations, including large and well known international agencies. Land holdings were small, but average for the area; the average land size was 0.9 ha. The villagers were well connected to the markets and being just 20km from Lilongwe interactions between the town and the village took place, especially around the tobacco auctions. An FAO implanted irrigation scheme had been operating in Hinnock for the

past four years. The scheme cost 2000KW to join and there was an annual fee. These significant start-up costs meant that only the 'better-off' households could participate.

### 3.5 Chapter summary

This chapter examined the links between migration, urbanisation and environmental change in Malawi. More specifically, the chapter presents Malawi as a typical example of a Southern African migration system where internal movement is the most prominent form of migration. Although migrants move to new rural areas, rural-urban migration accounts for over a quarter of migrations by household heads. Against this backdrop, Malawi is becoming more urban, for example, inter-censual growth in Lilongwe was 4.3% per year. Despite the prevailing view that rural-urban migration is predominantly circular and therefore not responsible for urbanisation, migration is a major concern for the Malawian government, and links between rural change and urban migration have been made in the literature. It is likely that shocks and stresses will continue to affect migration as climate change intensifies. Exactly how stresses and shocks will affect migration in Malawi is not clear and the available evidence is conflicting. What is clear is that Malawi suffers from prolonged stresses as well as frequent floods and acute food shortages following droughts. If urban areas are seen to offer a better way of life than rural areas, those in the village may decide to leave a sending region (the village) for a receiving region (a town) if they believe they can secure a better life. Finally, to understand rural-urban migration decision making in the context of climate change, the chapter presented environmental and socio-economic profiles of two study sites in rural sending regions, and three study sites in urban receiving regions.

The following chapter presents the theoretical framework that was used to guide data collection in each of the study sites, along with each of the specific methods used.

# Chapter 4. Research design and methods

## 4.1 Introduction

This chapter outlines the research design and methods used in the study. The chapter is split into five sections. The first section outlines how the ideas presented in the literature review (in Chapter 2) were developed into a theoretical framework. The second section explains how the fieldwork in each of the study sites was approached, including details of the research team and my position in the field as a white Western researcher working in Africa. In the third section, each of the key data collection methods is described and their relevance to the study is highlighted. In the fourth section, I detail the methodological difficulties of the study and how I overcame them, and in the fifth and final section, I briefly explain how the data were analysed.

## 4.2 Developing a theoretical framework

In order to explore how climate change may affect Malawi's migration system, it is necessary to develop a theoretical framework that will guide the data collection and help frame the analysis. The theoretical framework presented here places agency at its heart. In Chapter 2, I defined agency as "the *ability* to define one's own *goals* and act upon them" (Kabeer, 1999: 438). Therefore, this research examines households' *goals* relating to migration (or non-migration) as a response to climate change, as well as their *ability* to achieve those goals. Using the concept of agency, and specifically the concepts of *ability* and *goals* (henceforth: capabilities and aspirations) as the point of departure, this study develops a theoretical framework that borrows significantly from the migration scholar, De Haas (2009a, 2010, 2011, and see Bakewell et al., 2011). De Hass (2011: 8) argues that the "fragmented insights [into migration] can be integrated in one framework through conceptualizing virtually all manifestations of (internal and international) migration as a function of *capabilities* and *aspirations*".

Capabilities and aspirations are important elements of a migration system, which was defined in Chapter 2 as "a complex of interacting elements" that connects a pool of potential migrants in a sending region with people and opportunities in the receiving region (Mabogunje, 1970: 4). The interactions between the sending and receiving regions are affected by events in the

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sending region (e.g. social practices etc.) and events in the receiving region (e.g. changing wages and job opportunities). Using an aspirations and capabilites framework can help explain some key questions of migration system theory including how patterns of movements are determined; what situations may encourage or discourage the rate of movement between the rural area and the city; and, how a rural individual become a permanent city dweller (Mabogunje, 1970: 4). By undertaking a deep exploration of migration aspirations and capabilities this research seeks to tie together the action of individual migrants with the wider system and examine the place of individuals' agency in the development of migration systems (see Bakewell et al., 2011). Like Mabogunje (1970: 2), in this study "no attempt is made to define major components and relationships in a formal, mathematical manner. The emphasis here is on a verbal analysis of the ways in which the system operates" and in particular, the way in which aspirations and capabilities operate within the context of a migration system, especially when that system is affected by the kinds of shocks and stresses that climate change creates.

The importance of migration aspirations (and to some extent the link between aspirations and capabilities) is recognised by a body of literature that is well established in demography (for example, De Jong and Fawcett, 1981a, De Jong et al., 1985, De Jong, 2000, Carling, 2002, Benson and O'reilly, 2009, Yang et al., 2010, Creighton, 2012, Czaika and Vothknecht, 2012). However, only a handful of migration aspiration studies are relevant to the African context, and these studies do not explore interactions with the natural environment (Carling, 2002, Jónsson, 2008).

In order to gain a better theoretical understanding of migration capabilities and aspirations, the next section turns to an examination of the Capabilities Approach (CA) and the Sustainable Livelihoods Framework (SLF). Both the CA and SLF are underpinned by the entitlement literature of the 1980s, which emerged as a response to growing dissatisfaction with income maximisation approaches to poverty and development (e.g. Sen, 1982, 1999, Swift, 1989, Dreze and Sen, 1990). In very basic terms, both approaches are concerned with well-being and how people convert their potentials and strengths into livelihood outcomes. As the following sections will explore, the approaches are complimentary and can offer significant theoretical insights into decision making (including migration decision making) in rural livelihoods. Importantly, by exploring the CA and SLF, a framework for data collection can be developed.

### *4.2.1 Capabilities Approach (CA)*

The CA has its origins with Sen's (1976, 1982, 1999) work on welfare economics and well-being, which in basic terms seeks to evaluate economic policies in terms of their effects on people's well-being. The approach has received additions from numerous scholars (including Nussbaum and Glover, 1995, Alkire and Black, 1997, Nussbaum, 2001, Alkire, 2005, Clark, 2005a, Clark, 2005b, Robeyns, 2005) who all seek to build on Sen's idea. The approach departs from traditional welfare economics, which typically conflates well-being and income. To make this point, Sen (1990: 44) restates Aristotle's idea that "wealth is evidently not the good we are seeking; for it is merely useful and for the sake of something else". Similarly, the CA argues that the goal of human development is to expand the capability people have to do the things they value (Alkire, 2005).

The CA emphasises the importance of the "expansion of the 'capabilities' of people to lead the kind of lives they value—and have reason to value" (1999: 18). In this way, capability is only half the story; capabilities are important insofar as they give an individual the freedom to decide what they would like to do. The other half of the story is the aspirations that an individual holds. In basic terms, if an individual has an aspiration to do 'x' and has sufficient capabilities, they may be able to convert their aspiration into an achievement, known as a 'functioning' (Sen and Nussbaum, 1993). In the context of this research, the achievement, or 'functioning', is migration. Sen and Nussbaum (1993) argue that capabilities and not functionings are the important factor when examining well-being; in other words, evaluation should focus on the opportunities a person has and not their achievements. This argument is illustrated by contrasting a person that does not eat because they are fasting with a person who does not eat because they lack access to food. If the focus is on functionings, both people can be said to have the same level of deprivation. By focusing on opportunity a more realistic representation of a person's ability to achieve the things they value (i.e. eat) is achieved. In this way, Sen and Nussbaum (1993) distinguish between 'doing x' and 'choosing to do x and doing it'. This is an important point when evaluating migration decisions. As de Haas and Rodríguez (2010: 178) point out, "human mobility is the capability to decide where to live – human movement (i.e. migration) is the associated functioning". Not everyone who possesses the capability of mobility will migrate because not everyone will aspire to migrate. Aspirations can be affected by a number of factors, including the social and personal context an individual finds themselves in (Robeyns, 2005). Importantly, choices are structurally constrained (Burchardt, 2009), and as Sen (1999: 63) points out "deprived people tend to come to terms

with their deprivation...and they may, as a result... adjust their desires and expectations to what they unambitiously see as feasible".

The CA has been subject to criticism regarding how it can be applied to empirical research (Robeyns, 2000, Comim, 2001, Comim et al., 2008). For example, Rawls (1999:13) acknowledges that the notion of capabilities is important, but calls it "an unworkable idea". Similarly, Roemer (1998) has criticised the CA for being too vague and Sugden (1993) questions if it can be operationalized in the real world. Part of the problem surrounds what constitutes a capability and how a capability can be measured (Robeyns, 2000). Bebbington (1999) has suggested a useful way of operationalizing the CA in his 'framework for analysing peasant viability, rural livelihoods and poverty in the Andes'. Bebbington (1999) integrates ideas from the Sustainable Livelihoods Framework (SLF) (see the following section) into the CA and then develops his own 'capitals and capabilities' approach based on this. In this way, he develops a framework that highlights the importance of combining capitals with capabilities by arguing that "assets (or capitals) are not simply resources that people use in building livelihoods: they [give people] the capability to be and act" (Bebbington 1999: 5).

### *4.2.2 Sustainable Livelihoods Framework*

The Sustainable Livelihoods Framework (SLF) also has its roots in Sen's work and was formed as a central concept of the UK's Department for International Development's (DFID) poverty alleviation strategy, which aims to "create sustainable livelihoods for poor people, promote human development and conserve the environment" (DFID, 1997: 6). The key concept of the SLF is the 'sustainable livelihood', which, as defined in Chapter 1 is a livelihood that is able to "cope with and recover from stress and shocks, maintain or enhance its capabilities and assets, and provide sustainable livelihood opportunities for the next generation; and which contributes net benefits to other livelihoods at the local and global levels and in the short and long-term". (Chambers and Conway, 1992a: 7).

The SLF sees rural households in a context of vulnerability within which they have access to certain assets, also known as capitals (see Figure 4.1). The vulnerability context refers to the shocks and stresses that affect people's livelihoods (Chambers and Conway, 1992b, Chambers, 2006). More specifically, it refers to the likelihood of livelihood disruption or other harm as the result of environmental shocks, stresses and social changes (Eriksen and O'Brien, 2007). Capitals can be deployed to develop livelihood strategies that can help overcome vulnerability

(Scoones, 1998). Importantly, the SLF views a livelihood strategy as more than a method for securing material gain and, just as in the CA, the notion of well-being is central (Houghton, 2012).

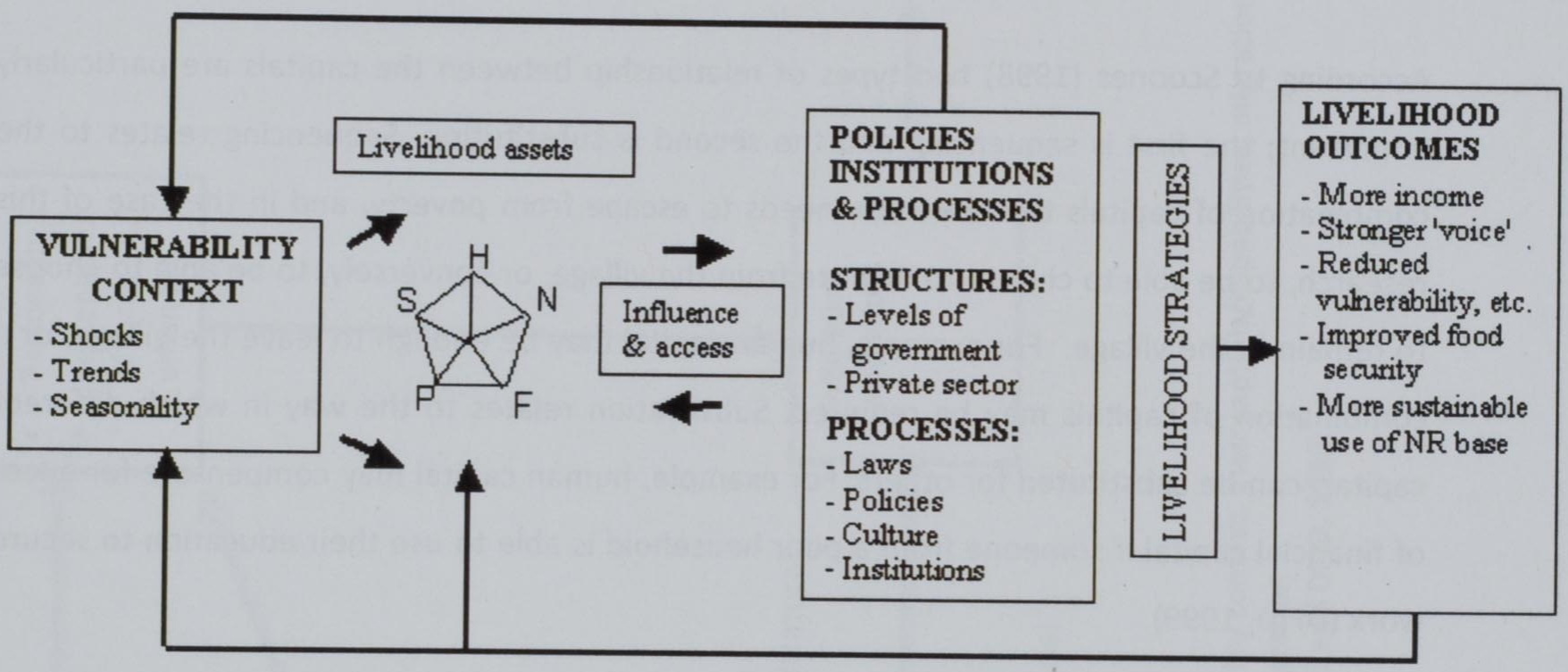


**Figure 4.1 – The Sustainable Livelihoods Framework (Source: DFID, 2001)**

**Table 4.1 – Capitals in the sustainable livelihood framework**

| Capital | Description |
|---|---|
| **Human** | Skills, health and ability to labour of members of a household |
| **Social** | Networks, relationships and membership of groups that households are able to draw on |
| **Natural** | Natural resource stocks, e.g. land, water, forests and environmental services (e.g. pollination, nutrient cycling) available for use by the household |
| **Physical** | Infrastructure and goods such as tools and equipment that households can use to increase productivity |
| **Financial** | Regular inflows of money and savings that households have available |

There are five types of capital in the SLF (see Table 4.1). Human capital represents skills, knowledge, ability to labour and good health (DFID, 1999). Human capital enables people to make use of any of the four other types of assets (*ibid.*). In this way, human capital is essential for the achievement of positive livelihood outcomes, as well as being important in its own right (Becker, 2009). Social capital relates to the social resources used by people to pursue their

livelihood goals (Portes, 2000). Natural capital relates to natural resource stocks available for use by the household (Costanza et al., 1997). Physical capital relates to the infrastructure and goods such as tools and equipment that households can use to increase productivity (DFID, 1999). Finally, financial capital relates to the amount of money that a household has available to them (Carney, 1998).

According to Scoones (1998) two types of relationship between the capitals are particularly important; the first is sequencing and the second is substitution. Sequencing relates to the combination of capitals that a person needs to escape from poverty, and in the case of this research, to be able to choose to migrate from the village, or conversely, to be able to choose to remain in the village. For example, human capital may be enough to leave the village, or a combination of capitals may be required. Substitution relates to the way in which different capitals can be substituted for others. For example, human capital may compensate for a lack of financial capital if someone from a poor household is able to use their education to secure work (DFID, 1999).

The possession of capital also changes how people see the world around them. Sen (1997, as quoted in Bebbington, 1999:5) argues that the possession of human capital not only means that people produce more, and more efficiently, "it also gives them the capability to engage more fruitfully and meaningfully with the world, ultimately and most importantly, providing them with the capability to change the world". In terms of migration, human capital in the form of education may be important in order to gain employment. Human capital is also important as it is "likely to have a huge impact on (1) people's notions of the good life and, hence, personal life aspirations; and (2) their awareness and perception of opportunities elsewhere. If people do not aspire to other lifestyles 'elsewhere', even if they seem 'objectively' or 'materially' better, they will not translate this awareness into a desire to migrate". (de Haas, 2011:21).

### *4.2.3 Synthesis of the CA and SLF*

In order to operationalize the framework to meet the research objectives (see Chapter 1, Section 1.5), ideas from the CA and SLF were synthesised into a single framework (see Figure 4.2). The starting point in the framework is the 'vulnerability context' of the sending region (i.e. the village) specifically, the frequency and severity of the shocks and stresses experienced at community level.

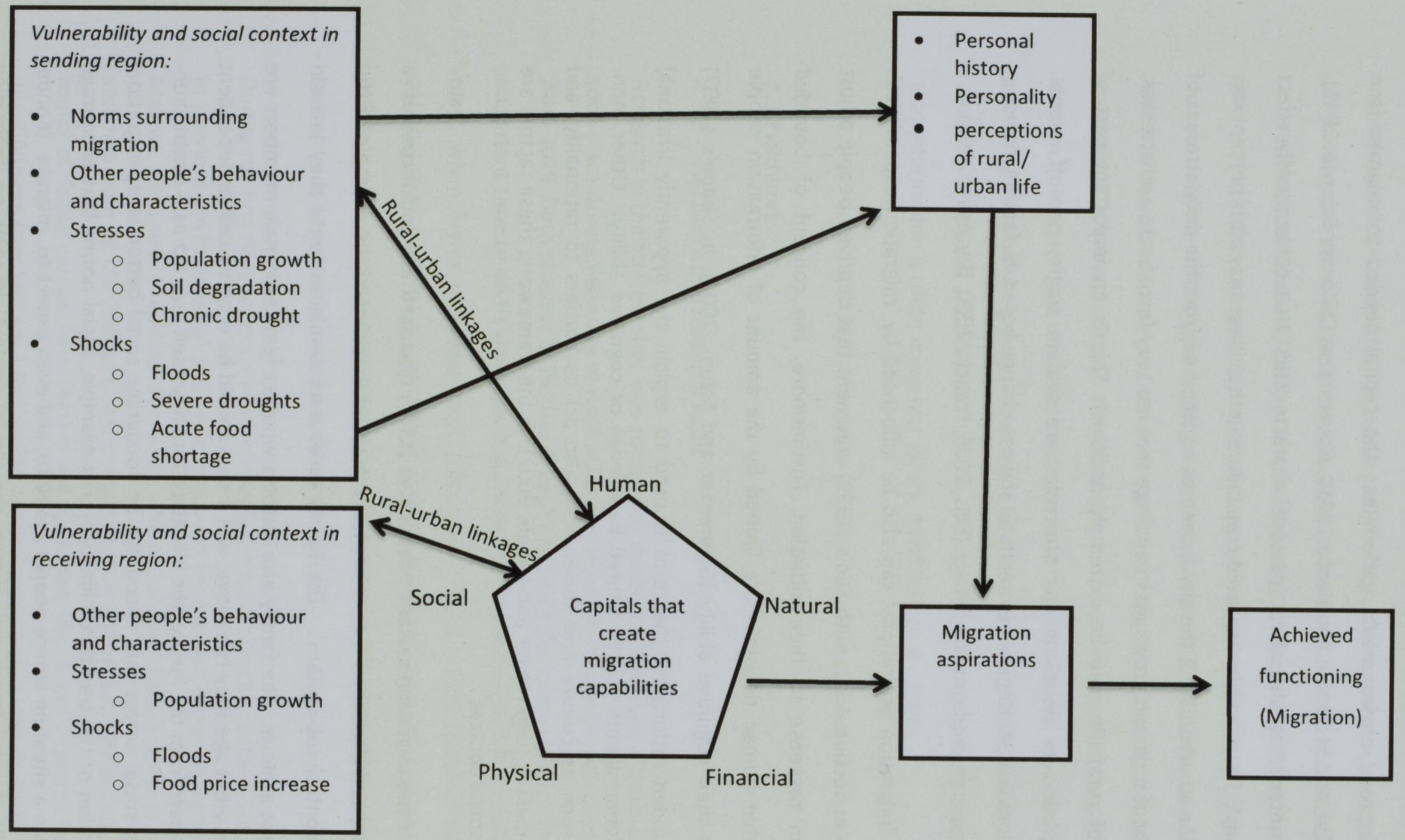


**Figure 4.2 – Representation of the links between a person's social and vulnerability context, their capitals/capabilities, migration aspirations and the achievement of migration**
**(Adapted from Robeyns, 2005 and DFID, 1999)**

The 'vulnerability context' of the sending region is likely to affect 'migration capabilities' as negative changes in rural environments undermines the capital needed to migrate (see Chapter 2, Section 2.4, and McLeman and Hunter, 2010, Government Office for Science, 2011). The 'vulnerability context' can also affect 'personal characteristics' that consequently affect 'migration aspirations'. For example, repeated crop failure in the village may alter perceptions of rural life in relation to urban life if the city is seen as a place free from the daily stresses of farming. Conversely, if a person grows up in a village that has very few shocks and stresses, their perceptions of rural life may be extremely positive. This is an important part of understanding migration as decisions and strategies are seldom single, one-off events. Furthermore, decisions and strategies are not static and can change based on factors including the availability of resources and current policies (Ellis, 2000, Francis, 2000, Bryceson, 2000).

In the framework, 'migration aspirations' can also be influenced by 'migration capabilities'. This was eluded to in Section 4.2.1, with Sen's (1999) argument that deprived people adjust their aspirations in response to their situation. Furthermore, the concept of bounded rationality states that human decisions are limited by the amount of information people possess as well as their cognitive ability (Gigerenzer and Selten, 2002). In Simon's (1997) description of bounded rationality, the term is used to explain the apparently irrational behaviour of economic agents due to limited knowledge or cognitive ability. Other, non-cognitive factors, such as culture and society can also act as barriers to rationality, and influence decision making (Gigerenzer and Selten, 2002). In the framework, these factors are referred to as the 'social context'.

In his description of the migration system, Mabogunje (1970) discussed the 'social context' a rural person lives in, and described it as a 'control sub-system'. He used the example of the family as a 'true control sub-system'. The family holds back a migrant until they are old enough to undertake a move. The family also dictates whether female or male members are allowed to migrate, what age they can move, and if they should be economically independent of their parents. Apart from the family, the village community itself may act as a control sub-system by creating social norms that encourage or discourage social betterment, migration, education or retention of the traditional lifestyle. For example, social norms that encourage migration can create a situation where people aspire to, and even expect to, migrate (Kandel and Massey, 2002). As the framework shows, the 'social context' impacts on 'migration capabilities'. For example, social capital in the form of urban social networks is necessary for migration to occur (Portes and Böröcz, 1989, Palloni et al., 2001, Curran and Saguy, 2013). If

the social norm within a village encourages people to migrate to town, the level of social capital (which is needed for migration) will be high. Conversely, in a village without a history of migration, the level of social capital, needed for migration, is likely to be low and therefore migration capabilities will be low. The 'social context' operating within the receiving region (i.e. the city) is also important. Using the example of social capital again, if urban migrants decide to return home following a negative urban event (such as the collapse of the urban economy) this will have repercussions on how potential migrants in rural areas perceive town. For example, if information about the instability of the urban economy begins to flow through the system, the aspirations of would be migrants in sending regions may decline. Information from receiving to sending regions is passed along networks by fellow villagers "who can provide destination-specific information" (Stark, 1984: 478). This process is complicated by the fact that information is often imperfect (Stark, 1984, Lall et al., 2006).

## 4.3 Fieldwork

### *4.3.1 Fieldwork and research team*

Research in the six field sites was conducted during two seasons of fieldwork. The first season took place during February to April 2009 and the second season took place during February to April 2010. Both seasons of fieldwork coincided with the rainy season. The rainy season is an important time to do fieldwork as it ensures the researcher does fall into a trap of 'dry season bias', when fewer pressures exist (Chambers, 1979). Wet season fieldwork finds people working at their hardest when food may be in short supply (Desai and Potter, 2006). For research that aims to examine responses to livelihoods that are under pressure, the wet season is an appropriate time to conduct fieldwork.

During the first field season, I worked closely with a research assistant, Stella, who had assisted in previous environmental and social research for Bunda College of Agriculture, University of Malawi, Lilongwe. I worked also with a team of four field assistants who were graduate students from Bunda College of Agriculture. In the first season, Stella and I conducted the first round of focus groups (see Section 4.4.4), whilst the larger research team conducted the questionnaire (see Section 4.4.3). In the second season of fieldwork, Stella was unavailable. As such, I worked with another assistant, Elise, to conduct the second round of focus groups whilst the larger research team conducted the semi-structured, in-depth livelihood interviews (see Section 4.4.5). The second research team was selected in collaboration with academic

staff at the Bunda College of Agriculture. The team comprised of two men and two women. Before the team embarked on fieldwork, a two day training session took place. During the training session, we reviewed data from the first round of fieldwork and finalised the questionnaire. I worked intensively with the field assistants in order to make sure they had understood the purpose of each question and to eliminate any ambiguity. The questionnaire, as well as the interview questions and focus group topics, were also discussed with an expert from Bunda College of Agriculture to make sure they were culturally appropriate.

Before contact was made with the potential rural study sites an official meeting was arranged with a local field office. Malawi is divided into eight Agricultural Development Divisions, which are subdivided into Extension Planning Areas (EPAs) and each EPA has a local office from which field activities are administered by an Agricultural Extension Development Officer (AEDO). The EPA plays an important role in field research; through the EPA contact with a village chief was made and access to the village secured. In this way, the EPA and the village chief became the gatekeepers to the village (Campbell et al., 2006). No visits to the village were made without permission. In both rural study sites, research began with a welcome meeting where the research team was introduced to the village by the chief. The research team was provided with a village guide who provided both geographical and cultural directions to the team. In the urban study sites, navigating gatekeepers was less clear and, under the advice of experts from Bunda College of Agriculture, research began without a formal introduction to the study sites.

In both the rural and urban areas, the research team were careful to cause the least disruption possible to the routines of the respondents. There were two reasons for this. First, the team did not want to create additional time pressures for respondents with heavy workloads. Second, by joining in with the respondent's routine, some of the power relationships that blight cross-cultural research were minimised (see Skelton, 2001).

Following each fieldwork day, the team regrouped and a discussion of the day's work took place. Surveys were also checked for inconsistencies. This proved to be important as inconsistences in questionnaire data were found in one research assistant's surveys. As such, these questionnaires were excluded from analysis. Although 100 questionnaires were collected in Lilongwe, Chikamana and Hinnock and 50 questionnaires were collected in Chitedze and Liwonde, the total number of questionnaires analysed may be less than this for a specific response. The total number of respondents included in analysis of responses is included in the results sections of the thesis.

### *4.3.2 Positionality and ethics*

Examining positionality requires the researcher to examine how their own 'position' may influence their study (Sultana, 2007). The researcher's gender, religion, class, or race in relation to those they are studying are all important aspects and can mark the researcher as an insider or an outsider (Corbin Dwyer and Buckle, 2009). My position as a white western female amongst male dominated African communities meant that I was instantly identified as an outsider. As explained by Merriam et al. (2001: 411) outsider status gives the researcher a certain advantage which lies in "curiosity with the unfamiliar, the ability to ask taboo questions, and being seen as non-aligned with sub-groups". Similarly, Adler et al., (1986) argue that by remaining on the outside instead of "going native" the researcher can retain their objectivity and analytic power. However, an outsider may miss non-verbal clues and an authentic understanding of the culture under study (Merriam et al., 2001).

At the same time, an outsider is under scrutiny by those being researched, which is of particular consequence in post-colonial settings (Jankie, 2004). For example, Bashkow (2006: 2) explains how the white person in Africa is a cultural presence representative of "western modernity, wealth, and race privilege, personifying the legacy of imperialism, the ideal of development, and the force of globalization". This has implications for power relations between the (white) researcher and the (African) community at the centre of the study. Furthermore, as Staeheli and Lawson (1995: 332) point out "Western researchers are in a position of power by virtue of being able to name the categories, control information about the research agenda, define interventions and come and go as research scientists".

The challenge is for the Western researcher to deconstruct and represent the experiences, events and mechanisms of the culture under study, without oversimplifying experiences or imposing Western values. This is perhaps an inescapable challenge. As Englund (2006: 287) writes "no research inquiry... exists outside the realms of ideology and politics; research is never value-free". Even when the researcher is aware of such challenges and sets out to overcome them, understanding people and their actions are understandings conceived in the mind of the researcher. However, with this in mind, I aimed to ensure that (1) there was an equal balance of power between myself and the people and communities at the centre of the research; (2) my analysis retained a balance between understanding and objectivity.

In terms of the first point, I adopted a number of strategies that aimed to promote a balance of power between the researchers and the respondents. For example, in both the rural and

urban study sites, the research team sat with and sometimes helped respondents whilst they worked. In Chikamana village, many of the villagers had recently harvested pigeon peas and the team would often shell peas with the respondent whilst administering the questionnaires. The research team made it clear to participants that they had the option to withdraw from interviews and surveys at any time, but no one did this, and for the most part it seemed that participants enjoyed talking about their experiences. I also made sure to dress appropriately in similar fashions as local women (e.g. a vest top and local fabric wraparound skirt). I did not wear expensive jewellery, nor did I take expensive equipment into the village. Although I had a digital camera, I was careful to only take it out of my bag once I had gained permission to take a picture. I did not drive my car into the centre of the village, despite being told it was fine to do so by the AEDO. Instead, I parked the car on the village periphery and walked in. I was also aware of the positionality of my research team. The fieldwork team were all experienced field researchers who had relatives in rural Malawi. As such, they dressed and acted in a style appropriate for the villages. Where possible the research team aimed to match male respondents to male researchers, and female respondents and female researchers during interviews and questionnaires. In terms of the second point, retaining a balance between understanding and objectivity, I discussed my ideas in depth with my field assistants to make sure we had both elicited the same meaning from focus groups and interviews.

## 4.4 Methods

A mixed methods approach was used and data was triangulated. Triangulation as defined by Denzin (1978: 291) is "the combination of methodologies in the study of the same phenomenon". By combining methodologies the researcher can add rigour to their study, reduce bias and produce valuable results. Triangulation has a long history in the social sciences where scholars are aware of issues of dependency on a single method. Studies using mixed-method have shown that integration of methods within the same study is complementary and useful (Greene et al., 1989, Caracelli and Greene, 1997). The technique relies upon the idea that by using a range of methods it is possible to cancel out inherent bias in one part of the data (Mathison, 1988). In particular, this study used expert interviews, in-depth interviews, key-informant interviews, focus groups, participant observations, time lines and questionnaires (see Figure 4.3 for a description of how each stage of the researched informed the following stage).

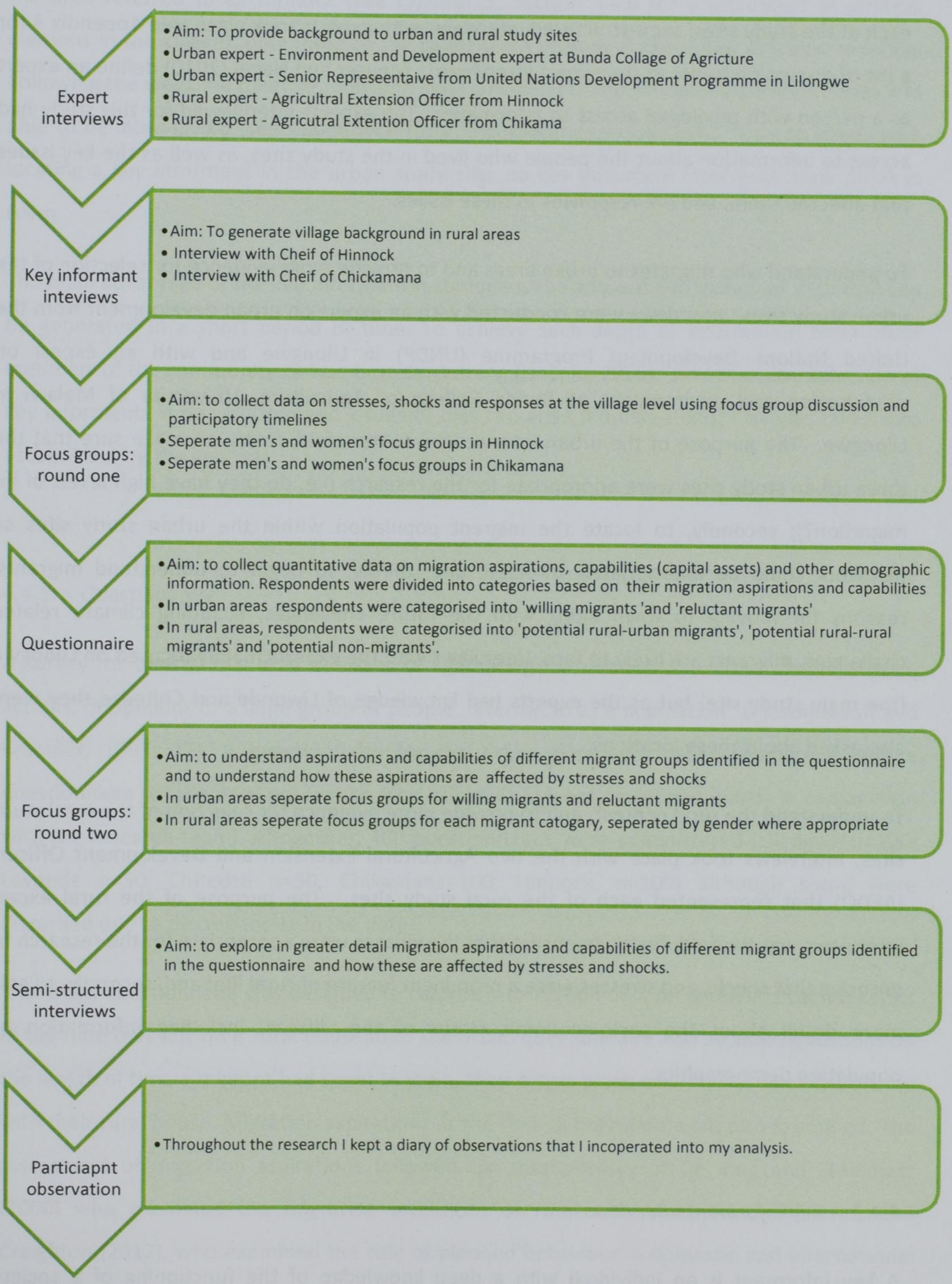


**Figure 4.3 – Stages of the research process**

### *4.4.1 Expert interviews*

At the start of the research process in field season one, and before fieldwork took place in each of the study sites, semi-structured interviews with experts took place (see Appendix A for a list of discussion topics at the expert interviews). Meuser and Nagel (2010) define an expert as a person with privileged access to information. The experts interviewed for this study had access to information about the people who lived in the study sites, as well as the key issues that affected them, and the responses to these issues.

To understand who migrates to urban areas and to provide more evidence for selection of the urban study sites, interviews were conducted with an expert on urban development from the United Nations Development Programme (UNDP) in Lilongwe and with an expert on urbanisation and environment at Bunda College of Agriculture, University of Malawi in Lilongwe. The purpose of the urban interviews was threefold; firstly, to make sure that the three urban study sites were appropriate for the research (i.e. do they have high levels of in-migration?); secondly, to locate the migrant population within the urban study sites so fieldwork could be appropriately directed; and, thirdly, to begin to understand migrants' reasons for moving to town along with the future challenges, including climate related challenges, migrants are likely to face. Interviews with the experts mainly focused on Lilongwe (the main study site) but as the experts had knowledge of Liwonde and Chitedze they were also asked about these locations.

To understand the rural context, and to provide more evidence for selection of the rural study sites, interviews took place with the two Agricultural Extension and Development Officers (AEDO) that represented each of the rural study sites. The purpose of the rural expert interviews was twofold; firstly, to ensure that the villages were appropriate for the research by ensuring that shocks and stresses were a prominent feature of rural life; and, secondly, to gain more detail about the socio-economic status of the villages, including information on population demographics.

### *4.4.2 Key informant interviews*

A key informant is an individual with a deep knowledge of the functioning of a society, including problems and needs of that society (Marshall, 1996). Due to their social status within the community, a key informant can provide valuable insights into a community (*ibid).* During

the first field season, semi-structured, key informant interviews took place with the village chiefs from Chikamana and Hinnock. Although there were five villages chiefs who look after the area referred to as Hinnock (see Chapter 3, Section 3.4.6 for a discussion of political divisions in the village), only three of the chiefs were present at the initial welcome meeting. Following the welcome meeting, only one chief (the chief of the official village of Hinnock) was able to be interviewed (see Appendix B for a list of interview questions). Due to issues with locating a key informant in the urban study site, no key informant interviews took place in town.

The main advantage of the key informant technique is the amount and quality of data that can be generated in a short period of time. To achieve such depth of information from other members of the community can be time consuming (Lincoln, 1985). However, the selection of key informants is not random and issues of bias can arise (Kumar, 1989). This was taken into account during the analysis.

### *4.4.3 Questionnaire*

A survey, or questionnaire, is a means of "gathering information about the characteristics, actions, or opinions of a large group of people, referred to as a population" (Pinsonneault and Kraemer, 1993: 77). A questionnaire for the urban population (see Appendix E) and a questionnaire for the rural population (see Appendix F) were developed (partly in conjunction with the research team). Altogether, 400 questionnaires were administered (Lilongwe n=100, Liwonde n=50, Chitedze n=50, Chikamana=100, Hinnock, n=100) although some were discarded due to discrepancies in the data.

The urban questionnaire was designed to capture information on a respondent's capital assets at the time they left their rural household. The urban questionnaire also included questions on the length of time a migrant had spent in town, their future plans, and the current relationship with their rural house. Migration aspirations at the time of migration were also examined. The assessment of migration aspirations followed the methodology of De Jong and Steinmetz (2006) who examined the migration intentions of rural and urban South Africans, and Creighton (2012), who examined the role of planned behaviour in domestic and international migration from Mexico. As such, to explore aspirations of urban migrants at the time of their migration, questionnaires contained two sequential questions;

1. *Before you moved here, did you want to move away from your village?*
2. *Would you rather have stayed at home if that was possible?*

Urban respondents were then divided into two groups: (1) willing migrants, who had strong aspirations to move to town at the time of their migration; and (2) reluctant migrants who, when asked *"before you moved here, did you want to move away from your village?"* had given a negative response. To explore the migrations and aspirations of each group more thoroughly, focus groups and semi-structured interviews were conducted (see Sections 4.4.4 and 4.4.5).

Similarly, the rural questionnaire was designed to capture information on a respondent's current capital assets. The rural questionnaire also included questions on migration aspirations. This allowed rural respondents to be categorised into potential rural-urban migrants, potential rural-rural migrants, and potential non-migrants. Specifically, rural respondents were asked two questions;

1. *Do you want to leave the village?*
2. *If yes, where will you go?*

Importantly, the rural questionnaire contained hypothetical questions on planned responses to shocks. Rural respondents were presented with a scenario in which they fall victim to two hypothetical extreme events. These were a very severe drought that had become a food crisis, and a very severe flood that had destroyed property and crops. Respondents were asked to make the decision about how they would respond based on the state of their household at the time of the interview. More specifically, respondents were asked the following;

1. *If a severe flood destroys your land and property, what will you do?*
2. *If a severe drought means all your crops fail and there is no food at home, what will you do?*

Based on the answer to this question, respondents were place in one of three categories that had emerged from the focus group on stresses, shocks and responses (see Section 4.4.4). These categories were: (1) leave the village; (2) stay and cope with the shock; and, (3) wait for outside assistance.

In both the rural and urban areas, systematic sampling (a modification of simple random sampling) was used (Patton, 2005). This involved the four members of the research team starting in four different locations in the village or urban market/informal housing area and

asking every fifth household if they would participate (see Figure 4.4). Respondents did not have to be household heads.

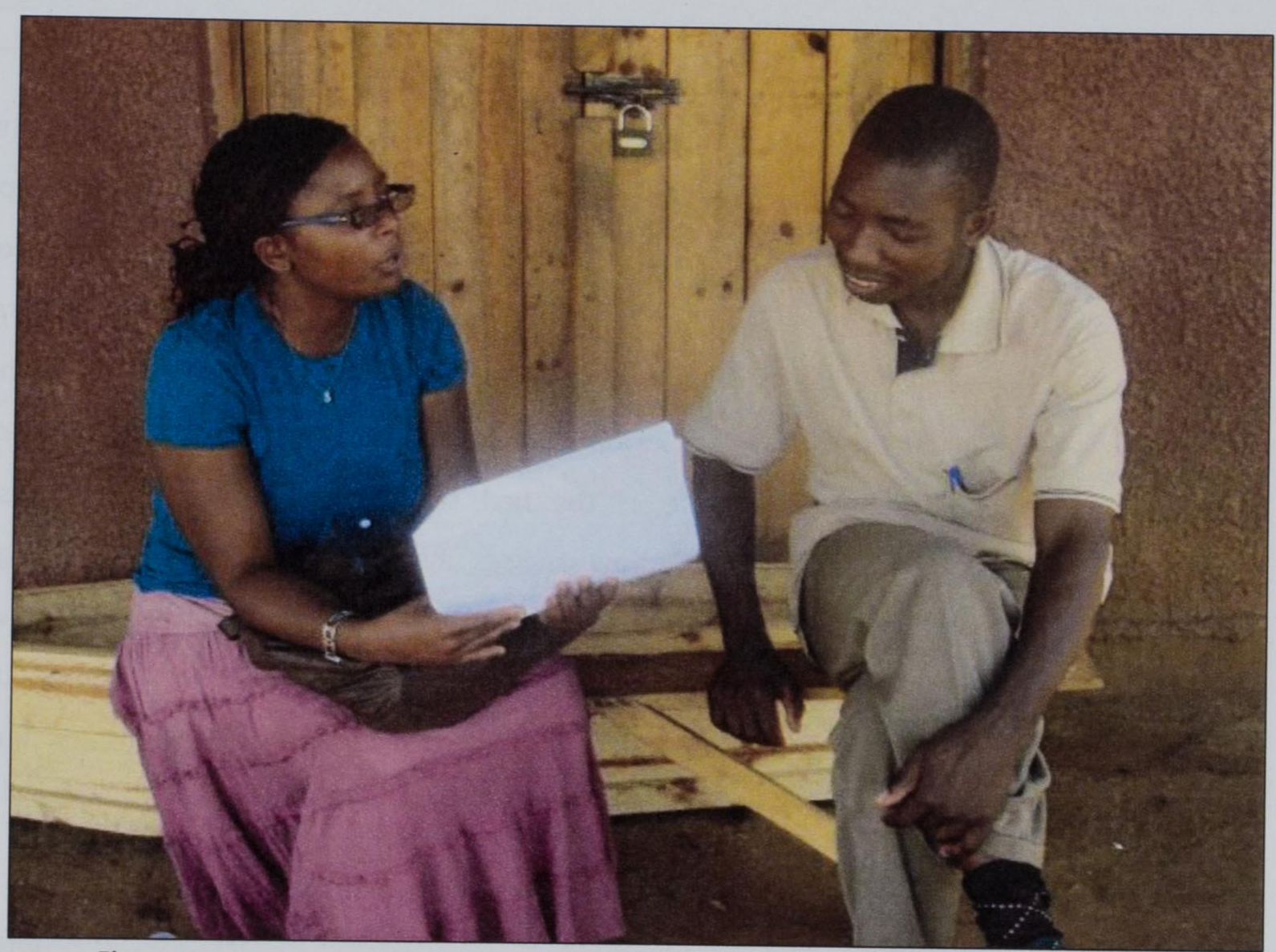

**Figure 4.4 – Research assistant conducting a questionnaire with a migrant in Lilongwe**

### *4.4.4 Focus groups*

Focus groups were used to gain a deep understanding of issues relating to climate and migration (see Longhurst, 2003). In Lilongwe, towards the end of the first field season, focus groups were held with the two groups of migrants that had been identified during the questionnaire (see Section 4.4.3). These were willing migrants who had been very keen to move to town, and reluctant migrants who had been less keen to move (see Appendix C for an outline of the focus group topics). Participants were asked why they had moved to town, how they had facilitated their move, and what prompted them to go, including environmental changes in the village. Participants were recruited to the focus groups following the urban questionnaire, when they were asked if they would like to take part in further research. Recruitment was generally limited to 8-12 people (Barbour and Kitzinger, 1998), although some groups were smaller/larger (see Table 4.2).

**Table 4.2 – Focus group attendance in Lilongwe**

| | Migration aspirations and capabilities of willing migrants | | Migration aspirations and capabilities of reluctant migrants | |
|---|---|---|---|---|
| | **M** | **W** | **M** | **W** |
| Lilongwe | 10 | 8 | 0 | 5 |

In both rural study sites, the focus groups provided the first formal contact between the research team and the communities at the centre of the research. Two sets of focus groups took place in the rural areas. The first set of focus groups, which were conducted soon after the research team had been introduced to the villages in season one, explored the natural environment of the village at the community level (see Figure 4.5). More specifically, the frequency of shocks and stresses as well as local responses to those shocks and stresses were explored (see Appendix D for an outline of the first set of rural focus group topics). Participatory timelines were used to explore how stresses and shocks had affected the village over the last 20 years (see Figure 4.6). Twenty years was chosen as the literature for Malawi often traces contemporary shocks and stresses back to 1991 (ActionAid, 2006). As the group was a village level discussion, anyone could attend. In each village, the chief or his assistant advertised the group by word of mouth.

**Table 4.3 – Rural focus group attendees**

| | Shocks, stresses and responses | | Potential non-migrants | | Potential rural-rural migrants* | | Potential rural-urban migrants** | |
|---|---|---|---|---|---|---|---|---|
| | **M** | **W** | **M** | **W** | **M** | **W** | **M** | **W** |
| Chikamana | 10 | 20 | 4 | 15 | 5 | 5 | 4 | 2 |
| Hinnock | 10 | 10 | 4 | 15 | 5 | 5 | 5 | 1 |

* In Chikamana, the questionnaire did not reveal any rural-rural migrants, therefore, a discussion exploring the lack of rural-rural aspirations was convened, which could be attended by anyone who had not attended any of the other focus groups.

** These groups were not separated by gender

The second set of rural focus groups, conducted toward the end of the data collection process in season two, were designed to understand the migration aspirations of the three types of 'migrant' that emerged during the questionnaires. More specifically, focus groups with potential rural-urban migrants, potential rural-rural migrants and potential non-migrants took place. For each group, the reasons they wanted to migrate/not migrate were discussed, along with an exploration of the link between their migration/non-migration decision and chronic environmental stress. Finally, each group was asked to discuss how they would respond to an extreme shock, and if their decision to migrate/not migrate would change. Each focus group

**Figure 4.5 – The researcher conducting a women's focus group in Chikamana village**

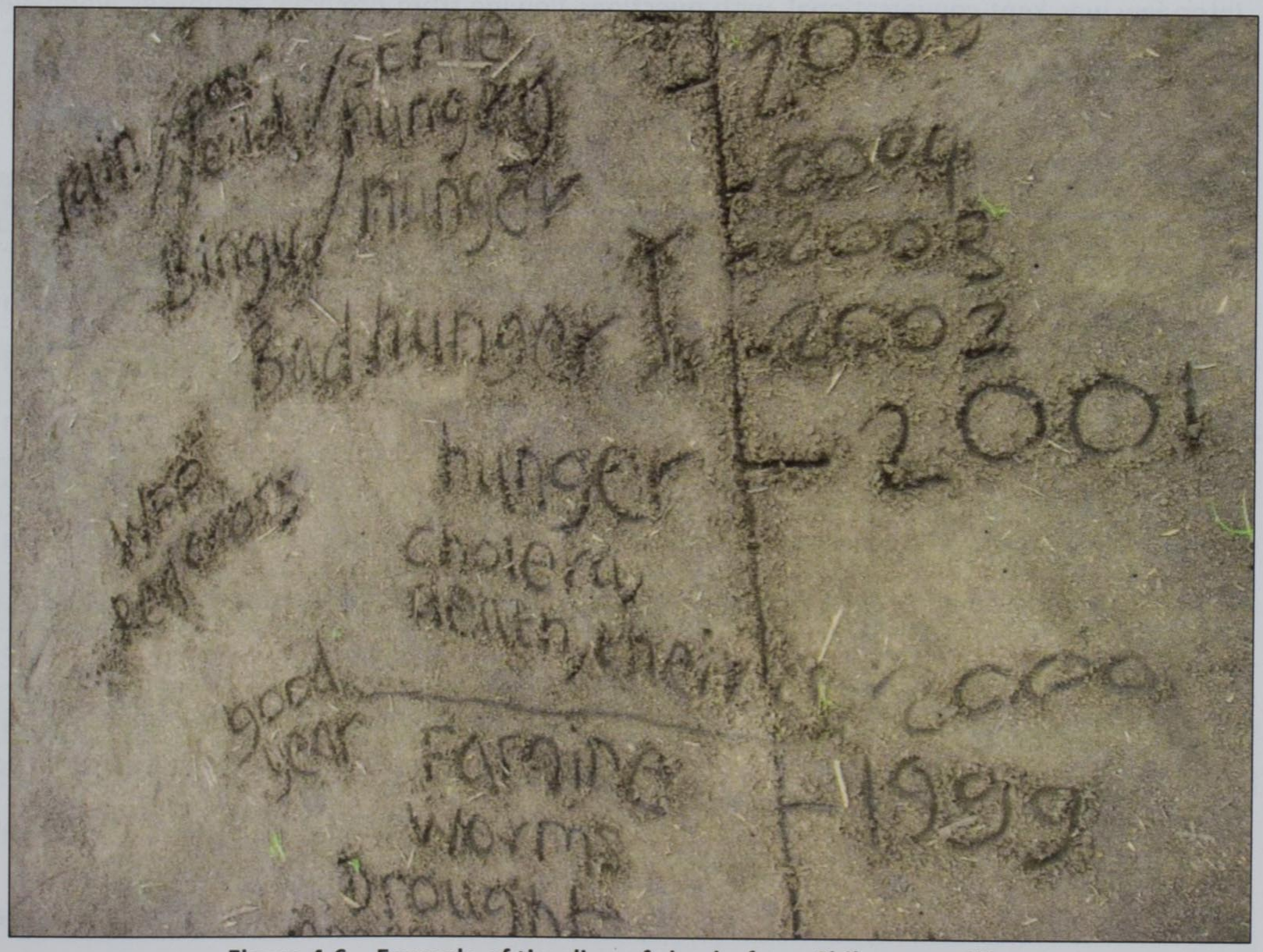


**Figure 4.6 – Example of timeline of shocks from Chikamana village**

was targeted at a specific group of people. For example, the group that explored non-migration aspirations could only be attended by those who had no aspirations to migrate. In Chikamana, the questionnaire did not reveal any rural-rural migrants; therefore, a discussion exploring the lack of rural-rural aspirations was convened. This group could be attended by anyone who had not attended any of the other focus groups.

### *4.4.5 Semi-structured interviews*

Frey and Oishi (1995:1) define interviews as "purposeful conversation in which one person asks prepared questions (interviewer) and another answers them (respondent)". Interviews can be closed (with structured questions) or open (with no set questions). They can also be semi-structured which allows the researcher to capitalise on the benefits of each type of interview. For example, open interviews allow the researcher to freely "deal with the topics of interest in any order and to phrase their questions as they think best" (Nichols, 1995: 131). They let the researcher delve deeper into the topic than a list of set questions would allow. Data can be rich, but is entirely dependent on the capacity of the researcher to draw the information out of the respondent. As such, a semi-structured interview that contained pre-planned questions was prepared for both rural and urban respondents (see Table 4.4). The interview was kept conversational, with questions flowing from previous responses whenever possible. All semi-structured interviews took place in the second field season.

**Table 4.4 – Respondents to the in-depth interviews**

| Location | In-depth semi-structured interview with... | Participants |
|---|---|---|
| Lilongwe | Willing migrants | 20 |
| | Reluctant migrants | 5 |
| Liwonde | Willing migrants | 25 |
| | Reluctant migrants | 0 |
| Chikamana* | Potential rural-urban migrants | 7 |
| | Potential non-migrants | 18 |
| Hinnock | Potential rural-urban migrants | 6 |
| | Potential non-migrants | 17 |
| | Potential rural-rural migrant | 2 |

*in Chikamana, the questionnaire did not reveal any rural-rural migrants, therefore, interviews did not take place with representatives from this group

Interviews with urban migrants (see Appendix H) were used to explore migration aspirations at the time of migration, migration capabilities, future plans and perceptions of city and village

life. Interviews with rural dwellers (see Appendix H) were also used to explore migration aspirations, migration capabilities and perceptions of city and village life. Rural respondents were also asked to choose the three environmental stresses that they were most concerned about. The list was generated using data from the first round of focus groups that explored stresses, shocks and responses.

In total, 100 semi-structured interviews took place (25 in each of Lilongwe, Liwonde, Chikamana and Hinnock). Interviews did not take place in Chitedze as riots in Lilongwe during the week of the planned interviews meant this was not feasible. Sampling was purposive and was designed to elicit a range of experiences. In the urban areas potential respondents were approached in the same way as described in Section 4.4.3. They were asked a series of short qualifying questions to determine if they were willing or reluctant migrants. As noted in Table 4.4, no reluctant migrants were found in Liwonde and only two were found in Lilongwe. In the rural areas, respondents who had completed a questionnaire and who had been identified as a potential rural-urban migrant, a potential rural-rural migrant (in Hinnock only) and a potential non-migrant were asked to take part in a more in depth interview.

### *4.4.6 Participant observations*

Throughout the research process, participant observations took place. Marshall and Rossman (2010: 79) define observation as "the systematic description of events, behaviours, and artefacts in the social setting chosen for study". In participant observation, the researcher records detailed notes of conversations and experiences. Using participant observation allows the researcher to access "backstage culture" (De Munck and Sobo, 1998) and helps the researcher understand the group's dynamics and motivations. One way of recording observations is to keep a field note diary. In the context of this research, the goal of observing participants and keeping a fieldwork diary was to improve the overall quality of data collection and interpretation and to facilitate the development of new research questions or hypotheses. Strauss and Corbin (1990) detail methods for dealing with the analysis of notes and the practicalities of keeping a field diary. The form of field note I keep here is adapted from Schatzman and Strauss' (1973) description of observational notes, methodological notes and theoretical notes (see Table 4.5).

**Table 4.5 – Field observation diary notes (Adapted from Schatzman and Strauss, 1973)**

| Type of note | Detail to be included | Example from my diary |
|---|---|---|
| **Observation notes:** | A running account of what happens. Details on the setting and communicative features of the community. Development of a full picture of what is happening within the community. | I'm on the ground in the middle of the communal area. Opposite me, under the shade of a tree are four women and a little boy (who is intrigued by me!) The group are greeting an older woman who is on her way to church. The greeting takes a long time. A woman who must be the boy's mother stands and follows the older women to church. The boy is left behind, but he isn't bothered by this. Children are often left in the care of female relatives. |
| **Methodology notes:** | A description of methods used to collect the data, how these methods may impact on the data analysis, ideas for possible changes in methodology and notes about what questions could be asked next time. | The men in this village appear to be 'missing'. How can I find out where they are? And, during my livelihood interviews, could I alter my sampling strategy to include more men? |
| **Theoretical notes:** | Emergent trends and hypotheses including guesses and hunches to follow up later | Have the men migrated to town? |
| **Personal notes:** | Personal reactions, how you feel, self-reflection, memories, and impressions. Especially notes on a struggle. | Today made me question my interview approach. Stella and I sat on the floor shelling peas with a woman. I was interested to why she wouldn't move to town, but I didn't understand her response. I kept asking slightly different questions to try to draw the information out. The woman said to Stella "she keeps asking me the same questions" so I quickly moved the interview on. It's really hard to find the balance. |

## 4.5 Methodological challenges

### *4.5.1 Migration intentions*

Collecting data on migration intentions presents a key issue as there is a well-documented gap between intentions and behaviour (Ajzen and Fishbein, 1980, Douglas et al., 2008, Haggblade et al., 2010). For example, in her study of circular migration in Southern Africa, Potts (2010: 13) noted that particularly in urban areas the discrepancy between the intentions of the potential leaver and the action is reflective of a "tendency to overestimate out-migration because it is felt that African urban dwellers are more likely to say they will leave than realise their plans". To overcome this, Potts (2010) labelled anyone with an interest in migrating as a 'potential leaver' and at the same time acknowledged that many 'potential leavers' would in fact never leave. I take a similar approach in this study. In this study, where the emphasis is on understanding migration aspirations and capabilities rather than making predictions of

migration, the gap between migration intentions and behaviour may be interesting in itself. For example, if 70% of rural single women with children express an intention to migrate, and there are no single women with children amongst the urban respondents, an issue has been identified. The reverse also may be true. For example, there may be very few women with children who express any desire to leave the village, but the village may report that many single mothers do indeed leave. By probing such issues it may be possible to uncover information about the agency and capability of migrants and non-migrants.

### *4.5.2 Hypothetical data*

Hypotheticals were chosen to explore shock responses as a way of avoiding issues associated with exploring 'real behaviour' (i.e. how households had responded previously) (Pearce et al., 2006). Real behaviour is complex and difficult to disentangle and in many cases does not exist (Helgeson et al., 2012). The behaviour of a household following a previous shock may have been influenced by factors not related to the shock. To ensure the validity of the hypothetical responses, I adopted two strategies. The first was to ensure that the study sites had been involved in large covariate weather shocks so respondents were familiar with the issues in question (see Chapter 3). The second was to explore how people in the village had responded to shocks in the past during the first set of focus group discussions that examined environmental stresses, shocks and responses.

### *4.5.3 Methodological difficulties in understanding capital assets*

To assess the capital assets that form migration capabilities, both household and individual level data was collected from respondents. This strategy took into account the prevailing view that most migration is circular and migrants retain strong ties to their rural homes. However, given that it is usually a single individual who leaves the household, individual level data are also needed.

Data on natural and physical capital were excluded from the analysis due to two methodological difficulties. Firstly, measuring natural capital is complex. For example, farming communities are dependent on the natural capital of soils (Dominati et al., 2010), the analysis of which is beyond the scope of this study. Collecting a simple measure of the size of a household's land as a proxy for natural capital may also be flawed as land size does not

necessarily give an indication of how well a household is doing. Land size and land productivity are two distinct concepts and an inverse relationship between the two is well recognised. This often means that the more land a household has the less productive the land is (see Dorward, 1999). In trying to explain this inverse relationship, Ghose (1979) argues that more productive pieces of land are more likely to be retained in distress land sales (and are thus less likely to be assimilated into larger holdings) but will tend to be inherited in smaller parcels than poorer quality land when a holding is divided between heirs. As such, treating the inverse relationship as a sign of efficiency rather than distress is a misguided approach (Dyer, 1996). The vulnerability context focus groups revealed that these issues were at play in the study villages, as highlighted in the following quotes;

*"Some people have land that they don't use because there is no one to take care of it. It is overgrown and has no value, it's worthless. But if you have land and you are healthy and you can take care of it, or if you can pay other people to take care of it, this means you are well-off in this village."*

(Female, 28, farmer, Hinnock – Interview statement)

*"I have land but I cannot use it all because there is no one to help me anymore. My husband died and my children are too young to help farm. We used to get a good harvest, but since he died we get almost nothing, just enough for a few months. Even my grain stores are overgrown [see Figure 4.7]."*

(Female, 26, farmer, Chikamana – Interview Statement)

Secondly, issues in measuring physical capital also emerged. For example, in Chikamana village, a Food and Agricultural Organisation (FAO) development programme that gave goats and basic tools to poor households meant that poorer households had artificially high levels of physical capital. As this was a recent development, the AEDO pointed out this would complicate any wealth ranking that used physical capital as a direct measure of wealth. The impact of the FAO programme on village households was captured during an informal conversation with a young male farmer;

*"FAO came to the village and they gave goats to us to breed and sell. They gave goats to poor households too, so now you look at this household and think they are rich because they have goats, but then you realise that they have no food, just goats [see Figure 4.8]. If they sell the goats they will get money, but FAO say breed them first."*

(Male, 23, farmer, Chikamana village – Interview Statement)

**Figure 4.7 – An overgrown grain store owned by a widowed mother in Chikamana**

**Figure 4.8– Women who are part of FAO's goat breeding programme**

Given the methodological difficulties in using natural and physical capital, a measure of financial capital that implicitly took into account natural and physical capital was created. The measure had two elements. The first measure examined how close to self-sufficiency a household was (i.e. small holder productivity). The second measure examined the household's relationship with *ganyu* (off-farm work, see Chapter 3, Section 3.3), which is an effective indicator of poverty (Whiteside, 2000). To assess self-sufficiency, respondents were divided into three categories based on the Government of Malawi's categories of net food buyers, intermediate farmers and net food sellers (Chirwa et al., 2006). Nationally, the level of farming productivity in Malawi is low (GoM, 2006, Denning et al., 2009). As discussed in Chapter 3, only 10% of Malawian maize growers are net sellers, with 60% being net buyers. The remaining 30% are intermediate farmers (Dorward and Chirwa, 2011)

Net food buyers are smallholder famers who farm less than 0.7 hectares of land and cannot produce food to satisfy their subsistence needs. Intermediate smallholder farmers are those with land holding between 0.7 and 1.5 hectares who produce just enough for their survival but have very little for sale. Net food sellers are those farmers with land holdings of more than 1.5 hectares who produce more than their subsistence needs for survival during the year.

Secondly, *ganyu* is defined as "any off-own-farm work done by rural people on a casual basis ...work is often, but is not exclusively relatively unskilled and agriculturally based..." (Whiteside, 2000: 1). It is usually better-off households who are able to employ poorer households to carry out *ganyu* labour in return for goods or cash (Bryceson, 2006). Employers of *ganyu* labour have been described by Vaughan (1987: 105) as, "people with larger than average land-holdings as well as higher than average earnings through employment or trade ...". Therefore, ganyu can be used as a proxy for household wealth, in that houses that do more ganyu are more likely to be poorer than houses that do less[1].

Human capital was examined by collecting data on the respondent's highest level of education and the number of school years they had completed. Social capital was examined by collecting data on the household's links to town.

[1] As the results chapters explore, the relationship between ganyu and poverty is more complex than the stylised notion presented in the literature. Nevertheless, this study agrees that it is generally poorer households who supply ganyu and better-off households who pay others to work for them.

## 4.6 Analysis

### *4.6.1 Qualitative*

The transcripts of the focus groups and semi-structured interviews were transcribed shortly after the focus group or interview had taken place. Further qualitative field notes had been kept in the form of a diary. The data were analysed using ideas from the grounded theory tradition, whereby data is disassembled and reassembled through the coding process (Charmaz, 2003, Corbin and Strauss, 2008). At first, transcript data can appear to be a mass of confusing and unrelated accounts, but by using codes and searching for patterns, order can be created. A code in qualitative inquiry is most often a word or short phrase that assigns an attribute to language data (Saldaña, 2012). Table 4.6 presents a list of basic questions used for coding. Bryman and Burgess (2002) suggest that data should be coded as soon as is possible after data collection, and if possible, even during data collection. As such, data analysis often began in the field and was followed by a more intensive analysis of the transcripts in the evenings. Once the coding stage was complete, a theory was constructed. The theory that was constructed following the first round of interviews was used to inform the questionnaire, which was subsequently used to inform the second round of focus groups, and the semi-structured interviews.

**Table 4.6 – Basic questions for coding (Adapted from, Flick, 2009)**

| What to look for |
|---|
| What is the concern here? Which course of events is mentioned? |
| Who are the people involved? What roles do they have? How do they interact? |
| Which aspects of the event are mentioned or omitted? |
| Referring to time, course and location: when does it happen? How long does it take? Where did the incident occur? |
| Which reasons are provided or can be contrasted? |
| What is the intention here? What is the purpose? |
| Referring to means, tactics and strategies for achieving the aim: What is the main tactic here? How are things accomplished? |

### 4.6.2 *Quantitative*

Quantitative data were entered and cleaned in MS Excel. Data was then transferred to SPSS (officially: IBM SPSS Statistics) where statistical tests were performed. T-tests to compare the

means of two samples (e.g. mean age of population one and mean age of population two), and a one-way Analysis of Variance (ANOVA) was used in cases of two or more samples (Heiman, 2012). Chi Squared ($\chi^2$) was used to test whether distributions of categorical variables differed from one another by comparing observed and expected frequency of data (Greenwood and Nikulin, 1996). In social science research, categorical variables often contain small sample sizes. In cases where n=<5, in more than 20% of the samples, the Chi Square distribution test is inaccurate (Heiman, 2012). Agresti and Wackerly (1977) have argued that the most common approaches to overcome this are to (1) combine or eliminate categories so that suggested regularity conditions are met on a reduced table; (2) use a Fisher's Exact test; (3) or simply to ignore any possible difficulties with the Chi Square. This study used multiple approaches to deal with small samples sizes. In some cases, data were aggregated. Where eliminating categories would result in a loss of information the Fisher's Exact test was used. Although Fisher's Exact is most commonly used for contingency tables of 2x2, it can be extended to tables of 3x2 (Agresti, 2002). Statistical tests were considered significant with *P*-values of less than 0.05, although in some cases *P*-values of <0.1 were accepted as approaching significance in keeping with conventional practice (Mohr, 1990).

## 4.7 Chapter summary

This chapter presented details on the theoretical framework, including the literature that informs the framework, and the methods used to apply the framework to the research. Specifically, the CA and SLF are presented as two inter-related frameworks that use aspirations and capabilities in order to understand how and why a rural dweller would leave a rural sending region for an urban receiving region. In the first season of fieldwork, the research began with expert interviews to confirm the choice of the urban and rural study sites, and to elicit more information about the study sites. Key informant interviews were then conducted in order to build up a better picture of life in the rural and urban areas, particularly in relation to environment and migration. A first round of focus groups took place in the rural study sites to explore rural dwellers' experiences of shocks and stresses as well as general responses to them. The fieldwork season ended with a large scale questionnaire in which groups with different levels of migration aspiration and capability emerged. During the second field season, semi-structured interviews and a second round of focus groups in urban and rural sites were convened to understand each group's experiences and future plans in relation to shocks and stresses. The remainder of the thesis presents the results of the fieldwork.

# Chapter 5. Developing a fuller and more complex understanding of rural-urban migration in Malawi

## 5.1 Introduction

In this chapter, I present and discuss the results of the data that were collected to explore the study's first objective, which is to develop a fuller and more complex understanding of rural-urban migration in Malawi. Specifically, the first objective is broken down into four sub-objectives. The first sub-objective is to understand who leaves a rural sending region for an urban receiving region in terms of their proximate[1] reason for movement, and their personal characteristics including gender, age, marital status and origin at the time of migration. The second sub-objective is to assess migration capabilities in terms of the material, human and social capital available to the migrant at the time of their move. The third sub-objective is to explore migration aspirations at the time of migration. Finally, the fourth sub-objective is to explore the rural-urban linkages that are maintained between town and the village home, including the permanence of moves to town, and flows of money and goods between the sending and receiving regions. Overall, this chapter aims to contribute to the literature on rural-urban migration motivations and the circularity or permanence of migration that can affect urbanisation.

The sub-objectives are explored using four sources of data. First, data from the expert interviews in Lilongwe (n=2) were used to provide contextual background to the study sites. Second, data from the questionnaires in the three study sites (total n=162[2]; Lilongwe, n=97; Liwonde, n=39; and Chitedze, n=26) were used to explore personal characteristics of migrants, their migration capabilities at the time of migration, as well as rural-urban linkages. Third, data from the interviews in the three study sites (total n=75; Lilongwe, n=25; Liwonde, n=25; and Chitedze, n=25) were used to explore migration aspirations. Fourth, three focus groups were held in Lilongwe to (1) explore migration capabilities and aspirations of female 'willing migrants' (n=8); (2) explore migration capabilities and aspirations of male 'willing migrants'

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[1] A 'proximate' reason is the most immediate and obvious cause of an observed result, in this case migration. By contrast, the 'distal' cause is the 'real' reason something occurred.

[2] At the start of the research the aim was to secure 100 questionnaires in Lilongwe and 50 questionnaires in Liwonde and Chitedze. The number of respondents given above is the total possible number of respondents included in the analysis after some were excluded due to discrepancies in the data. Further exclusions have been made at different points in the analysis where individual questions have been answered/recorded incorrectly.

(n=10); and, (3) explore migration capabilities and aspirations of female 'reluctant migrants' (n=5).

## 5.2 Rural-urban migration: Who goes to town?

In this section, I explore the basic characteristics of the urban migrant population for each of the three urban study sites. I begin with an examination of the proximate reason for moving to an urban area. (The proximate reason for migration is unpicked in greater detail in section 5.4, where I explore migration aspirations). I then examine where migrants in each study site originated from (i.e. where the main sending regions are). Finally, I present data detailing the age, gender and marital status of the migrant population as these personal characteristics can affect both capabilities and aspirations.

### *5.2.1 Proximate reason for migration*

Three proximate reasons for rural-urban migration emerged from the data collected in the urban questionnaire. These were (1) economic/to make money in town; (2) marriage or to join urban family; and, (3) education. Across all three urban study sites, the majority of respondents (75.6% - 121/162) had migrated for economic reasons (see Appendix J for a breakdown of all migrants included in this analysis). In Lilongwe, the capital city, 72.2% (70/97) of respondents had migrated for this reason; in Chitedze, a road side trading area, 69.2% (27/39) of respondents were motivated by an economic reason; and in Liwonde, a medium size market town, 92.9% (24/26) of respondents had an economic motive. The second most common proximate reason for migration was to be with urban family, including marrying a partner. In Lilongwe, 12.4% (12/97) of respondents had migrated to marry or join family; in Chitedze, 28.2% (11/39) of respondents had migrated for this reason; and, in Liwonde, 7.1% (2/26) had done the same. The third most common proximate reason for migration was education. In Lilongwe, 15.4% (15/97) of respondents had moved to the city to attend school. In Chitedze, 2.6% (1/39) of respondents had done the same. No respondents in Liwonde had moved for education. A Fisher's exact test shows that differences between the locations is approaching statistical significance ($p=0.07$). This suggests that migration to Lilongwe is informed by a greater diversity of reason than Liwonde or Chitedze. The fact that there was a greater proportion of education-seeking migrants in Lilongwe may be explained by

the greater number of secondary schools in the capital. Overall, the results show that the majority of migrants to all three sites are primarily motivated by an economic reason.

### *5.2.2 Gender, marital status and age*

Across all three study sites, when proximate migration motives are aggregated, women accounted for over a third (37.6% - 61/162) of respondents. Of these women, 52.4% (32/61) migrated for economic reasons (see Table 5.1). Aside from economic motivations for migration, just under a third (32.7% - 20/61) of women migrated to be nearer family/to get married, and 14.7% (9/61) migrated for education. Men accounted for 62.3% (101/161) of respondents in the three study sites. Of these men, the overwhelming majority (88.1% - 89/101) migrated for economic reasons. A small minority migrated to be with family (4.9% - 5/101) or for education (6.9% - 7/101). A Chi Square test shows these results are statistically significant (*p=0.00*). This suggests that although it is not uncommon for women to migrate to town for economic reasons, women are more likely than men to move for family or education reasons.

**Table 5.1 – Proximate reason for rural-urban migration by gender (Source: Field questionnaire -Urban)**

| | All motivations % | Economic % | Family % | Education % |
|---|---|---|---|---|
| **Men** | 62.3 (101/162) | 88.1 (89/101) | 4.9 (5/101) | 6.9 (7/101) |
| **Women** | 37.6 (61/162) | 52.4 (32/61) | 32.7 (20/61) | 14.7 (9/61) |

Taking only economic migrants into account, men make up the majority of the sample population; when all three study sites (Lilongwe, Liwonde and Chitedze) are aggregated, men represent nearly three-quarters (73.5% - 89/121) of respondents who identified as economic migrants and women represent just over a quarter (26.4% - 32/121) of respondents who identified as economic migrants (see Table 5.2). The proportion of male and female economic migrants is varied in each study site. In Lilongwe, women make up just under a third (27.1% - 19/70) of respondents who identified as economic migrants. Similarly, in Liwonde, women make up just over a third (37.5% - 9/24) of migrants. However, in Chitedze, women only account for 14.9% (4/27) of economic migrants. A Chi Square test shows that differences between locations is only significant at the 10% level (*p=0.1*). This might suggest that women are more likely to move to Liwonde or Lilongwe than Chitedze.

Table 5.2 – Gender of economic migrants in each urban study site (Source: Field questionnaire -Urban)

| | All sites % | Lilongwe % | Chitedze % | Liwonde % |
|---|---|---|---|---|
| **Men** | 73.5 (89/121) | 72.8 (51/70) | 85.1 (23/27) | 62.5 (15/24) |
| **Women** | 26.4 (32/121) | 27.1 (19/70) | 14.9 (4/27) | 37.5 (9/24) |

The idea that fewer women may migrate to Chitedze was explored more deeply during the in-depth interviews, where a lack of facilities in the area emerged as a barrier to female migration. This finding agrees with Pott's (2010) study of migrants in Zimbabwe in which she reported that female migrants were more likely to be discouraged by a lack of facilities than their male counterparts. In Chitedze, respondents described an average working week as comprising a day trip to the village to collect produce, followed by six days of selling the produce at the roadside. No infrastructure or facilities existed in Chitedze and respondents described how they 'camped out', in other words, they slept rough. This was not an attractive option for female respondents as highlighted in the following quotes;

*"This place isn't really for women. There is nowhere for us to be. I came to help my husband with the selling. I don't like it here."*

(Female, 38, vegetable seller, Chitedze – Interview statement)

*"It is not safe here because we are near the road and there are no facilities. It is ok for selling [vegetables] but it is not a good place"*

(Female, 23, vegetable seller, Chitedze – Interview statement)

Across all three study sites, when the three proximate reasons for migration were aggregated, there was little difference between the marital status of men and women (see Table 5.3). Of the men who had migrated for economic reasons, over half (59.5% - 53/89) were married. Similarly, amongst the women who had migrated for economic reasons, over half (56.2% - 18/32) were married. A Chi Square test shows that any differences between genders are not statistically significant ($p=0.7$). Of those who had moved to town to be with family/to get married, the majority of both men (60% - 3/5) and women (85% - 20/25) were married. This is perhaps unsurprising given the reason to come to town may have been to get married. Finally, the majority of both men (85.7% - 6/7) and women (88.9% - 8/9) who moved to town for education were unmarried at the time of their move. Again, this is unsurprising given that the average age of education migrants was 15.2 years old.

Overall, these results suggest that when women move to town for economic reasons, they are as likely as men to be unmarried. This suggests that women are as likely as men to be independent economic agents.

**Table 5.3 – Proximate reason for rural-urban migration by gender and marital status (Source: Field questionnaire - Urban)**

| | All motivations % | Economic % | Family % | Education % |
|---|---|---|---|---|
| **Men – married** | 60.3 (61/101) | 59.5 (53/89) | 60 (3/5) | 14.3 (1/7) |
| **Men – unmarried** | 39.7 (40/101) | 40.4 (36/89) | 40 (2/5) | 85.7 (6/7) |
| **Women – married** | 68.9 (42/61) | 56.2 (18/32) | 85 (17/20) | 11.1 (1/9) |
| **Women – unmarried** | 31.1 (19/61) | 43.7 (14/32) | 15 (3/20) | 88.9 (8/9) |

Finally, the average age of first migration varied between urban study sites, but not by gender. Migrants to Lilongwe were younger than migrants to Chitedze and Liwonde. In Lilongwe, the average age of respondents at the point they left their home village was 22.6 years old; in Liwonde, migrants had arrived in town at 24.7 years old; and, in Chitedze, migrants had arrived in town at 25.6 years old. A one-way ANOVA test shows that differences between the sample populations in each site are statistically significant ($p=0.05$), suggesting that migrants to Lilongwe are younger than migrants to Liwonde or Chitedze.

### *5.2.3 Migrants' origins*

The origin (i.e. home region) of respondents migrating for economic reasons varied across the three study sites (see Figure 5.1). In Lilongwe (in the Central region), 41.4% (29/70) of respondents who migrated for economic reasons had originated from within the same region (i.e. the Central region). A further 47.1% (33/70) of respondents had migrated from the neighbouring Southern region. Finally, 11.4% (8/70) of respondents had moved from the Northern region. This pattern closely matches the national population distribution pattern in Malawi where the population is unevenly distributed amongst the three regions: 45% reside in the Southern region, 42% in the Central region and 13% in the Northern region (NSO, 2008).

This suggests that migrants to Lilongwe arrive from all over the country, with a slight over representation from the Southern region. A very different pattern emerged in Chitedze and Liwonde. In Chitedze, almost all (84.6% - 22/26) of respondents had moved from within the same region, and 15.4% (4/26) had moved from the neighbouring Southern region. No one had moved into Chitedze from the Northern region. Finally, in Liwonde (in the Southern region), 100% of respondents who had migrated for economic reasons had moved from within the same region. This suggests that migrants to Chitedze and Liwonde are more likely to be local to the region than in Lilongwe.

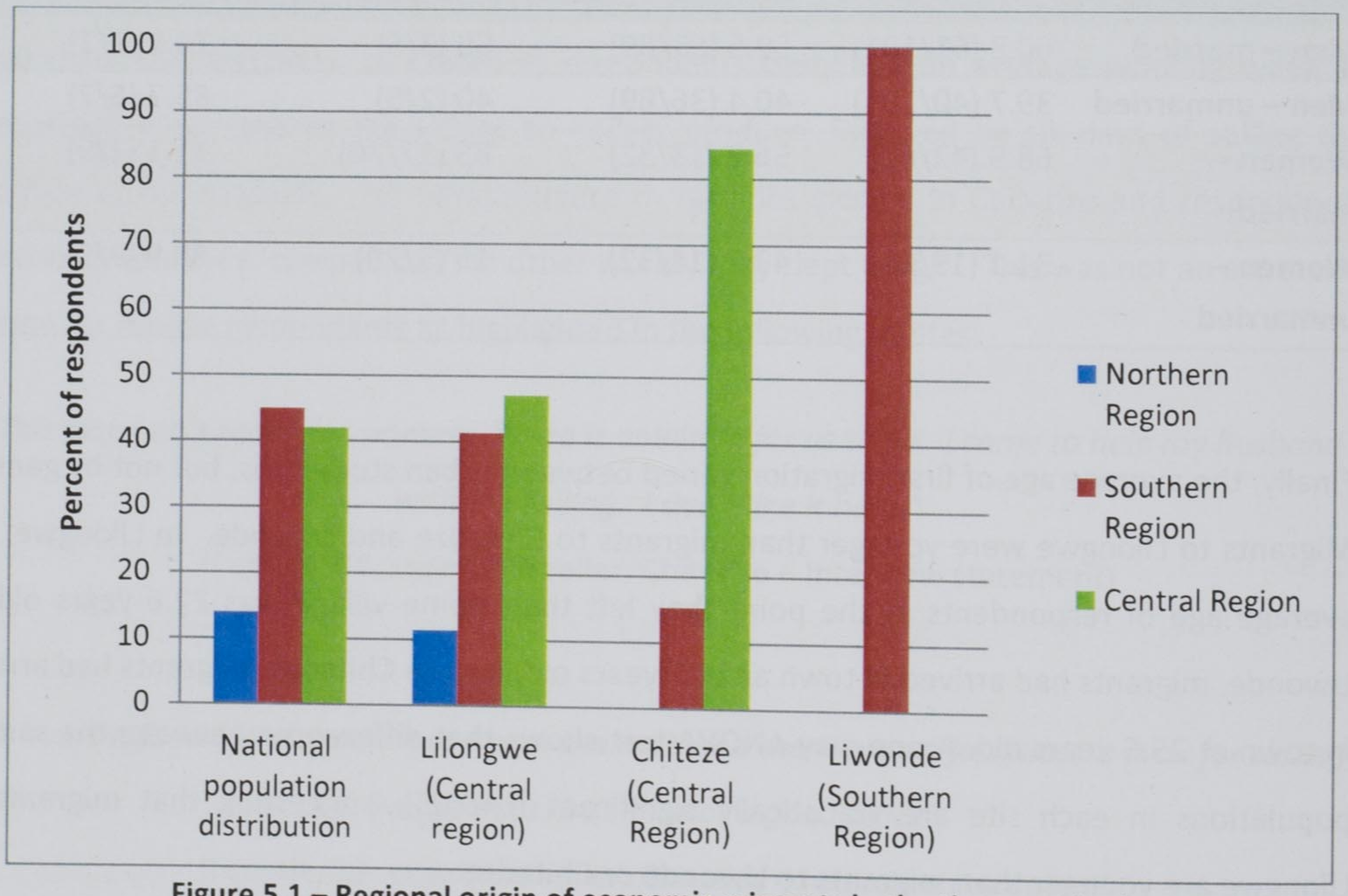


**Figure 5.1 – Regional origin of economic migrants in the three study sites (Lilongwe n=70; Chitedze, n=26 Liwonde n=24) (Source: Field questionnaire - Urban)**

### *5.2.4 Synthesis: who migrates to town?*

In summary, these results suggest that migrants leave their rural homes for three reasons; to make money in town (economic reasons), to get married/to be with family, or for education. Across all three sites, half of female migrants say they migrated for an economic reason. Of these women, half are unmarried, which suggests that women are independent economic actors who migrate to earn money in their own right. However, there is also some evidence that for women the provision of adequate facilities is a factor in their migration choices (the influence of the perception of urban facilities on rural-urban migration decisions is explored in

more depth in Chapter 6, Section 6.3.3). Whilst the results show that women do participate in economic migration, rural-urban migration in Malawi is still dominated by males. Whilst half of female migrants move to town primarily to make money, men still make up the greatest proportion of economic migrants; across all three sites, women accounted for 26.4% (32/121) of economic migrants, whilst men accounted for 73.5% (89/121). This proportion of women in town is lower than may be expected for Southern Africa. For example, Posel and Casale (2003) point out that women account for 41% of labour migrants to urban areas across SSA. Finally, Lilongwe appears to attract younger migrants from across the country, whereas regional centres (e.g. Liwonde and Chitedze) appear to attract slightly older migrants from areas nearby.

## 5.3 Migration capabilities

As illustrated in the literature review (Chapter 2), understanding migration patterns also requires an understanding of the basic assets that a migrant has to begin with. This is especially important for understanding the impact of stresses and shocks on migration as stresses and shocks are likely to affect assets (Chambers and Conway, 1992a). This study used a questionnaire, in-depth interviews and focus groups to collect data on the capital assets of rural-urban migrants in the context of the household they left in their village of origin. As outlined in Chapter 4, only three of the five capital assets in the SLF are used; these are financial, human and social capital (see Chapter 4, Section 4.5 for a review of the theory behind using these capital assets as the basis of livelihoods assessments). Exactly how financial, human and social capital may be affected by climate change is explored in more detail in Chapter 6 and 7. The remainder of this section explores how financial, human and social capital informs migration capability for migrants to Lilongwe, Chitedze and Liwonde.

### *5.3.1 Financial capital*

The commonly held perception of migration is that middle-income households migrate away from the village in search of economic opportunities (de Haan and Yaqub, 2009, and see Chapter 2, Section 2.3). To understand if this is the case in Malawi, the financial capital of respondents in Lilongwe, Chitedze and Liwonde was assessed. The assessment of financial capital was based on two criteria; the first was the level of farming productivity in the

respondents' rural household, i.e. the household that they were a member of at the time of their migration to town. The second was through the rural households' relationship with off-farm temporary work on other people's fields, known as *ganyu*. The methodology for this is explained in more detail in Chapter 4, Section 4.4.3.

Nationally, the level of farming productivity in Malawi is low (GoM, 2006, Denning et al., 2009). As discussed in Chapter 3, only 10% of Malawian maize growers are net-sellers, with 60% being net-buyers. The remaining 30% are intermediate farmers (Dorward and Chirwa, 2011). In Liwonde and Chitedze respondents from the intermediate farmer group were disproportionality represented (see Figure 5.2). Specifically, in Chitedze 65.4% (17/26) were intermediate farmers, 26.9% (7/26) of respondents were net-sellers (7/26) and 7.7% (2/26) were net-buyers. In Liwonde, 69.5% (16/23) were intermediate farmers, 26.1% (6/23) were net-buyers, and 4.3% (1/23) were net-sellers. These results suggest that in Chitedze and Liwonde, migrants fit the 'empirical regularity' that it is the middle-poor who are most likely to migrate. However, in both sites, net-sellers (who are from better-off households) are over-represented and net-buyers are under-represented, which highlights the importance of financial capital in migration. The importance of financial capital is even more evident in Lilongwe, where the results begin to depart from the 'empirical regularity' that it is the middle-


**Figure 5.2 – 'Farmer type' of migrants to the three study sites compared to national average**
**(Lilongwe n=69; Liwonde n=23; Chitedze, n=26)**
**(Source: Field questionnaire - Urban)**

poor who are most likely to migrate. Specifically, the results show that almost half (49.2% - 34/69) of the respondents in Lilongwe had left rural households that, at the time of migration, were net-sellers of agricultural products, and therefore from 'better-off' households. A further 37.6% (26/69) of migrants in Lilongwe had left rural households that were intermediate famers. Only 13% (9/23) of respondents had left households that were net food buyers. A Chi Square test shows that differences between the villages are statistically significant (*p=0.03*). This suggests that a higher level of financial capital is needed to move to Lilongwe than is needed for Liwonde or Chitedze. One explanation for the fact that more net-sellers move to Lilongwe is that they are there to sell their surplus of crops. However, data that were collected to explore the nature of work undertaken by migrants suggests that migrants are employed in a variety of roles in the informal market. The majority of respondents (33.8% - 22/65) were involved in services, for example, security guards, cleaners and waitresses in local restaurants. Only 15.4% (10/65) sold crops, and a further 12.3% (8/65) sold food items such as donuts or milk. Just over a quarter of respondents (26.1% - 17/65) sold non-food items such as vouchers for airtime (for mobile phones), clothing, and hardware. Finally, 12.3% (8/65) worked on an ad-hoc basis in whatever role they could get.

The second method of assessment of household wealth examined the extent to which households engage in *ganyu.* Analysis of Malawi's Integrated Household Survey (IHS) showed that nationally only 14.4% of rural households were able to pay others for their labour as the majority did not have the financial capability to do so (Dimova et al., 2004). The results of this study show that 55.7% (39/70) of respondents in Lilongwe had left rural households who regularly employed *ganyu* labour. This is four times higher than the national average. A similar picture emerged from Liwonde where 65.2% (15/23) of respondents reported leaving households that employed *ganyu* labour. However, in Chitedze, only 29.6% (8/27) of households employed households to do *ganyu*. A Chi Square test shows that differences between locations are statistically significant (*p=0.02*), which again suggests that migrants to Chitedze are from poorer households.

Although the majority of migrants in all three locations were from better-off or intermediate rural households, they did not always directly rely on these households to fund their migration (see Figure 5.3). Instead, almost half (46.4% - 31/69) of respondents in Lilongwe and 34.6% (9/26) of respondents in Chitedze funded their move to town by calling on their urban networks for 'gifts'. However, the household's status as better-off was still important as it was only the better-off households that were able to call on urban networks for a 'gift'. This is

because most of the people in the urban networks were other family members who had once been or were still part of the same 'better-off' rural household in the home village. For example, 68.7% of migrants to Lilongwe had a parent, sibling, spouse or other family member in town that they had relied on for support in the first few weeks following their migration (this is described in more detail in Section 5.3.3). Urban networks were a less important source of migration funding in Liwonde; only 8.3% (2/24) of respondents had funded their migration in this way.

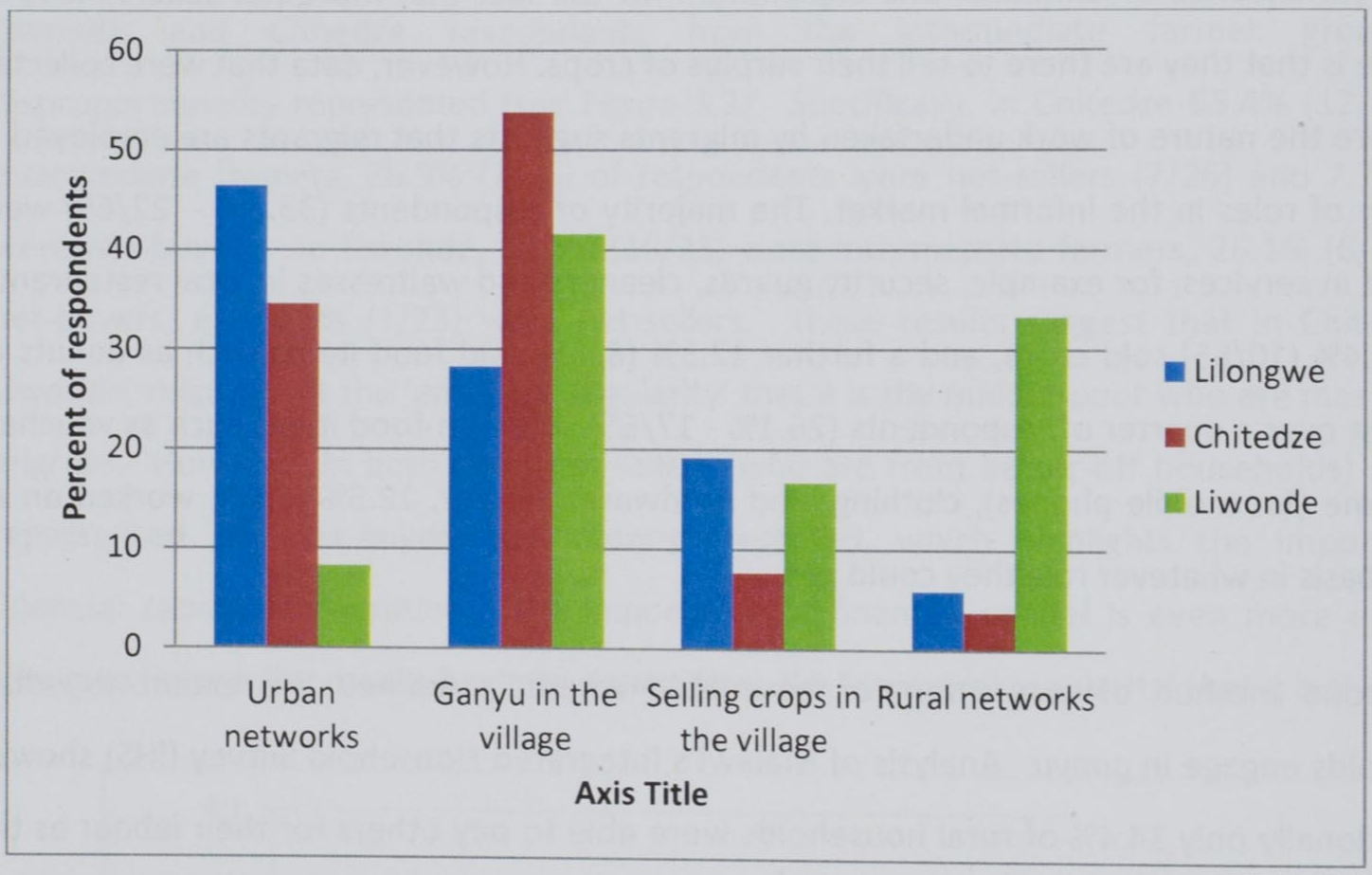


**Figure 5.3 – Source of finance for rural-urban migrants in each of the three urban sites (Lilongwe n=69; Chitedze, n=23 Liwonde n=26) (Source: Field questionnaire - Urban)**

The alternative to financing migration through urban networks was to call on money from the village, either from rural social networks, selling crops or doing *ganyu* for other households. In Liwonde, 33.3% (8/24) of respondents had funded their migration by calling on their rural networks – this was usually their own household, or a closely related rural household (i.e. grandparents or siblings). In contrast, only 5.9% (4/67) of respondents in Lilongwe and 3.8% (1/26) of respondents in Chitedze called on their rural networks. Almost a fifth (19.4% - 13/67) of respondents in Lilongwe, 7.6% (2/26) of respondents in Chitedze and 16.7% (4/24) of respondents in Liwonde sold crops to fund their moves to town.

Almost a third (28.3% - 19/67) of respondents in Lilongwe had directly funded their move to town with money earned from providing their own labour as *ganyu*. The figure was even higher for respondents in Chitedze where 53.8% (14/26) had used *ganyu* to fund their move, and finally in Liwonde, 41.6% (10/24) had done the same. This finding suggests a departure from the pervasive view that *ganyu* is a contributor to poverty (Ellis et al., 2003). This does not undermine the idea that poorest households are the most likely to offer their labour and better-off households are the most likely to provide paid opportunities. However, 'better-off' households were able to use *ganyu* to generate extra income without compromising food security and production. This finding fits with a new conceptualisation of *ganyu* (i.e. it is not always a cause and effect of poverty). For example, Orr et al. (2009) argue that ganyu does not always lead to a loss of own farm productivity. Instead, for better-off households, *ganyu* may represent an important source of additional income to be used for the purchase of fertilizer and other productivity promoting activities. This research suggests that one of these activities may be migration.

The importance of having enough financial capital to move to town was discussed in the focus groups. During the focus groups, participants dismissed high transport costs as a barrier to migrating, but highlighted the expense of the first few days and weeks in town before a job was secured. This is illustrated in the following quotes;

*"Taking the matatu [bus] to town is not the problem, because you only have to do this once. It is possible to borrow the money for this, or to use your own money. But arriving in town with no money is the problem. In town you have to pay for water and food. You cannot arrive with nothing because you will not survive."*

(Male, Lilongwe – Focus Group Statement)

*"Life in town is so expensive because we have to pay for crops, even food like okra has a cost. So money is very important here. You cannot come to town with nothing in your pocket or you will die before you get a job."*

(Female, Lilongwe – Focus Group statement)

*"Even if you have a good friend or your brother in town, you need to know there is enough money so you can eat too. You cannot expect your brother to give you all his money."*

(Male, Lilongwe – Focus Group statement)

Overall, these results suggest that a high level of financial capital is needed to leave the village and move to town. Migration to Lilongwe may require the greatest amount of financial capital as more migrants to the capital were from better-off households than in Liwonde or Chitedze. Importantly, the financial capital needed to move to town is not always generated from the village, but also comes from within the city itself. This is important given that some researchers (e.g. McLeman and Hunter, 2010, Government Office for Science, 2011) suggest that would-be migrants may be prevented from migrating if climate change affects their ability to generate financial capital in the village. However, if capital can be accessed in town, would-be migrants may still be able to migrate even if rural productivity declines. This is explored in more detail in Chapters 6 and 7.

### *5.3.2 Human capital*

Broadly, human capital refers to knowledge, skills and qualifications. For this reason, the questionnaire collected data from respondents on the length of time they had attended school, and their highest qualification. In addition to the quantitative data collected during the survey, qualitative data from the interviews and focus groups is presented.

**Table 5.4 – Average years of education/highest grade achieved for respondents in the three urban study sites (Source: Field questionnaire - Urban)**

| | Malawi Average | Migrant Average (n=129) % | Lilongwe (n=55) % | Chitedze (n=27) % | Liwonde (n=47) % |
|---|---|---|---|---|---|
| **Average (yrs)** | 3.2[a] | 7.3 | 7.9 | 7.1 | 7.4 |
| **Men** | | | 8.2 | 7.2 | 8.2 |
| **Women** | | | 7 | 6.6 | 6.1 |
| **No education** | 72[b*] | 4.6 (6/129) | 3.6 (2/55) | 0 | 8.5 (4/47) |
| **Primary School Leaving Certificate** | 8.9[c] | 40.3 (52/129) | 32.7 (18/55) | 55.5 (15/27) | 40.4 (19/47) |
| **Junior Certificate of Education** | 6.5[c] | 28.6 (37/129) | 23.6 (13/55) | 37 (10/27) | 29.8 (14/47) |
| **Malawi Secondary Certificate of Education** | 2.6[c] | 24.8 (32/129) | 36.3(20/55) | 7.4 (2/27) | 21.2(10/47) |
| **Tertiary** | 0.7[c] | 1.5 (2/129) | 3.6 (2/55) | 0 | 0 |

The PSLC (Primary School Leaving Certificate) is awarded after 8 years at school; JCE (Junior Certificate of Education) is awarded after 10 years at school; MSCE (Malawi Secondary Certificate of Education)is awarded after 12 years at school; tertiary relates to college or university
([a] Word Bank (2010) [b] FAO (2011) [c] Benson (2002)
*this is the average for the Central Region

The results from the questionnaire (see Table 5.4) show that the average length of education for respondents in Lilongwe was 7.9 years. On average, men had attended school for 8.2 years, which is a year and two months longer than women who had attended for 7 years. In Chitedze, migrants had on average attended school for 7.1 years with men having around six months' more education than women – men had attended school for 7.2 years compared to women who had attended for 6.6 years. Finally, in Liwonde, the average time spent in education was 7.4 years, with men attending school for 8.2 years and women for 6.1 years. Given that the average time spent in education in Malawi is just 3.2 years (World Bank, 2011), it is clear that respondents in all the study sites were better educated than average. In this context, it is perhaps unsurprising that the proportion of the migrant population with no educational attainment (i.e. a formal certificate following school exams) was exceptionally low when compared to the national average. For example, data from a report by the Food and Agricultural Office (FAO, 2011) shows that 72% of people in the Central region have no formal education compared with only 3.6% of rural-urban migrants in Lilongwe (which is also in the Central region). Furthermore, a greater proportion of respondents in Lilongwe had a MSCE (Malawi Secondary Certificate of Education) qualification, which is awarded after 12 years at school. This suggests that migrants to Lilongwe are better educated than migrants to Chitedze or Liwonde.

During the focus groups and in-depth interviews, the importance of an education for participation in the urban economy, even in the least skilled jobs, emerged as a well-recognised fact; without an education it was felt that there would be no opportunity for migration. This is illustrated in the following quotes;

*"The guy here [respondent points to a young man in middle of the market] walks round and sells these plastic bags to shoppers. He gets into trouble because he cannot count. At the end of the day, he counts the bags and he counts the money he has taken, and nothing matches. He will not survive this job for long!"*

(Male, 25, fruit seller, Lilongwe - Interview statement)

*"...some of the people at home must know that leaving the village is not a possibility for them because they did not complete school. Some even have no education. They will just have to stay and farm in the village because what else can they do?"*

(Male, 32, brick layer, Lilongwe - Interview statement)

*"I worked hard at school and I was lucky because my mother was ambitious and made me work hard. When I complete school I know I would come to town straight away to make some money and be independent because I did not want to just stay in the village and be a farmer. I could use my education to do better."*

(Female, 42, secretary, Liwonde - Interview statement)

The results presented here show the importance of education for participation in the Malawian urban economy even at the most informal level. A similar finding was reported by Kishindo (1995) in his study of Malawian 'bar-girls' (a colloquial term for prostitutes) where it was found that all women had achieved at least five years of education. One interpretation of this is that bar-owners expected the women to have basic literacy and numeracy skills before they could be employed. In Malawi, education is the passport to higher earnings and off-farm opportunities.

### *5.3.3 Social capital*

As was described in Section 5.5.1, social networks can assist in funding migration – 46.4% of respondents in Lilongwe, 41% of respondents in Chitedze and 15.3% of respondents in Liwonde had financed their move to town through their urban social networks. To further ascertain the importance of social networks in Malawi, quantitative data from the questionnaires from Lilongwe[3] as well as the qualitative data from the focus groups and in-depth interviews in all three study sites were examined. Specifically, the relationship between the respondent and the person who supported them on their arrival in town was explored.

The quantitative data from Lilongwe show that no respondent in the study had moved to town independently (i.e. all respondents had a friend or family member in town with whom they stayed during the first few days, weeks or months). Over two-thirds (65.9% - 31/47) of men and over half (52.9% -9/17) of women stayed with immediate family members (such as parents or siblings) or extended family members (such as aunts or uncles) when they first arrived in town (see Figure 5.4). Around a quarter (23.5% - 4/17) of women were supported by a spouse. A minority (8.5% - 4/47) of men were supported by an employer. For example, one male

[3] Only the data from Lilongwe is used because discrepancies in data from Chitedze and Liwonde were found.

respondent had moved to Lilongwe to become a 'garden-boy[4]' and had moved directly into the house of his employer. The sample size is too small to infer statistically significant differences between men and women's social networks. However, a Chi Square test to examine difference between men's and women's family and friends networks shows no statistical difference between genders (*p=0.5*).

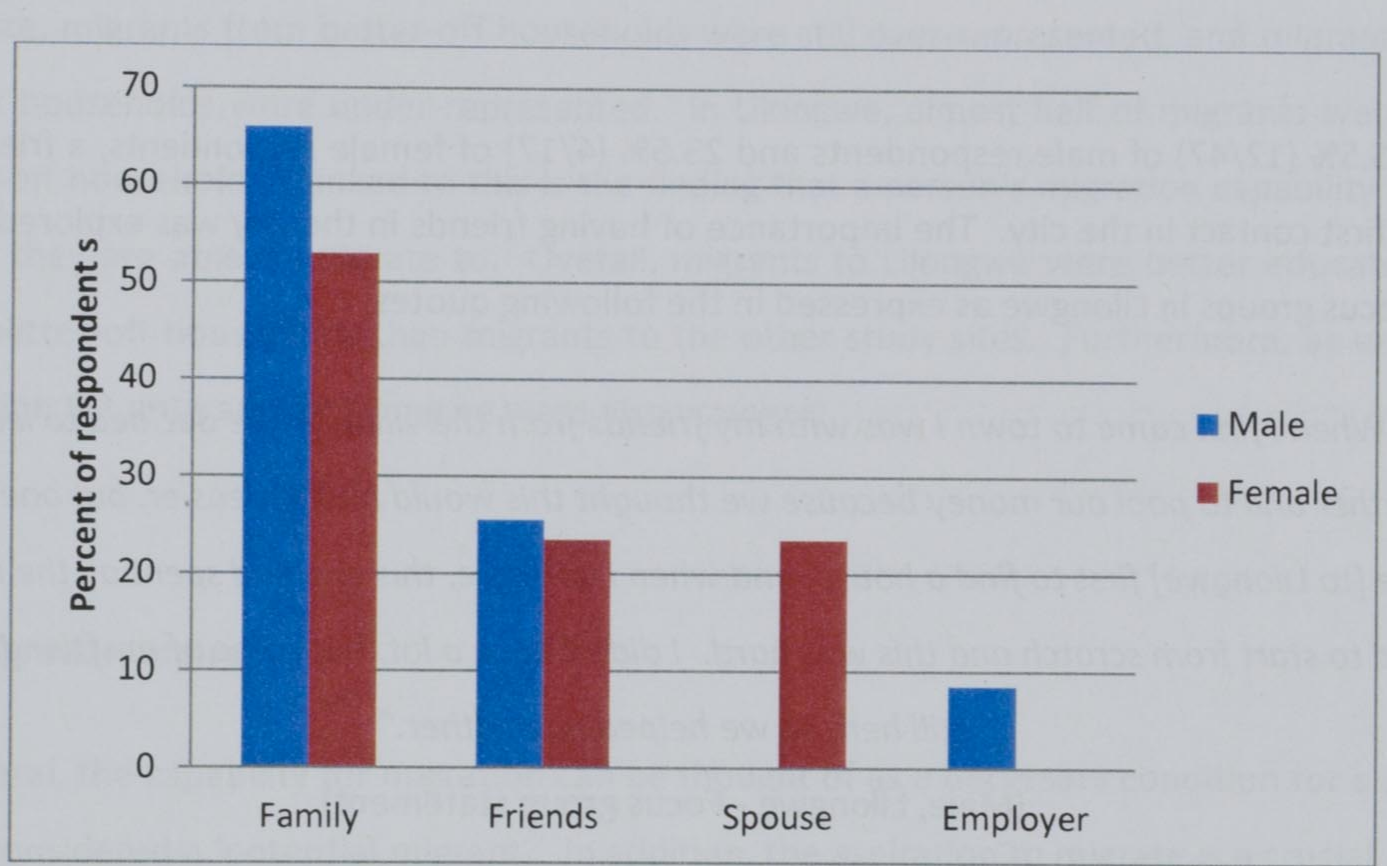


**Figure 5.4 – Composition of social networks used by male and female migrants to Lilongwe (Male n=47; Female n=17)**
**(Source: Field questionnaire - Urban)**

The composition of men and women's family networks were explored in greater detail. For 8.5% (4/47) of men and 11.7% (2/17) of women who had relied on family to support their move, a parent was the first contact in town. A member of the extended family was the first point of contact for 21.2% (10/47) of men and 11.7% (2/17) of women. For both men and women, a sibling was the most likely choice of family member; 36.1% (17/47) of men in the family category stayed with a brother or sister on arrival, and 29.4% (5/17) of women did the same. A Fisher's exact test shows that any differences in responses between genders are not statistically significant (*p=0.7*). The role of siblings in the city was discussed in the focus groups and interviews, and male participants in particular felt a duty to facilitate their brothers' migration. For example, one participant explained;

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[4] A garden-boy is someone who looks after the outdoor space in a large home on a plot of land. Traditionally, garden-boys have been employed by non-African (usually European) families, but are increasingly employed by middle-class Malawians. Because of this, the term garden-boy has Colonial era connotations.

*"My brother helped me to come to town because he was doing well here. He showed me town and helped me. I still live with him and I give him money, but now I need to be independent from him. If I become independent in town my other brothers could come and stay with me and I could help them."*

(Male, 22, CD salesman, Lilongwe – Interview statement)

For 25.5% (12/47) of male respondents and 23.5% (4/17) of female respondents, a friend was their first contact in the city. The importance of having friends in the city was explored during the focus groups in Lilongwe as expressed in the following quotes;

*"When I first came to town I was with my friends from the village. We decided to leave together and to pool our money because we thought this would make it easier, but one friend came [to Lilongwe] first to find a house, and when I got here, this one had spent all the money. I had to start from scratch and this was hard. I didn't have a lot, but some of my friends were still here so we helped each other."*

(Male, Lilongwe - Focus group statement)

*"Life would be bad without your friends in town. You have someone to turn to; someone to play football with. When life is hard you help each other. When your friends are the ones from the village it is like your brothers are in town with you. "*

(Male, 30, car part sales, Lilongwe – Interview statement)

### *5.3.4 Synthesis: what constitutes a migration capability?*

These results suggest that a rural-urban migration capability is based on a relatively high level of financial, human and social capital. Importantly, a mix of all three capitals is important in forming a migration capability. Financial capital is needed to ensure that the migrant who does not yet have a job can buy food and other essentials as soon as they arrive in town. In order to gain work, migrants must have high human capital in the form of education. Education is essential for even the most menial jobs such as selling plastic bags on the market. However, a move is unlikely to take place without social capital. Social capital in the receiving region is important for both men and women as the presence of a friend, family member, spouse or employer helps them facilitate their move practically, emotionally, and often financially. By suggesting that a high level of capital is needed for migration to take place,

these findings contribute to the literature on the link between migration and poverty (e.g. de Haan, 1999, de Haas, 2007), which is limited and mixed (Waddington and Sabates-Wheeler, 2003). The findings also begin to diverge from the 'empirical regularity' that the poorest and richest are actually the least likely to migrate (de Haan and Yaqub, 2009). In this case, although migrants were most likely to be from intermediate households in Liwonde and Chitedze, migrants from better-off households were still over-represented, and migrants from poorer households were under-represented. In Lilongwe, almost half of migrants were from better-off households. Linked to this is the finding that a person's migration capability affects where they are able to migrate to. Overall, migrants to Lilongwe were better educated and from better-off households than migrants to the other study sites. Furthermore, as explored in Section 5.2, migrants to Lilongwe were also younger.

## 5.4 Migration aspirations

In general, the capability for migration can be thought of as a necessary condition for a person to be considered a 'potential migrant'. In addition, the aspiration to migrate is a crucial part of the migration process. Without the aspiration to migrate, the level of voluntariness relating to the migration decision is likely to be low. Some researchers have described migrants who move in the absence of a migration aspiration as 'unwilling' migrants or 'forced' migrants, and a link between forced migration and environmental change is often highlighted (see Bates, 2002). To explore this link more thoroughly (as I do in Chapter 6 and Chapter 7), a basic understanding of what constitutes an urban migration aspiration is needed. This goal of this section is to unpick the migration aspirations of economic migrants more thoroughly. Data from focus groups and interviews with self-identified willing and reluctant migrants are presented.

### *5.4.1 Willing migrants*

Willing migrants were those who, during the questionnaire, stated that they had wanted to move to town and that they would not rather have stayed at home in the village if that had been possible. In all three study sites, willing migrants accounted for the majority of participants. In Lilongwe, 92.7% (90/97) were willing migrants; in Chitedze and Liwonde all respondents identified as willing migrants.

In both the male and female focus groups in Lilongwe, willing migrants were asked why they had decided to move to town. All participants immediately agreed that the desire to make money had been their prime motivation. Participants were asked to expand on this and were asked why they wanted to make money, and why they wanted to do this in town. At this point, in both groups, the theme of 'greener pastures' emerged. Participants described how greener pastures were the goals of two pursuits. The first was the obvious economic goal of migration (i.e. to make money), and the second was the sense of personal adventure that the migration experience provided. Both goals are closely interlinked and almost impossible to separate. This is because a move to the city was about more than just money, but money was needed to access new experiences. All participants at the men's focus group discussed the excitement of town and how their eyes had been metaphorically opened by new sights and sounds and a different way of living. This is expressed by the following statements;

*"I came to town because I was bored of the village. I wanted to see new things and experience a new place."*

(Male, Lilongwe - Focus group statement)

*"I needed to be independent so I came to Lilongwe. We can do more here. There's entertainment here, we can watch movies at the video store. In the village we couldn't ever do that. Even if we had the money we would have no place to go. There is no entertainment at home. I needed to be free of that. You know, make some money and be free..."*

(Male, Lilongwe - Focus group statement)

*"Town opens your eyes and you see things that people in the village can't see. You become independent. In the village it is boring because you have to be a farmer and there is no entertainment. In the city, life can be hard, but at least we can have entertainment. We have places to watch football on a television! Life is very different here!"*

(Male, Lilongwe – Focus group statement)

*"I came here for greener pastures. I want to be free in town, make some money, see the culture of town, and see something different from the village."*

(Male, 26, fruit seller, Lilongwe – Interview statement)

*"The farming life is not for us. We are men are the city! We can see different cultures in the city. You would never see that in the village. It is just farming."*

(Male, 19, electrician, Lilongwe – Interview statement [see figure 5.5])


**Figure 5.5 – Two young men dismiss the farming life**

A similar picture emerged from the women's focus group, where the desire to escape the traditionalism that is pervasive in the village informed migration aspirations. In particular the focus groups revealed that women, more than men, wanted to be free from the domestic burdens of village life as well as the traditional expectations relating to being a woman. The following three quotes illustrate this;

*"If you stay in the village there is only one life you can have. Of course you will be a farmer. Of course you will be a housewife. Of course you will live a life like your mother or your sisters. But in the town, you can be free from that life."*

(Female, Lilongwe - Focus group statement)

*"In the village people are jealous and they gossip. Everyone knows your business."*

(Female , Lilongwe, Focus group statement)

*"In the village everyone, EVERYONE, wears a chitenje [long skirt]. There is no choice because if you didn't wear it people would gossip. The men would think you were a prostitute and the women wouldn't want to talk to you. In town thought I would wear different clothes, but it is only the prostitutes that wear trousers.. It would not be good to go without."*[5]

(Female, 25, sells papers, Lilongwe – Interview statement)

*"Why would I want to stay in the village and carry water on my head? I have a tap here in my garden. Why would I want to be married and be a housewife? Why would I want to be a farmer? I am a secretary here in the town. I have money and I can drink green*[6] *at the bar! What is there for me in the village? Nothing. My life is here in this town."*

(Female, 38, secretary at an agricultural organisation, Liwonde – Note from field dairy)

These findings support the idea that an important aspect of migration is to achieve social and economic independence to make the transition from child to adult (Punch, 2002, Laoire et al., 2010). The results also suggest that the cultural role of the city is important in Malawi. This supports the 'bright lights' theory, which suggests that people make (often irrational) decisions to move to town as they are drawn by the excitement of the city (see Harris and Todaro, 1970). This departs from Potts' (2010) argument who suggests that in Zimbabwe, young people do not necessarily move from rural areas to towns to be part of an exciting culture that is not available at home, or to make use of urban facilities. Overall, these findings feed into the nascent literature on the cultural role of the African city, which is rarely studied as there is an academic pre-occupation with urban development and poverty reduction (Robinson, 2002, 2006, Pieterse, 2010). This research suggests that for willing rural-urban migrants in Malawi, the city represents an exciting space that allows them a certain degree of emotional, social and economic freedom from the constraints of village life.

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[5] In mid-January 2012, the BBC reported that women wearing trousers on the streets of Lilongwe and Blantyre had been attacked, prompting the President to announce *"You are free to wear what you want. Women who want to wear trousers should do so, as you will be protected from thugs, vendors and terrorists."*

[6] "Green" is the commonly used name for the domestically brewed European lager, Carlsberg – throughout Malawi it is known by the colour of its distinctive green bottle.

### *5.4.2 Reluctant migrants*

Reluctant migrants were those who, during the survey, said they had not wanted to move to town and that they would rather have stayed at home if that was possible. This group was only visible in Lilongwe, where 7.3% (7/97) identified as reluctant migrants. All were women and all were unmarried, widowed, divorced or separated from their husband (see Figure 5.6).

Reluctant migrants were not looking for greener pastures in town. Instead, the urban migration 'decision' was one of necessity and made after their rural livelihood became unsustainable. Although migration to town had not previously formed part of their life-plan, the need to move away from a failing livelihood outweighed the desire to remain at home. Although the sample of women was too small to make statistical inferences from, the

**Figure 5.6 – Four of the five 'reluctant migrant' focus group members in Lilongwe**

qualitative data suggests that when the women left their rural homes, they all had high social and human capital, along with declining financial capital. All the women had more than six years of education; all had a friend or relative to stay with on arrival in the city; and all were experiencing financial hardship at home. This is expressed in the following quotes (and in Box 5.1);

*"I brought my baby to town when my husband moved to a new village. It is not easy to be here alone with a baby, but I did not want to stay in the village once my husband had left. It would be hard to manage the farming on your own and my husband's family would not help me once he died."*

(Female, reluctant migrant, Lilongwe – Focus group statement)

*"When my husband died I came to town to sell vegetables and send money back to the children. But if your husband dies, or if you are in a bad situation and you don't know anyone in town and no-one can look after your children, then how can you come. You would just be wandering in town with your children. You can't do this"*

(Female, reluctant migrant, Lilongwe – Focus group statement)

*"Back at home we used to eat and we used to be ok. But last year, when the crops failed, and we didn't have any money...[I came to town]...for the children...they had to eat. Now I sleep in the market and send home money for them."*

(Female, 28, tomato seller, Lilongwe – Interview statement)

**Box 5.1 – A case study of a reluctant migrant**

**Sarah Phiri, 40, a reluctant migrant to Lilongwe**

Sarah Phiri is from a small village in Nsanje District in the Southern Region. Sarah is 40 and she has two daughters and four sons. The oldest child is 23, and the youngest is five. Until 2010, Sarah lived with her husband and children at home in the village. The family had almost 2 acres of land, and nearly all of this was cultivated. Despite suffering the cumulative effects of two years of localised drought, Sarah's household was able to sell maize and generated a small profit each year. This profit was topped up by income from an additional business selling >home brew< why the >< at the side?. Altogether, the family felt well off and were able to exceed their basic needs. When Sarah's husband died (in 2009) the family's income began to decline. Sarah explained;

*"...we weren't getting enough crops in the village and I now had to provide for my six children alone. My oldest son is 23 but he has special needs. He cannot help me. The youngest is five. I had a lot of responsibility. It was hard, especially because we had suffered from no rain in the village. I could not manage this on my own."*

Sarah's sister offered to look after the children leaving Sarah free to join another sister in town. She now sends money back to her children and sister in the village and feels better able to support the family. However, this arrangement meant that Sarah sometimes had to sleep rough in the market. She explained;

*"I do a small-scale business in town. I sell fruit in this market. I buy boxes of tomatoes from the next district along and I come to town and sell them. I stay with my sister, but if I have a lot of tomatoes to sell and I want to sell early, I sleep in the market with the other women."*

During the focus groups it also emerged that social capital from within the village played an important role in facilitating migration. Participants felt strongly that without a strong and supportive rural social network, they would have not been able to leave the village. This is illustrated in the following three quotes from the focus groups and interviews;

*"I was lucky that my oldest daughter could take the younger children. All the children live with my mother but it is my oldest daughter who cares for them."*

(Female, reluctant migrant, Lilongwe – Focus group statement)

*"It is not possible to come to town if you have no-one to care for your children. Yes, you can bring the baby, but if you have other children, what do you do with them in town? You cannot arrive at your friend's house and say 'can you take all of my children into your house?' This is not fair to their budget."*

(Female, reluctant migrant, Lilongwe – Focus group statement)

*"I came to town because I could leave the children with my sister. If she could not take them I could not come to town, because I could not bring the children."*

(Female, reluctant migrant, Lilongwe – Focus group statement)

In the case of reluctant migrants, it could be argued that the cause of migration was the interaction between social processes and environmental change. A wife whose husband dies is left without the financial capital needed to successfully maintain the household's land. Environmental shocks the household could once have overcome now send the family into a spiral of poverty. To ensure that their households do not fall into poverty, the women use their high human and social capabilities to move to town and make money which they send back to the rural house. They aspired to come to town, an aspiration born out of necessity, but an aspiration nonetheless. They came in the face of diminishing financial capital, and were able to use their social and human capital to migrate.

## 5.5 Rural-urban linkages

The common view within the literature is that most migration is circular; migrants do not see their moves as permanent and they intend to return to the village (e.g. Potts 2010). Similarly, the most common perception of the flows of money and goods within a migration system is that they are one-way transfers from urban to rural households (see Chapter 2 for a full discussion of these topics). To explore the relevance of this for Malawi, this section examines the current duration of respondents' stay in town, the linkages migrants retain with their rural homes, and their future plans including a possible return to the village.

### *5.5.1 Current duration in town*

Data from the social survey shows that in Lilongwe, over half (52.1% - 36/69) of respondents had been in town for more than ten years; 27.5% (19/69) of respondents had been in town between one and five years; and 20.3% (14/69) of had been in town for a year or less (see Table 5.5). For the overwhelming majority (87.1% - 61/70) of migrants moving to Lilongwe, this was their first time in town meaning that they had only migrated once; 8.5% (6/70) had migrated twice; and only 2.8% (2/70) had migrated three or more times.

**Table 5.5 – Permanence of migration in the urban study sites (Source: Field questionnaire - Urban)**

| | Migrant Average % | Lilongwe % | Chitedze % | Liwonde % |
|---|---|---|---|---|
| **Length of current migration** | | | | |
| Less than 1 year | 20.8 (30/144) | 20.3 (14/69) | 18.5 (5/27) | 22.7 (11/48) |
| 1-5 years | 36.8 (53/144) | 27.5 (19/69) | 40.7 (11/27) | 47.9 (23/48) |
| More than 5 years | 21.5 (31/144) | 27.6 (17/69) | 22.2 (6/27) | 16.6 (8/48) |
| More than 10 years | 20.8 (30/144) | 27.5 (19/69) | 18.5 (5/27) | 12.5 (6/48) |
| **Number of migrations made in respondents' lifetime** | | | | |
| One | 88.8 (106/120) | 87.1 (61/70) | 92.6 (25/27) | 86.9 (20/23) |
| Two | 9.1 (11/120) | 8.5 (6/70) | 3.7 (1/27) | 13.1 (3/23) |
| Three or more | 2.5 (3/120) | 2.8 (2/70) | 3.7 (1/27) | 0 (0/23) |

Similarly, in Chitedze, 18.5% (5/27) had been in town for more than ten years; 22.2% (6/27) for between five and ten years; 40.7% (11/27) for fewer than five years and just 18.5% (5/27) of respondents had been in the area for less than a year. The majority (92.6% - 25/27) of respondents in Chitedze had migrated just once; 3.7% (1/27) had migrated twice and 3.7%

(1/27) had migrated three or more times. A similar picture emerged in Liwonde where 12.5% (6/48) had been in town for more than 10 years; 16.6% (8/48) for between five and ten years; 47.9% (23/48) had been in town for fewer than five years and just over a fifth (22.7% - 11/48) had been in town for a year or less. The majority (86.9% - 20/23) of respondents had migrated once and 13.1% (3/23) had migrated twice. No-one had migrated three or more times.

If permanent migration in Malawi is defined as migrations lasting more than five years, as it is by Lewin et al. (2012), then the results in this study suggest that many migrants in Malawi are permanent, and therefore less circular, than has previously been assumed. More specifically, 42.3% (61/144) of migrants across all three sites had been in town for five years or more and can be classed as permanent. Over half (52.1% - 36/69)) of migrants to Lilongwe can be classed as permanent, as can 40.7% (11/27) in Chitedze, and 29.1% (14/48) in Liwonde. A Chi Square test comparing those who have been in town for more than five years, with those who have been in town for less than five years shows that differences between study sites are significant ($p=0.04$). This may suggest that moves to Lilongwe are more permanent than moves to Liwonde or Chitedze, but it may also suggest that migration to Liwonde and Chitedze is a more recent phenomenon.

### *5.5.2 Future plans*

Respondents in all three sites were also asked if they planned to leave their current location within the next five years. Less than half (45.8% - 44/96) of respondents in Lilongwe thought they would return home within the next five years. Similarly, in Liwonde, 43.5% (17/39) of respondents said they would like to return home within five years. In Chitedze, the figure was higher and 62.9% (17/27) said they would like to return home within five years. There were no gender differences between future plans with men and women giving similar responses. Furthermore, answers did not differ between new migrants and more experienced migrants.

Future plans were explored in more depth in Lilongwe. In the questionnaire, respondents were asked where and why they wanted to make their next move and the factors that may affect their migration decisions. Four main groups emerged. These were (1) potential returnee migrants (who would leave the city and move back to the village); (2) potential step migrants/urban-urban migrants; (3) potential international migrants; and (4) potential permanent urbanites (see Table 5.6). These groups were explored in greater detail during the

Table 5.6 – Exploration of reasons for the next move of respondents in Lilongwe (n=96) (Source: Field questionnaire - Urban)

| What will your next move be? | Why do you want to do this? | What could affect these plans? |
|---|---|---|
| **Return to the home village (potential returnees) (45.8%, - 44/96)** | Home is best (54.5% - 24/44) | Nothing, I want to return home (91.6% - 22/24)<br>I would stay if I made more money in town (8.3% - 2/24) |
| | Life here is hard; I have no money and no land (38.6% - 17/44) | Nothing, I don't think life will get better (5.8% - 1/17)<br>More money and land and a chance to do business because I want to stay and I cannot return home with nothing (94.1% - 16/17) |
| | The City Assembly do not want migrants in town (6.8% - 3/44) | I will stay if the City Assembly leave me alone (100% - 3/3) |
| **Remain in current location (potential permanent migrants) (33.3% - 32/96)** | This is home now, I am settled and have invested in town (100% - 32/32) | Nothing, I want to stay here because this is home now (71.8% - 23/32)<br>I would leave if my business failed (21.8% - 7/32)<br>I would leave if the City Assembly started to hassle me (6.2% - 2/32) |
| **Move to a new city in Malawi (potential step migrants, urban-urban migrants) (11.2% - 11/96)** | For greener pastures, there may be more opportunities to make money and see new things (54.5% - 6/11) | Nothing, I just want to leave (50% - 3/6)<br>I would stay if I made more money in town (50% - 3/6) |
| | The City Assembly do not want migrants in town (45.4% - 5/11) | I would stay if the City Assembly leave me alone (100% - 5/5) |
| **Make an international move, within Southern Africa (potential international migrants) (5.2% - 5/96)** | For greener pastures, there may be more opportunities to make money and see new things (100% - 5/5) | Nothing, I just want to leave (100% - 5/5) |
| **I don't know/ I can't plan this far ahead (4.1% - 4/96)** | I will wait to see if I can sustain my life here (3/4)<br>My future depends on what my family think is best (25% - 1/4) | - |

in-depth interviews in Lilongwe, Liwonde and Chitedze (although questionnaire data on this was collected in Lilongwe only).

The first main group, potential returnee migrants, accounted for just under half (45.8% - 44/96) of all respondents. This group stated that they wished to return to their home village in the next five years. Over half of the potential returnees (54.5% - 24/44) said they wanted to return simply because "home was best". Within the 54.5% of respondents who wanted to return because "home was best", a small minority (8.4% - 2/24) said they would stay in Lilongwe if they could ensure financial stability in town. However, the majority of this group (91.6% - 22/24) said that nothing would change their mind. A return home was always intended to be the ultimate goal of migration. This was illustrated by one woman who, during an in-depth interview, said;

*"I came to town for greener pastures. I'll go back home when I've made money. I'll want to be there after I made money. Of course I will do that because home is best!"*

(Female, 34, bar worker, Liwonde – Interview statement)

However, a planned return home was not always a function of the desire to return to the rural way of life. Two further sub-categories of potential returnee also emerged. The first sub-category who accounted for more than a third (38.6%- 17/44) of potential returnees saw a return home as an escape from the poverty of urban life. Perhaps unsurprisingly, the majority of this group (94.1% - 16/17) said they would remain in town if they could earn more money and ensure more reliable trading. A small minority (5.9% - 1/17) had become disillusioned with urban life and were resigned to their return home.

Finally, a small sub-category (6.8% - 3/44) of potential returnees felt they were being driven out of town by the City Assembly which is responsible for the city's 'upgrading' programme. For example, one respondent stated;

*"They can just come here to the market and do what they like. If they think you don't have the correct papers or if your stall is a certain way they don't like, they can just smash it up and you have to move on. They want money from us, they hassle us, and they make it hard for us to stay."*

(Male, 37, sells second hand teddy bears, cigarettes and sachets of alcohol, Lilongwe – Interview statement)

Potential returnees were asked exactly where they would return to if they moved back to the village. Only 38.6% (17/44) of respondents said that if they did go back to the village they would return to the same house that they left behind. The majority suggested that they would move to a new house with the family they created in town. This suggests that rural-urban migration, even where the proximate cause is economic, is more than a livelihood diversification strategy where one member of household temporarily moves to town. Instead, migrants leave some degree of separation between their new lives and the homes that they left behind. (However, as detailed in Section 5.5.3 this does not imply that rural-urban connections in Malawi are unimportant).

The second main group, potential step-migrants/urban-urban migrants, accounted for 11.2% (11/96) of respondents. For this group, a move to a new city in Malawi, such as Zomba or Blantyre in the Southern region or Mzuzu in the Northern region, would be the next step. Within the potential step-migrants/urban-urban migrant group, two sub-categories emerged. The first sub-category was potential step-migrants/urban-urban migrants who were motivated by greener pastures of a new city. This group accounted for 54.5% (6/11) of potential step-migrants/urban-urban migrants. Exactly half of these greener pasture seekers felt that nothing would change their minds. For the other half, the opportunity to make more money in the current location was the key to remaining in town. For example one respondent in Lilongwe, spoke about moving to Blantyre if her business failed;

> *"I know there is more employment in Blantyre. I think I will go there if my business keeps failing. Business is bad. It should be ok in Blanytre though."*
>
> (Female, 24, Plastic goods trader, Lilongwe – Interview statement)

The second sub-category of potential step-migrants/urban-urban migrants explained that they were not planning their move in response to a desire for greener pastures; instead they felt threatened by the City Assembly. This sub-category accounted for just under half (45.4% - 5/11) of the potential step-migrants/urban-urban migrants. All respondents within this group suggested they would stay if the City Assembly made it easier to be in town.

The third main group were the potential international migrants. This group only accounted for 5.2% (5/96) of respondents. All members of this group were considering an international move within Southern Africa. All described that they were motivated by the pursuit of greener pastures.

The fourth and final main group, potential permanent urbanites, accounted for a third (33.3% - 32/96) of all respondents. This group wished to remain in Lilongwe for at least the next five years and possibly permanently. All said that their decision to remain was because they felt settled, had successful businesses and had invested in the city. The majority of these 'permanent settlers' (71.8% - 23/32) felt that nothing would change their aspiration to stay in town. However, 21.8% (7/32) felt that they may have to return to the village as a result of business failure, and a further 6.2% (2/32) were concerned about the impact of the City Assembly on their ability to maintain an urban livelihood.

When considering the future plans of migrants to Lilongwe, there are two points to be considered. The first point is that only 22.9% (24/96) of all the respondents in Lilongwe said they were unwavering in their desire to move home within five years because "home was best". Furthermore, a third of respondents (32/96) expressed a desire to become permanent urban migrants. In some respects this finding is hardly surprising; as Gugler (1989: 348) points out "when the search for a job takes months, circular migration is no longer a viable proposition. The migrant who wants to be assured of urban work has to cling to his job." However, permanent urban migration is about more than the fear of losing one's social and financial position in the city. As the following quotes illustrate, a third of migrants had very strong ties to their urban homes;

*"I have built my life here, so it would be hard to go back to the village. I have invested in my business and I own land in town."*

(Male, 43, sells/makes bricks, Lilongwe – Interview statement)

*"My children were born in town. They go to school in town and have more opportunities here. I don't think we will leave because things are just ok for us."*

(Female, 33, phone card seller, Lilongwe – Interview statement)

*"I am too in invested in town to leave. I will go back to visit my family, but I cannot give up my land and work in town. We built a house here; I don't have a house in the village!"*

(Male, 37, sells tools, Lilongwe – Interview statement)

The second point is that 28.3% (27/96) of all respondents said their decision (or potential decision) to leave Lilongwe was based on the inability to sustain an urban livelihood. In the in-depth interviews, environmental shocks emerged as a threat to livelihood sustainability.

Shocks threatened livelihoods in two ways; directly (e.g. through urban flooding or local water shortages) and indirectly (e.g. through price rises after flooding or a drought outside of town resulted in commodity price increases). In terms of direct shocks that happen in the city, 76% (19/25) of urban interview respondents described how they had been affected by or were worried about flooding following intense rainfall. Flooding occurs regularly in Lilongwe (see Chapter 3), this may be from intense rainfall or as a result of the river bursting its banks (see Figures 5.7 and 5.8). Respondents described how flooding could potentially lead to direct loss of productive assets as flooding destroys property, and create illness that leads to an inability to work and a loss of financial capital. Furthermore, respondents also discussed the impact of district wide drought leading to local water shortages in Lilongwe. This is highlighted in the following quotes;

*"When it rains for a long time, everything is affected. The charcoal and other things are wet. No one wants wet charcoal. Business drops a lot and then you have no money. Last time the river flooded, my friend's chickens were swept away."*

(Female, 35, roadside charcoal seller, Lilongwe – Interview statement)

*"When there is no water, you have to buy from traders that sell at high prices. A pail of water [20 litres] is normally MK2 [about £0.003], but the traders sell the same amount for more than MK2500 [about £0.40]! How am I supposed to afford this?"*

(Male, 24, sells jeans in the market, Lilongwe – Interview statement)

In terms of indirect shocks that happen in rural areas outside of the capital, (80% n=20/25) of interview respondents described being affected despite being in town. The logistics of delivering rural produce into town emerged as an issue as rural goods become wet and roads become impassable. For example;

*"Our business can suffer if there are lots of rains because the roads are slippery. We don't get to make more coffins for these people who die on the road! No! It is the other way; we are unable to get trees for the coffins because of the poor road conditions. Also, the trees are wet and it is hard for us to use them."*

(Male, 33, Coffin maker, Lilongwe – Interview Statement)

**Figure 5.7 – Lilongwe River before a heavy rainfall event**

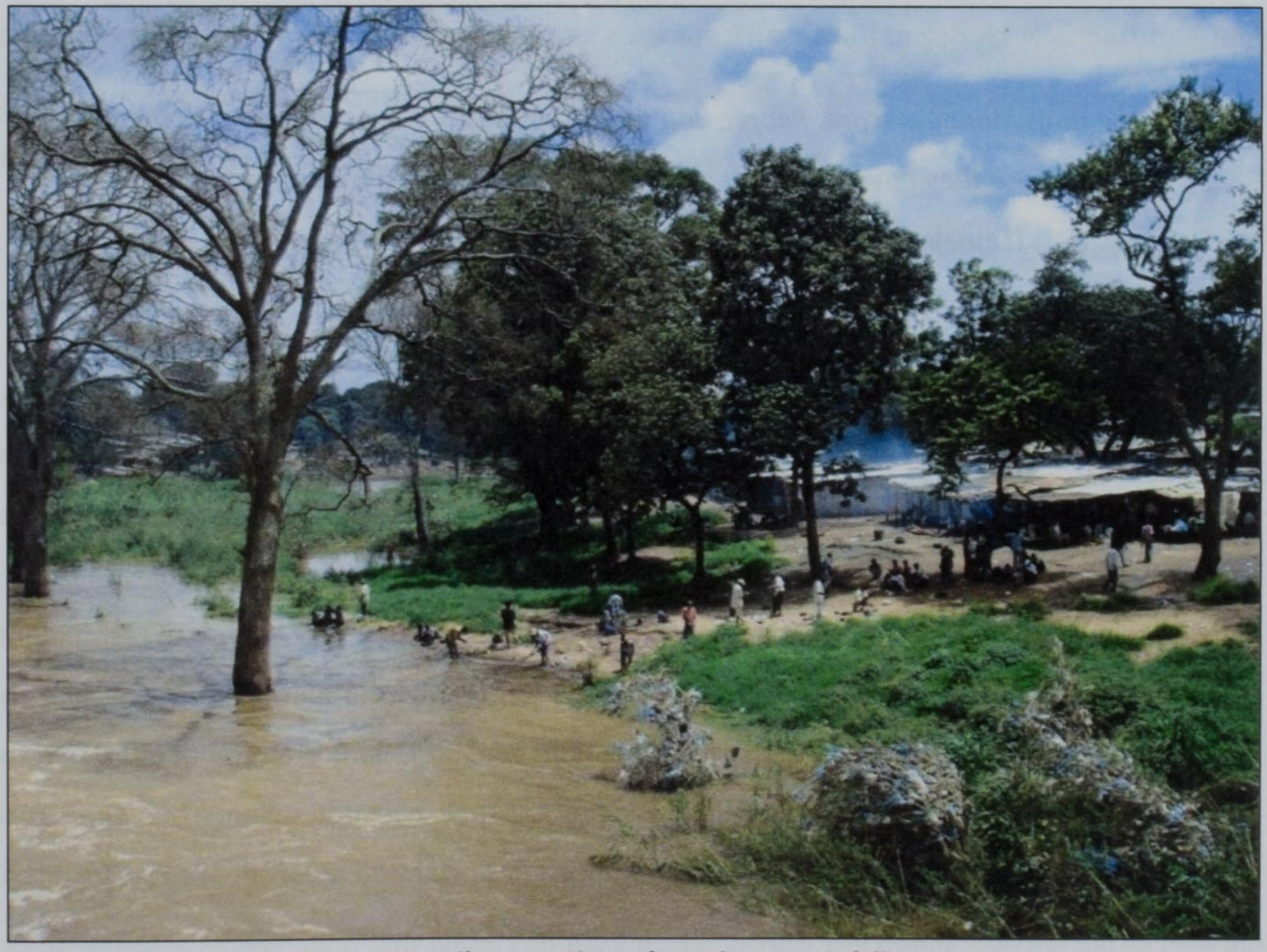

**Figure 5.8 – Lilongwe River after a heavy rainfall event.**
**The debris in the trees (in the right foreground) show the recent water level was higher before the picture was taken**

*"If it has been raining badly near my village in Dedza District, I am unable to get to the village to collect the produce that I sell in town. Maybe I can take the matatu [bus] to the turn-off nearby my village, but I know that in bad rains the rural roads are impassable. I can't walk to the village because it is a very long way. If I know the rains are very bad, I will not go to the village so I have nothing to sell in town."*

(Female, 39, tomato seller, Lilongwe – Interview Statement)

During bad rains, or regional droughts, respondents felt that general trade in the urban markets declined. This was attributed to food price increases. This finding is supported by Cohen and Garrett (2010: 473) who point out "urban poor people will seek to cushion food price shocks by reducing spending on other necessities." ;

*"Who in their right mind would pay money for a radio to be repaired when there is no money at home for food?"*

*(*Male, 22, electrician, Lilongwe)

*"During the rains money is scare. People don't want to spend. They don't want to go to the café because they have to save their money. After the rains they come back."*

(Female, 27, waitress/cook, Lilongwe – Interview statement)

Overall, these findings contribute to the literature on circularity and permanence in Malawi (e.g. Potts, 2010, Lewin et al., 2012) by suggesting that circularity is not as predominant as has previously been suggested. Instead of relatively short repeated moves between rural and urban areas, migrants tend to move once and stay in town for a long time unless they are unable to sustain their urban livelihoods. Just under a third (28.3% -27/96) of all respondents may leave Lilongwe if their livelihood was affected by an environmental shock. Despite the permanence of migration, rural-urban connections are still important and although the respondents in this study were migrating for longer, they had not relinquished their rural allegiances. Rural to urban support was an important social and survival strategy for urban migrants, and the consequences of this support in the face of climate change

### *5.5.3 Connection with the village*

A key way that rural-urban ties are cemented is through the act of remittances. As discussed in Chapter 2, Section 2.3.4, internal remittances are not a well-studied phenomena. This study finds that urban-rural transfers are important in supporting the rural family. In Lilongwe, 77.1% (54/70) of migrants remitted money back to their rural home and the likelihood of them doing so varied by the length of time they had been in town (see Table 5.6). For example, 64.3% (9/14) of respondents who had been in town less than a year remitted money back home compared to 100% of migrants who had been in town for more than ten years. A Chi Square test shows these differences are statistically significant (*p=0.03*). This is indicative of finding one's feet in town; before a job is found, life in town is financially difficult.

The study also found that remittances were often two-way; respondents also reported receiving help (usually food/maize) from their village. Across all three study sites, just less than half (45% - 54/120) of respondents received money or food from their rural families. Two main reasons for this emerged. The first was the idea that urban migrants were still part of a rural household, and therefore should benefit from the rural farm. The second was the idea that by giving food or money to the urban migrant, the rural household was ensuring they would receive support from town when they needed it. These ideas are expressed in the following quotes;

*"I don't have a garden [farm plot] in town, but my house in the village has a garden so why shouldn't I get some maize when they harvest."*

(Male, 25, fruit seller, Lilongwe - Interview statement)

*"Even a 'big man' in town will receive a bag of maize when he goes home. It is so he does not forget [his rural family]"*

(Female, 19, phone card vendor, Lilongwe – Interview statement)

*"I left the village more than twenty years ago to get some money and an education by working and going to school at the same time. Now I have a Western university education, a car and a large house in its own plot. But when I go back to the village, my family give me maize to bring back with me. But they will ask me for money when they need school fees, or in bad times. "*

(Expert interview with representative from Bunda Collage of Agriculture)

Table 5.6 – Urban connections with the village (Source: Field questionnaire - Urban)

| | Migrant Average % | Lilongwe % | Chitedze % | Liwonde % |
|---|---|---|---|---|
| **Sends money back to village** | | | | |
| All respondents | 76.0 (92/121) | 77.1 (54/70) | 62.9 (17/27) | 87.5 (21/24) |
| Men | 76.4 (68/89) | 78.4 (40/51) | 60.9 (14/23) | 93.3 (14/15) |
| Women | 75.0 (24/32) | 73.7 (14/19) | 75.0 (3/4) | 77.8 (7/9) |
| Duration: | | | | |
| Less than 1 year | 57.7 (15/26) | 64.3 (9/14) | 40.0 (2/5) | 57.1 (4/7) |
| 1-5 years | 85.0 (34/40) | 89.5 (17/19) | 72.7 (8/11) | 90.0 (9/10) |
| More than 5 years | 75.9 (22/29) | 82.4 (14/17) | 50.0 (3/6) | 83.3 (5/6) |
| More than 10 years | 96.2 (26/27) | 100 (19/19) | 80.0 (4/5) | 100 (3/3) |
| **Receives gifts/help from the village** | | | | |
| All respondents | 45.0 (54/120) | 50.7 (35/69) | 37.0 (10/27) | 37.5 (9/24) |
| Less than 1 year | 25.0 (6/24) | 21.4 (3/14) | 40.0 (2/5) | 20.0 (1/5) |
| 1-5 years | 50.0 (20/40) | 52.6 (10/19) | 45.5 (5/11) | 50.0 (5/10) |
| More than 5 years | 44.8 (13/29) | 58.8 (10/17) | 0 (0/6) | 50.0 (3/6) |
| More than 10 years | 51.9 (14/27) | 57.9 (11/19) | 60.0 (3/5) | 0 (0/3) |
| **Goes to the village each year to farm** | | | | |
| All respondents | 35.8 (43/120) | 24.6 (17/69) | 37.0 (10/27) | 66.7 (16/24) |
| Less than 1 year | 28.0 (7/25) | 35.7 (5/14) | 16.7 (1/6) | 20.0 (1/5) |
| 1-5 years | 45.0 (18/40) | 21.1 (4/19) | 63.6 (7/11) | 70.0 (7/10) |
| More than 5 years | 34.5 (10/29) | 17.6 (3/17) | 30.0 (2/6) | 83.3 (5/6) |
| More than 10 years | 29.6 (8/27) | 26.3 (5/19) | 0 (0/5) | 100 (3/3) |
| **Has made at least one visit to the village** | | | | |
| All respondents | 85.0 (102/120) | 85.5 (59/69) | 77.7 (21/27) | 91.7 (22/24) |
| Less than 1 year | 79.2 (19/24) | 78.6 (11/14) | 60.0 (3/5) | 100 (5/5) |
| 1-5 years | 90.0 (36/40) | 94.7 (18/19) | 72.7 (8/11) | 100 (10/10) |
| More than 5 years | 93.1 (27/29) | 100 (17/17) | 83.3 (5/6) | 83.3 (5/6) |
| More than 10 years | 92.6 (25/27) | 94.7 (18/19) | 100 (5/5) | 66.7 (2/3) |

As well as remitting two way transfers, urban migrants visited their rural homes. Regardless of the length of time a migrant had been in town, the majority of migrants (85% - 102/120) had made at least one trip home. Slight differences between those who had and had not made a visit home and the length of time a person had spent in town were not statistically significant ($p=0.4$). This suggests that visiting home is a relatively easy and normal activity for all migrants. Visits home were undoubtedly an opportunity for migrants to spend time with their relatives, but visits also served a more practical purpose. During the in-depth interviews, respondents explained the relationship between visits home and receiving gifts as illustrated in the following quotes;

*"It is good for us to visit home if possible because we can bring [maize] back with us when we return to town. It is good for us to have this maize because if there is a problem with our wages or if something happens and we aren't getting money, we can at least have something to eat."*

(Male, 30, rides bike taxis, Liwonde – Interview statement)

*"Whenever I go home, they give me maize and sometimes they give me other things like pumpkin or groundnuts. Even if I don't need these items I will get them as a gift!"*

(Male, 26, carpenter, Lilongwe – Interview statement)

*"We need help from our family because in town we are poor. In town, food costs money, but in the village it is free. If our farms in the village are producing food, we should be able to have this food!"*

(Male, 33, car parts trader, Lilongwe – Interview statement)

Conversely, one male respondent from Nsanje District, an area around 550km (or an eight hour drive) from Lilongwe explained;

*"I moved to town last year to become a security guard. When there is a problem with my wages I would like to get food from my home, but there is no way to send anything to me. I will have to wait until I can make a trip home and maybe I will get something from the household then."*

(Male, 22, security guard, Lilongwe – Interview statement)

These findings challenge the pervasive view that remittances are one way urban-rural transfers designed to support the rural family (Stark and Bloom, 1985, Stark and Lucas, 1988, Stark and Taylor, 1991). Instead, remittances emerge as two way transfers that act to strengthen the bonds between rural and urban households as well as providing a practical means of support for urban migrants.

## 5.6 Discussion

Overall, the results presented in this chapter suggest that people from better-off households move to Malawi's towns in search of adventure and economic opportunity where many remain on a permanent basis. The remainder of this chapter turns to a discussion of three key points. Firstly, in Malawi, rural-urban migration is not directly connected to resource scarcity. In fact, this study finds that it is individuals from better-off households, i.e. those households who are better able to function in the village, who are more likely to migrate to town. This has implications for migration capabilities under worsening climate change (the role of environmental change in migration capability will be explored in more depth in the following chapters). Secondly, despite the common assumption that remittances are one way urban-rural transfers, in Malawi money and goods are also remitted back to the countryside showing that the rural economy also supports the urban migrant. Thirdly, despite the fact that the literature suggests that circular migration is the most common form of migration throughout Southern Africa, this study finds that a significant proportion of people who arrive in the city tend to stay. However, the ability to maintain an urban livelihood is underpinned by rural sustainability. This discussion examines each of these three points in turn as it develops a fuller understanding of migration in Malawi.

### *5.6.1 Rural-urban migration is not directly connected to resource scarcity*

The first key finding from this study is that in Malawi rural-urban migration does not seem to be directly connected to resource scarcity. Against a backdrop of generally worsening rural environmental conditions at national level (see Chapter 3), rural-urban migrants in this study were from households that were more likely to be doing well in the village. These individuals have the financial, human and social capital that translates to a migration capability. Instead of migration being a flight from poverty, migration emerged as a purposeful decision to

experience greener pastures. This was especially true in Lilongwe, where almost half of migrants were from better-off households.

Furthermore, although migration was partly motivated by the pursuit of money, for most people (i.e. the willing migrants described in Section 5.4.1) it was about more than that. Willing migrants described an aspiration born out of a desire to experience 'greener pastures'. Greener pasture migrants described the pursuit of two things. The first was the obvious economic goal of migration, and the second was the sense of personal adventure the migration experience provided. Both were closely interlinked and were almost impossible to separate i.e. making money was essential in order to enjoy an urban lifestyle, but the pursuit of money was not the only goal. In this way, migration emerged as a 'rite of passage' available for those with the capability to pursue it. The outcome of the passage was the achievement of social (and to some extent economic) independence from the village and the opportunity to make the transition from child to adult. During the focus groups, respondents spoke about having their *"eyes opened"* by new sights and sounds and a different way of living. In this way, migration is much more than an economic phenomenon even if material gain is an outcome. Migration in Malawi has a deeper psychological dimension that relates to the need to explore new places and have new experiences, although the city has to be economically viable for these experiences to take place.

African migration experts contend that cities are essentially locations for economic activity (Todaro, 1997, Pavanello et al., 2010). This denies the important cultural dimensions of cities outlined in Section 5.4.1 (i.e. the city as a place for freedom, independence and learning). For those who wish to be in the city, the urban space represents all that is modern in society. The traditions of the village can be (to some extent) left behind, and new (and usually Western) fashions and tastes can be embraced. Young men and women can be independent of rural families. These are some of the basic elements of African "cityness" that Robinson (2006) argues are lacking from urban analysis in Africa.

### *5.6.2 Reverse remittances: the rural economy supports the urban migrant*

The second key finding is that reverse remittances, from urban to rural areas, are common. This is despite the pervasive assumption that urban dwellers remit money back to the countryside in one way transfers. In Malawi, there are times when the rural economy supports the urban migrant. It is likely that this serves two functions which benefit both the

migrant and the rural household. Firstly, maize from home is sometimes essential to migrants' survival as it helps reduce urban household food bills. Secondly, two way transfers help cement the bond between rural and urban households thereby creating an informal insurance network between two geographical areas. This may explain why even those who have been in town for a long time receive 'help' from their rural households.

Although research to support these results has not been undertaken in Southern Africa, research from other parts of the world gives weight to the findings. For example, Mobrand (2007) suggests that in South Korea reverse remittances take place between rural households and their sons who are studying in town. He suggests that this can be attributed to the fact that massive permanent urban migration was not preceded or accompanied by short-term circulation, and consequently migration was poorly integrated into rural economic activities. This is obviously not the case in SSA where migration has long been part of rural economic activities. However, Mazzucato (2009) showed that international reverse remittances between Ghana (the sending country) and the Netherlands (the receiving country) do take place, which suggests that reverse remittances in SSA are possible.

### *5.6.3 Permanent migration to town is common*

The third key finding is that despite the fact the literature suggests circular migration is the most common form of migration throughout Southern Africa (Orr and Mwale, 2001, Potts, 2010), a significant proportion of migrants become permanent urban dwellers. Overall, 42.3% of respondents had been in town for more than five years. In Lilongwe, over half of all respondents had been in town for more than five years and one-third of all respondents had no intention of ever leaving. In contemporary Malawi, improvements in transport and technological changes in communication (i.e. the introduction of cellular phones) have created a situation in which urban life and rural allegiances are compatible. In this way a household can be integrated into both the rural and the urban economy at the same time, and the migrant acts as an intermediary between the two. The migrant does not have to give up the rural household, or the urban lifestyle. Using a variety of communication methods, it is possible to keep in touch constantly and maintain kinship, neighbourhood, friendship, and other relations beyond the boundaries of the city. This idea fits with the migration systems theory in which Mabogunje (1970) suggested that transportation and communication improvements would lead to greater integration of rural and urban areas. Migrants in town

described how they were able to deal with village problems without going home. For example, one young man described dealing with a complex village problem from within the city;

*"When my sister's husband died, I had to decide where the children would live and what would be best for the family. She had a lot of problems but I did not have to stay with her in the village for an extended period of time. Instead, I could direct her from here in Liwonde."*

(Male, 33, car parts trader, Liwonde – Interview statement)

Transport links play a central role in the ability of people to move around a country. For example, in a discussion of short-term migration in Mali, Findley (1994: 540) found that "given the poorly developed road and transportation network,...migrants generally stay away for months, returning only once a year for cultivation or harvest." In Lilongwe, almost 30 years ago, Potts (1986) described a situation in which low-income groups had become completely reliant on an expensive and inadequate bus service provided by the government's United Transport Malawi organisation. The inadequacy of the bus service led the government to permit private mini-buses (*matatus*) to operate in an effort to alleviate transport problems. Before the *matatus* arrived, low-income groups were excluded from public transport and movement in between rural and urban areas came at great cost in terms of time and money (Potts, 1986). In the last few years the situation has changed rapidly as documented in an interview with a senior representative from the United Nations Development Programme (UNDP) in Lilongwe;

*"...in the past, when [migrants] came to town they had a long journey. To get to Lilongwe was long for people even in Dowa[7]! The roads were ok but the buses and the matatus were not there. Not like they are now. Before you would have to wait at the turn-off all morning and if you missed [the bus] you would be waiting until the next day. Now these buses are so many. The matatu drivers are everywhere! Sometimes they are a problem."*

(Expert interview with representative from UNDP)

However, the stability of urban livelihoods and therefore the permanence of urban migration is affected by climate change. Overall, urban respondents in this study felt that they would struggle to maintain stability within their urban livelihood following direct and indirect shocks

[7] Dowa is a district just north of Lilongwe.

in town. These findings are supported by data on urban environmental change from across the southern African region. For example, Douglas et al. (2008) describes how, in 2000, heavy rain and cyclones led to the worst flooding in Mozambique for 50 years. This led to "widespread devastation" in the capital city, Maputo, affecting more than one million people. The event completely destroyed an entire neighbourhood including all homes and businesses (Action Aid, 2006). Similarly, in Malawi, it has been documented that food shortages caused by rural droughts and floods have led to sharp price increases that reduce urban households' disposable incomes (Pauw et al., 2010).

Throughout Malawi large quantities of rural produce are sold throughout urban markets to urban residents (Mkwambisi, 2009, Mkwambisi et al., 2011). This produce includes food but also other rural goods, such as firewood or timber. When regional scale floods or droughts affect the country, commodity prices in both rural and urban areas rise as demand outstrips supply (Roe, 1992, Devereux, 1999, 2007, Pauw et al., 2010). A relatively small shortfall in marketed supplies can cause major increases in food prices (Devereux, 2007). This is both a function of low productivity and because roads linking urban markets with commodity supply sources become impassable leading to shortages of good in urban areas (Dorward and Kydd, 2004). For example, during Malawi's 2002 food crisis (see Chapter 3) the same floods that caused the food production shock created logistical constraints that hampered the distribution of maize into and throughout the country (Devereux, 2002a). Rising commodity costs place a particularly significant burden on the urban population and are particularly burdensome as food expenditure makes up the biggest share of all urban household spending (Mkwambisi et al., 2011). Furthermore, agricultural markets are negatively affected by problems in transport and communications infrastructure (Dorward and Kydd, 2004), which become worse during a flood.

The impact of urban economic decline on the livelihoods of rural-urban migrants was explored by Potts (Potts, 2006a) in Harare, Zimbabwe. In Zimbabwe, the effects of the nation's Structural Adjustment Policy (SAP) undermined urban livelihoods by creating high food prices. According to Potts (2006) this exposed the vulnerability of Harare's rural-urban migrants who began to exhibit stronger rural linkages and many intended to return home to the village

## 5.7 Conclusion

The objective of this chapter was to develop a fuller and more complex understanding of rural-urban migration in Malawi. To do this, results from the urban study sites were presented. Three key findings emerged. Firstly, migration is not connected to resource scarcity. Instead, young, educated male (and to some extent, female) members of intermediate and better-off households make a purposeful decision to move to town to experience 'greener pastures', which is the pursuit of urban adventure and money-making. Secondly, despite the permanence of migration, rural dwellers remain in contact with their urban homes, and there is a bilateral flow of goods between rural and urban areas. Thirdly, migration is more permanent than some scholars suggest; 42.3% of migrants had been in town five or more years. One explanation for this is the improvements in transport and communication, which means that migrants are able to retain strong rural ties without physically being present in the rural home. However, shocks in both rural and urban areas threaten urban livelihoods and may lead to return urban-rural migration.

A consideration of the three key findings together suggests that the town and the village are two interconnected spaces with shared resources. More specifically, the town and the village are connected by a migration system, in which Bakewell et al. (2011: 5) suggest "people, families, and communities [become linked] over space in what today might be called transnational or translocal communities." In a translocal space, resources and strategies reach far into each other. In such a space, households are not "static self-contained rural or urban units but fluid entities with permeable boundaries" (Crush, 2013: 63). Given the interconnectedness of both spaces, which is made possible by advances in communication and transport, rural-urban migrants can remain in town on a permanent basis without severing their rural allegiances. Instead, both an urban life style and a strong rural allegiance are compatible.

Armed with this fuller and more complex understanding of urban migration in Malawi I will now explore the role of the environment, specifically chronic stresses, in migration decision making in the next chapter, Chapter 6. Shocks are dealt with in Chapter 7.

# Chapter 6. Understanding migration capabilities and aspirations under chronic rural environmental stresses

## 6.1 Introduction

In this chapter, I present and discuss the results of the data that were collected to explore the study's second objective; to understand migration capabilities and aspirations under the types of chronic rural environmental stresses that are likely to be exacerbated by climate change. The chapter is broken down in five sections. The first section focuses on the vulnerability context in the two rural study sites, Chikamana and Hinnock. The second section assesses the current migration aspirations of the populations in Chikamana and Hinnock. Links are made between environmental stresses and the perception of where the 'good life' can be found. The third section examines migration capabilities (i.e. the financial, social and human capital needed to leave the village) and then explores the relationship between these capabilities and migration aspirations. The chapter culminates with a discussion of the chapter's three key findings, which in broad terms contribute to the literature on migration and environmental stresses.

The sub-objectives of the chapter are explored using multiple sources of data; (1) community level focus groups exploring stresses, shocks[1] and responses in Chikamana (women's group, n=20; men's group, n=10) and in Hinnock women's group, (women's group, n=10; men's group, n=10); (2) key informant interviews with the four chiefs that represent the two rural sites; (3) in-depth interviews in Chikamana (n=25) and Hinnock (n=25); (4) questionnaires in Chikamana (n=87) and Hinnock (n=71) (total n=158[2]); (4) data from the second round of focus groups that explore aspirations of potential non-migrants (Chikamana, n=19, 15 women/4 men; Hinnock, n=19, 15 women/4 men); potential rural-rural migrants (Chikamana, n=10, 5 women/5 men; Hinnock, n=10, 5 women/5 men); and, potential rural-urban migrants (Chikamana, n=6, 2 women/4 men; Hinnock, n=5, 1 women/4 men). Participant observations were also used to guide data analysis.

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[1] Shocks are explored in more detail in Chapter 7

[2] At the start of the research the aim was to secure 100 questionnaires in Chikamana and 100 questionnaires in Hinnock. The number of respondents given above is the total possible number of respondents included in the analysis after some were excluded due to discrepancies in the data. Further exclusions have been made at different points in the analysis where individual questions have been answered/recorded incorrectly.

## 6.2 The impact of rural stresses

Examining the rural vulnerability context in terms of stresses is an essential step in understanding how the stresses created by climate change may affected a person's perception of the rural versus urban areas, including where the good life can be found, which in turn affects their migration aspirations (see Figure 6.1). Stresses can also affect the capital assets that contribute to a migration capability, which again affects migration aspirations. As such, this section is an important starting point for the remainder of the chapter.

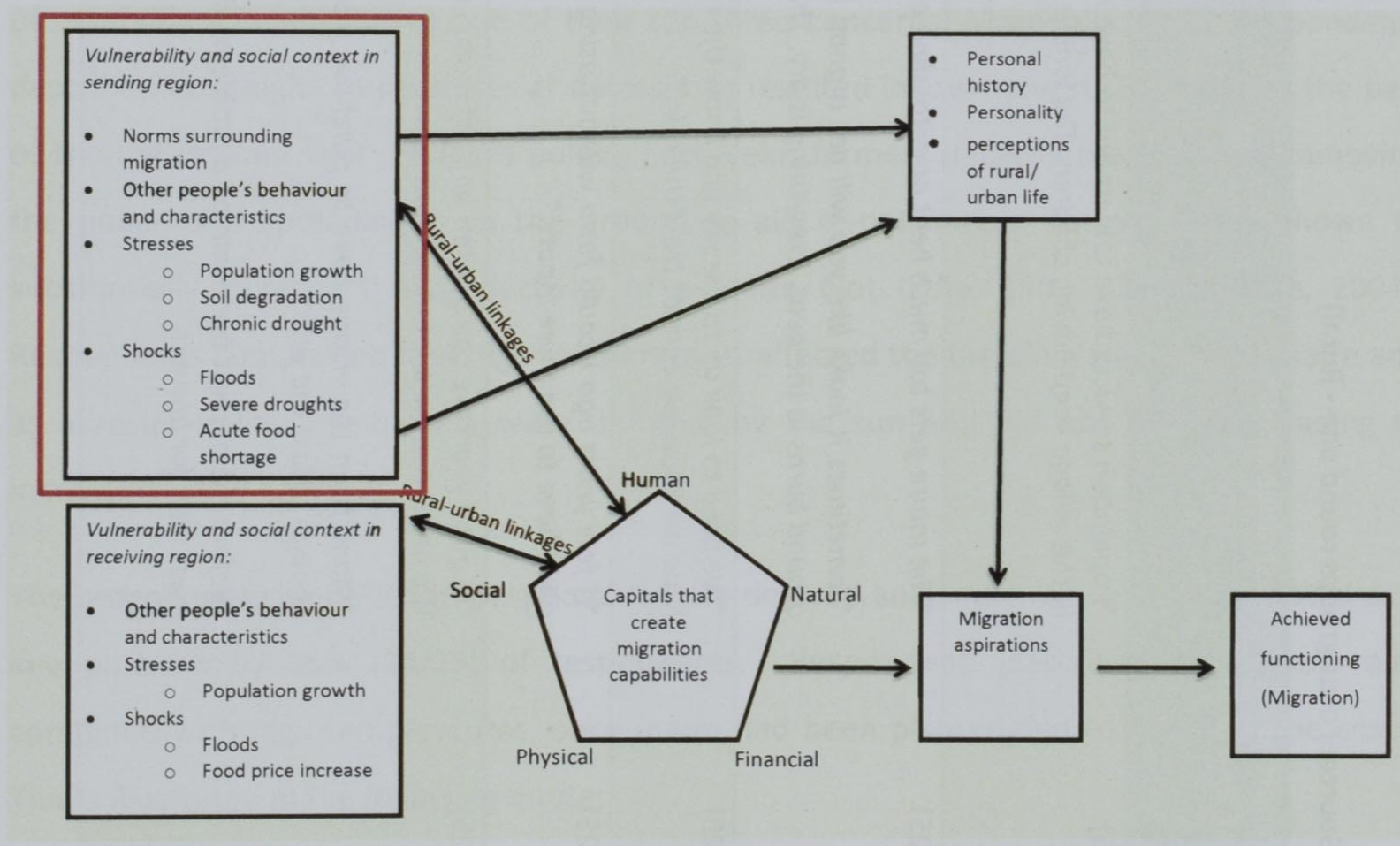


**Figure 6.1 – The link between stresses, migration capabilities, and migration aspirations**

### *6.2.1 Stresses in Chikamana*

In the focus groups in Chikamana, participants were asked to discuss the main pressures on their livelihoods, and how these pressures had changed in the 20 years since the early 1990s (see Chapter 3, Section 3). Participants agreed that over the last 20 years there had been a long term trend towards declining productivity. More specifically, five key stresses were identified. These were (1) loss of agricultural productivity and an increasingly pronounced hungry season; (2) temperature increase; (3) delayed and short rains; (4) decreased soil fertility; and, (5) population increase.

Table 6.1 – Key livelihood stresses in Chikamana (Source: Focus groups round one - Rural)

| Key issue | Per cent reporting issue as 1st, 2nd or 3rd concern | Illustrative quotes |
|---|---|---|
| • **Population increase** | 36% (9/25) | *"Population services have told us not to have more children if we cannot feed them, but people in this village keep having children. The land is running out."* |
| • **Temperature increase** | 44% (11/25) | *"The maize gets too much heat at detassling and burns so we cannot spread the seeds"*<br><br>*"Sometimes it looks like you will get a good harvest but the maize burns in the heat and the ground burns in the heat. Everything is dry. This is just normal for us now."* |
| • **Low/delayed rainfall** | 56% (14/25) | *"We used to look up to the sky and know the rain was coming. Now the clouds play tricks on us. Now we know we cannot trust the rain."* |
| • **Decrease in soil fertility** | 76% (19/25) | *"A few years ago I could farm without using fertiliser. Now the same land gives me nothing and I have to use more inputs."* |
| • **Decreased agricultural productivity and increasingly pronounced hungry season** | 88% (22/25) | *"In good years we can get ten bags of maize, but in bad years we only get three bags of maize. We used to grow a lot more than now."*<br><br>*"Many from the village have to purchase maize when they run out because we cannot grow enough to last the year"*<br><br>*"Before the harvest there can be a problem with hunger as we have exhausted our food and we must wait for harvest."* |

To further explore the five key pressures on livelihoods in Chikamana, interview respondents were asked to choose their top three concerns from a list generated as a result of the focus groups (see Table 6.1). A key theme that emerged from the interviews was the long-term stresses had become a normal part of farming livelihoods. This is highlighted in the quotes in Table 6.1. The majority (88% - 22/25) of respondents in the interviews identified an overall decrease in agricultural productivity and an increasingly pronounced hungry season from December to March. Respondents attributed the decline in yield to the four other stresses that were identified during the focus groups; temperature, rains, fertility and population.

The first issue identified by respondents was temperature increase. Nearly half (44% - 11/25) of respondents cited this as one of their top three concerns. More specifically, respondents described how high temperatures at detasseling resulted in low harvest. The tassel is the part of the maize plant that produces pollen. Each year, farmers detassel the maize by removing the pollen and spreading it on the ground to aid re-pollination. This has been shown to substantially increase the productivity of a maize plot (Edje, 1983, Mashingaidze, 2004). Respondents complained that high temperatures affected the tasseling stage of the maize and as a result pollinating flowers were 'burned' by the sun and did not develop, leading to increasingly low harvests.

The second issue identified by respondents was delayed and short rains. This was noted as a key problem by 56% (14/25) of respondents. Respondents described how short rains combined with high temperatures, once maize had been planted, led to drying of the crops. This is illustrated in the following quote;

> *"For a long time the village has had bad luck with rain. The rains don't come and we have no water. When they do come they are not long enough. The ground is dry. Our crops are dry. This drought is not good for our work. Now it is normal for us to have a poor harvest and we think we have got luck when the crops grow."*
>
> (Male, 48, farmer, Chikamana – Interview statement)

Aside from poor rains resulting in drying of the crops, rainfall that came late was also identified as an issue. Farmers at the focus group described how, until the late 1970s, they used to be able to predict the arrival of the rains to within a week. This made planting very predictable and ensured a decent harvest. Participants at the focus group explained that since the 1990s, rains had been delayed and planting was less predictable. Overall, participants described how

the rainy seasons had been reducing in length and resulted in a decline in agricultural productivity. This is highlighted by the following quotes;

*"The rains look like they are going to come, so we plant the maize and wait for the rain. But if it doesn't come the crop cannot grow. Or if the rains come, but then they stop, the plant gets too much heat and then it burns. You do all your work and you get nothing."*

(Female, farmer, Chikamana - Focus group statement)

*"Last year the village got no rains. We could see the rains approaching the village. They were waiting over the hill but every time they approached the witch would hold them back. We went to the chief and we said 'we know who is holding the rains'. The chief made sure she was punished"*

(Female, 51, farmer, Chikamana – Interview statement)

*"We used to be able to predict the rains to within a few days. Now the rains are so unpredictable we don't know what they will do. It may look as if the rains are coming, but they may not come. But then you have a problem if you have planted your maize and the rains don't come. You get no harvest."*

(Key-informant interview statement with Chief of Chikamana)

The third issue identified by respondents was a lack of soil fertility. This was mentioned by 76% (19/25) of respondents. This is highlighted in the following quotes;

*"I am farming the same area of land I have always farmed but now I get less. Even when the rains come I have to use more fertilizer and work harder on the farm to make sure I can at least get some harvest. Nothing else has changed, but the problem is in the soil."*

(Female, 51, farmer, Chikamana – Interview statement)

*"The soil humiliates us. How can we farm when we don't have fertiliser?"*

(Key-informant interview statement with Chief of Chikamana)

The fifth and final issue mentioned by the respondents was population increase. This was mentioned by 36% (9/25) of respondents. Population increase was attributed to natural birth

rates rather than in-migration. Respondents detailed how population was responsible for food security issues as a reduction in yield meant that harvests were not large enough to feed everyone, especially those with large households. This is highlighted in the following quote;

*"There are some people in this village who have more children than they can feed. If you have seven children, but enough maize to feed five children then you and your children are in trouble."*

(Female, 51, farmer, Chikamana – Interview statement)

Respondents directly attributed the village's environmental challenges to climate change. A key theme that emerged from the focus groups was the high level of climate awareness in Chikamana. In the focus groups, respondents identified 13 different external organisations including NGOs and agricultural extension workers who worked with the community to build awareness of change and provide support. Respondents described how one of these organisations (a large international NGO) was involved in a large scale climate and agriculture programme in which villagers took part in workshops and field visits. The organisation had recently provided the village with fruit trees, which villagers explained were to provide fruit and shade to help mitigate the effects of climate change. One woman stated;

*"This mango tree* [see Figure 6.2] *is from the charity that came to the village a few months ago. They gave us this tree because of climate change. When the tree grows, we will have shade from the sun and we will have fruit to eat if our maize does not work."*

(Conversation with female farmer in Chikamana village - Note from field diary)

**Figure 6.2 – Villagers in Chikamana with a fruit tree provided by an international NGO**

Focus group participants were asked how they cope with chronic stresses. In the men's focus group, one participant explained how he coped with declining productivity by planting new crop varieties in an attempt to secure predictable harvests. However, this was the cause of an argument in which he and two further participants who also thought alternative crops were a good idea, debated with the remaining seven members of the group who felt that new crops were always inferior to the current varieties grown in the village and therefore not a viable alternative. In the women's group, respondents described how they simply worked harder on the farm to ensure that they got the maximum possible harvest. One respondent mentioned that in the future they may turn to irrigation. However, the remainder of the group (19 women) felt that this was not a possibility for most households as the cost of irrigation was prohibitive. In both groups, participants unanimously agreed that stresses were a normal part of life as represented in the following quote;

*"You just have to try harder at farming. Keep trying and hope you get some luck. Farming is hard but we are used to these problems in this village"*

(Female, Chikamana – Focus group statement)

### *6.2.2 Stresses in Hinnock*

The investigation into stresses in Hinnock was conducted in the same way as in Chikamana. Firstly, at the focus groups, participants were asked to discuss the main pressures on their livelihoods, and how these pressures had changed since the early 1990s. In a similar trend to Chikamana, focus group participants felt that the multiple stresses they described had been normalised into daily life. More specifically, participants described how agricultural productivity was in decline and that they now worked harder to achieve the same amount of harvest that had been normal 20 years ago. Declining productivity was attributed to poor soils and unpredictable rain – sometimes too much, and sometimes too little. Focus group participants also described worsening flooding, that damaged crops and property, and issues with the sustainability of tobacco farming. Participants felt that overall, these issues led to increasing hunger and poverty throughout the village. An identical situation to Chikamana emerged; a pronounced hungry season from December to March and an increase in the search for *ganyu*. Data from the questionnaires showed that 78.8% (56/71) of respondents in Hinnock had done *ganyu* at some point in the last five years. The issues identified in the focus groups were explored during the interviews where respondents were asked to state their three main concerns (see Table 6.2).

Table 6.2 – Key livelihood stresses in Hinnock (Source: Focus groups round one - Rural)

| Key issue | Per cent reporting issue as 1st, 2nd or 3rd concern | Illustrative quotes |
|---|---|---|
| • **Increased hunger and poverty** | 64% (16/25) | *"We are getting poorer in this village. Some years you look around and see that even those who had food all year is the quote finished?"*<br><br>*"The village is getting worse because we are poorer than we used to be."* |
| • **Poor soils** | 36% (9/25) | *"The soil humiliates us! It is weak and we must use fertiliser."*<br><br>*"When I was a boy, the soil gave us everything we needed. Now we get very little."* |
| • **Unpredictable rain** | 80% (20/25) | *"How can we plant maize when the rain plays tricks on us?"*<br><br>*"We bring the tobacco in to dry, but the rains come and it goes mouldy."* |
| • **Tobacco prices declining each year** | 28% (7/25) | *"Even when we get a good harvest, we cannot be sure that this is enough to secure us a good income. When traders come into the village we get a bad price, but if we want to get at least some money we have to sell."*<br><br>*"At the tobacco auctions, they can pay you what they like. One year you work hard and take a lot of money; another year you work harder and take less money. This problem is getting worse for us."* |
| • **Floods get worse each year** | 92% (23/25) | *"The river often bursts its banks so we have a scheme where we build trenches to protect us. This year the trenches did not work. The rains were too heavy."*<br><br>*"Rain is a problem in this village. The ground is flat and the water runs into our homes."* |

Around two-thirds of respondents (64% - 16/25) described a situation of increasing hunger and poverty throughout the village. As was the case in Chikamana, diminishing returns were accepted as a normal part of farming life as is illustrated in the following quotes;

*"It is hard to see no harvest when you have spent all your time working on the farm. Weeding, tilling, planting, and tending to the crops to make sure pests don't get them. You work hard, but get nothing. These days you have to increase your effort if you want to get luck on your farm. We work hard but we are still hungry. There is nothing we can do; this is just our life so we work harder."*

(Female, 28, farmer, Hinnock – Interview statement)

*"We are poor, but what do can we do? If our crops do not work, or if a flood washes our crops away, we will get poorer. Especially if we cannot find ganyu, we have no options. Farming is a hard life!"*

(Female, 45, farmer, Hinnock – Interview statement)

Poverty was partly associated with poor harvest due to soil infertility, mentioned by 36% (9/25) of respondents, and unpredictable rains, mentioned by 80% (20/25) of respondents. For those who engaged in tobacco farming, the inability to compensate for declining maize harvests through income from tobacco was highlighted. This was a concern for almost a third, (28% - 7/25) of respondents. Income from tobacco is affected by fluctuating prices, for example, in response to the anti-smoking lobby tobacco prices have declined recently from US$3/kg in 2008 to US$0.50/kg in 2011 (IPS, 2011). At the focus group, participants speculated that tobacco prices would drop further and would no longer be a viable opportunity. This caused some concern, but as not everyone in the village grew tobacco, respondents did not feel that it would be a wide-spread issue. Finally, repeated and worsening flooding emerged as a concern, but this will be dealt with more thoroughly in Chapter 7, where the focus is on shocks.

Focus group participants were asked how they respond to chronic stresses. Irrigation was mentioned as a possible future adaptation to drought in the men's and women's focus group in Hinnock. In Hinnock, irrigation has recently been introduced by a development agency. However, as was the case in Chikamana, participants felt this would be an option for the very rich, and even then, without adequate water irrigation would be useless. When pressed about

other ways in which people coped with stresses both groups agreed that most people accepted that rural life was difficult, and without new farming inputs (e.g. fertiliser), or significant opportunities for livelihood diversification there was little that could be done. Instead, participants insisted that chronic stresses were a part of rural life and the consequences were accepted as normal. This is highlighted in the following quote;

*"Because we are poor there is not much we can do. We accept our problems. We are used to these problems. Being a farmer is hard."*

(Male, Hinnock – Focus group statement)

### *6.2.3 Synthesis*

From the analysis in this section, it is evident that both Chikamana and Hinnock are affected by chronic environmental stresses. Furthermore, stresses have been normalised into everyday life. Given the climate data for Malawi, outlined in Chapter 3, Section 3.3, it is likely that theses stresses are at least in part attributable to climate change. However, it is recognised that other drivers such as population change and economic forces operating outside the village also contribute to long-term stress. Regardless of the extent to which climate and non-climate drivers affect each village, the important point is that chronic stress is a key feature of rural life in Chikamana and Hinnock. Consequently, all decisions made by people in the three villages are made in the context of chronic environmental stress.

## 6.3 Migration aspirations

### *6.3.1 Social norms around migration*

Before it is possible to make sense of the data on future migration aspirations, it is important to develop an understanding of past migrations in the study villages. In the questionnaire, respondents were asked if they currently have a household member who was away in town. In Chikamana, only 3% (1/33) had a household member who was currently away. In Hinnock, no respondents had a family member in town. Questionnaire respondents were also asked if they had ever migrated away from the village themselves (see Figure 6.3). This question was designed to elicit information about return migration, as by default those who had migrated and who were back in the village were 'return migrants'. In Chikamana 71.2% (62/87) of the population had never migrated outside of the village. In terms of rural-urban migration, 13.8%

(12/87) of respondents in Chikamana had migrated to town at some point in their lifetime. Only 8% (7/87) of respondents had migrated to a new village. A small minority (4.6% - 4/87) had completed an international migration. Two of these migrations had been just over Malawi's border into Zambia and Mozambique, and two had been slightly further afield into South Africa and Zimbabwe. Finally, just 2.2% (2/87) had left the village to attend boarding school in nearby Liwonde. In Hinnock, 86.3% (82/95) of the population had never migrated outside of the village. In terms of rural-urban migration, just 5.2% (5/95) of respondents had migrated to town at some point in their lifetime. Only 3.1% (2/95) of respondents had migrated to a new village. A small minority (2.1% - 3/87) had completed an international migration and all had crossed the border into Zambia. Finally, just 3.1% (2/87) had left the village to attend boarding school in the capital, Lilongwe. A Fishers' Exact test shows differences between the two villages are approaching significance (p=0.09) suggesting that respondents in Hinnock are less likely to have ever migrated.

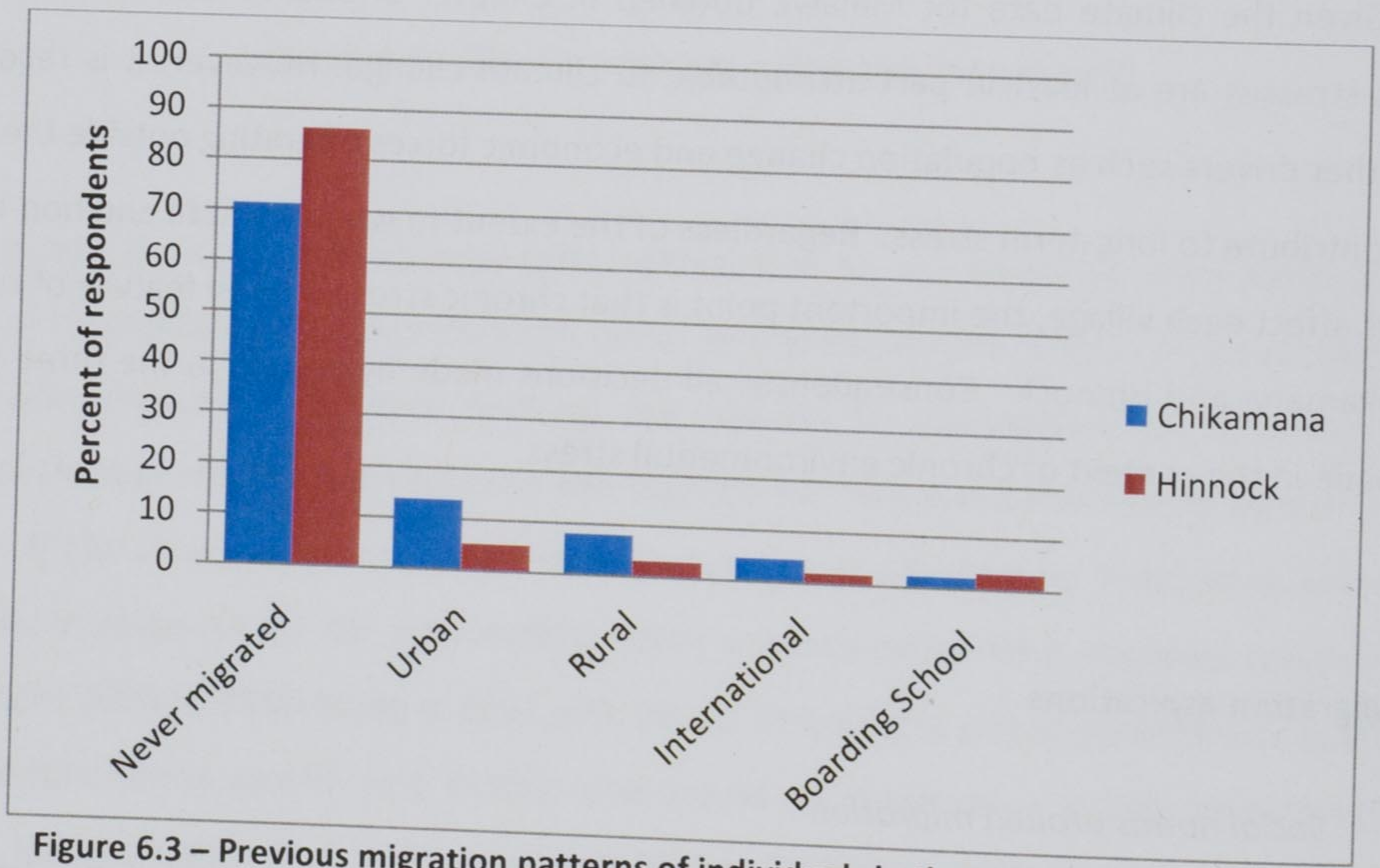


**Figure 6.3 – Previous migration patterns of individuals in the two case study villages (% per migration category, Chikamana n=87, Hinnock n=95) A Fishers' Exact test shows differences between the two villages are approaching significance (*p=0.09*) (Source: Field questionnaire - Rural)**

Overall, these results suggest that in both villages migration, especially rural-urban migration is not a significant aspect of village life. This suggests that a "culture of migration" (see Kandel and Massey, 2002), characterised by a high rate of out-migration to town has not previously been a feature of the study villages, however, this may be transitional, and it may be the case that migration aspirations are evolving, perhaps as a result of environmental stresses. The following sections explore this.

### 6.3.2 *Who intends to leave the village?*

Against the backdrop of chronic environmental stress (as described in Section 6.2), questionnaire respondents in Chikamana and Hinnock were asked if they were considering leaving the village. The purpose of this question was to ascertain what proportion of the population intended to stay in the home community, thus 'choosing' to live with environmental stress, and what proportion of the population intended to leave for alternative locations. It is recognised that 'choosing' to live with environmental stress may be the only 'choice' available to those who are limited by a lack of a migration capability. It may also be the case that those with no intention of leaving the village have a high a migration capability, but the capitals that constitute that capability enable a person to successfully deal with chronic stress. As such, the migration capabilities of those who appear to 'choose' to live with environmental stress are examined in Sections 6.4. At the same time, the migration capabilities of those who intend to leave the village are also examined.

Before migration aspirations and capabilities can be more deeply explored, it is necessary to briefly examine the basic demographic characteristics of those who want to leave the village and those who do not. During the questionnaire in Chikamana (n=87) and Hinnock (n=71), respondents were asked if they would leave the village. For those who said they would leave, a further question clarifying their destination was asked (see Chapter 4, Section 4.2.5 for an explanation of the methodology). In Chikamana, the overwhelming majority (78.2% - 68/87) of respondents said they would never leave the village (see Table 6.3). These respondents are now referred to as 'potential non-migrants'. Specifically, 72.8% (24/33) of men and 81.4% (44/54) of women were classed as potential non-migrants. The remaining respondents (21.8% - 19/87) said that they would like to leave the village in favour of an urban centre. These respondents were classed as 'potential rural-urban migrants'. More specifically, 27.2% (9/33) of men and 18.5% (10/54) of women were classed as potential rural-urban migrants. A Chi Square test shows the differences between genders in Chikamana is approaching statistically significant at the 10% level ($p=0.07$) suggesting that in Chikamana, slightly more men than women intend to move to town.

In Hinnock, 59.1% (42/71) of respondents said they would never leave the village and can therefore be classed as potential non-migrants. More specifically, 57.7% (15/26) of men compared to 60% (27/45) of women were potential non-migrants. Overall, fewer respondents in Hinnock than Chikamana are classed as potential non-migrants. This can be explained by the proportion of respondents in Hinnock who said they would make a rural-rural move (no one in

Chikamana had suggested they would make such a move). In Hinnock, 19.7% (14/71) of respondents were classed as potential rural-rural migrants. This is 7.7% (2/26) of men and 26.6% (12/45) of women. This was a pattern of movement that was not available to respondents in Chikamana (this will be discussed in more detail in section 6.3.5). Finally, potential rural-urban migrants in Hinnock accounted for 21.1% (15/71) of respondents. Gender differences emerged with 34.6% (9/26) of men and 13.3% (6/45) of women stating a desire to move to town. A Chi Square test shows that gender differences in Hinnock are approaching significance at the 10% level (*p=0.09*).

**Table 6.3 – Migration/non-migration intentions of respondents in Chikamana and Hinnock (Source: Field questionnaire - Rural)**

| | Potential non-migrants (%) | Potential rural-urban migrants (%) | Potential rural-rural migrant (%) |
|---|---|---|---|
| **Chikamana (n=87)** | | | |
| **Total** | 78.2 (68/87) | 21.8 (19/87) | 0 |
| **Men** | 72.8 (24/33) | 27.2 (9/33) | 0 |
| **Women** | 81.4 (44/54) | 18.5 (10/54) | 0 |
| **Hinnock (n=71)** | | | |
| **Total** | 59.1 (42/71) | 21.1 (15/71) | 19.7 (14/71) |
| **Men** | 57.7 (15/26) | 34.6 (9/26) | 7.7 (2/26) |
| **Women** | 60 (27/45) | 13.3 (6/45) | 26.6 (12/45) |
| | 37.5 | 28.1 | 34.2 |
| **Total (n=158)** | | | |
| **Total** | 69.6 (110/158) | 21.5 (34/158) | 8.8 (14/158) |
| **Men** | 66.1 (39/59) | 30.5 (18/59) | 3.4 (2/59) |
| **Women** | 71.7 (71/99) | 16.1 (16/99) | 12.1 (12/99) |

When responses from Chikamana and Hinnock were aggregated (and potential rural-rural migrants excluded from analysis for consistency as this group were not represented in Chikamana) gender differences between non-migrants and rural-urban migrants became more pronounced. Just over a quarter (26.1%- 34/130) of respondents across both sites could be classed as rural-urban migrants. This is 31.6% (18/57) of men and 18.4% (16/87) of women. A Chi Square test shows that when responses are aggregated, difference between rural-urban migration intention and genders are approaching statistical significance (*p=0.06*). This may suggest that more men than women intend to move to town.

Difference between ages also emerged. The average age of respondents in Chikamana was 41.8 years old. Respondents who intended to leave the village for town were younger than average at 28.3 years old, and the average age of those who planned to stay was 45.2. A two-

tailed T-Test show that age differences between groups is statistically significant (*p=0.00*). The average age of respondents in Hinnock was 34.6 years old. Respondents who intended to stay in the village were slightly older than average at 37.5 years. Those who intended to move to a new village were marginally younger than the average age at 34.2. As was the case in Chikamana, those who wanted to leave the village were the youngest; the average age of this group was 28.1. A one-way ANOVA test shows that these differences are statistically significant (*p=0.05*).

Overall, these results suggest that despite chronic environmental stresses, most people in Hinnock and Chikamana do not want to leave the village. The data also support findings from Chapter 5 where I highlighted that most migrants to Malawi's towns are younger men. However, it should be noted that there is a slight age and gender bias in the rural questionnaire respondents. Most respondents were in their 40s, and most were women.

The remainder of this section unpicks the aspirations of the three groups identified above; these groups are potential non-migrants, potential rural-urban migrants, and potential rural-rural migrants. In particular, the remainder of this section uses data from focus groups and interviews to understand the link between migration aspirations and chronic environmental stress in the village. More specifically, the following sub-sections explore if environmental stress affects where people think the "good life" can be found and where they think their life goals are most likely to be achieved (see De Jong, 2000). Similar findings emerged from focus groups in both villages and as such findings from both study sites are presented together.

### *6.3.3 Potential non-migrants*

Potential non-migrants were those who answered 'no' when asked if they would leave the village for town. Across both villages, this group accounted for 69.6% (110/158) of questionnaire respondents. During the focus groups, and in-depth interviews, two key themes emerged. These were (1) despite chronic environmental stress people want to stay in the village because of the social, cultural and emotional ties they have with home, in this context, environmental stresses become normalised into everyday life; (2) the city is not seen as a place where the "good life" can be found, instead, it is a place that is disliked and feared.

The first theme that emerged is that despite chronic environmental stress people want to stay in the village because of social, cultural and emotional ties. In both Chikamana and Hinnock,

the focus groups revealed themes relating to family ties, village unity and a love of farming. In terms of family, focus group participants and interview respondents spoke mainly about the continuing influence of relations who had passed away;

*"I made a promise to my parents before they died that I would not leave this land. So even if things are bad for me, I will stay*

(Male, 50, farmer, Chikamana – Interview statement)

*"Home is best. We are all tied to our homes. In our village we have the graveyards. We will never leave our graveyards. They are too important. This is where our ancestors are."*

(Female, Student at Chancellor Collage, Zomba – Note of conversation from field diary)

*"Our ancestors are buried in this village so we have no right to leave them behind."*

(Male, 50, farmer, Chikamana – Interview statement)

Focus group participants described how the village was seen as a place of unity where family and neighbours supported each other through stresses. The women's focus groups were more vocal about unity than the men's and gave clear examples, such as neighbours assisting with childcare, or a group of women sharing a maize store. This finding evokes the African concept of *ubuntu*, which in very basic terms is a belief that people do not exist as individuals but as part of a community (Nussbaum, 2003). Although the physical aspects of place are important (e.g. graveyards), it is family and friends that make a place home. By contrast, participants imagined that people in town did not receive financial or moral support from their follow urbanites. This is highlighted in the following quotes;

*"When I am sick or things are not going my way, I know I can turn to my sisters or my neighbours for help. In this village we are one. In town, everyone is for themselves."*

(Female, Chikamana – Focus group statement)

*"We are together in the village. We are all together."*

(Male, 50, farmer, Chikamana – Interview statement)

Aside from an emotional commitment to other people in the village, respondents also expressed a commitment to agriculture. Farming is a daily activity for most households in Malawi and it defines most village activities. Although the main season for planting, and subsequently the peak time for labour is October to December, lives revolve around the farm. For example, in February, following planting, immature green maize is harvested. This is followed by a period of winter planting from March to June, which overlaps the main maize harvest from April to August. Then the cycle starts again (see Chapter 3, Section 3.3). The importance of farming was repeatedly bought up in focus groups and interviews as highlighted in the following quotes;

*"Life wouldn't be the same without farming. Farming is life and life is farming!"*

(Male, 45, farmer, Chikamana – Interview statement)

*"We are just farmers! What is a man without his land?"*

(Male, 22, Hinnock, Chikamana – Interview statement)

During the focus groups, respondents were specifically asked if they would remain farmers if the stresses described in Section 6.2 continued to affect their productivity. Respondents were also asked to consider if, in the face of continued stresses, they would move to town. In Chikamana and Hinnock, and throughout the men's and the women's focus groups, respondents unanimously stated that they would always be farmers and would never move to town. This is represented in the following quotes;

*"You can't leave because farming is hard! I won't go to town; whatever happens I won't go. I don't imagine I would like life there, so I will stay right here and see what life throws at me."*

(Male, 40, farmer, Hinnock – Interview statement)

*"If life is hard in the village, it will be harder in town! Can you imagine how hard it is in town where you need money for everything?! You just have to accept that village life is hard and try your best."*

(Female, 27, farmer, Hinnock – Interview statement)

These quotes support the idea (that was highlighted in Section 6.2) that the increasing difficulties associated with farming have become normalised into everyday life. Farmers learn to live with the declining productivity and cope with the effects.

The second theme that that emerged during focus groups and interviews was that potential non-migrants held negative perceptions of town. During the focus groups, five key words relating to the city emerged and all had negative connotations. These words were (1) youth; (2) dirt; (3) expense; (4) danger and (5) immorality. Overwhelmingly, the city was seen as a place for the young. This perception went beyond a fear of being too old to find work in town. It was also related to how they may be viewed by others in the city. At all the focus groups, discussion turned to why older people should remain in the village. A key reason was because it was felt that by this stage in their life the younger family members should take care of the older family members. An older person in town would represent failed family support, or that the older person was 'crazy' for choosing to move away from their family to put up with unsatisfactory living conditions in town. This is illustrated in the quotes below;

*"Town is for young people who can cope with working. An old person could not cope with working"*

(Male, Chikamana – Focus group statement)

*"When you are my age [around 50] you cannot start your life again in town! That is only for young people. The young ones should look after us in the village."*

(Male, Hinnock – Focus group statement)

Town was also seen as expensive. This transcended a fear of not being able to make enough money to live (although, this was a pressing concern). Negativity also surrounded the idea that items taken for granted as being free and accessible in the village had to be paid for in town. Paying for goods that were free in the village was also mentioned as an issue in for the rural-urban migrants describe in Chapter 5. Urban respondents had expressed surprise at having to pay for water and wild foods such as okra. In addition to the high cost of living, the idea that income was dependent one's own business was also viewed in a negative way. Although focus group participants noted that their income in the village was reliant on their ability to sell crops (or run small businesses), respondents feared having to do this without the support of other households to assist if things go wrong. This is highlighted in the following quotes;

*"If you don't make money then you don't eat. There is nothing to do. You just don't eat. No one will help you in town. You're on your own. You will starve. "*

(Male, 23, farmer, Chikamana – Interview statement)

*"Life in the village is much cheaper. If I wanted vegetables I could just walk out into the bush for them. Here I have to buy everything from firewood, water, flour, even vegetables...everything. I was so shocked when I arrived; we had to buy okra – that is free at home. I need money for everything."*

(Female, 31, vendor, Lilongwe – Interview statement)

*"You have to pay for vegetables! Vegetables!"*

(Female, 40, farmer, Hinnock – Interview statement)

The perception of town as dirty and unhygienic was pervasive amongst the focus group respondents. Respondents described how a lack of regulation and monitoring by the authorities was directly responsible for poor sanitation. For example, respondents described how waste in the markets was never removed (see Figure 6.4) and how this could lead to the spread of disease. Furthermore, participants in the focus groups and in the interviews had negative pre-conceptions about the state of urban housing. Respondents were very aware of urban living conditions and that many people who leave the village for town end up in informal housing (slum) areas. Respondents noted that their village homes would always be preferable to urban homes where overcrowding and poor construction, coupled with unsanitary/unhygienic conditions were seen as key issues. This highlighted in the following quotes;

*"[In town] the roofs are bad on the houses and they get wet. You have to live in a wet, dirty house and everywhere in the city you have to cope with dirt and water."*

(Male, Hinnock – Focus group statement)

*"The markets are so full of rubbish. There is rubbish everywhere because the authorities do not help people in town. They let it get into an unhygienic state and it is dangerous to live in conditions of such dirt and disease"*

(Male, Chikamana – Focus group statement)

Figure 6.4 – Rubbish dumped in Lilongwe next to an uncollected and overflowing skip

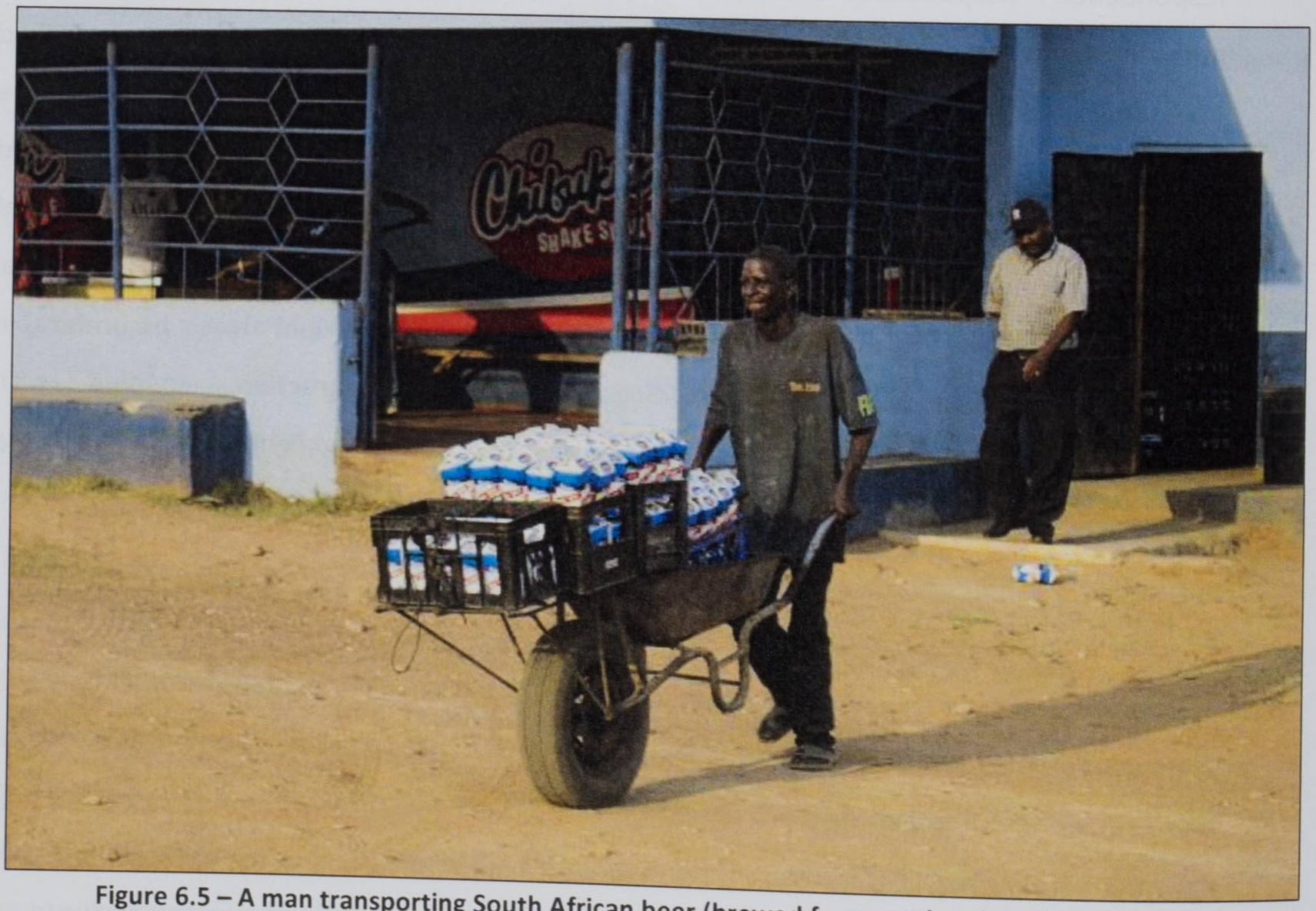

Figure 6.5 – A man transporting South African beer (brewed from sorghum) in Liwonde

*"In the village our homes are clean and we don't have these problems of dirt that are in town. We don't get sick like the people in town. There is too much disease there."*

(Male, Chikamana – Focus group statement)

The city as a place of immorality was also explored during the focus groups where both male and female participants spoke about alcohol (see Figure 6.5), western dress, and prostitutes. In the focus groups, female participants were more vocal about the social consequences of drinking alcohol than their male counterparts. However, male participants were more vocal about the use of western dress and the presence of prostitutes in town. This may be in part attributed to the subjects that men and women felt comfortable talking about, for example, sex is a taboo subject in Malawi, especially for women (Kamwendo et al., 1999). However, this gender bias was also reflected in the in-depth interviews when both researchers conducting interviews were female and therefore more likely to be able to talk about taboo subjects that would not be discussed in the presence of males (see Chapter 4, Section 4.3.2 for a discussion of the researchers' positionality). The male view of the city as a home to western dress and prostitutes (which were seen as synonymous) is based on the notion that a woman would not consider wearing any garment that may expose the shape of their thighs and buttocks, which are considered erogenous zones in Malawi (Gilman, 2004). This includes short skirts or trousers. For many, rural residents at the focus groups and in the in-depth interviews the thought of women dressing freely was a social ill that could not be tolerated. These issues are highlighted in the following quotes;

*"Everyone sits around and gets drunk. The men are bad, but even the women drink beer. That would not happen in the village, but there is no respect in town."*

(Female, 30, farmer, Chikamana – Interview Statement)

*"There are so many prostitutes all around. They are all over town."*

(Male, 43, farmer, Hinnock – Interview Statement)

*"The women dress badly. They wear clothes that would never be worn at the village. I don't like it. There are no morals about how to dress in the city"*

(Male, Hinnock – Focus group statement)

Danger was seen as a key aspect of city living in both the men's and women's focus groups. The main concerns centred on violence, theft, rape and road accidents, although violence, including random and unprovoked attacks, was the most frequently cited concern. Through social networks, and from radio and newspapers, rural dwellers could keep informed of crime in the city. For example, in mid-2013, a national newspaper reported violent clashes between street vendors and the police (Nyasa Times, 2013b). In addition, respondents saw towns, and especially market as a hotspot for road accidents. In market towns, this was due to the proximity of the road to the trading area. The combination of men and women trading on the roadside and poor driving skills meant accidents were seen as inevitable. There was also a perception that the lack of social norms and strong village bonds meant that there were no rules to govern behaviour, as the following quotes from the in-depth interviews illustrate;

*"If they don't like you in town, they can just kill you or bewitch you. They can do that in town because no one knows you they think they can do what they want to you."*

(Female, 44, farmer, Chikamana – Interview statement)

*"They will kill strangers. Because they don't know you there is nothing to stop them attacking and killing you. It's not safe."*

(Female, 26, farmer, Chikamana – Interview statement)

*"I would never move to town. It is very violent in town you know. People hide in the maize before harvest and when you walk by they jump out at you, beat you and take your money."*

(Male, Hinnock – Focus group statement)

Overall, the results from the potential non-migrant focus groups suggest that despite chronic stresses rural-urban migration is not seen as a solution. This is partly informed by a dislike of the city, which is seen as dirty, expensive, dangerous and immoral. In contrast, the village embodies unity, family and farming, which are critical elements of what it means to be Malawian. Chronic stress makes it harder to be a farmer, to some extent stress is normalised into life as farmers accept that rural life is difficult. Furthermore, the majority of people in Chikamana and Hinnock lack a migration capability (see Section 6.4), which means that even in the context of chronic stress, migration to town is unlikely.

### *6.3.4 Potential rural-urban migrants*

Potential rural-urban migrants were those who answered 'yes' when asked if they would leave the village for town. Overall, this group represented 21.5% (34/158) of questionnaire respondents across the two villages. Data from the focus groups and interviews in the rural study sites, as well as data from the interviews in urban sites were used to explore the links between environmental stress and potential migration to town. Two key concepts emerged (1) chronic stresses make rural life harder, but even potential rural-urban migrants recognise the common perception that chronic stresses are a normal part of the rural livelihood. Furthermore, there is a disconnect between the desire to migrate and the presence of environmental stress; (2) despite this acceptance that stress is a normal part of rural life, potential rural-urban migrants recognised that a farming life is not the only life available to them as their money, knowledge and social networks could buy access to a new 'better' life in town.

In terms of the first concept, that chronic stresses are a normal part of the rural livelihood, focus group respondents were quick to detail and then dismiss chronic stress as a reason for leaving the village. A similar theme also emerged during interviews in the urban areas. This is highlighted in the following quotes;

*"I do want to go to town, but these problems [as described in Section 6.2] won't make me go. We know life is difficult in the village. It has always been difficult, but you should not run from your problems"*

(Male, Chikamana - Focus group statement)

*"Yes, we had drought in the village. The maize would look promising but then we would get too much heat or wind and we would be left with nothing. It was bad. Sometimes serious. But this didn't make me move. My husband is a carpenter and no one in the village wants things like display cabinets. People in the village wouldn't even buy a chair. They would just use a mat and sit on the floor. "*

(Female, 19, phone-credit-vendor, Lilongwe – interview statement)

*"It is getting hotter in the village and we don't have as much water. This means productivity is reduced and we don't have as much income. But for us... this didn't make us move. My*

*husband was asked if he wanted to come and work in a shop with his friend. So he came to take the job and have a new experience in town and I followed."*

(Female, 27, waitress/cook, Lilongwe – Interview statement)

*"No, of course the environment didn't make me move here! Ha! Of course not! I just got tired of the village and wanted money. You know it's not like that here. We are used to these problems in the village. My brothers are in the village and they farm. When there is a bad harvest they just try to survive. I wanted to come to town and be independent. I wanted to grow up."*

(Male, 34, seller of Chinese produced plastic goods, Liwonde – Interview statement)

The second theme to emerge was that potential rural-urban migrants recognise that the rural life is not the only life available to them. For the potential rural-urban migrant group, farming was seen as laborious even if the household had a successful farm. For example, during a livelihood interview, a female respondent, 22, from a better-off household in Chikamana village described how she wanted to move to town. Despite being a successful farmer whose maize lasted for 18 months, the respondent described how she did not like to farm as it was time consuming and hard work. Instead she imagined a life in nearby Liwonde where she felt she would be free of the constraints of the village. She explained;

*"When I think about going to town, I think that I won't have to be a farmer and live by how lucky I am with my crops. I can have a life in town and be free from village work. Be free from farming."*

(Female, 22, farmer, Chikamana – Interview statement)

Instead of having to engage in hard labour, potential rural-urban migrants favoured a different lifestyle in town. In this way, it could be argued that the desire to leave the village is a product of the interaction between environmental stresses and increasing aspirations for a more urban lifestyle. Environmental stress alone is not enough to 'push' people out of the village, but when stresses are combined with a desire to experience life outside the village, urban aspirations develop;

*"One day I would like to experience what town has to offer. There is more to do there. I know life there can be hard, but at least you are free from the village and from hard work and farming. You can experience entertainment!"*

(Male, Chikamana – Focus group statement)

*"Farming is ok but I don't want to be a farmer because I prefer to live in town. We are free from the village and the gossip and the jealousy. When you are a famer you work so hard and you still don't get anything. Yes, life is hard in town, but if I can work hard at least I know that I will get something."*

(Female, Chikamana – Focus group statement)

Participant observations in Chikamana support the idea that the aspirations of young rural Malawians are becoming more urban. For example, during an interview with a teacher in a local primary school, it was evident that learning materials had an urban (and even Western) focus. The students' bookshelves contained books from around the world, featuring children enjoying typically Western activities such as shopping in the city, visiting a zoo, or going on holiday. The children in the books were from socio-economic backgrounds far removed from any child in Chikamana. None were from farming families and all the stories reflected an urban bias. For the village children, these are signals that there may be life outside of the village, and that there may be an alternative to farming.

These results suggest that the combined effect of two processes influence the migration-decision making of potential rural-urban migrants. The first process is increasing Westernisation, and the second is reduced agricultural productivity. As farming gets harder and farmers are trapped in a situation of diminishing return, some people (i.e. younger men and to a slightly lesser extent, younger women) begin to question where the good life can be found. However, even potential rural-urban migration accept that chronic stresses are a normal part of urban life, however, as I will explore in Section 6.4, those with high financial, human and social capital have the capability to choose where to live.

### 6.3.5 *Potential rural-rural migrants*

Potential rural-rural migrants were respondents who answered 'yes' when asked if they would leave the village for a new rural location. In Hinnock, 19.7% (14/71) of questionnaire respondents said they may leave the village for a new rural location. In Chikamana, no one said they would leave the village for a new rural location. This is perhaps surprising given Potts' (2006b) conclusion that rural–rural migration in Malawi is a vitally important aspect of rural livelihood change and a positive adaptation to declining agricultural opportunities. In this study, despite being affected by rural stress, very few people say they would move to a new rural location. As such, data were analysed in order to understand the factors that contribute to a rural migration aspiration (including if people move in search of the good life and labour opportunities) and the link this has with environmental stress.

In Hinnock, all of the potential rural-rural migrants intended to move either within the same district or to neighbouring districts and all intended to move for personal reasons that were not connected to environmental stresses. More specifically, women wanted to leave to get married, and men wanted to leave following a divorce. These differences can be attributed to the fact that the village mainly, but not exclusively, practices virilocal marriage, where women leave the village to live near their husband's parents. Male migration can be explained by the fact that the village also practices uxorilocal marriage, where a man moves to live near their wife's parents. When marriages break down, the partner who has moved to join their spouse's family has no access to farming rights. This is illustrated in the following quote;

*"I need to go to get peace. I have no peace here. I will go back to my mother's village because this is not my village after I divorce my wife."*

(Male, 45, farmer, Hinnock – Interview Statement)

*"I am just a visitor here now. I live in my husband's village. I am visiting my aunt's home."*

(Female, ex-resident of Hinnock – Note of conversation from field diary)

Participants in both Hinnock and Chikamana explained that they would be unlikely to leave the village to look for new, more productive land as a result of environmental stresses. The main reason for this was a lack of kinship connections to other rural areas that could facilitate migration that was not for the purpose of marriage. Without these connections a 'frontier' migrant would have to go "begging" to the chief of the new village for land. Despite the term "begging" land transfers are not free and a chief may charge a substantial fee for a plot to be

secured (Peters, 2002). A lack of kinship networks were a particular problem in Chikamana as the village was relatively isolated from its neighbours. Although rural-rural migration had once been a feature of the area, land shortages meant that it was no longer possible (see Box 6.1). In Hinnock, local kinship networks were stronger as villages were close by to each other. Despite this, focus group participants and interview respondents felt that permanent migration into a new village would cause tensions with the current population who, because of their close proximity to Hinnock, would be experiencing a similar level of environmental stress. The fear of causing conflict through migrating into a new village is expressed in the following;

*"Even if you begged for land from the chief you would always be alone. No one would assist a stranger if a problem happened. They don't know you, why would they assist you?"*

(Female, Chikamana, - Focus group statement)

**Box 6.1 – Rural-rural migration, ethnicity and land rights**

An interview with the village chief in Chikamana revealed a period of mass in-migration during the 1960s when rural dwellers from the surrounding areas came to Chikamana in search of land. At this time Chikamana was largely unoccupied; however, a local chief had jurisdiction over the area and was responsible for granting land rights to new migrants. Most of the migrants came from an area of land around 10 miles north of Chikamana. They were granted access to land because of their ethnicity. More specifically, migrants were part of the Yao tribe and they were welcomed into the area in an effort to ensure that other ethnic groups did not take over. The chief suggested that more recently, there had been a downward trajectory of land-seeking migrants, and he attributed this to the lack of available land;

*"There is not as much land as there was because of population growth and immigration. Immigration is less than it was before because we don't have the land now. When people came here in the 1960s, we could give them a plot, but not now."*

(Interview with Chief of Chikamana)

*"We moved here in 1993[3]. We remain outsiders. We will always be outsiders. We know that there is gossip about us. So when the rains don't come, eyes turn to us. They think we are 'holding the rain'"*

(Female, 60, witch doctor, Chikamana – Interview statement)

[3] According to the key informant, Malawians from across the country descended on Chikamana in 1993 when Billy Goodson Chisupe arrived in the village and announced that he had a cure for HIV/Aids. Those in search of a cure would camp outside the village or stay with family members until they had seen Billy. Although many of these migrants subsequently died, a handful remained in the village with their children and other dependants

*Why would we move to another village? So we are in this village and we have problems. If we move to another village we will have the same problems. We don't know what our life would be like in another village. What if it is worse and we find a bad situation. We can't just move like this.*

(Male, 23, farmer, Hinnock– Interview statement)

## 6.4 Rural-urban migration capabilities

To understand the link between migration aspirations, migration capabilities and stresses, an assessment of financial, human and social capital took place. Data to quantify a person's capital assets were collected during the questionnaire in both Chikamana and Hinnock. The impact of stresses on capitals was explored qualitatively during interviews and focus groups. For each of the three types of capital, a baseline of is presented at the village level. This baseline is then compared to each of the three 'migration aspiration' groups identified in Section 6.3.

### *6.4.1 Financial capital, migration aspiration and stresses*

#### 6.4.1.1 Baseline of financial capital at the village level

A village level assessment of financial capital was made in two ways. The first was based on a household's ability to maintain food security and to generate an income from farming. The second was based on the household's relationship with *ganyu* (see Chapter 4, Section 4.3.3 for an explanation of the methodology). The poorest households are unable to sustain agriculture productivity throughout the year and must buy most of their food. They are also more likely to supply their own labour for ganyu. Middle-poor households are able to maintain food security for around half of the year and supply their own labour more than they employ others. Better-off households can maintain food security all year whilst selling some surplus, and are more likely to employ others to do ganyu on their land.

The results show that in terms of ability to maintain food security and to generate an income from farming, households in Chikamana and Hinnock matched the national average (see Figure 6.6). More specifically, in Chikamana, 20.6% (18/87) of households were net-buyers of maize. All of these households supplied their own labour for ganyu. These are the poorest households in the village. In Hinnock, this figure was 20% (14/70), and almost all (92.8 – 13/41)

supplied ganyu. In both Chikamana and Hinnock, intermediate farmers who comprise the middle-poor were the largest category representing 56.3% (49/87) of respondents in Chikamana and 58.5% (41/70) of respondents in Hinnock. In Chikamana, 73.4% (36/49) intermediate farmers supplied labour, and in Hinnock, 80.4% (33/41) supplied ganyu. Finally, 22.9% (20/87) and 21.4% (15/70) households in Chikamana and Hinnock respectively, were regularly able to sell their crops for a profit and were overall net-sellers of their produce. In Chikamana, 40% (8/20) supplied ganyu, and in Hinnock 60% (9/15) supplied ganyu. These households are the better-off households.

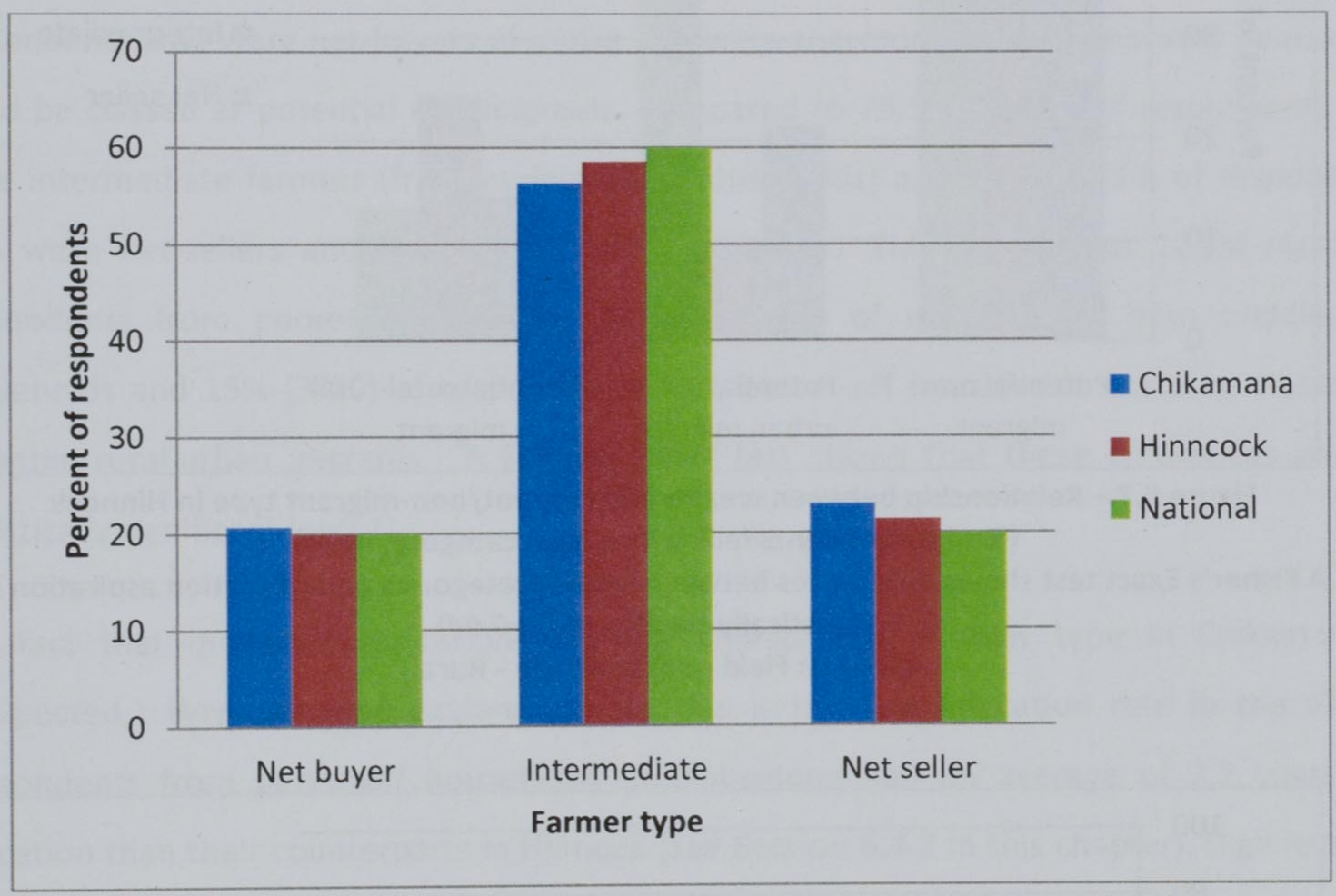


**Figure 6.6 – Farmer productivity in case study areas compared to the national average (% of respondents falling into wealth category, Chikamana n=87, Hinnock n=70)**
**A Chi Square test shows that any differences between the villages are not statistically significant (*p=0.9*)**
**(Source: Field questionnaire - Rural)**

6.4.1.2 Linking financial capital and migration aspiration

As described in Chapter 5 (Section 5.3.1), financial capital is an important factor for migration to take place. In Hinnock the majority (64.3% - 9/14) of respondents who were net-buyers (and therefore from the poorest households) were potential non-migrants (see Figure 6.7). Just over a fifth (21.4% - 3/14) were potential rural-urban migrants and 14.3% (2/14) were potential rural-rural migrants. The majority (65.8% - 27/41) of intermediate farmers were also classed as potential non-migrants. Only 9.7% (4/41) were classed as potential rural-urban

migrants and 24.3% (10/41) were classed as potential rural-rural migrants. Finally, 40% (6/15) of net-sellers were classed as potential non-migrants, 46.6% (7/15) were classed as potential

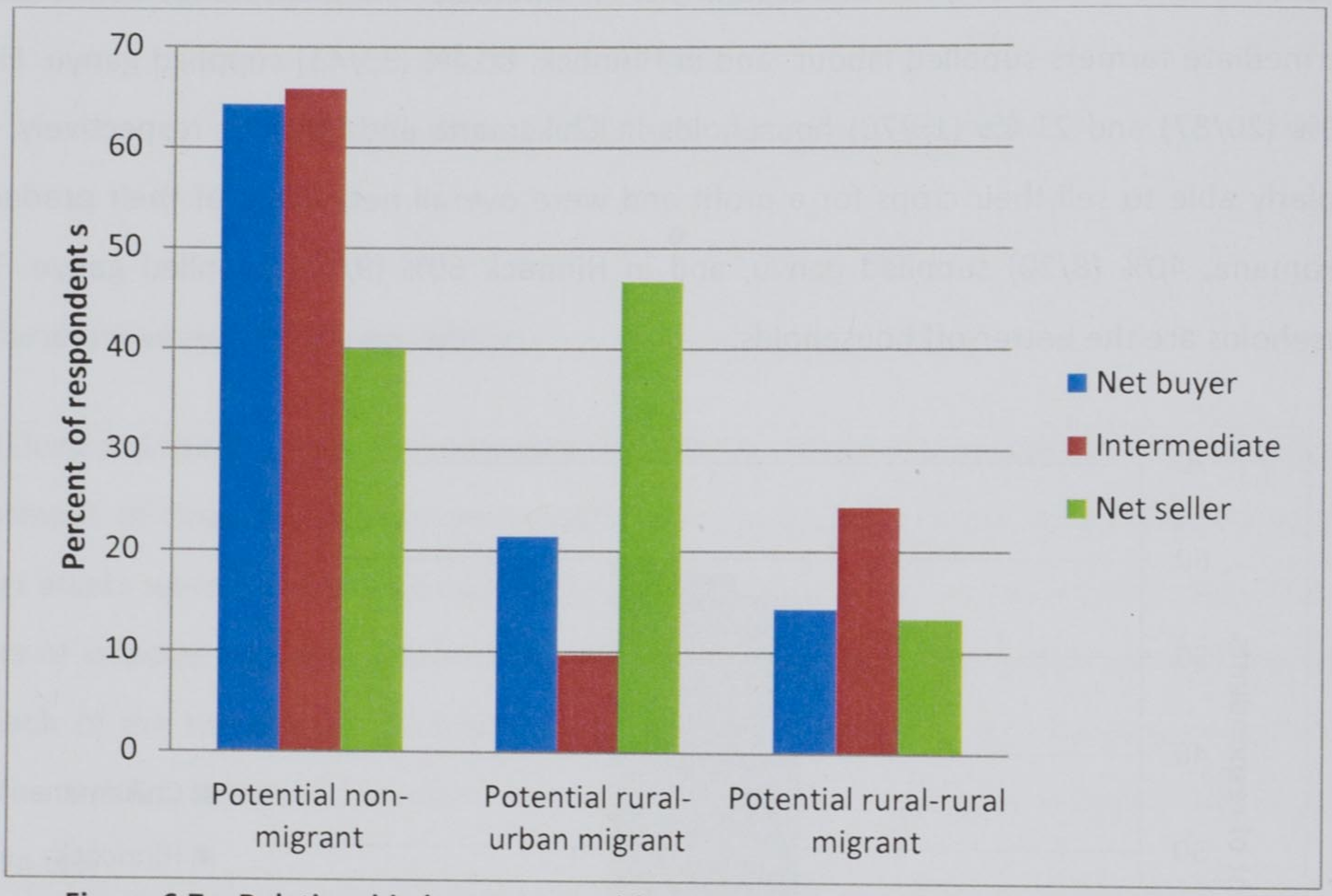


**Figure 6.7 – Relationship between wealth and migrant/non-migrant type in Hinnock (% of respondents falling into each category, n=70)**
**A Fisher's Exact test shows differences between wealth categories and migration aspiration is statistically significant (*p=0.04*)**
**(Source: Field questionnaire - Rural)**

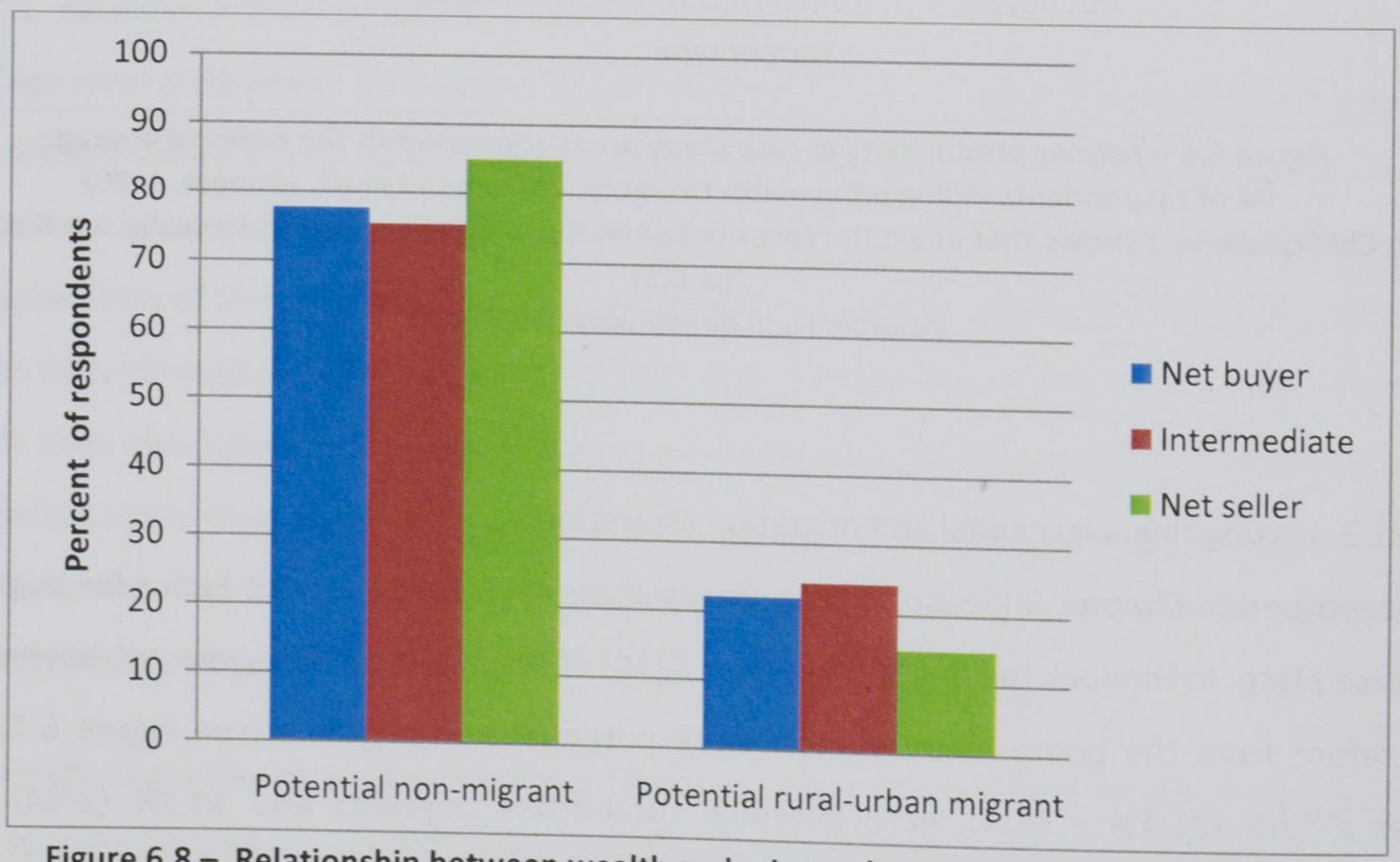


**Figure 6.8 – Relationship between wealth and migrant/non-migrant type in Chikamana (% of respondents falling into each category, n=85)**
**A Fishers Exact test shows differences between wealth categories and migration aspiration is not statistically significant (*p=0.7*)**
**(Source: Field questionnaire - Rural)**

rural-urban migrants and just 13.3% (2/15) were classed as rural-rural migrants. A Fisher's Exact test shows that these differences are statistically significant (*p=0.05*). This suggests that in Hinnock net-sellers (those from better-off households) are more likely to have an aspiration to move to town. Those from intermediate households (the middle poor) are the least likely to aspire to move to town.

The relationship between farmer type and migration aspiration in Chikamana was more complex than in Hinnock. In Chikamana, there was little difference in rural-urban migration aspiration across the three farmer types (see Figure 6.8). Specifically, 77.7% (14/18) of respondents who were net-buyers of maize and were therefore from the poorest households could be classed as potential non-migrants, compared to 75.5% (37/49) of respondents who were intermediate farmers (from middle-poor households) and 85% (17/20) of respondents who were net-sellers and from better-off households. This meant that 22.2% (4/18) of respondents from poorer households, 24.5% (12/49) of respondents from middle-poor households and 15% (3/20) of respondents from better-off households could be classed as potential rural-urban migrants. A Fisher's Exact test shows that these differences are not statistically significant (*p=0.7*).

The fact that migration aspirations did not change with farmer type in Chikamana is unexpected. However, one explanation for this is the low education rate in the village. Respondents from better-off households in Chikamana had an average of 2.2 years less education than their counterparts in Hinnock (see Section 6.4.2 in this chapter). High levels of education are perceived as a prerequisite for rural-urban migration (see Chapter 5, Section 5.3.2 and Section 6.4.2 in this chapter for more data on education and migration), and a lower level of education leads to decreased migration aspirations. As one respondent from a net-seller (better-off) household explained;

*"What would I do in town? You must have schooling to live there. I haven't been to school so I wouldn't be able to survive in town."*

(Female, 48, farmer, Chikamana - Interview statement)

The findings presented here highlight the importance of the 'correct' combination of capitals in constituting a migration capability, and in turn a migration aspiration. Financial capital alone is not adequate to make a move to town. Stark and Taylor (1991) revealed a similar finding in their analysis of migration in Mexico. They found no statistically significant pattern with

respect to the influence of family income on the propensity for internal migration. They concluded that this was partly reflective of the fact that educated migrants more readily take on more expensive moves to town, but when the wealthy lack education, they are less likely to take on such moves (also see, Levy and Wadycki, 1974). Altogether, these results show that financial capital is important but contextual.

6.4.1.3 Financial capital and stresses

In Chapter 5, I highlighted how the majority of migrants finance their move using money generated within the village; in Lilongwe, 53.3% did this, in Chitedze 65.4% did this, and in Liwonde 91.4% did this. More specifically 41.6% of migrants to Liwonde relied on money from their own ganyu within their home village, 16.7% relied on money from crop sales, and 33.3% relied on gifts from rural friends and family, who in turn rely on productive rural environments. The data that were presented in Section 6.2 shows that chronic environmental stresses affect agricultural productivity and therefore the ability to generate a steady income from farming. Farming is becoming increasingly difficult, for example, farmers are farming the same area of land they have always farmed but harvests are declining. This is largely attributed to poor rain, increased temperatures, soil infertility and population increase. In the focus groups, potential rural-urban migrants were aware of the impact of declining productivity on their ability to leave the village. This is highlighted in the following quotes;

*"I am trying to save my money from crops and do extra ganyu so I can go to town, but it's not easy when the farm does not give you much. I have to spend money on food so I don't have any left for anything else."*

(Male, potential rural-urban migrant, Chikamana – Focus group statement)

*"If I get a good harvest next year, then I will be able to sell my crops and just go to town. If I get no luck I will just stay because I need money from the crops to leave."*

(Male, potential rural-urban migrant, Hinnock – Focus group statement)

*"I am just waiting in the village until I can move to town. If we have a good harvest I will be able to make my money and leave, but if we don't get enough this year I can't go."*

(Male, potential rural-urban migrant, Chikamana – Focus group statement)

### *6.4.2 Human capital, migration aspirations and the vulnerability context*

#### 6.4.2.1 Baseline of human capital at the village level

Given the importance of education for rural-urban migration to occur in Malawi (see Chapter 5, Section 5.3.2), data on the on the length of time respondents had attended school were collected during the questionnaire. Data show that respondents in Chikamana had attended school for 3.6 years and in Hinnock for 4.7 years. The respondents in Hinnock had, on average, received 1.1 years more education than the community in Chikamana. A two tailed t-test showed this difference was statistically significant (*p=0.04*). This difference can be explained by the number and location of both primary and secondary schools in relation to the villages. Hinnock has two local secondary schools in the area and students are able to access either school. Furthermore, children in Hinnock are nearer to the capital city, Lilongwe, where numerous day and boarding school options exist. By contrast, in Chikamana primary education was hampered by the poor quality of the local school. The villagers reported that they were waiting for outside assistance to build a new primary school. Furthermore, any child sent for secondary education was required to travel to Liwonde some 22km away

In Hinnock, the respondents from the poorest households had attended school for an average of 4 years, individuals from the middle-poor households had attended school for 5.1 years and individuals from better-off households had attended school for 6.5 years. A one-way ANOVA test shows that differences between groups is statistically significant (*p=0.04*). In Chikamana, respondents from net-buyer (poorer) households had attended school for 2.2 years; respondents from the intermediate farmer (middle-poor) households had attended school for 4.3 years, and; respondents from net-seller (better-off) households had attended school for 3.7 years. A one-way ANOVA test shows that differences between groups is statistically significant (*p=0.03*). Again, although this indicates that better-off respondents in Chikamana were more educated than poorer respondents, they had 3.6 years less education than their counterparts in Lilongwe who had 7.9 years of schooling.

#### 6.4.2.2 Linking human capital and migration aspirations

In terms of human capital, differences between migration aspirations and the number of years spent in education were evident in both study sites. The results from Hinnock show that education is related to financial capital; those from better-off households spent longer in education and are more likely to have a migration aspiration. In Hinnock, potential non-

migrants had spent an average of 3.8 years in education. Similarly, potential rural-rural migrants had spent an average of 3.7 years in education. However, potential rural-urban migrants had spent an average of 7.75 years in education. A one-way ANOVA test shows that these differences are statistically significant (*p=0.02*). In Chikamana, where the average number of years spent in education were fewer overall there was little difference between migrant aspiration groups. Potential non-migrants had spent an average of 2.5 years in education compared with potential rural-urban migrants who had spent 3.1 years in education. Again, a two-tailed t-test shows that these differences are not statistically significant (*p=0.8*).

#### 6.4.2.3 Linking human capital and stresses

Education is needed for rural-urban migration to take place; however, stresses can affect education. For example, as harvests continue to decline nutrition is affected. The link between nutritional status and education has been widely documented (Bryceson, 1996, Alderman et al., 2001, 2006, Few et al., 2004). For example, Alderman et al. (2006) used data from rural Zimbabwe to show that children who had a good nutritional status started school earlier and completed more grades. Furthermore, when household food security is severely threatened, children may stop going to school altogether, partly because they are hungry, and partly because the household lacks extra money to pay school fees (for secondary school children[4]) and to buy books or pay for compulsory exams. These issues are highlighted in the following;

*"Hungry children won't go to school. I know this has happened before. The children were too hungry to walk to school. And they were too hungry to sit and to learn."*

(Interview with the chief of Chikamana)

*"When we had no food at home and no money, I decided to quit school because I needed to be at home. Anyway, I was being chased away every day for not paying fees."*

(Male, 23, farmer, Chikamana – Interview Statement)

Importantly, the link between education and migration capabilities was recognised by interview respondents and focus group participants. Echoing findings from the urban study

[4] The chief of Chikamana estimated that the nearest secondary school costs around 5,00 kw per term, which is about £7.60. Primary school is free.

sites, people in Chikamana and Hinnock were aware that without an education they would not be able to migrate to town. This is reflected in the following quotes;

*"Of course I have never thought about going to town! Town is not for someone like me! I haven't been to school, I don't have any money...No, my life is here in this village. Whatever happens, my life is here in this village"*

(Female, 47, farmer, Hinnock – Interview Statement)

*"I didn't go to school. It would be hard for someone like me to get a job in town. At least I can have some things in the village without getting a job, but in town I would have nothing because in town you need a job to get by. "*

(Male, 20, just staying[5], Hinnock – Interview Statement)

### *6.4.3 Urban social capital, migration aspirations and stresses*

#### 6.4.3.1 Urban social capital at the village level

In Chikamana, 70.8% (51/72) of respondents did not have any social networks in town i.e. they did not know anyone currently in town who could help them find work, or offer them a place to stay. More specifically, 60% (15/25) of men and 76.5% (36/47) of women had no knowledge of urban social networks. A Chi Square test shows that differences between genders in Chikamana is significant at the 10% level (*p=0.1*). In Hinnock, a similar pattern was found with 70.4% (50/71) of respondents also suggesting they had no knowledge of urban social networks. Specifically, 69.2% (18/26) of men and 71.1% (32/45) of women in Hinnock had no knowledge of social networks; however, the slight differences between genders are not statistically significant. Furthermore, differences between the two villages are not significant. This suggests that in both villages, the majority of male and female respondents had no knowledge of urban social networks, although in Chikamana, men may be slightly more aware of urban social networks than women.

[5] 'Just staying' is a colloquialism for unemployed. For example, young people may help other household members in the fields, but as it is not their primary responsibility, it is not always considered to be employment.

6.4.3.2 Social capital and migration aspirations

In terms of social capital, potential rural-urban migrants were more likely to have social networks in town than the potential permanent rural dwellers. In Chikamana, 68.7% (11/16) of potential rural-urban migrants had an urban social network, compared to only 17.8% (10/56) of potential non-migrants. A Fishers' Exact test shows this result is statistically significant (*p=0.00*). In Hinnock, where overall, fewer people had links to town, only 40% (6/15) of potential rural-urban migrants had an urban social network. This is compared to 21.4% (9/42) of potential non-migrants, and 42.8% (6/14) of potential rural-rural migrants. A Fishers' Exact test shows that differences between migrant aspiration groups are not statistically significant (*p=0.2*). Furthermore, these results suggest that in Hinnock migration aspirations are unlikely to be realised by the majority of potential rural-urban migrants, as in the absence of networks to facilitate movement there will be little change of migrating.

6.4.3.3 Social capital and stresses

The existence of urban social networks is dependent on the presence of migrants who have left a sending region for a receiving region. If financial capital and human capital decline (as is suggested in Sections 6.4.1.3 and 6.4.2.3) then fewer people will be able to go town thus threatening the social structures that sustain the process of rural-urban migration (Castles et al., 2005). The importance of social networks on the ability to migrate was recognised by focus group participants in both study sites, as highlighted in the following quotes;

*"If I went to town I'd be ok because my friend would assist me. It would be hard to go without a friend in town to assist because you would not know where to stay or how to find work."*

(Male, Chikamana – Potential Rural-Urban Migrant Focus Group Statement)

*"You would have to know someone in town before you could just move there."*

(Male, Chikamana – Potential Non-Migrant Focus group statement)

*"I can't go to town because I don't know anyone there. Where would I stay? I cannot just take my children and turn up in town. I could not take my children anywhere because we would disturb the household budget of the person we went to stay with. We will stay here and look after ourselves."*

(Female, Chikamana – Potential Non-Migrant Focus group statement)

## 6.5 Discussion

This section highlights three key findings. The first is that exposure to Westernisation influences perceptions of where the good life can be found. Younger people, with a high migration capability are more likely than other groups to feel the good life can be found in town. For older people with a low migration capability, the good life remains in the village. The second finding is that the chronic environmental stress experienced by rural dwellers can negatively affect migration capabilities, which may over time lead to reduced rural-urban migration. The third finding is that for those who lack the aspiration or capability to leave the village, environmental stress is normalised into everyday life.

### *6.5.1 Westernisation affects urban aspirations for some groups*

The first finding is that Westernisation affects urban migration aspirations for young people with high migration capabilities. More specifically, in contemporary Malawi, the quest to enjoy life no longer focuses solely on the village. While people in the past were mainly unaware of different opportunities outside of the village, they now have an imagination about the 'good' life (or bad life) in town. De Haas (2008) suggests that this is partly a result of media coverage of Western lifestyles that have exposed rural people to non-rural alternatives. Youth culture also prizes a non-farming, urban lifestyle, an attitude which develops from within the village as a result of both internal and external factors. Furthermore, data suggest that for potential rural-urban migrants, the 'bright lights effect' is a critical element in shaping migration aspirations. This is consistent with the findings from Chapter 5, where migrants spoke about the search for greener pastures and the desire to experience the adventure and culture of town. This provides further evidence that in Malawi rural-urban migrants are responding to the 'bright lights' of town, unlike in Zimbabwe where Potts (2010) suggests migrants to the capital, Harare, are only appreciative of the city's 'bright lights' once they have arrived and do not move because of them.

In direct contrast to those who seek out the bright lights of town, the majority of respondents fear an urban life. For this group, the bright lights represent danger, immorality, dirt and poverty. The two different pictures of the city (the bright lights are attractive versus the bright lights are to be avoided) suggests a societal division in how the city and the village is perceived. African cities have long been presented in a negative light by some researchers and policy makers (see Pieterse, 2010), and it appears that this negative view is strong for many rural

Malawians. This finding agrees with a study by Kaler (2006: 348) who found that in Malawi modernity and monetisation, which are both critical to urban life, are seen as "responsible for breaking down some of the bonds of respect and honour which previously structured social and economic relations." Against the backdrop of a dislike for the city, many rural Malawians have strong ties to home that are partly informed by the philosophy of *ubuntu*, which is based on community cooperation and supportiveness. Nussbaum (2003: 2) describes it as the "capacity in African culture to express companionship, reciprocity, dignity, harmony and humanity in the interest of building and maintaining a community with justice and mutual caring". The central doctrine of *ubuntu* is the idea that a person is a person through other persons (Sindane and Liebenberg, 2000). Importantly, identity is constructed through other people in the village, as well as narratives about ancestral roots. For many rural Malawians, there is a perception that *ubuntu* cannot be found in town. This idea is supported by Bonn (2007) who showed that traditional ethics of *ubuntu* are disappearing from African life as a result of urbanisation.

It is likely that the split between those who see the city as exciting, and those who see the city as dangerous is a relativity recent one given that restrictions on mobility to urban areas lasted until the 1990s (see Chapter 3). Partly as a result of these mobility restrictions, and partly as a result of the pervasive traditionalism promoted during President Banda's thirty year authoritarian regime, Malawian villages have remained remote and insular (Rohregger, 2006, Bryceson and Fonseca, 2006b, Bryceson, 2008). Villages still hold a world view that is limited to local events and the need to retain good relationships with others in the village to ensure property rights (Bryceson and Fonseca, 2006b). However, the presence of a group of people who want to leave farming behind indicates that this may be changing. This group is challenging the mainstream Malawian identity that is very much based on traditionalism and farming. This supports the findings of Barnett (2008), who, writing about the small island nation of Niue, in the Pacific Ocean, described a distinguishing feature of Niuean life as "enjoyment of the land, plants, animals, and the sea." Calling on a 1970s study of Nuiean agriculture, Barnett comments on attitudes of "soon to leave" islanders who described their bush work (farming and gardening) as a key reason to leave the island. Those who remained on Niue described it as "relaxing, enjoyable, and a significant part of what it means to be Niuean" (2008: 37).

### *6.5.2 Environmental stress reduces migration capabilities*

The second finding is that chronic environmental stresses reduce the financial, human and social capital needed to move to town. Since migrating requires a financial investment a certain threshold of wealth is necessary, making it difficult for the poorest to move (de Haas, 2007). Again, these findings begin to contradict the acceptance of an "empirical regularity" that the poorest and richest are the least likely to migrate (de Haan and Yaqub, 2009: 5, and see Chapter 2, Section 2.3.3). However, in Chikamana, there was no significant difference between financial capital and migration aspiration. One explanation for this is the lack of human capital (low education) in Chikamana across all three farmer types. When the better-off lack education, they are less likely to want to take risks such as migrating to town. The important factor in Chikamana was social capital. Potential rural-urban migrants were more likely than other groups to have urban social networks. To some extent these networks may be able to compensate for a lack of financial capital by providing money to facilitate urban moves; in Chapter 5, almost half (46.4% - 31/69) of the urban respondents in Lilongwe called on an urban friend to fund their move. This means that even if rural financial capital declines as a result of harvest failures, potential migrants may be able to move to town. However, social networks cannot compensate for low education (see Chapter 5, Section 5.3.2) as someone without education will not be able to function in town. If stresses threaten the education of rural children, this means that fewer children will develop the level of human capital required to move to town. In the long term this will have a negative impact on the rural-urban social networks; with fewer people in town, there will be less opportunity to facilitate the moves of future migrants.

When a person has a high aspiration to leave the village but a low capability to do so, they become a reluctant non-migrant. These are people who wish to migrate but are unable to leave due to a lack of material, human and social capital (or a combination of all three capitals). In other words, they suffer from "involuntary immobility" (Carling, 2002). Involuntary immobility may occur as a result of resource scarcity. For example, the respondent who, in Section 6.4.1, was waiting for a good harvest in order to leave the village may never be able to leave if the harvest is not forthcoming. At the same time, however, aspirations to leave may increase as faming becomes harder and the 'bright lights' of the city become stronger. However, as Sen (1999: 63) points out "deprived people tend to come to terms with their deprivation...and they may, as a result... adjust their desires and expectations to what they unambitiously see as feasible". This means that a decline in urban migration capabilities will see a decline in urban migration aspirations.

### *6.5.3 Environmental stress is normalised into rural livelihoods*

The third finding is that environmental stress is accepted as a normal part of rural life. Environmental uncertainty, stress and degradation become imbedded into everyday life; stress is not necessarily experienced as a deviation from the norm, but as a constant factor in life. This idea is supported by evidence from a number of authors who discuss "*la condition Sahelienne*[6]" (see Jónsson, 2010). For example, De Bruijn and Van Dijk (2003) describe how change, instability, irregular rainfall and drought are pervasive element of the Sahelian landscape. Similarly, in Niger, Mounkaïla (2002) describes food insecurity as a constant fact in the economic history of that area. Finally, Meze-Hausken (2000: 386) writes that "so-called 'normal' rainfall in the semiarid tropics is perhaps fictional. For subsistence farmers with rainfed agriculture variability is the current norm" However, in the Sahel, farmers cope with variability by migrating (Pedersen, 1995, Rain, 1999, Mortimore and Adams, 2001, Barbier et al., 2009). In the Sahel, mobility is part of the way of life for the region's agro-pastoralist community, but this is not the case in Malawi. Sahelian pastoralists have enjoyed a freedom of movement (both culturally and geographically) for around 5000 years (Brooks, 2006). Due to land constraints and cultural factors, Malawians do not have the same opportunities to respond to stresses by moving across the landscape. Instead, chronic environmental stress have become normalised in daily life and is not seen as a reason to move.

This is perhaps what Reuveny (2007: 657) is referring to when he argues that one option available to people affected by climate stresses is "to stay in place and do nothing, accepting the costs". Similarly, Burton (1993) shows that a characteristic behaviour of people living affected by environmental changes is to deny what is happening or tolerate losses without taking countermeasures.

## 6.6 Conclusion

The objective of this chapter was to understand migration aspirations and capabilities in the context of chronic environmental stresses. To do this, results from the rural study sites were presented (alongside results from the urban study sites where appropriate). Three key findings emerged. The first is that exposure to Westernisation influences perceptions of where the good life can be found. For young people with high migration capabilities, this is in town. For everyone else, the good life remains tied to farming in the village. The second finding is that

[6] The translation from French is the Sahelian Condition.

the chronic environmental stress can negatively affect migration capabilities, which may over time lead to reduced rural-urban migration. More specifically, fewer people are able to join the migration system leading to a self-sustaining declining of the social networks that the system depends on. The third finding is that for those who lack the aspiration or capability to leave the village, environmental stress is normalised into everyday life. A consideration of these three key findings together suggests that over time, rural-urban migration will decline. This does not necessarily mean that more people will be 'trapped' in the villages as migration capabilities and aspirations are relatively well matched. In other words, people may come to terms with their deprivation. In doing so, chronic stress is normalised into the livelihood and becomes an accepted part of life.

# Chapter 7. Linking migration capabilities and aspirations to environmental shocks

## 7.1 Introduction

In this chapter, I present and discuss the results of the data that were collected to explore the study's third objective; to link migration capabilities and aspirations to the types of environmental shocks that are likely to become more intense and frequent with climate change. The chapter is divided into four sections. The first section presents the contextual background on environmental shocks in both the sending regions (Chikamana and Hinnock). The second section uses hypothetical scenarios to explore how people in Chikamana and Hinnock plan to respond to shocks, and if migration, especially migration to town forms part of response strategies. The third, fourth and fifth sections examine each of the planned response strategies in turn. The chapter concludes with a discussion of the findings thus contributing to the literature on migration decision making during shocks.

As described fully in Chapter 4, the chapter's objectives are explored using multiple sources of data. These include; (1) community level focus groups to explore shocks in Chikamana (women's group, n=20; men's group, n=10) and Hinnock (women's group n=10; men's group, n=10); (2) key informant interviews with the chief of Chikamana, and one of the three chiefs that represents Hinnock; (3) in-depth interviews in Chikamana (n=25) and Hinnock (n=25); (3) questionnaires in Chikamana (n=87) and Hinnock (n=71) (total n=158[1]); and (4) data from the second round of focus groups that explore aspirations of potential non-migrants (Chikamana, n=19, 15 women/4 men; Hinnock, n=19, 15 women/4 men); potential rural-rural migrants (Chikamana, n=10, 5 women/5 men; Hinnock, n=10, 5 women/5 men); and, potential rural-urban migrants (Chikamana, n=6, 2 women/4 men; Hinnock, n=5, 1 women/4 men).

[1] As described in Chapter 6, at the start of the research the aim was to secure 100 questionnaires in Chikamana and 100 questionnaires in Hinnock. The number of respondents given above is the total possible number of respondents included in the analysis after some were excluded due to discrepancies in the data. Further exclusions have been made at different points in the analysis where individual questions have been answered/recorded incorrectly.

## 7.2 The impact of rural shocks

Before I could ask people how they might respond to shocks, including if responses may include migration, I needed to gain an understanding of the types of environmental shocks people had experienced and how they had already responded. Therefore, this section explores what the livelihoods literature refers to as the "vulnerability context" with a focus on sudden shocks. To understand shocks and past responses, focus groups (where a timeline of shocks was created), in-depth semi-structured interviews and key-informant interviews were carried out.

### *7.2.1 Shocks in Chikamana*

Data on shocks from the men's and women's focus groups in Chikamana were broadly similar. It was revealed that the village had experienced four serious environmental shocks in the last 20 years, and three of those shocks had occurred within the past seven years (see Table 7.1).

**Table 7.1 – Timeline of environmental shocks in Chikamana (Source: Focus groups round one - Rural)**

| Year | Event |
|---|---|
| **2008** | Flooding after the river burst its banks. |
| **2005** | Too much rain led to river flooding, a poor harvest and subsequent hunger and disruption in the village. |
| **2004** | Severe hunger in the village after the rains failed. Not helped by President Bingu who was pre-occupied with re-running in the election |
| **2001/02** | Insufficient rain led to severe hunger and outbreaks of cholera. The World Food Programme intervened. |
| **1999** | Worms and pests in the crops combined with drought led to "famine"* |
| **1992** | Massive cyclone, floods, disruption and hunger |

The first shock that respondents detailed was a cyclone in 1992, which lead to severe flooding. During the cyclone, property and land were damaged or lost. The flooding also bought illness with participants describing an increase in malaria and cholera. This was followed seven years later by a severe crop failure in 1999 after rains failed and a pest infestation took hold. At this time, hunger was endemic throughout the village leading one focus group participant to state;

*"Nothing was as bad as what happened to us that year. Everyone was hungry, but there was no food in the village. Life was so bad at that time."*

(Female, Chikamana – Statement from Stresses/Shocks/Responses Focus Group)

Just two years later, and just as the community were getting back to normal, delayed rains lead to crop failure, which subsequently lead to another food shortage. This was part of the 2001/02 national food crisis (as described in Chapter 3, Section 3.3) and across Malawi many households were maize deficient. During this time, there was also a severe outbreak of cholera, which villagers attributed to the food shortage. This assumption is supported by epidemiology literature where the link between drought, food shortage (or famine) and cholera has been examined. For example, limited and impure water supplies during drought could lead to increased cases of cholera, which then mutate more rapidly in malnourished hosts (Pascual et al., 2002). Three years later in 2004, the rains were delayed again leading to another food shortage and a severe hunger. Finally, heavy rain in 2005 and 2008 led to the river bursting its banks. This resulted in destruction of property, loss of crops and disruption to daily life. The impact of the flood is expressed in the following quotes;

*"The flood took away the maize I store in my house. I make and sell buns with this maize. I couldn't afford anymore maize, so how could I work after this?"*

(Female, 45, farmer, Chikamana – Interview statement)

*"When we get floods the river cuts the village in two. The gardens and the school are at the other side of the river so we cannot access them. The waters come into the village and cause trouble. If the water gets into your house or your garden you are in trouble."*

(Chief of Chikamana – Interview statement)

### *7.2.2 Shocks in Hinnock*

Focus group respondents in Hinnock revealed that the village had experienced two periods of. The first was in the 2002/3 season where the village had been affected by the national food shortage. As was the case in Chikamana, hunger was a serious issue. The second period of drought was in 2009. This dry period ended with heavy rainfall that caused flooding. Two serious floods had occurred in the last ten years (see Table 7.2). Although some of the flooding was localised (for example in 2008 a localised flood occurred when a river burst its

banks) some flooding had occurred on a district wide scale following heavy rainfall events. Flooding had two main effects; one was the disturbance of homes and properties and the other was the effect on both maize and tobacco farmers. Maize farmers were faced with a reduced harvest after water logged soils produced destroyed crops, and tobacco farmers were unable to dry their tobacco and therefore sell their crop at national tobacco auctions.

**Table 7.2 – Timeline of environmental shocks in Hinnock (Source: Focus groups round one - Rural)**

| Year | Event |
|---|---|
| **2010** | Severe flooding after rain, homes lost, property destroyed |
| **2009** | Some flooding after rains, this followed a drought period |
| **2008** | Ok year – some flooding but localised near river |
| **2004** | No rains, food shortage and hunger in the village, then flooding |
| **2003** | Drought year – no food |
| **2002** | Drought year - no food |

Focus group participants detailed how flood events were becoming more frequent and intense. Flooding had occurred in 2004, 2008, 2009 and 2010. In the 2010 flood, rains fell for about a week causing the river to burst its banks with significant consequences for property and crops. This is expressed in the following quotes;

*"The crops went mouldy because of the water. The ones that did work were small so we had nothing that year."*

(Male, 30, farmer, Hinnock – Interview statement)

*"After the flood, I was left with nothing. Not even one brick. The flood came and swept it all away."*

(Female, 56, farmer, Hinnock – Interview statement)

### *7.2.3 Responses to shocks*

Following the discussion on shocks, focus group respondents were asked how they had responded to past crises. In both villages, and in both the men's and women's groups, three general responses were discerned. The first was to leave, although this was usually only in a flood, for a short amount of time and to a nearby village. Just two members of the men's focus

group in Chikamana suggested that they would consider moving to town in a drought. The second response was to stay in the village and try to cope with the shock by making adjustments within the household such as reducing meals or using savings to buy food or replace lost items. The third was to stay and wait for outside assistance in the form of government help or international aid. For example, in 2001/2 in both villages, the lack of rain, subsequent food shortage and health crisis was so severe that the World Food Programme (WFP) and other agencies intervened.

The next section, Section 7.3, explores the proportion of the sample population in each village that plan to respond to future shock in one of the three ways outlined above. Particular attention is paid to their demographic characterises, including a person's current migration aspiration (as identified in Chapter 6), their gender, age and their ability to maintain household food security (i.e. farmer type). Following this, the final three sections (Sections 4, 5 and 6) explore each of the three responses in more detail, taking into account demographic differences that emerge from the analysis in Section 7.3.

## 7.3 Future responses following a shock

The impact of shocks on rural-urban migration aspirations were explored during the questionnaires, interviews, and focus group. More specifically, respondents were presented with two extreme scenarios, and asked to imagine that each one had occurred in their village. The scenarios were not connected and respondents were asked to imagine that they had occurred at different times from each other. These scenarios were;

1. A very severe and prolonged drought resulting in an acute food shortage.
2. An intense flood resulting in the destruction of property and productive land.

Responses were then placed into one of the three categories; (1) leave (for town or a new village); (2) remain in the current village, cope with the extreme event; (3) remain in the village, wait for help.

### *7.3.1 Responses by type of shock*

When responses from Chikamana and Hinnock were aggregated, 25.3% (23/91) of all respondents said they would leave the village during a flood (see Figure 7.1). Only 8.5%

(10/117) said they would do the same during a drought. However, as highlighted in the focus groups, moves are predominantly to rural areas (not urban) and are temporary. A quarter (24.2% - 22/91) of respondents said they would remain in the village to try to cope with the flood. Another 40.2% (47/117) said they would do this during a drought. Finally, in both a flood and a drought just over half of respondents said they would remain in their village and wait for outside assistance. More specifically, 50.5% (46/91) said that they would do this during a flood and 51.3% (60/117) said they would do this during a drought. A Chi Square test shows that differences between shocks and responses are statistically significant (*p=0.00*). This confirms that people are more likely to move during a flood than a drought, but are less likely to stay and cope with a flood. In both a flood and a drought, respondents are equally as likely to remain in the village and wait for help.

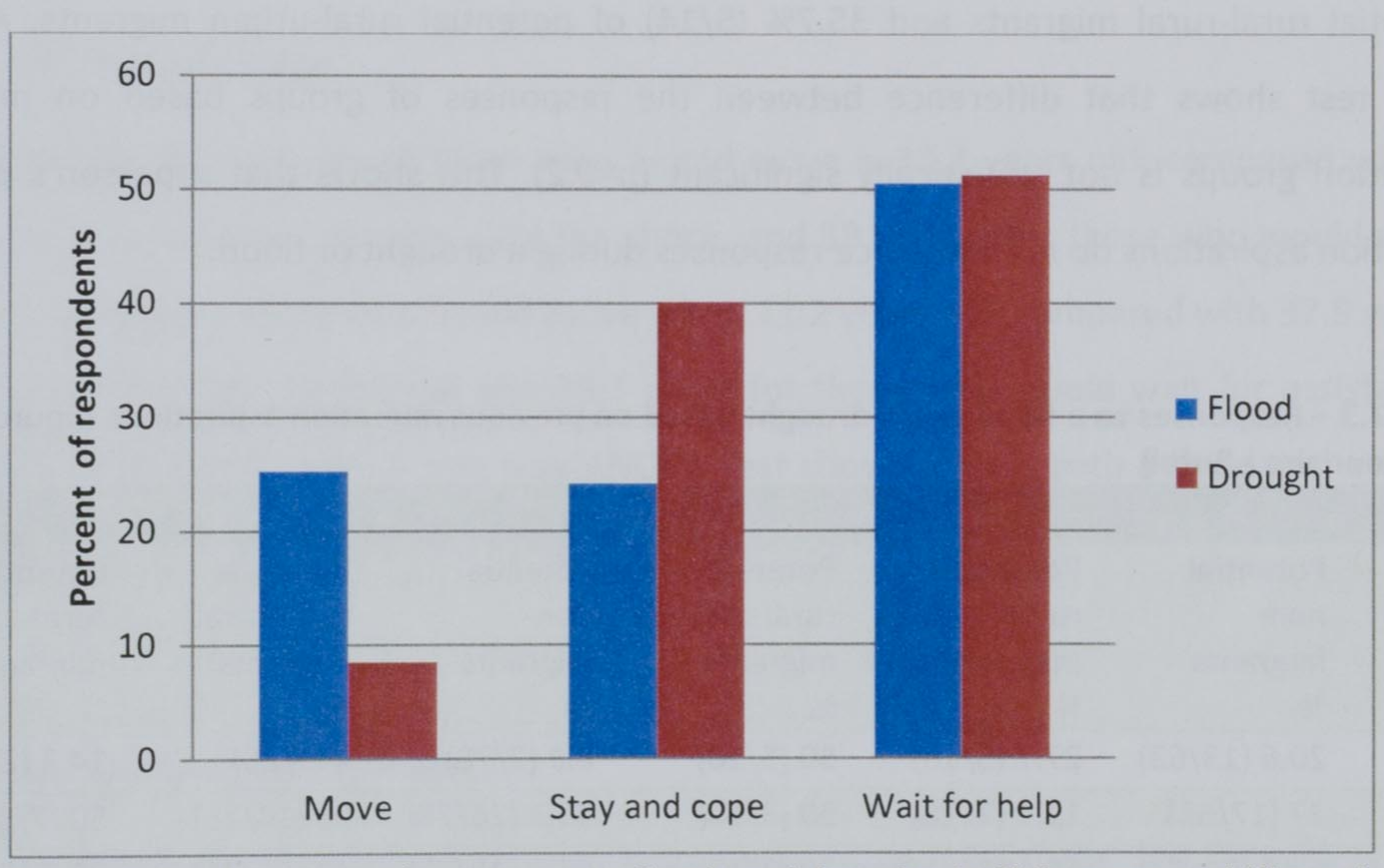


**Figure 7.1 – Hypothetical responses to floods and droughts in Chikamana and Hinnock (Responses to floods, n=91; Responses to droughts, n=117) (Source: Field questionnaire - Rural)**

### *7.3.2 Responses by current migration aspiration*

Differences in response were examined by the three migration aspiration groups as defined in Chapter 6, (see Table 7.3); these groups were potential rural-urban migrants (who accounted for 21.5% of all rural respondents); potential rural-rural migrants (who accounted for 8.8% of all rural respondents); and, potential non-migrants (who accounted for 69.6% of all rural respondents). In a flood 20.6% (13/63) of potential non-migrants suggested that they would move out of the village, compared with 27.7% (5/18) of rural-rural migrants and 50% (5/10) of potential rural-urban migrants. Just over a quarter (27% - 17/63) of potential non-migrants

said they would cope with the flood, compared with 11.1% (2/18) of rural-rural migrants and 30% (3/10) of potential rural-urban migrants. Finally, over half (52.4% - 33/63) of potential non-migrants said they would wait for outside assistance, compared with 61.1% (11/18) of rural-rural migrants and 20% (2/10) of potential rural-urban migrants. A Fisher's Exact test shows that difference between the responses of groups based on migration aspiration groups is not significant (*p=0.2*). In a drought, 8.7% (7/78) of potential non-migrants suggested that they would move, compared with 4% (1/25) of potential rural-rural migrants, and 14.3% (2/14) of potential rural-urban migrants. Exactly a third (33.3% - 26/78) of potential non-migrants said they would cope with the drought, compared to 26% (14/25) of potential rural-rural migrants and 50% (7/14) of potential rural-urban migrants. Finally, over half (57.7% - 45/78) of potential non-migrants said they would wait for outside assistance, compared with 40% (10/25) of potential rural-rural migrants and 35.7% (5/14) of potential rural-urban migrants. A Fisher Exact test shows that difference between the responses of groups based on migration aspiration groups is not statistically significant (*p=0.2*). This shows that a person's previous migration aspirations do not influence responses during a drought or flood.

**Table 7.3 – Responses to a flood and a drought based on previous migration aspirations (Source: Field questionnaire - Rural)**

| | Flood | | | Drought | | |
|---|---|---|---|---|---|---|
| | Potential non-migrants % | Potential rural-rural migrants % | Potential rural-urban migrants % | Potential non-migrants % | Potential rural-rural migrants % | Potential rural-urban migrants % |
| **Move** | 20.6 (13/63) | 27.7 (5/18) | 50 (5/10) | 8.9 (7/78) | 4 (1/25) | 14.3 (2/14) |
| **Cope** | 27 (17/63) | 11.1 (2/18) | 30 (3/10) | 33.3 (26/78) | 56 (14/25) | 50 (7/14) |
| **Wait** | 52.4 (33/63) | 61.1 (11/18) | 20 (2/10) | 57.7 (45/78) | 40 (10/25) | 35.7 (5/14) |

### *7.3.3 Responses by gender*

Differences in response following a shock were also examined by gender (see Table 7.4) where responses of men and women were broadly similar. Specifically, in a flood, 20% of men (6/30) and 27.8% (17/61) of women would leave. Just under a quarter of both men (23.3% - 7/30) and women (24.6% -15/61) would cope with the shock. And, around half of men (56.6% - 17/30) and women (7.5% - 29/61) would wait for help. A Chi Square test shows that any small differences are not statistically significant (*p=0.6*). In a drought a similar pattern emerged. More specifically, 7.1% (3/42) of men and 9.3% (7/75) of women suggested they would leave following a shock. Just under half (47.6% - 20/42) of men would stay and cope compared with

just over a third of women (36% -27/75). Finally, around half of both men (45.2% - 19/42) and women 54.6% (41/75) would wait for help. Again, a Chi Square shows that any differences between responses and gender are not statistically significant (*p=0.4*). This suggests that in both villages men and women behave in similar ways during a flood and a drought.

**Table 7.4 – Gendered responses to a flood and drought (Source: Field questionnaire - Rural)**

| | Flood | | Drought | |
|---|---|---|---|---|
| | Men % | Women % | Men % | Women % |
| **Move** | 20 (6/30) | 27.8 (17/61) | 7.1 (3/42) | 9.3 (7/75) |
| **Cope** | 23.3(7/30) | 24.6 (15/61) | 47.6 (20/42) | 36 (27/75) |
| **Wait** | 56.6 (17/30) | 47.5 (29/61) | 45.2 (19/42) | 54.6 (41/75) |

### *7.3.4 Responses by age*

In a flood, the average age of those who would move is 33.3 years old; compared with 39.4 years for those who would cope with the shock, and 39.9 years for those who would wait for help. In a drought, those who would move were 42.2 years old, compared with 37.9 years for those who would stay and cope and 39.1 years for those who would wait for assistance. In both a flood and a drought, a one way ANOVA test shows that in both a flood and a drought these differences are not statistically significant (*p=0.2*).

### *7.3.5 Responses by farmer type*

Finally, differences in shock response by farmer type were examined. Three type of farmer exist (see Chapter 3); these are net-sellers of maize (from better-off households), who can maintain food security throughout the year and generate a surplus of maize for sale; intermediate farmers (from middle-poor households) who are able to maintain food security for around half the year; and, net-buyers (from the poorest households) who are unable to maintain food security and therefore must buy the majority of their household's food.

In a flood, there were no statistically significant differences between farmer type and response. In a drought however, differences were significant (see Figure 7.2). In a drought, 7.6% (2/26) of net-buyers suggested that they would move out of the village compared with 11.1% (7/63) of intermediate farmers, and 3.7% (1/27) of net-sellers. Just under a third (30.7% - 8/26) of net-buyers said they would cope with the drought, compared to 47.6% (30/63) of intermediate farmers and 29.6% (7/14) of potential net-sellers. Finally, almost two-thirds

(61.5% - 16/26) of net-buyers said they would wait for outside assistance, compared to 41.2% (26/63) of intermediate farmers and 66.6% (18/27) of potential net-sellers. If those who say they will leave the village are removed from analysis, the difference in responses (i.e. stay and cope and stay and wait) between the different farmer groups is approaching statistical significance (*p=0.08*).

One explanation for this is that the poorest cannot make any more coping strategies as they are already at the limits of their coping ability. For example, they are less able to draw on savings or reduce meals any further. For this group, there is no choice but to wait for assistance. By contrast, the middle-poor have more room to reduce consumption or make household level changes that will enable them to cope. They are also most likely to both supply and demand ganyu labour, which means that they are more likely than poorer households (who are most likely to only supply their labour) to be given ganyu opportunities by better-off households following a shock. This is because ganyu networks rely on reciprocity; a household who once demanded labour on their own farm is more likely to be given a paid opportunity in the future (Dimova et al., 2010). The fact that the better-off households, who should have the most room to make changes to the household budget, are likely to wait for help may be explained by their privileged access to outside assistance that is not enjoyed by the other farmer types. This privileged access to outside assistance may enable them to employ the middle-poor to do ganyu. This is explained in more detail in Section 7.6.


**Figure 7.2 - Hypothetical responses to drought in Chikamana and Hinnock (n=116)**
**(Source: Field questionnaire - Rural)**

### *7.3.6 Synthesis*

Overall, the results show that during a flood or drought current migrant aspiration, gender and age do not have a bearing on a person's decision to leave the village, stay and cope, or stay and wait for outside assistance. In a drought, however, the level of self-sufficiency (and therefore level of wealth) at the household level is an important factor in influencing decision making. The richest and the poorest are most likely to wait for help, with the middle-poor most likely to try and cope with the shock. To understand the difference in responses in more depth, participants at each of the three migration aspiration focus groups were asked questions about leaving, coping or waiting for help following a shock.

## 7.4 Leaving the village

Across both villages, 25.3% (23/91) of all respondents said they would leave the village during a flood and 8.5% (10/117) said they would do the same during a drought. These figures are low because most people did not want to give up their rural life as discussed in Chapter 6, where a strong preference to retain a farming life in the home village emerged as a key finding. A preference for rural life in one's own village did not change during a drought or flood. This is highlighted in the following quotes;

*"A man will not leave the village because of a drought. He will mend the land. What is a man without his land?!"*

(Male, 56, farmer, Chikamana – Interview Statement)

*"This is our home. A flood will not change that. We will rebuild on our land. If the flood comes back, we will rebuild again. This is home."*

(Female, 44, farmer, Hinnock – Interview Statement)

*"We are farmers and this is home so we will stay here and cope with whatever life throws at us."*

(Female, 40, farmer, Chikamana – Interview Statement)

Social norms around migration also emerged as a factor in discouraging migration decisions. For example, during an interview with the chief of Chikamana about migration following shocks, an elderly man who was listening in to the conversation shouted in Chichewa to the chief. The chief explained;

*"He is remembering some people who didn't come back after the drought in 1999 – they are machona [the lost ones]. He thinks they should have returned. He says they disappeared[2]."*

(Interview with Chief of Chikamana)

Similarly focus group and interview respondents though that leaving the village permanently would be unusual behaviour outside the bounds of current social norms. This is highlighted in the following quotes;

*"People don't leave because of a drought. That would not make people leave."*

(Male, 40, farmer, Hinnock – Interview Statement)

*"The drought [in 2001] was bad because we had no food, but I don't know anyone that left the village."*

(Female, 39, farmer, Chikamana – Interview Statement)

Despite the general reluctance to leave the village during a shock, around a quarter of survey respondents (25.3% - 23/91) said they would do this in a flood, and 8.5% (10/117) said they would do this during a drought. Of the 25.3% respondents who said they would leave the village during a flood, 78.2% (18/23) were from Hinnock, and only 21.7% (5/23) were from Chikamana. Of the 8.5% who said they would leave during a drought, 40% (4/10) were from Hinnock and 60% (6/10) were from Chikamana. All those who said they would leave Hinnock suggested that they would go to a new rural area for a short time. No one said they would move to town. In Chikamana, three of the six who said they would move suggested they would go to town. The reasons for this are explored in the following sub-sections.

[2] Following this revelation, I tried to find more information out about people who left and did not return, but no one in the village could remember this. The chief was dismissive of the idea that people had actually left.

### *7.4.1 Movement to a new rural area*

In Hinnock close connections with local villages meant temporary rural migration following a flood was possible. By contrast, in Chikamana rural migration was less of a possibility due to a lack of local kinship networks that could facilitate short term emergency migration (see Chapter 6, Section 6.3.5). The importance of connections during a flood is highlighted in the following quotes;

*"My family is in the next village. We could move there in a flood but we would come back to this village when it was safe to return."*

(Male, 40, farmer, Hinnock – Interview Statement)

*"I would move to the next village because that would be a safe place to go. But I would return when the waters left."*

(Male, 26, farmer, Hinnock – Interview Statement)

*"We would have nowhere to go apart from somewhere else in the village, so it would be hard to leave this place."*

(Female, 26, farmer, Chikamana – Interview Statement)

In a drought, however, the kinship networks that facilitate local migration between Hinnock and its neighbours became redundant as it was likely that family in neighbouring villages faced similar issues. Furthermore, the fear of creating conflict by moving into a new village (as identified in Chapter 6, Section 6.3.4) intensifies during a drought. This is highlighted in the following quotes;

*"There would be no point me going to try my luck in the next village because all the villages here suffer when there is drought."*

(Female, 45, potential rural-rural migrant, Hinnock – Interview statement).

*"If there is no food in this village, there will be no food in the next village either."*

(Female, 45, potential non-migrant, Hinnock – Interview statement).

*"You can't just go to a new village and expect help. The chief will favour his own people if there is trouble in his village. A stranger will not be helped and they may turn on you."*

(Female, 27, potential non-migrant, Chikamana – Interview statement).

### *7.4.2 Movement to a new urban area*

Only 2.5% (3/117) of survey respondents said they would leave for town during a drought. This represented three respondents, all of whom were in Chikamana. The first respondent was a young (29 years old) male potential rural-urban migrant, the second respondent was a young (24 years old) female potential rural-urban migrant, and the third respondent was an older (70 years old) male potential non-migrant. The three respondents were asked why they would go to town following a drought, but not following a flood. The older man felt that an acute food shortage would see him starve as he had no family in the village. At this point he suggested he would stay with a nephew in Liwonde. Both of the younger potential rural-urban migrants said that whereas a flood would be over with relatively quickly, a drought and associated food shortage would be longer lasting and would signal that rural life was over.

**Box 7.1 – Potential rural-urban migrants are needed at home following a shock**

**Case study: Frankson Malusi (age 21) – Farmer and Sunday school teacher, Chikamana village**

Frankson lives with his elderly grandmother and four younger siblings. His mother died last year. Like many others in his village Frankson is a farmer. Alongside maize, he grows sweet potato, pigeon peas and cassava. Frankson did well at school and completed his Malawi Certificate of Secondary Education (MSCE). With this qualification he secured a job as a Sunday school teacher in the village. The role is unpaid, but Frankson enjoys it. Frankson has aspirations to leave the village for town where he would get a job and eventually become a secondary school teacher. He is not sure when he will go, but for now he is happy to remain at home with his grandmother. During an interview, Frankson was asked if a flood that destroyed his home or a drought that affected the family's harvest would catalyse his move to town. He was adamant that it would not as he felt that this was the precise time that his family would need him most. Frankson explained;

*"I would need to be in this village if there were a flood because my family would need me. I can't be the one who says 'ok now I will leave'. I wouldn't leave my grandmother when she needed me to help. If a flood had destroyed her house, it would be bad for me to just go."*

*"If something bad happened to my household, I would not leave just like that. Because if I went to town, who would help my grandma find food and ganyu? I would have to leave my grandma on her own with no luck at getting ganyu. In this village we all have to help each other. If I left I would not be helping. Then the house would be in a mess."*

Overall though, the desire to leave the village for town decreased following a flood or acute food shortage. In both study sites, participants in the potential rural-urban migrant focus groups, and potential rural-urban migrant interview respondents described that during or immediately after a shock would be a bad time to migrate to town. There were three main reasons for this; (1) the money needed to move to town was directed to other more immediate areas; (2) there was concern that urban areas may also be affected by the shock; and, (3) a flood or drought was not seen as an appropriate time to follow the pursuit of 'greener pastures' as would-be migrants were needed by their rural family (see Box 7.1);

In terms of the first point, that the money needed to move to town is directed to other more immediate areas, interview respondents described how any savings they had would be consumed by a shock as money was directed to more immediate needed.

*"Even if you have the money to go to town, you can't just leave because there is drought. Your family will need that money to buy food. What right do you have to leave them hungry?"*

(Male, 26, potential rural-urban migrant, Chikamana - Interview statement)

*"The problem is that when there is no food in the village, the price of one bag of maize increases beyond what you could ever imagine. When you spend all your money on one bag of maize, you have nothing for anything else. Even if you have the money to go to town in your hand in the morning, that money will be gone by the afternoon because you need to eat."*

(Female, 28, potential rural-urban migrant, Hinnock – Interview statement)

*"If a flood washed away the maize store and we had nothing, I would not go to town because I would need to buy maize for my family and help them rebuild the store."*

(Male, 30, potential rural-urban migrant, Hinnock - Interview statement)

The second reason for not leaving for town was based on the concern that urban areas may also be affected by the shock. Respondents described how village droughts and floods could prevent them getting work in the town centre nearest to their village and make urban life more expensive as food prices would rise. This is especially important given that in Chapter 5, Section 5.2, I highlighted how migrants in Chitedze and Liwonde attract people from within the same region. The concern that urban areas would also be affected is expressed in the following quotes;

*"When it rains here, it will be raining in town too. If we have a flood here there will be problems with rain in Liwonde. Then I can't go to find work in Liwonde because if there is rain there I can't burn bricks."*

(Male, 26, potential rural-urban migrant, Chikamana - Interview statement)

*"But there are problems in the city too! What is the point of leaving one problem and heading for another problem? If you have to spend all your money on maize in the village then prices will be worse in Lilongwe."*

(Female, 28, potential rural-urban migrant, Hinnock – Interview statement)

*You can't run because of your problems. If you did that you'd always be running. Problems are everywhere."*

(Male, 30, potential rural-urban migrant, Hinnock - Interview statement)

Aside from the perceived inability to secure work in town, respondents described how the networks they would rely on to facilitate migration are affected by shocks. Respondents felt that an acute food shortage in Hinnock, for example, would be felt in Lilongwe where food prices would increase (this is supported by data in Chapter 5). Similarly, respondents felt that heavy rainfall in Chikamana would affect their networks in nearby Liwonde. Given that around half of all urban respondents in Chapter 5 had funded their move to town through their urban networks, respondents felt that shocks felt in the village and the town would hinder migration. This is highlighted in the following quotes;

*"My friend in Lilongwe was going to send me money for transport to move to town to stay with him. But he started having problems in town. Then last year when it rained here and in town, his business suffered. He didn't have the money to support me."*

(Male, 34, potential rural-urban migrant, Hinnock – Interview statement)

*"I would not go to town if my friends told me life was bad there too. If my friends have no money in town, what is the point of going to that situation?"*

(Male, 26, potential rural-urban migrant, Chikamana - Interview statement)

The third and final reason for not moving to town following a shock was that potential rural-urban migrants felt that they would be needed at home. This was partly because a flood or drought was not seen as an appropriate time to follow the pursuit of 'greener pastures' (based not only on the desire to make money, but the pursuit of adventure), and partly because it is young men who comprise the majority of the potential rural-urban migrant group (see Chapter 6, Section 6.3). Retaining the labour of young men may be an important strategy for the rural household; as Nyirongo et al. (2001) point out, men are paid around half more than women for the same task, which may mean that households prize men's labour more than women's labour. The importance of staying in the village to provide labour following a shock is highlighted in the following quotes, and is explored in more depth in the following section (Section 7.5) where coping strategies, including *ganyu*, are examined.

*"It's not the right time to go to town. My family need me here. I can't leave them to try my luck in town. If I have no luck in town I will have nothing. There will be nothing in the village and nothing in town and I would be no use to my family. I would stay here to help my family get through the worst."*

(Male, 26, potential rural-urban migrant, Chikamana - Interview statement)

*"My family would need me to do ganyu if we had no food or money."*

(Male, 30, potential rural-urban migrant, Hinnock - Interview statement)

*"I won't leave the village if things are bad for me. If things are bad, how can I leave my family? We are one family and we help each other."*

(Female, 28, potential rural-urban migrant, Hinnock – Interview statement)

### 7.5 Coping with the shock

A quarter (24.2% - 22/91) of respondents across both villages suggested that they would remain in the village to try to cope with a flood. Another 40.2% (47/117) said they would do this during an acute food shortage. The strategies that enabled people to remain in the village during shocks were explored during the focus groups and during the in-depth interviews. During the focus groups, it became clear that responses to shocks were short term coping

strategies that were erosive in terms of a household's long term sustainability. For example, in both villages, but only in the women's focus groups, livelihood diversification, including brewing local beer or making and selling muffins from poor quality maize bran, had been used to deal with past shocks. However, participants explained that selling goods was only appropriate when sufficient people in the village had not been affected by the shock and therefore still had money. For example, the women's focus group in Hinnock explained that in 2003, they had started selling maize buns to those who still had money, but whose maize stores were diminishing. The strategy had become unviable once better-off households stopped buying beer or muffins. When strategies had become exhausted, households turned to eating fewer meals and begging to neighbours. In the female focus group in Hinnock participants noted that in the 2009 flood, at least two families had sent their young sons to work as cattle hearders for wealthy families outside of the village (see Figure 7.3).

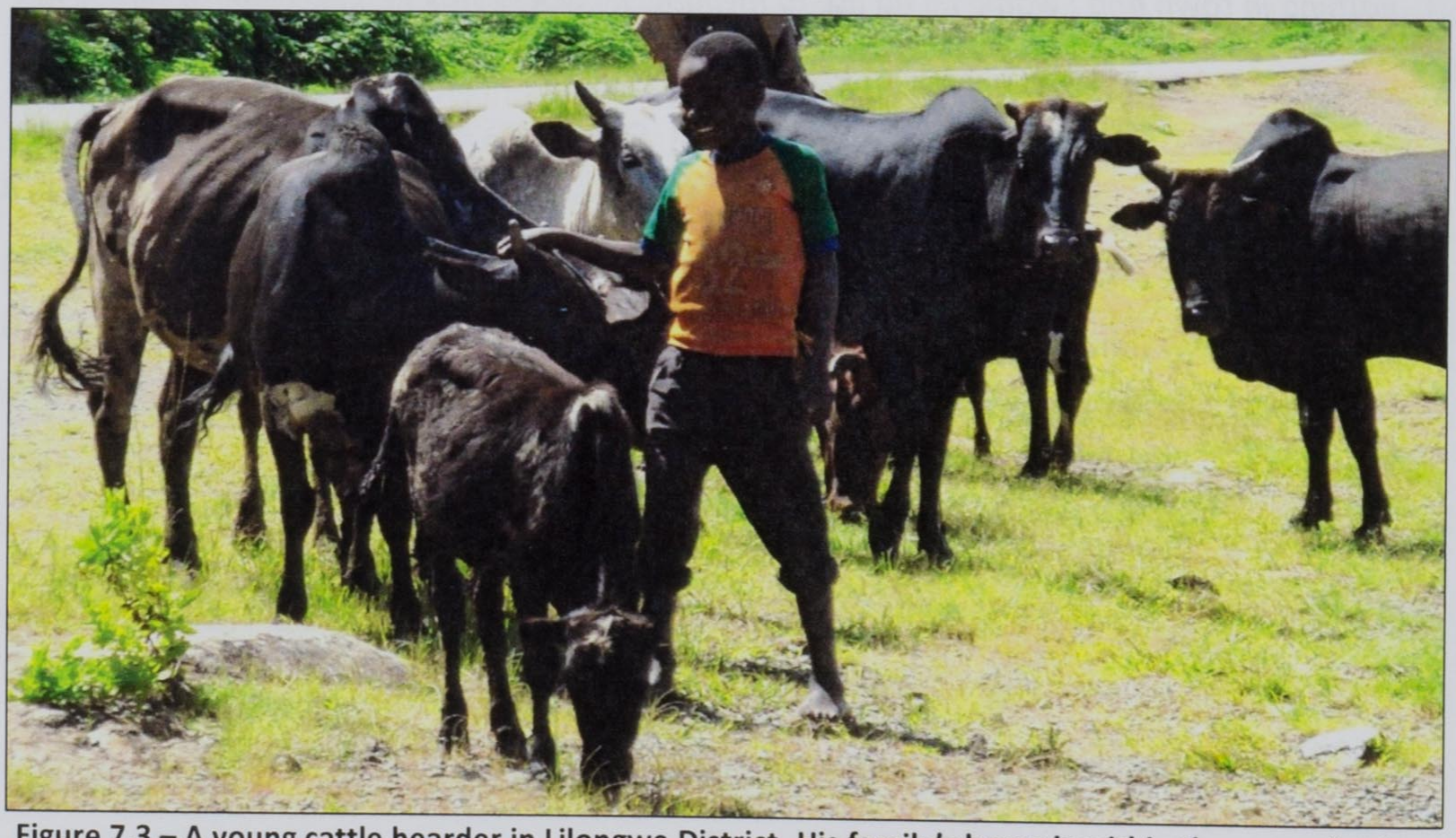

**Figure 7.3 – A young cattle hearder in Lilongwe District. His family's home is within the same district, but he now sleeps in the open with his heard.**

In both villages and in all of the migration aspiration focus groups, participants described how increasing the supply of their own labour for *ganyu* was the primary coping strategy following shock, but it was hard to find as demand outstripped supply;

*"If my crops failed, if they burnt, or if they were washed away, if it was really bad, I would look around for ganyu. I will keep looking and working until my life is ok again. I'll just keep doing*

*ganyu until I get some luck. But if there is drought, and everyone in the village is looking for ganyu, how will I get luck?*

(Male, 20, just staying, Hinnock – Interview Statement)

*"Ganyu is hard to find. Even if ganyu is your plan, if everyone has this plan, you might not get lucky. These are the problems we face in this village"*

(Male, 25, farmer, Chikamana – Interview Statement)

Despite the fact that local *ganyu* was hard to find, this study finds that people in Chikamana and Hinnock were not likely to leave the village to find external *ganyu* following a shock. This diverges from the findings of some researchers (e.g. Whitehead, 2000, Bryceson, 2006) who suggest that households under chronic stress will look for opportunities outside of the village in small towns and neighbouring villages. This study finds two main reasons why people in Chikamana and Hinnock are unlikely to do this following a shock. First, there was the idea that 'problems are everywhere' as highlighted in Section 7.4. Second, there was a fear of being a stranger looking for *ganyu* outside of the village. This finding is supported by Englund (1999) who suggests that when strangers are hired for *ganyu*, the relationship tends to be exploitative. These issues are highlighted in the following quotes;

*"If you can't get ganyu in this village when you know the people, how will you get ganyu in the next village when you do not know anyone? If they have problems too they will give ganyu to their neighbours, not to a stranger like me."*

(Male, 20, just staying, Hinnock – Interview Statement)

*"You have to walk around begging for ganyu. If you get no luck, well, that is your problem and no one will help you. At least in this village people will share with you."*

(Male, 26, potential rural-urban migrant, Chikamana - Interview statement)

The strategy to stay and cope with the shock by using *ganyu* went beyond a fear of not being able to secure *ganyu* outside of the village. In all focus groups, both men and women agreed they felt a moral obligation to ensure the household remained in a local *ganyu* network following a shock. Participants described how a member of a *ganyu* network who had paid someone to work on their farm may expect a similar opportunity in the future. Although it is recognised that a covariate shock affects multiple households in a village, there is some

evidence that communities can still incorporate *ganyu* at such times by changing the terms of payment. For example, the amount of *ganyu* undertaken to secure the monetary equivalent of a bag of maize increases during a drought year (Peters, 1996). Furthermore, payment that would have been in cash is sometimes made in maize bran, a cheaper version of maize meal (Whiteside, 2000). The importance of staying in a network following a shock is highlighted in the following quotes;

*"When you give ganyu to your neighbour he may be suffering so he desperately needs money from you. Sometimes, when there is no food in this village and you are the one who has managed to get food because you got lucky with the harvest, neighbours will come begging to your door. You should remember that if this one you gave you food last time, you must help them this time. When you are the one with no food, you go to your neighbour and he will help you the way you helped him."*

(Male, 26, potential rural-urban migrant, Chikamana - Interview statement)

*"If there is no food one year and this neighbour helps you, then you should help them if they have no food the following year. You help the ones who helped you because otherwise everyone in the village will be begging at your door when they see you are at home."*

(Male, 30, potential rural-urban migrant, Hinnock - Interview statement)

The idea that people stay in the village to remain in *ganyu* networks following a shock may help explain why intermediate farmers are more likely than other groups to say they will stay and cope. When both villages are combined, nearly all (96.87% - 31/32) of the net-buyer (the poorest) households supplied their own labour for *ganyu* and just 6.2% (2/32) supplied it. Just over three-quarters (76.6% - 69/90) of intermediate farmers (middle-poor households) supplied labour and 15.5% - 14/90) demanded it. Finally, 48.5% (17/35) of net-sellers (the better-off households) supplied their own labour and 45.7% (16/35) provided opportunities for other people to work on their farms. A Chi Square test shows that differences between farmer types and the supply labour of own labour for *ganyu* are statistically significant ($p=0.00$). Similarly, the difference between farmer type and the provision of opportunities is statistically significant ($p=0.00$).

These results suggest that the poorest households are less likely to be able to rely on *ganyu* because they are the least likely to provide other households with *ganyu* opportunities.

Intermediate households are more likely than poorer households to supply and demand *ganyu*, so may be better placed to take advantage of opportunities provided by better-off households, who, as the following section will explore, may financially benefit from outside assistance thus enabling them to employ workers on their land.

### 7.6 Waiting for outside assistance

In both a flood and a drought just over half of all questionnaire respondents said they would remain in their village and wait for outside assistance. More specifically, 50.5% (46/91) said that they would do this during a flood and 51.3% (60/117) said they would do this during a drought. As described in Section 7.3, age, gender, current migration aspiration did not affect the likelihood of deciding to wait for help. However, differences emerged between farmer types with people from households that are net-buyers of food (i.e. the poorest households) and net-sellers of food (i.e. the better-off households) the most likely to plan to wait.

Given the fact that poorer households are less likely to be part of reciprocal *ganyu* networks, and are likely to be already exceeding the limits of their coping ability, it is not surprising that this group is likely to wait for help. This is highlighted in the following comments;

*"Someone will come for us. [The aid agency] built this chicken coop for me so they will come if there is a problem. Of course they will! I am sure! "*

(Female, famer, 36, Hinnock – Interview Statement)

*"My choices would be to wait for help or die. We don't have food to sell, we don't even have enough food to eat, so if something happened to us we would have no choice but to sit and wait for help. "*

(Female, 26, farmer, Chikamana – Interview Statement)

However, waiting for help was also a strategy for some better-off households who felt that they would financially benefit in the long term from outside aid. Untargeted aid was also noted by poorer households who perceived it as unfair that better-off households also benefit from aid. The relationship between aid and better-off households is highlighted in the following quotes;

*"When we had a very bad harvest, outsiders gave us food and money [see Figure 7.4]. Even people that had some food and money at home where given assistance. I don't think it would want to go to town and miss out on getting help in the village. There are so many problems in the village and in town. The problems in town might be worse than the problems here but at least here you will get some help."*

(Male, Chikamana – Potential Rural-Urban Migrant Focus Group Statement)

*"After the flood we got food aid. But the chief favours certain people who have better land and better farms. He gave the food to them and the poorest had nothing still."*

(Female, Chikamana – Focus group statement)

*"When we got food aid in the village, even the rich people got some. They sold their own maize to other people and made money because they had free food."*

(Male, 45, farmer, Hinnock – Interview Statement)

These ideas are supported by evidence in the literature. For example, in an evaluation of Oxfam's Malawi's Cash-Transfer Programme, Savage and Umar (2006) found that a blanket distribution of cash had inequitable effects on household food security. More precisely, better-off families received cash transfers that left them with significant money to spend on non-food items. Furthermore, better-off households were able to use their extra money to provide *ganyu* opportunities for other households. This meant that better-off households could use their own labour on their own fields, and employ others to do work for them. The result was that better-off households made longer term gains in food security, whilst poorer households were unable to work on their own fields, and did not make such gains.

In the interviews, respondents who suggested that they would wait for help were asked what they would do if aid were not forthcoming. At this point, a belief in a higher power emerged as a strategy (see Figure 7.5). This is highlighted in the following quotes;

*"We will just wait here like the birds. He will provide. God will look after us. He has a plan."*

(Female, 43, farmer, Chikamana – Interview Statement)


**Figure 7.4 – An African based disaster relief organisation, 'Gift of the Givers', gives out maize to households in Malawi's Northern Region following a flash flood in April 2013 that left 1000 people homeless (Source: Nyasa Times, 2013a)**


**Figure 7.5 – A sign in a house in Liwonde states "PUSH – Pray Until Something Happens"**

*"God knows what he wants for us. If God wants to punish us he will. If God wants to provide for us he will. We are at the mercy of God's will. "*

(Female, Chikamana – Focus group statement)

*"If God decides that our house will be struck by a flood then that is our future. We will wait and see what God decides for us. These are the things you cannot change. We are at the mercy of God's will. Whatever will be!"*

(Female, 51, farmer, Chikamana – Interview statement)

## 7.7 Discussion

This section highlights three key findings. The first is that the migration system that normally facilitates rural-urban migration is also threatened by shocks, especially regional level shocks. The second finding is that that following a shock, rural dwellers feel an obligation to remain in the village and assist their households resulting in fewer people with a rural-urban migration aspiration. The third finding is that following a shock, the prevailing strategy is to wait in the village for outside assistance. If assistance is not forthcoming respondents suggest that they will turn to a higher power. Importantly, leaving the village is not on the radar of the majority of rural respondents.

### *7.7.1 Erosion of the migration system*

The first finding is that the migration system that facilitates rural-urban migration is threatened during a regional scale shock. More specifically, respondents in the study believe that a shock such as an acute food shortage or a heavy rainfall not only affects the village but also urban areas outside the village. This is supported by evidence from Chapter 5, where current migrants described high commodity prices following food shortages or regional flooding. Furthermore, this supports a hypothesis by Chirwa et al. (2006: 2) who argue that in Malawi "if, hypothetically, agriculture were to run into a severe crisis..., then the small scale trading and service sectors in both rural and urban space would decline drastically." The perception that urban areas are also impacted by floods and droughts that affect the villages is also supported by Whiteside (2000) who points out practical difficulties associated with

securing work outside the village, for example, making roads or moulding bricks during or immediately after heavy rainfall events.

This study shows that information about the difficulties faced by urban dwellers in town is transmitted from receiving to sending region. In a migration system, sending and receiving areas are connected by flows and counterflows of people, goods, services, and information, including ideas and information (Mabogunje, 1970). The flow of negative information about difficulties in town following a shock affects the perception of where the good life can be found. Information may be transmitted by return migrants who are unable to maintain an urban livelihood. Even in the absence of return migration negative stories about migrants' progress at the destination can be transmitted to the place of origin (Bakewell et al., 2011). Mabogunje (1970) stressed the importance of these feedback mechanisms in shaping migration systems. Through the spread of negative migration-related knowledge to family and friends within the village, the internal movement of the system can be broken lowering rural aspirations to migrate (Massey and Zenteno, 1999, Kandel and Massey, 2002). This is because when urban livelihoods deteriorate, and when rural populations are aware of this, the advantages of staying in the village start to outweigh the financial, psychological and social costs of migrating (de Haas, 2009a).

### *7.7.2 Obligation to remain in the village*

The second finding is that following a shock there is a sense of obligation to remain in the village. This means it is unlikely that even potential-rural urban migrants would leave. This is partly because moving to town during a shock would be seen as inappropriate given that migration aspirations are the result of a desire for greener pastures, which aside from making money, represents the search for adventure. It is also because household members who in normal times (which, as highlighted in Chapter 6, may be characterised by chronic stress) would have migrated to town are bound by an obligation to contribute to the *ganyu* networks that operate after a shock. This supports a finding by Englund (1999) who found that there was 'moral pressure' to provide *ganyu* opportunities within a local network, especially following a shock.

If a household member moves to town following a shock, they remove their labour from the community thus undermining their obligations and risking their household's future participation in the *ganyu* network. This idea is supported by Bloch et al. (2008) who argue

that individuals who deviate when they are asked to take part in a labour network will be punished by some sort of exclusion from the scheme in the future (and possibly other social exclusions). Other authors also agree that households who deviate from the scheme will be punished by being entirely barred from the network (Coate and Ravallion, 1993, Fafchamps and Lund, 2003, De Weerdt and Dercon, 2006, Bold, 2009). Fear of being excluded from a *ganyu* network helps to explain why some households sometimes supply *ganyu* even in periods when they are not struggling to meet their consumption needs and when, at the same time, their labour is highly productive at home (Englund, 1999, Whiteside, 2000). The costs of being excluded during a shock are high. For example, in a South African study of how households cope during severe food shortages, it was found that children from households who were part of an informal insurance network were less stunted in growth than children from households outside networks as neighbours provided support (Carter and Maluccio, 2003). The risks of losing one's place in the network through migration are even greater when income opportunities in other areas may also be in decline.

The ability to get the most from an insurance network, depends on the household's relative wealth (Jalan and Ravallion, 1999). This is especially true during a covariate shock when households scramble for employment opportunities (Linnerooth-Bayer et al., 2005, Trærup, 2012). During a covariate shock in Malawi, demand for *ganyu* outstrips supply (Whiteside, 2000, Dimova et al., 2004, Bryceson, 2008). In this scenario, those from the poorest households are the least likely to secure *ganyu* (Dimova et al., 2010). This is partly because the very poor are more likely to suffer from labour constraints (*ibid.*) along with health issues as a result of food shortages, which act as an obstacle to securing work (Dessing, 2002). It is also partly because better-off households are more likely to have supplied *ganyu* opportunities in the past, and in a show of reciprocity households who once demanded labour will respond to return the favour (if they are in a position to do so). However, this study suggests that it is intermediate households who are the most likely to supply their own *ganyu* following a shock, and the better-off households who are most likely to offer opportunities. This is because better-off households may benefit from outside assistance in a way that enables them recruit labour.

### *7.7.3 Government reliance and fatalism as a prevailing strategy*

Given the obligation to remain in the village, the scramble for local *ganyu* opportunities, and people's previous experience of receiving outside assistance, it is perhaps not surprising that

over half of all respondents have an explicit plan to wait for outside assistance from government/NGO following a shock. This finding is supported by evidence from previous crisis situations in Malawi. For example, when rain hit Balaka District in 2003, the Department for Disaster Preparedness Relief and Rehabilitation gave two hundred houses in Balaka 'standard packages of assistance'[3] (UN-OCHA, 2003). Similarly, local religious organisations have a long history of food aid distribution. For example, from October 2012 to March 2013, Presbyterian World Service and Development (part of the Presbyterian Church in Canada) distributed food packages including maize, beans, salt and cooking oil to 5,000 farming households (around 25,000 individuals) across Balaka (PWS&D, 2013). This followed a prolonged dry spell during the 2011/2012 growing season that caused crops to fail resulting in food insecurity (SADC, 2012).

Food aid can also play a role in enabling people to remain in their home areas throughout a crisis (WFP, 2005). For example, food aid has been cited as a factor in preventing out-migration in chronically poor areas of Ethiopia (Pankhurst and Bevan, 2004). The availability of food aid may well be a considerable factor in influencing people's decisions to stay at home. Furthermore, better-off households that receive food aid are able to purchase less food in the market or sell more of their own production. This means those households do better as a result of aid.

Finally, the logic of fatalism can be applied to decision making during shocks in both study villages. As is the case throughout Malawi, religious beliefs in both villages are strong. The local worldview is based on Christianity or Islam combined with traditional practices based on magic, witchcraft, and demons, (Forster, 1998, Englund, 1996, 2007). At the heart of this worldview is that suffering as a result of a flood or drought is controlled by a higher power either as a part of 'God's will' or as a punishment for poor behaviour. This finding is supported by evidence from Kaler (2004: 290) who states that in Malawi "pure fatalism ... whether by God or by Allah or by witchcraft or by vengeful spirits" creates the idea that changes in personal behaviour does not necessarily reduce risk. Similarly, Shaffer (2008, 1984) describes how the fatalist sees all roads as leading to the same 'inevitable' event. Nothing is accidental with all events, including catastrophe and death controlled by the gods. According to Grothmann and Patt (2005: 204), fatalism is a maladaptive response that does "not prevent monetary or physical damage in the case of a climate change impact but only the negative

[3] Each package included: a 50kg bag of maize, 5kg of beans, 1kg of salt, two blankets, a plastic bucket, four plastic plates, five plastic cups and ten metres of plastic sheeting

emotional consequences of the perceived risk of those impacts (e.g., fear)." Whilst the physiological well-being of communities is important, fatalism may not represent a sound strategy for maintaining sustainability during a shock. This makes reliance on outside assistance all the more likely.

### 7.8 Conclusion

This objective of this chapter was to understand how shocks affect the decision to migrate to town. To do this, rural respondents were presented with two hypothetical scenarios. The first was a very severe and prolonged drought resulting in an acute food shortage. The second was an intense flood resulting in the destruction of property and productive land. Responses were then placed into one of the three categories; (1) leave (for town or a new village); (2) remain in the current village cope with the extreme event; (3) remain in the village wait for help. The results show that even people who in normal times (which are characterised by chronic environmental stress) have an aspiration to migrate are unlikely to move following a shock. This is partly a result of a collapse of the migration system that facilitates rural-urban migration. More specifically, regional level shocks also affect towns and villages creating urban hardships that potential rural-urban migrants are unwilling to risk. Furthermore, the social networks that once facilitated migration are threatened as urban dwellers no longer have the financial capital to fund their friends' migration. Instead of leaving the village, respondents are more likely to cope with the shock by supplying their own labour to better-off households, or by waiting for outside assistance.

# Chapter 8. Conclusion

## 8.1 Introduction

In this concluding chapter, each of the study's three research objectives is revisited and the main findings are drawn out. These objectives are: (1) to develop a fuller and more complex understanding of rural-urban migration in Malawi; (2) to assess the migration aspirations and capabilities of rural households in relation to chronic environmental stresses that are likely to be exacerbated by climate change; (3) to examine how the migration aspirations and capabilities of rural households are affected by sudden shocks that are likely to become more frequent and intense with climate change. The key findings from each objective are then collated to provide a synthesis of the research and draw out implications for the future of rural-urban migration. Issues of generalizability are addressed in order to understand if the theory of migration (and therefore migration under climate change) developed in this thesis holds for other countries that are dependent on agriculture in Southern Africa and the developing world more generally. The chapter ends with policy recommendations relating to rural and urban spatial planning and climate policy.

## 8.2 Revisiting objective one: Development of a fuller and more complex understanding of rural-urban migration in Malawi

Migration in Malawi is not connected to resource scarcity. Instead, young, educated male (and to some extent, female) members of intermediate and better-off households make a purposeful decision to experience the 'greener pastures' of town. The pursuit of greener pastures is based on the desire for an urban adventure as well as money-making. Once in town, many migrants stay on a more permanent basis than some scholars have previously suggested (e.g. Potts, 2010); almost half of migrants had been in town five or more years. This is after the point at which Lewin et al. (2012) consider migrants in Malawi to be permanent. One explanation for this is the improvements in transport and communication, which Mabogunje (1970) suggested would lead to greater integration of rural and urban areas. For example, due to a more cheaper and more efficient transport system in contemporary Malawi, migrants no longer have to rely on the expensive bus service that Potts (1986) described. Instead migrants can make short and frequent trips home. Similarly, mobile phone allow

families to communicate without the need for movement between rural and urban areas. This supports the theory that rural and urban households are no longer self-contined, instead, they occupy a 'translocal' space where strategies and resources overlap (Bakewell et al., 2011, Crush, 2013). This means that migrants are able to retain strong rural ties without physically being present in the rural home. Cash or food remittances are the physical manifestation of the communication between permanent urban dwellers remain and their rural homes. There is a bilateral flow of goods between rural and urban areas with rural households sending goods to their urban relations. These findings support emerging work from other parts of the world that suggest two way flows do take place (Mobrand, 2007, Mazzucato, 2009). However, the interconnectedness of rural and urban areas may expose urban livelihoods to rural threats and may lead to return urban-rural migration if urban livelihoods are unable to cope. This supports work by Potts (2006a) who found that following economic reform in Harare, Zimbabwe, rural-urban migrants were less able to support themselves in town and returned home.

### 8.3 Revisiting objective two: Understanding migration capabilities and aspirations under chronic rural environmental stresses that are likely to be exacerbated by climate change

In Malawi's rural areas there are two processes at play that affect rural-urban migration capabilities in different ways. The first process is the increasing Western/urban influence in the village (e.g. through exposure to the media or through urban biased educational materials in village schools), which means that young people with high migration capabilities increasingly look toward town. The idea that the rural life is not the only life available to young, educated Malawians influences perceptions of where the good life can be found and where they can be free from the constraints of village life and farming. The finding begins to diverge from Potts (2006) who suggests that migrants to Zimbabwe's capital are not attracted to town by the urban facilities on offer to them. For the majority of the village, however, the good life remains tied to farming in the village, despite the perception that farming is becoming harder. This may be as a result of Malawi's political and social history (see Chapter 3), a result of which is that the village remains remote and insular, with a traditional identity that is prizes local events (Rohregger, 2006, Bryceson and Fonseca, 2006b, Bryceson, 2008). For those who do not want to leave the village, town is seen as a dangerous, dirty, expensive and immoral place where there was no sense of community and support.

The second process is the gradual erosion of rural-urban migration capabilities as chronic environmental stress makes farming harder. Over time, this may lead to reduced rural-urban migration. More specifically, the fewer people there are who have a migration capability, the fewer people who are able to join the migration system, leading to a self-sustaining decline of the social networks that migration depend on. Where migration aspirations remain high, but migration capabilities are low, people are 'involuntarily trapped' in the village. However, as was the case in both rural study sites, respondents with low migration capabilities had low migration aspirations. This supports the idea that deprived people come to terms with their deprivation and adjust their expectations accordingly (Sen, 1999, Burchardt 2009).

The third finding is that for those who lack the aspiration or capability to leave the village, environmental stress is normalised into everyday life. This idea is support by authors wiring about the Sahel who suggest that inconsistency and irregularity and defining features of livelihoods in the area (Meze-Hausken, 2000, Mounkaïla, 2002, De Bruijn and Van Dijk, 2003, Jónsson, 2010)

A consideration of these three key findings together suggests that over time, rural-urban migration will decline. This does not necessarily mean that more people will be 'trapped' in the villages as migration capabilities and aspirations are relatively well matched. In other words, people may come to terms with their deprivation. In doing so, chronic stress is normalised into the livelihood and becomes an accepted part of life.

## 8.4 Revisiting objective three: Linking migration capabilities and aspirations to environmental shocks that are likely to become more frequent and intense under climate change

The results from this chapter show that during a flood or drought, overall rural-urban migration aspirations from the two rural study villages (Chikamana and Hinnock) are lower than during 'normal' times (which are characterised by chronic stresses as described in Chapter 6). In Chapter 6, 19.7% of respondents in Hinnock and 21.8% of respondents in Chikamana were classed as potential rural-urban migrants. This group had a self-declared ambition to move to town from the village. However, during a drought, no one said they would move to town, and during a flood only two people said they would leave. At the same time, there was a decline in rural-urban migration capabilities, especially in terms of social and material capital. Overall this means that few people are likely to make permanent moves to

town from the village during a flood or drought. There are three reasons why. First, social norms discourage migration through invoking feelings of community obligation following a shock. These feelings of community obligation are tied to the informal insurance networks that operate during a shock. Regardless of prior migration ambitions, rural dwellers feel that their rural family need them to stay at home during a crisis to directly support the family, and to help retain their position in the network. This finding supports work from Englund (1999) who described a 'moral pressure' to do *ganyu* following a shock.

Second, the migration system that facilitates movement of people from rural to urban areas breaks down following environmental shocks. This finding supports a hypothesis by Chirwa et al. (2006) that if rural agriculture were to run into crisis, traders in town would be affected. Once people stop migrating to town (because they fear they will not get work, or because their urban network has moved back to the village) the internal movement of the migration system is threatened, further reducing aspirations to migrate. This supports work from Mexico by Massey and Zenteno, 1999) and Kandel and Massey (2002) in which they examine the impact negative information about town on social networks.

Third, given the experience that many rural dwellers have with outside assistance from government and NGOs, 'waiting for help' is an explicit strategy for many households in the study villages. The availability of aid may be a significant factor in enabling people to stay in their homes. This idea is supported by Pankhurst and Beven (2004) who show that food aid in Ethiopia prevents migration in chronically poor areas. Finally, for households who have been affected by a shock, fatalism (i.e. the believe that a higher power controls all events) emerges as coping strategy.

## 8.5 The impact of climate change on rural-urban migration in Malawi

### *8.5.1 Migrant/non-migrant types*

In this synthesis section, the way in which climate change may affect rural-urban migration, and consequently urbanisation, is conceptually mapped out. More specifically, the impact of stresses and shocks on the aspiration and capabilities of each of the migrant and non-migrant types identified in the three results chapters are charted and discussed.

These migrant types are: (1) potential rural-urban migrants, with high migration aspirations and capabilities; (2) (potential) reluctant migrants, with comparatively low aspirations and

diminishing capabilities; (3) (potential) non-migrants, with low aspirations and high capabilities; (4) (potential) non-migrants, with low aspirations and low capabilities; and, (5) (potential) reluctant non-migrants with high aspirations and low capabilities. For migration to occur, a migrant must have sufficient capabilities and aspirations. In Figure 8.1, this means they must fall to the right of axis a, which represents a capabilities threshold. A migrant must also fall above axis b, which represents the aspirations threshold. Only migrants at point '1' (potential rural-urban migrant) and point '2' (potential reluctant migrant) will migrate to town.

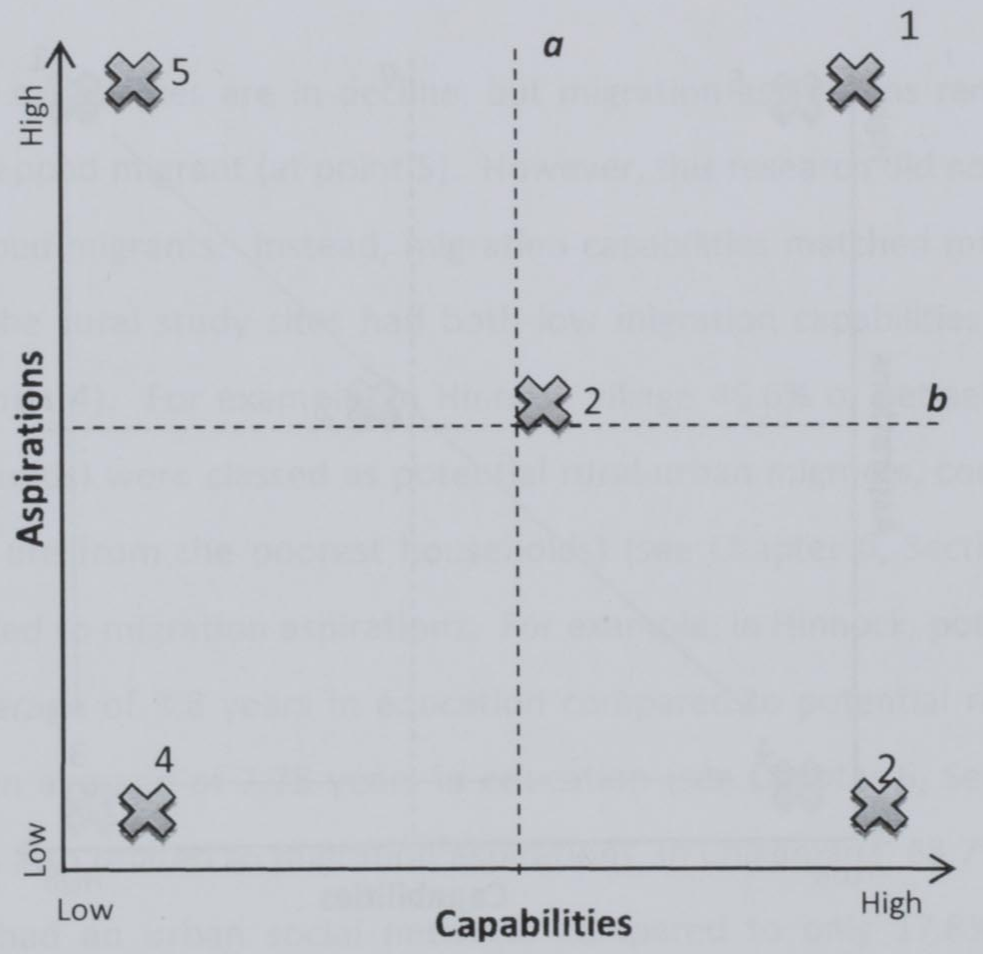


**Figure 8.1 – Conceptual chart of the role of capabilities and aspirations in rural-urban migration**

**Axis a represents a capabilities threshold – potential rural-urban migrants must fall to the right of this threshold for rural-urban migration to be possible. Axis b represents the aspirations threshold – potential rural-urban migrants must be above this threshold for migration to take place.**

### *8.5.2 The impact of stresses on aspirations and capabilities*

There are two simultaneous processes occurring in the village that affect migration aspirations. First is the increasing Westernisation that affects ideas about where the good life can be found. Second is the erosion of capabilities as a result of climate change. Firstly, increasing Westernisation in rural areas means that current non-migrants who have high migration capabilities but low migration aspirations (see Figure 8.2, point 3) may develop urban aspirations. For example, school age children in Chikamana village are exposed to stories and

images of Western, non-agricultural lifestyles in their school books (see Chapter 6, Section 6.3.4). For these rural children, these are signals that there may be life outside of the village, and that there may be an alternative to farming. In the face of increasing rural stresses, this alternative non-agricultural lifestyle may seem more appealing to young Malawians. However, the same chronic stresses that affect agricultural productivity are also likely to reduce the migration capabilities of a potential rural-urban migrant (at point 1).

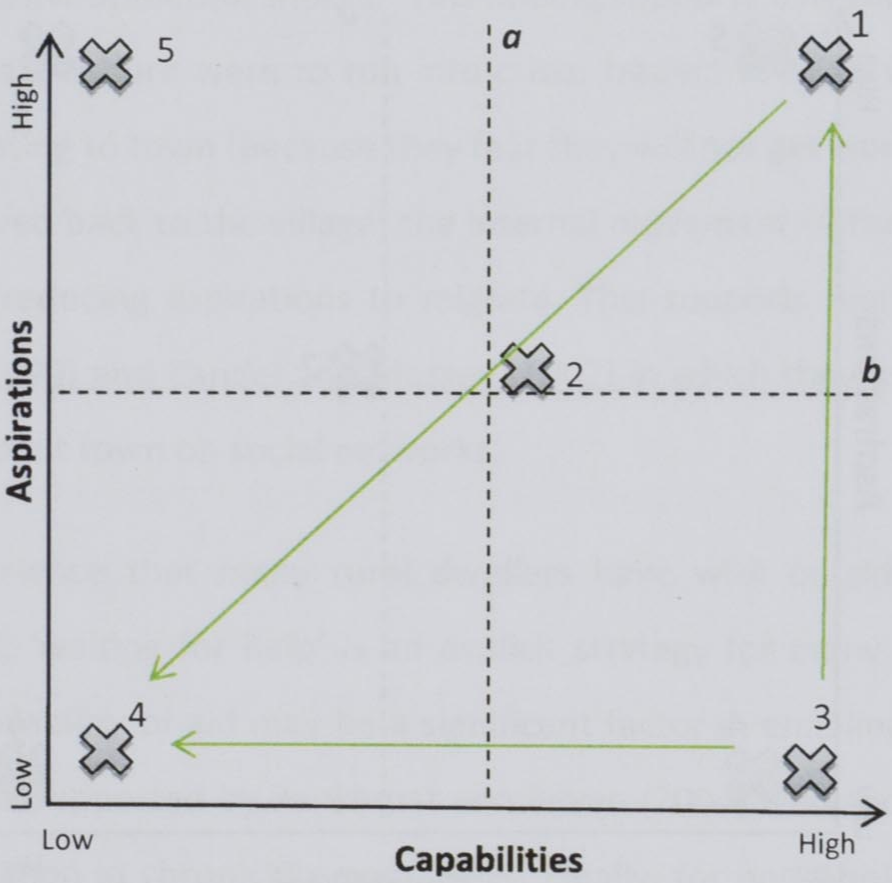


**Figure 8.2 – Conceptual chart of the role of rural-urban migration capabilities and aspirations under environmental stresses. The green arrow represents the direction of movement from one migrant category to another.**

As detailed in Chapter 6, harvests are declining. This has negative consequences for financial capital. Villagers attribute this decline to poor rain, increased temperatures, soil infertility and population increase. Declining productivity that reduces income has a negative effect on a person's ability to leave the village. This is highlighted by the example of the farmer in Hinnock village who was planning to move to town once he had sold his crops. However, the farmer was aware that if he was unable to sell the crops he *"will just stay [in the village] because I need money from the crops to leave"* (see Chapter 6, Section 6.4.1). Similarly, human capital declines overtime as households redirect financial capital away from education and toward their more immediate needs. For example, during the interviews in Chikamana village, a young

male farmer described how he quit school to support his struggling family following poor harvests. His decision to leave education was compounded by the fact that he was *"being chased away [from school] every day for not paying fees"* (see Chapter 6, Section 6.4.2). Finally, social capital, specifically the social networks that connect a potential rural-urban migrant to town are also affected by rural stress as the networks are dependent on the presence of migrants who have left a sending region for a receiving region. If financial capital and human capital decline then fewer people will be able to go town thus threatening the social structures that sustain the process of rural-urban migration (see Chapter 6, Section 6.4.3).

Where migration capabilities are in decline, but migration aspirations remain high, a person may become a trapped migrant (at point 5). However, this research did not find any empirical evidence of trapped migrants. Instead, migration capabilities matched migration aspirations; most people in the rural study sites had both low migration capabilities and low migration aspirations (at point 4). For example, in Hinnock village 46.6% of net-sellers (who are from better-off households) were classed as potential rural-urban migrants, compared to 21.4% of net-buyers (who are from the poorest households) (see Chapter 6, Section 6.4.1). Similarly, education is related to migration aspirations. For example, in Hinnock, potential non-migrants had spent an average of 3.8 years in education compared to potential rural-urban migrants who had spent an average of 7.75 years in education (see Chapter 6, Section 6.4.2). Finally, social capital was also related to migration aspirations. In Chikamana, 68.7% of potential rural-urban migrants had an urban social network, compared to only 17.8% of potential non-migrants (see Chapter 6, Section 6.4.3).

### *8.5.3 The impact of shocks on aspirations and capabilities*

Following a shock, such as a flood or drought with an acute food shortage, the migration aspirations of rural-urban migrants immediately decline as potential rural-urban migrants are obliged to take part in ensuring the rural household has the capacity to cope with the consequences of the shock. For example, following a flood, households may need to repair damage to property and replace their productive assets. During an acute food shortage, households may need to find new income sources in purchase food that has dramatically risen in price as a result of the shortage (see Chapter 7, Section 7.4.2). Instead of migrating outside of the village to look for income opportunities, potential rural-urban migrants are obligated to

provide their labour in local *ganyu* networks. By leaving these networks in search of work outside of the village (which cannot always be guaranteed) the migrant's household faces stiff penalties from the rest of the community and may be excluded from participation in the network in the future (see Chapter 7, Section 7.7.2). Consequently, a person who was at point 1 (on Figure 8.3) may move to point 3, where they have high migration capabilities (in terms of human and social capital – their financial capital may be restored some time after the shock) and low migration aspirations.

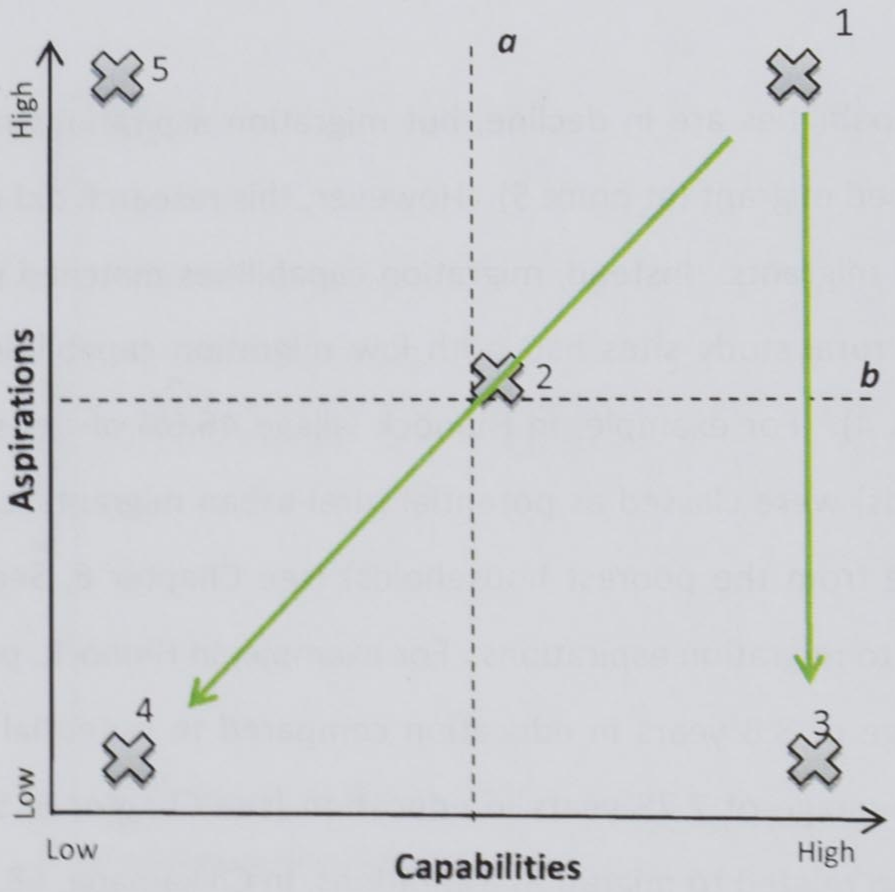


**Figure 8.3 – Conceptual chart of the role of rural-urban capabilities and aspirations in rural-urban migration following an extreme shock. The green arrow represents the direction of movement from one migrant category to another.**

After the shock has been dealt with and financial capital has been restored, the potential rural-urban migrant's migration aspirations may increase. However, regional shocks have the potential to destroy migration capabilities. More specifically, social capital may be threated through the erosion of the rural-urban social networks that facilitate migration. For example, heavy rain and flooding that takes place on a regional level affects urban livelihoods. Migrants who were interviewed in Lilongwe described how flooding and rain in rural areas made it source rural goods because of transport difficulties during rains even when goods could be sourced their quality was often affected by the rain. For example, a coffin maker in Lilongwe described how wood needed for his coffins would be too wet to work with following heavy rural rain (see Chapter 5, Section 5.5.2). Similarly, in the case of a severe national level

drought, food prices increased beyond the reach of most urban dwellers who then had little money left to spend elsewhere. If migrants return home as a result of urban livelihood loss, they take with them negative information about their difficulties in town. This leads to a reduction in migration capabilities amongst potential rural-urban migrants (as social networks collapse) and a reduction in migration aspirations (as town appears less appealing). In this case, the person at point 1 would move to point 4 where they have both low migration capabilities and low migration aspirations.

## 8.6 Summary of original contributions

### *8.6.1 Methodological contributions*

This thesis makes a methodological contribution by examining migration in response to climate shocks and stresses through an aspirations and capabilities framework. This extends the work of Bakewell et al. (2011) and De Haas (2009a, 2010, 2011) who argue that the "fragmented insights [into migration] can be integrated in one framework through conceptualizing virtually all manifestations of (internal and international) migration as a function of *capabilities* and *aspirations*". (de Haas, 2011: 8). By applying a capabilities and aspirations lens to the research, this study makes a novel attempt at conceptualising the environment-migration-urbanisation nexus

A further contribution is made to the migration systems literature (e.g. Mabogunje, 1970, Bakewell et al., 2011, DeWaard et al., 2012, Bakewell, 2013a). In particular, this study explores how migration systems change over time and how they come to decline as a result of environmental stresses and shocks. More specifically, reductions in financial and human capital in rural areas as a result of stresses and shocks mean fewer people are able to join the system. In time this means fewer people connect sending regions (villages) to receiving regions (town). This has a negative effect on the social capital (i.e. urban social networks) needed to facilitate migration. Furthermore, shocks that affect urban areas destroy productive assets and increase commodity costs for migrants in town who then lack the financial capital to support the rural-urban migration of friends and family in the village. Information about the struggles of migrants is transmitted throughout the system, thus lowering aspirations to move to town following a regional level shock.

The final methodological contribution of this thesis is the use of hypothetical data to examine how the migration aspirations of rural households change during severe floods and droughts. Using such a method navigates the complexities of understanding 'real behaviour', which is difficult to disentangle and in many cases does not exist (Helgeson et al., 2012).

### *8.6.2 Empirical contributions*

This research makes a general contribution to the environment and migration literature by using an empirical case study to conclude that over time, climate change is likely to lead to less rural-urban migration, and is unlikely to be a great contributor to urbanisation. More specifically, rural stresses have some effect on increasing the urban aspirations of young rural dwellers, although Westernisation also contributes to this (i.e. increasing exposure to the media or Western teaching materials promotes the idea that there is an alternative life outside of farming). At the same time stresses erode migration capabilities. Where migration aspirations outweigh migration capabilities, a potential rural-urban migrant becomes 'trapped' in the village. However, aspirations and capabilities are linked; in both rural study sites those who were unable to move often did not want to. Instead, people come to terms with life in the village and accept environmental stress as a normal part of rural life. Following a shock, migration aspirations are low even for those who previously harboured a desire to move to town (who represent around a fifth of respondents). This is because the labour of potential rural-urban migrants is required at home. Furthermore, it is too risky for a potential migrant to look for work in town as shocks impact urban areas too.

The thesis also contributes to the literature on circulation and permanence (e.g. Potts, 2010, 2012) by presenting evidence of permanent rural-urban migration to Malawian towns. Although circularity between rural and urban areas still exists in Malawi, it is not defined by physical movement of people between rural and urban areas. Instead, it is defined by circulation of goods (e.g. maize and money) and ideas (e.g. about life in town, both positive and negative). Rural and urban households are able to keep in touch through mobile phones and relativity cheap transport, which means that migrants can remain in town without severing their rural allegiances.

The research begins to depart from the 'empirical regularity' that it is the poorest and richest who are least likely to migrate (de Haan and Yaqub, 2009). Instead, the research finds an under-representation of the poorest households in all the three study sites. Furthermore, in

Lilongwe, half of all migrants were from better-off households. This suggests that migration in Malawi is not directly connected to resource scarcity, and is a strategy that is not available to poorer households. As such, an empirical contribution to understanding the link between migration and poverty is made (see Waddington and Sabates-Wheeler, 2003, de Haas, 2005, 2007, de Haan and Yaqub, 2009).

The thesis also contributes to the small body of literature on African 'cityness' (Robinson, 2002, 2006, Pieterse, 2010) where knowledge and "assumptions about the urban nature of African cities and towns are so paper-thin" Pieterse (2010: 1) that it is impossible to formulate realistic understanding. This thesis suggests that for some young Malawians, the city represents an exciting space, where adventure, independence and new cultures can be experienced. Importantly, it is far removed from village life. By contrast, for the majority of rural dwellers, the city represents a fearsome place characterised by poor morals, disease and a lack of lack of social bonds that are prevalent in the village. For those who view the city as a negative space, the village represents the 'good life' despite chronic environmental stress.

Finally, a contribution is made to the literature on adaptation and coping with shocks by arguing that most people in the rural study sites plan to stay in the village and wait for outside assistance following a flood or drought.

### 8.7 Relevance of findings beyond Malawi

This study took a case study based approach to understanding migration dynamics under climate change. This provided an in-depth contextualised understanding of migration in one country, Malawi. Caution should be taken in assuming generalizability of these specific empirical findings between countries in SSA as countries are diverse in terms of social, cultural and economic factors. For example, in terms of economy, the International Monetary Fund has projected that Ethiopia, Mozambique, the United Republic of Tanzania and Zambia will be among the ten fastest growing economies in the world (IMF, 2013). On the other hand, the region includes some of the world's poorest and most fragile states, including Eritrea and South Sudan. The level of economic development will affect urban opportunities and as such, migration aspirations. In terms of social and cultural factors, there is diversity even within the Southern African region where citizens share a relatively recent history. For example, in Potts' (2010) examination of circular migration in Zimbabwe she found the excitement or 'bright lights' of the city to be insignificant. In a review of her work, O'connor (2011: 510) points out

that "rural life in Zimbabwe may be less boring there than in much of Africa, with grandparents and village elders less of a drag". In Malawi, however, village life is boring for the young people who harbour an ambition to experience the culture of town.

Although the findings may not be statistically generalizable for the rest of the developing world, the conceptual understanding is analytically generalizable (see Yin, 2009). In other words, country specific contexts will encourage or discourage migration aspirations and reduce or enhance migration capabilities; however, the interaction between aspirations and capabilities will shape migration decisions regardless of geographical location.

## 8.8 Policy recommendations

In the context of the conclusion presented above, three policy recommendations for dealing with climate change and migration in Malawi are explored. These are (1) the promotion of chronic-stress compatible rural livelihoods; (2) the sustainable provision of rural assistance following a shock; and, (3) support for urban livelihoods.

### *8.8.1 Promotion of chronic-stress compatible rural livelihoods*

The research findings suggest that most rural dwellers in Malawi deeply value the pursuit of farming activities. Food self-provisioning has an important cultural dimension in Malawi as outlined in Chapter 6. Despite chronic environmental stress and repeated shocks, the majority of people want to remain in the village. Stresses are becoming normalised and people are choosing to live with them. In other words, despite environmental stresses the village is still an important cultural space and subsistence farming is still an important part of what it means to be Malawian. That means chronic-stress compatible livelihoods should be promoted; options may include effective input packages and alternative crops.

- *Effective input packages*

There should be a renewed seriousness about addressing Malawi's self-sufficiency and identifying what role rural dwellers can play in increasing food output. One way of doing this is through the use of fiscal instruments, for example subsidies or input packages. Subsidies and

input packages have been actively discouraged by donors for two decades due to perceived trade-offs with other development investments, a lack of clarity around exit strategies, and difficulty targeting the poorest of the poor (Denning et al., 2009). However, recent research has shown that access to improved agricultural inputs can boost the income of resource-poor farmers (Chibwana and Fisher, 2011). This is especially important given that Chapter 6 did not find evidence of any autonomous household strategies to boost food production.

- *Alternative crops and farming methods*

New varieties of maize that are more tolerant to droughts and floods have been proposed as a solution to climate change (e.g. Campos et al., 2004). In Malawi, research has shown that hybrid maize varieties appear to be drought tolerant, but will only be taken up if cultural preferences such as taste are accounted for (Fisher and Mazunda, 2011, Lunduka et al., 2012). New methods of farming that include intercropping also provide a way forward (Stringer et al., 2009). For example, legume intensification has been promoted to improve the productivity and sustainability of maize farming (Thapa, 1996). However, research in Malawi has shown that that farmers will only choose to grow legumes if access to markets is improved (Snapp et al., 2002). Similarly, conservation agriculture (CA) where land is farmed with minimum soil disturbance has been shown to combat persistently low yields in Tanzania (Owenya et al., 2011).

### *8.8.2 Efficient government response to shocks*

Over half of all rural respondents have an explicit strategy to stay in the village and rely on international aid or government assistance to help them through a shock. In terms of policy, there are three points to be considered; the first is that government help may lower risk perception relating to a shock, which is fine if assistance always arrives. The second is that long term assistance aid households' ability to adapt to repeated floods and droughts. The third is that alternative rural support measures that do not focus solely on aid are needed.

- *Government/NGO help may lower the sense of risk following a shock*

The government must be consistent in their rural support as the help they provide is an explicit part of a household's strategy for dealing with shocks. By providing support following past shocks, government and NGOs have contributed to villagers' sense of risk. Grothmann and Patt (2005) describe the two components of 'risk perception'. First, is the 'perceived probability' of a threat (i.e. how much a household expects a threat to occur). Second, is the 'perceived severity' of the threat (i.e. how harmful the household believes the consequences of that threat to be). For example, a household may have a high 'perceived probability' of a flood occurring, but their 'perceived severity' may be low if they believe external organisations, such as the government or an aid agency, are there to mitigate against the worst effects by providing support and relief. With this in mind, governments and NGOs should recognise that they are at the heart of many rural families' strategies. This makes a rapid and well managed response to rural shocks even more important. However, this has not always been the case in Malawi. For example, during the 2001/2 food crisis, aid was delayed and once it arrived, private traders were allowed to profit from the sale of the Grain Reserve at the expense of rural food security (Devereux, 2002a).

- *Long term assistance may affect adaption to repeated floods and droughts.*

Government, NGOs and policy makers should be aware of the impact of continued support on decision making. For example, in Burundi, following a series of drought and civil war-related disasters, international humanitarian agencies began to provide emergency aid. Whilst emergency aid undoubtedly gave immediate relief to some of the most vulnerable members of Burundian society, local coping strategies and practices changed and a mentality of aid dependency was created (Kolmannskog, 2010). Similarly, on the South Pacific island of Niue, aid created a situation of maladaptation after the European Union agreed to supply (or heavily subsidise) more than 200 solar powered hot water units to local households. The hot water units reduced monthly spending on electricity by a significant amount each month and could make a huge difference in the lives of some of the island's poorest people. However, as Barnett (2008) points out, the project not only disenfranchised those who did not receive the solar units, it also reinforced the expectation that aid will provide private goods. The fact that Niueans did not want to incur the costs of adaptation is hardly a unique behaviour, but it does point to a potential cultural barrier to adaptation.

If households who repeatedly receive assistance wait for as long as possible to take action in the expectation that the costs will be met by aid, they face huge risks if aid is not forthcoming.

- *Alternative rural support measures are needed*

With the sustainability and productivity of ex-post aid in question, the need for alternative rural support measures is highlighted. Localised and practical ex-ante solutions such as flood proofing have been integrated into strategies in other country contexts. For example, in South and South-east Asia, flood-proofing measures include raising the plinths or foundations for homesteads, flood shelters and schools (Shaw, 2006). Protecting livelihood assets is also important. In Bangladesh, for example, one measure that has proved effective is keeping space for livestock in flood shelters (DEC, 2000).

Micro-insurance schemes offer one alternative to ensuring drought affected farmers retain food security following losses. The *Kilimo Salama* (Safe Farming) scheme was launched in 2010 in Kenya and provides small scale farmers with crop insurance. Farmers purchase insurance whilst buying seeds and payments are made if farmers suffer significant crop losses due to adverse weather conditions. Weather station data is used to verify farmers' claims. In March 2011, the system paid out US$3,135 each to more than 1,200 farmers for losses after lack of rain (IFC, 2011).

### *8.8.3 Support for urban livelihoods*

Whilst it is recognised that the above mechanisms may increase migration capabilities in sending regions, thus contributing to further rural-urban migration, this study suggests this may be a positive for development. Government and policy makers should recognise that despite a general anti-rural-urban migration policy stance, some migration is inevitable as young rural dwellers develop increasingly urban aspirations. Not only is migration inevitable, it can be beneficial and policies that attempt to discourage migration by controlling the ability of migrants to make a living in the informal sector do not work; there is no historical precedent of successful policies to inhibit rural to urban migration (UN-HABITAT, 2001). Instead of discouraging migration, supportive national policy can cushion its impacts and harness its

benefits, especially if climate compatible urbanisation is explored, and alternative food security strategies, such as urban agriculture, are promoted.

- *Harness the benefits of rural-urban migration*

Well-managed, large cities do well and can support the national development agenda (Kessides, 2006). They have less poverty and far better access to basic public services than smaller towns, secondary cities, and rural villages (World Bank, 2013b). This is partly because a large urban population creates higher urban agglomeration, which allows for innovation and increases economies of scale (Kessides, 2006). For example, larger schools and hospitals have lower costs and can reach more people. Creating development interventions in multiple rural locations is more costly than concentrating on one area.

- *Plan for climate compatible cities*

One of the findings from this study is that urban people are affected by both rural and urban shocks. This means that cities in Malawi are not 'climate-proof'. Aside from providing basic infrastructure that is resilient to direct shocks (such as flooding) Malawi's urban residents also need to be protected from rising commodity prices. Urban food security emerges as a concern because urban households are increasingly squeezed between rising food prices and stagnant or deteriorating incomes (Crush and Frayne, 2010, Crush et al., 2011). Rural dwellers are usually better equipped than urbanites to produce their own food and although some urbanites also grow food, this is usually small scale and not adequate to provide a buffer against urban food shocks (Devereux, 1999, Mkwambisi et al., 2011). Urban food shortages/commodity price rises could be overcome if urban agriculture was supported by the government.

## 8.9 Conclusion

This research has contributed empirical data to the evidence and knowledge base of migration under climate change in Malawi. The mixed method approach, taken throughout the research,

permitted flexibility in data collection whilst retaining rigour through triangulation of data sources and the gathering of in-depth, rich data.

The research has challenged ideas about who moves to town and suggests that is it those from better-off households who migrate for adventure and to make money. This requires high financial, human and social capital (these three capitals constitute a migration capability) and a high migration aspiration. Contrary to the pervasive view that most migration in SSA is circular, this study suggests that the majority of migration in Malawi is permanent. This has implications for urbanisation as more people stay in town for longer. At the same time, however, the majority of rural dwellers have little aspiration to leave their village, despite living under chronic environmental stress. In fact, chronic environmental stress has become normalised into rural livelihoods. However, as social dynamics change in Malawi (as Malawi becomes more urban) more young people from better-off households are realising that the rural life is only one option available to them; town is another. Furthermore, sudden shocks such as floods and droughts do not change the migration aspirations of rural dwellers. In fact, those who previously held a migration aspiration feel that following a shock is the wrong time to move. Shocks that affect town threaten the livelihoods of current migrants who exhibit a greater desire to return to the village. In turn, this affects the migration aspirations and capabilities of would be migrants in the village as town appears a less desirable place to be than living under chronic environmental stress at home. In fact, chronic environmental stress has become normalised into rural livelihoods. However, as social dynamics change in Malawi (as Malawi becomes more urban) more young people from better-off households are realising that the rural life is only one option available to them; town is another. Finally, sudden shocks such as floods and droughts do not change the migration aspirations of rural dwellers. In fact, those who previously held a migration aspiration feel that migration following a shock is the wrong time to move. Furthermore, shocks that affect town threaten the livelihoods of current migrants who exhibit a greater desire to return to the village. In turn, this affects the migration aspirations and capabilities of would be migrants in the village as town appears a less desirable place to live.

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## Appendix A – Expert Interviews

**Urban expert interviews:**

Discussion topics with experts from Bunda Collage of Agriculture, Lilongwe and the United Nations Habitat Office, Lilongwe

- Who migrates to Lilongwe?
- Where do migrants live and what jobs do they do?
- In your opinion, what do you think is the cause of rural-urban migration?
- What impacts do migrants have on the city?
- What are the biggest challenges that migrants face?
- What other areas, outside of Lilongwe, experience high rural-urban migration?

**Rural expert interviews:**

Discussion topics with Agricultural Extension and Development Officers (AEDO)

- How many people live in the village?
- What are the main livelihood strategies?
- Please tell me about stresses faced in the village
- Please tell me about shocks faced in the village
- what are the biggest challenges that people in the village face
- Is there migration into, or out of the village
- In your opinion, do the stresses and shocks you described lead to migration

## Appendix B – Key informant interviews

**Key informant interviews:**

Semi-structured interviews with village chiefs

- What are the main livelihood strategies in this village?
- Please tell me about stresses faced in the village – how have these changed over the last 20 years?
- Please tell me about shocks faced in the village
- What are the biggest challenges that people in the village face?
- Is there migration into, or out of the village?
- In your opinion, do the stresses and shocks you described lead to migration?
- Which groups are the most/least likely to migrate?

## Appendix C – Topic guide for urban focus groups

**Urban focus groups**

- Why did you move to town?
- What did you hope to gain from moving to town (*Prompt;* money, new friends, etc)
- Did the environment influence your move to town? (*Prompt*; soil, rain harvest, floods, drought, etc.)
- How were you able to move here? (*Prompt;* did anyone give you money? Did your rural/urban friends help you?)
- What do you think the greatest threats to your livelihood are?

## Appendix D – Topic guide for rural focus groups

**Rural focus groups:**

1. **Vulnerability context: First rural focus groups (season one)– topic guide**

- Think back over the last 20 or so years; how has your life changed, and what has been the cause?
    - *Prompt*: Environmental issues; productivity issues; population etc...
    - *Prompt*: Are things getting better or worse?
    - *Prompt*: How do you cope with the changes?
- Think back over the last 20 or so years; what 'shocks' has the village experienced?
    - Conduct timeline exercise.
    - *Prompt*: How did you cope with these shocks?

2. **Migrant groups: Second rural focus groups (season two) – topic guide**

- What are the best things about living in this village?
- What are the worst things about living in this village?
- Why do you want to leave/stay?
- What would prevent you achieving your goal of staying/leaving?
- What do you imagine the best things about town are?
- What do you imagine the worst things about town are?
- What kind of person moves to town?
    - *Prompt*: Age, gender etc.
- In the focus group last year, people told me the village was generally a hard place to be sometimes because harvests are declining, the rain is unpredictable etc; do these factors influence you decision to leave/stay?
- If a very severe flood or drought affected you would this influence you decision to leave/stay?

# Appendix E – Urban questionnaire

## SECTION A: Respondent information

**1** Gender
**2** Marital status
**3** Age
**4a** Highest qualification gained:
**4b** Years completed at school:
**5** Where is your home village?
**6** When did you move to town?
**7** How many times have you migrated between your village and this town?
**8** How many times have you migrated between your village and any other town?
**9** Where do you live now?
**10** Who constitutes your household?
How many people?

## SECTION B: Reason for move

**11** Why did you move to town?
**12a** Did you want to come here?
**12b** Would you rather have stayed at home if that was possible?

## SECTION C: Life in the village (Please think back to the time when you left the village)

**13** How did your household generate income?
**14** How much land did your household have?
**15** How long did your maize last?
**16** Did you sell maize?
**17** Number of people in household
**18** Describe the environment (prompt; soil, rain, farming productivity etc.)
**19** Describe any problems this gave you
**20** Did this make you move?

## SECTION D: Making the move to town

**21** How long did you plan your move for?
**22** How did you fund your move?
**23** Did someone in town help you to move here?
**24** Who was this person?
**25** Did you want to come here? Did you rather have stayed at home if that was possible?

## SECTION E: Life in town and future plans

**26** Do you plan to leave this place?
**27** Where will you go?
**28** Ask all respondents, why did you give the above answers
**29** If you plan to return to the village, will you return to the house you left behind?
**30** What will affect these plans?
**31** What job do you do in town?

## SECTION F: Relationship with the village

**32** Do you send money to the rural household?
**33** How much?
**34** How often?
**35** Does the rural household send money to you in town?
**36** How much?
**37** How often?
**38** Do you return to farm?
**39** Every year?
**40** Do you visit the rural household?
**41** How often?
**42** Why?

# Appendix F – Rural questionnaire

## SECTION A: Respondent information

1 Gender
2 Marital status
3 Age
4 Size of household
5 Highest qualification gained:
6 Years completed at school:

## SECTION B: Migration history

7 Were you born in this village?
8 If no when did you move here?
9 Why did you move
10 Where is your home village?
11 Have you ever lived in town?
12 If yes, when did you last move?
13 How long did you live there for?
14 Have you lived anywhere else apart from this village?
15 In total, how many times have you moved between this village and another place?

## SECTION C: Migration aspirations

16 Do you want to leave the village?
17 If yes, where will you go?
18 Why do you want to do this?
19 Do you know anyone in town?
20 If yes, who?
21 Would they let you stay with them if you wanted to move to town?
22 Do they send you money?
23 Is anyone who usually lives in your house away at the moment?

## SECTION D: Life in the village

24 How did your household generate income?
25 How much land did your household have?
26 How long did your maize last?
27 Did you sell maize?
28 Number of people in household
29 Describe the natural environment (prompt; soil, rain, farming productivity etc.)
30 Describe any problems this gave you
31 Did this make you move?

## SECTION E: Plan in crisis

32 If a severe flood destroys your land and property, what will you do?
33 If a severe drought means all your crops fail and there is no food at home, what will you do?

## Appendix G – Urban in-depth interviews

**Urban in-depth semi-structured interviews:**

**DEMOGRAPHIC DETAILS:**

1 Gender
2 Marital status
3 Age
4 Size of urban household
5 Highest qualification gained:
6 Years completed at school:
7 How did your rural household generate income?
8 How much land did your rural household have?
9 How long did your maize last?
10 Did you sell maize?
11 What job do you have in town?

**IN-DEPTH QUESTIONS**

- Why did you move to town?
- How were you able to move here? (*Prompt;* did anyone give you money? Did your rural/urban friends help you?)
- What was your life like in the village before you left?
- Did anything prompt you to move to town?
- Did the environment influence your move to town? (*Prompt*; soil, rain harvest, floods, drought, etc.)
- What did you think town would be like?
- Were your expectations met?
- What do you think the greatest threats to your livelihood are?
- Will you return to the village?

## Appendix H – Rural in-depth interviews

**Rural in-depth semi-structured interviews:**

**DEMOGRAPHIC DETAILS:**

1 Gender
2 Marital status
3 Age
4 Size of household
5 Highest qualification gained:
6 Years completed at school:
7 How did your household generate income?
8 How much land did your household have?
9 How long did your maize last?
10 Did you sell maize?

**IN-DEPTH QUESTIONS:**

- What is your life like in this village?
- Why did you want to/ not want to move to town?
- Has anything in particular influenced this decision?
- Specifically, has the environment influence your move to town? (*prompt*; soil, rain harvest, floods, drought, etc.)
- What do you think the greatest threats to your livelihood are?
    - Ask respondent to rank top three threats from;
        - Loss of agricultural productivity /increasingly pronounced hungry season
        - Temperature increase
        - Delayed and short rains
        - Decreased soil fertility
        - Population increase.
        - Tobacco price fluctuations
        - Flooding worse each year
- If like becomes harder in this village would this affect your plans?
- What did you think town would be like?
- Were your expectations met?
- Will you return to the village?

## Appendix I – Urban survey respondents

| Motive for move to town | Average across all three sites (n=162) % | Lilongwe (n=97) % | Chitedze (n=39) % | Liwonde (n=26) % |
|---|---|---|---|---|
| **All motives** | | | | |
| **Male** | 62.3 (101/162) | 60.8 (59/97) | 69.2% (27/39) | 57.6 (15/26) |
| ***Married*** | 60.4 (61/101) | 52.5 (31/59) | 70.3 (19/27) | 73.3 (11/15) |
| ***Unmarried*** | 39.6 (40/101) | 47.4 (28/59) | 29.6 (8/27) | 26.6 (4/15) |
| | - | | | |
| **Female** | 37.6 (61/162) | 39.1 (38/97) | 44.4 (12/27) | 42.3 (11/26) |
| ***Married*** | 60.9 (42/61) | 68.4 (26/38) | 66.6 (8/12) | 72.7 (8/26) |
| ***Unmarried*** | 31.1 (19/61) | 31.6 (12/38) | 33.3 (4/12) | 27.3 (3/26) |
| **Economic motive** | 75.6 (121/162) | 72.2 (70/97) | 69.2 (27/39) | 92.9 (24/26) |
| **Male** | 73.5 (89/121) | 72.8 (51/70) | 85.1 (23/27) | 62.5 (15/24) |
| ***Married*** | 59.6 (53/89) | 50.9 (26/51) | 69.5 (16/23) | 73.3 (11/15) |
| ***Unmarried*** | 40.4 (36/89) | 49.1 (25/51) | 30.5 (7/23) | 26.3 (4/15) |
| **Female** | 26.4 (32/121) | 27.1 (19/70) | 14.8 (4/27) | 37.5 (9/24) |
| ***Married*** | 56.2 (18/32) | 52.6 (10/19) | 50 (2/4) | 66.6 (6/9) |
| ***Unmarried*** | 43.7 (14/32) | 47.3 (9/19) | 50 (2/4) | 33.3 (3/9) |
| **Marriage/ to be with family** | 15.4 (25/162) | 12.4 (12/97) | 28.2 (11/39) | 7.1 (2/26) |
| **Male** | 20 (5/25) | 8.3 (1/12) | 36.3 (4/11) | 0 |
| ***Married*** | 60 (3/5) | 0 (0/1) | 75 (3/4) | 0 |
| ***Unmarried*** | 40 (2/5) | 100 (1/1) | 25 (1/4) | 0 |
| **Female** | 80 (20/25) | 91.6 (11/12) | 63.6 (7/11) | 100 (2/2) |
| ***Married*** | 68 (17/25) | 81.8 (9/11) | 85.7 (6/7) | 100 (2/2) |
| ***Unmarried*** | 12 (3/25) | 18.2 (2/11) | 14.3 (1/7) | 0 |

| | | | | |
|---|---|---|---|---|
| **Education** | 9.8 (16/162) | 15.4 (15/97) | 2.6 (1/39) | 0 (0/26) |
| **Male** | 45.7 (7/16) | 46.6 (7/15) | 0 | 0 |
| ***Married*** | 14.3 1/7) | 14.3 (1/7) | 0 | 0 |
| ***Unmarried*** | 85.7 (6/7) | 85.7 (6/7) | 0 | 0 |
| **Female** | 56.2 (9/16) | 53.3 (8/15) | 100 (1/1) | 0 |
| ***Married*** | 11.1 1/9) | 12.5 (1/8) | 0 | 0 |
| ***Unmarried*** | 89.9 (8/9) | 87.5 (7/8) | 100 (1/1) | 0 |
| | | - | - | |

## Appendix J – Rural survey respondents

| | Average across the two sites (n=158) % | Chikamana (n=) % | Hinnock (n=) % |
|---|---|---|---|
| **All respondents** | | | |
| **Male** | 37.3 (59/158) | 37.9 (33/87) | 36.6 (26/71) |
| **Female** | 62.6 (99/158) | 62 (54/87) | 63.4 (45/71) |
| **Age** | | 41.8 | 34.6 |
| **Potential non-migrants** | | | |
| **Total** | 69.6 (110/158) | 78.2 (68/87) | 59.1 (42/71) |
| **Male** | 66.1 (39/59) | 72.8 (24/33) | 57.7 (15/26) |
| ***Female*** | 71.7 (71/99) | 81.4 (44/54) | 60 (27/45) |
| ***Age*** | | 45.2 | 37.5 |
| **Potential rural-urban migrants** | | | |
| **Total** | 21.5 (34/158) | 21.8 (19/87) | 21.1 (15/71) |
| **Male** | 30.5 (18/59) | 27.2 (9/33) | 34.6 (9/26) |
| ***Female*** | 16.1 (16/99) | 18.5 (10/54) | 13.3 (6/45) |
| ***Age*** | | 28.3 | 28.1 |
| **Potential rural-rural migrants** | | | |
| **Total** | 8.8 (14/158) | 0 | 19.7 (14/71) |
| **Male** | 3.4 (2/59) | 0 | 7.7 (2/26) |
| ***Female*** | 12.1 (12/99) | 0 | 26.6 (12/45) |
| ***Age*** | | - | 34.2 |