

**ASSESSING THE ROLE OF PLACE ATTACHMENT IN ENVIRONMENTALLY INDUCED
RESETTLEMENT: A CASE STUDY OF THE SHIRE RIVER VALLEY IN MALAWI**

Thesis submitted in fulfilment of the requirements for the Degree of Doctor of Philosophy

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17th February 2022

Declaration

I declare that this is my own work and all materials used from other sources have been duly acknowledged.

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17th February 2022

Dedication

Specially dedicated to the Minikwa family. That is; my dad, Rodrick Ntapara, my mum, Annie Namusiye Ntapara, my sister and brother in-law, Chikaiko and Jodawe Lungu, not forgetting my one and only daughter, Emertha. I thank God for the gift of life and allowing us to witness this great achievement in our family. To God be the glory.

Abstract

This thesis examines the meaning of home and how it leads to different movement dynamics during environmentally induced resettlement in Malawi. Specifically, this study explores how resettlement has emerged as a disaster response measure in Malawi, how resettlement is designed and executed as a result, and what the role of place attachment is in determining where resettlers go and what they do after being resettled.

Using a mixed method approach, data were generated using a semi-structured questionnaire, key informant interviews, in-depth interviews, participatory photography, trend analysis and participatory mapping. The quantitative data were analysed using the Statistical Package for Social Sciences (SPSS), whilst content analysis and Nvivo-software were used for the qualitative data. These data were collected from four resettlement sites in two administrative districts of Nsanje and Chikwawa. The sites were called Medrum village, Mwalija village, Mpomba GVH and T/A Nyachikadza.

The first major finding of this thesis is that, although resettlement in Nsanje and Chikwawa is characterised as voluntary by the government, a top-down approach was used by them to induce people to move upland. Indeed, the majority of resettlers prefer to maintain their ancestors' lowland due to the availability of fertile soil in the river valley that facilitates their farming goals, unlike the upland soil that was described as unproductive.

The second key finding of this study is that resettlement disrupted the resettlers' place attachment, which explains why resettlers' preferred to maintain their ancestors' land. This preference prompted the resettlers to either refuse to resettle, move back and forth between the high or low areas, or return to the lowlands after the resettlement programme has been completed. This thesis established that the resettlers' movements were motivated by their need to maintain their place attachment, which was portrayed by their narratives of place dependency, social bonding and place identity. In particular, the resettlement design did not factor in the resettlers' place dependency needs, with many farmers struggling to grow crops in the uplands, especially those farmers that had been resettled very far from their original land.

Thirdly, this study found that social bonding plays a crucial role in influencing people's decisions to resettle. Evidence presented in this thesis indicates that resettlement disrupted the resettlers' social networks and neighbouring ties that were reported to be central to their everyday lives. Findings also reveal that the resettlers aim to preserve their place identity, but that this has been downplayed by government. The resettlers' identity was manifested by their desire to live in proximity to their ancestors' land, maintaining their culture and social norms. Therefore, it is deduced that resettlement impinged on their place identity as the resettlers were not able to identify with their new settlements.

Therefore, this study recommends that resettlement should take a holistic approach whereby resettlement is not only driven by consideration of resettlers' safety but also considers the place constructs that theory and empirical evidence shows are key to successful resettlement programmes. Giving resettlers opportunities to plan their own resettlement helps to ensure that there is mutual agreement on how meanings of home can be feasibly incorporated into post-disaster resettlement programmes.

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List of Acronyms

ADC	Area Development Committee
CADECOM	Catholic Development Commission in Malawi
CARD	Churches Action in Relief and Development
DC	District Commissioner
DIDR	Development Induced Displacement and Resettlement
DoDMA	Department of Disaster Management Affairs
GDP	Gross Domestic Product
GVH	Group Village Headman
IOM	International Organisation for Migration
IPCC	Inter-governmental Panel for Climate Change
KII	Key Infront Interviews
MVAC	Malawi Vulnerability Assessment Committee
NAPA	National Adaptation Plan
NGO	Non-Governmental Organisation
SPSS	Statistical Package for Social Sciences
T/A	Traditional Authority
UK	United Kingdom
VDC	Village Development Committee
WHH	Welt Hunger Hilfe

CHAPTER ONE

THE INTRODUCTION

1.1 Introduction

The impact of environmentally induced resettlement has been widely documented, but its detailed impact on the resettlers' relationship to their home has been given less attention. Therefore, the main objective of this research was to understand the role of place attachment and the resultant movement dynamics generated by people's wish to stay in proximity to their home, using a case study of Malawi. This chapter presents a general overview of flooding and resettlement in Malawi and the resettlers' movement dynamics in response to resettlement based on the idea of home. It also outlines the objectives guiding this research and the corresponding research questions. Lastly, this chapter provides a detailed outline of the 8 chapters forming the literature review, methodology, results and conclusions of this study.

Globally, environmentally induced disasters such as floods and drought threaten human habitats, especially those of people living in fragile and susceptible areas. This increases the vulnerability of poor households in affected areas who do not have the capacity to adapt to the environmental change. Even though these disasters pose threats to human life, people continue to stay put because they have an attachment and bond to those areas (Anton and Lawrence, 2014). These issues of environmental change impacts and non-movement are of increasing concern to both policy makers and other stakeholders, locally and internationally (Artur and Hilhorst, 2014). The Inter-governmental Panel for Climate Change (IPCC) report acknowledged the frequency, severity and great damage that environmentally induced disasters cause to human life and the environment (IPCC, 2014). It is estimated that floods and droughts account for 90% of disastrous events globally of which floods are one third (Güneralp et al., 2015, Birkholz et al., 2014). To minimise the losses and vulnerability of people trapped in these conditions, it is necessary to explore different and concerted policy options by the various stakeholders. Güneralp et al. (2015) reported that permanent relocation of people from disaster prone areas, preventing infrastructural development in these areas and adopting flood resilient strategies that protect livelihoods are some of the mitigation

measures. However, due to the severity of these disasters and their long-term impact, resettlement of vulnerable communities from the flood prone areas has been considered as an option to protect human life and property.

Resettlement is described as the planned permanent relocation of people from disaster prone areas to safer locations (Arnall et al., 2013). This adaption strategy provides opportunity for reconstruction of the affected communities both economically and socially, enabling them to sustain their livelihoods (Kapucu, 2012). Although resettlement secures the lives and property of vulnerable communities with minimal adaptive capacity, however, its suitability as a strategy is contentious. Cernea (1997a.) contends that the model raises pertinent issues affecting matters such as access to land, jobs, social disarticulation, marginalisation and leads to food insecurity. Additionally, resettlement does not only affect tangible resources, but also affects psychological and emotional attachment to people's original habitats (Johnson, 2012, Mujere, 2011, Strong, 2016). Therefore, the combined impact created by loss of both tangible and non-tangible resources results in either resistance to resettlement or return to the fragile areas, even amidst disasters of increasing severity. This then challenges resettlement efforts when the affected people return to the vulnerable areas after being resettled. Mujere (2011) argued that this could be aggravated by the people's attachment to their land, more especially where land is the basis for the resettlers' livelihoods (Arnall, 2015, Artur and Hilhorst, 2014, Mujere, 2011). Supporting this argument, Artur and Hilhorst (2014) contend that land does not only entail physical and geographical space, but encompasses symbolic meanings, practices and experiences that are associated with it and are not transferable. The politics of place attachment of people according to Adger et al. (2011) is significant in the success of resettlement and reconstruction as an adaption strategy to disaster prone areas. Taking cognisance of this, place attachment minimises the tension that arise from resettlement, thus contributing to its success. In the resettlement scholarship, it is observed that place attachment is fundamental to the understanding of how people respond to changes involving their place, which is the key element in resettlement (Scannell and Gifford, 2010). Existing place related literature laid more emphasis on assessing people's attachment to their neighbourhood, city, and houses through the lens of social class and people's attitudes towards their environment (Groulx et al., 2014, Guest, 2000).

However, the resettlement of people living in flood affected areas has proven unsuccessful, particularly in Africa, because people depend on their land and surrounding natural resources for livelihoods (Adams, 2016). Resettling people has been faced with some resistance while others have been moving back and forth between their new homes and the disaster-prone areas or moving to totally different areas after being resettled. These movements are attributed to social disarticulation, food insecurity, reduction in livelihood options and the loss of physical property like land which is a consequence of resettlement (Cernea, 1997b). In addition, resettlement disrupts emotional bonding between people and their environment. Place attachment, which is socially and physically constructed, shapes people's social ties, connectedness and emotional attachment to features such as land, lakes, graveyards and mountains (Scannell and Gifford, 2010). This emotional bonding has a significant impact on people's responsiveness to programmes that disconnect them from their environment. This is because their livelihoods, social connections and identity depend on the environment: this, however, is not emphasised in resettlement discourses (Kelman et al., 2017). Kyle et al. (2005) argued that resettlement initiatives have achieved little success because they fail to acknowledge the value of these intangible assets to people affected by the process. Therefore, failure to analyse people's attachment to their place of origin has implications for programmes that aim at permanently resettling people.

Morgan (2010) argues that people's affection for and attachment to their environment are internalised through their experiences, memories and cultures forming their identity. Protection of this identity enforces one's place attachment to disaster prone areas, and consequently enforces resistance to resettlement despite being exposed to disasters. Therefore, incorporating understanding of people's place attachment in disaster management strategies is a valuable contribution to the acceptability of resettlement initiatives and encourages people to permanently embrace those new places as their home. Furthermore, understanding the meanings and importance people attach to things that define their sociocultural identity is valuable in the decision making, design, implementation and adoption of resettlement programmes (Strong, 2016). However, the link between people's attachment to their ancestors' land and their feelings about resettlement has been given minimal attention. Therefore, it is the aim of this study to address this knowledge gap

in the environmentally induced resettlement discourses, in order to ensure the sustainability of environmentally induced resettlement programmes.

1.2 Overview of resettlement in Malawi

Before colonial rule, Malawians were wanderers who practised shifting cultivation, and, in the process, different tribes found their own land. From 1891-1964, Malawi was under British colonial administration. During this period, many resettlement programmes emerged both for economic progress through development of agricultural estates and infrastructural development like railway construction, as well as dwelling places for European settlers (Kishindo, 2011). It has been reported that people's land was taken by the British people and no form of compensation was put in place, which affected people's livelihood, especially in the Shire high lands where huge fields were taken for coffee and tea estates (Malekano, 1999). Therefore, due to these problems, people voluntarily migrated to neighbouring countries like South Africa where they worked in mineral mines. Apart from this, people also migrated to other countries to run away from the exploitative labour system, referred to as *thangata*, by which Malawians were forced to provide labour on the European owned estates (Karl and Malcolm MaClachlan, 2000).

Malawi gained independence in 1964, and, thereafter, was under one party rule for 30 years with the late Dr. Hastings Kamuzu Banda as the life president. During his dictatorial reign, anyone who opposed him was persecuted, so many political and religious refugees migrated to other countries (Kishindo, 2011). In 1993, Malawi voted for a multiparty system of democracy. During this period, the Malawian government encouraged the all people in exile to come back home as it was indicated that they would be resettled by the government through provision of money and land for farming (Karl and Malcolm MaClachlan, 2000). However, this did not materialise as the government did not implement the resettlement programme: this was described as psychological torture by the returnees who were also unable to reclaim their land as they had been away for over 30 years (ibid).

From 2004, the Malawian government decided to implement a resettlement programme to provide resources for poor people from the southern region who were trapped in poverty due to the lack of land for farming. It was reported that there was a sharp increase of

landlessness in the targeted districts because most of the land was engrossed by estates during colonial rule (Chinsinga, 2011). Therefore, the affected communities were asked to relocate voluntarily to abandoned tobacco estates in the region. The programme provided \$1050 as a resettlement allowance, enabling the resettlers to buy land in the new area (Mueller et al., 2014). However, the programme received a mixed reaction from both the host community and the resettlers. The host community treated the resettlers badly, claiming that the land was inherited from their ancestors and the government had not involved them in the process (Chinsinga, 2011, Mueller et al., 2014). On the other hand, the resettlers also complained that, although they increased their agricultural production in the resettlement areas, they did not have access to markets to sell their products, and there was no provision for schools and health facilities: this led to many people returning to their original homes (Kishindo, 2011).

Currently, Malawi continues to plan and implement both development and disaster induced resettlements; however, resettlement has been characterised with failure for several reasons. One key factor to which the failure of resettlement in Malawi is attributed to is the lack of a properly organized resettlement policy, consequently, resettlement is implemented in an *ad hoc* manner (Mugabi, 2017). In addition to this, although Malawi has had a National Disaster Risk Management Policy since 2015, resettlement has not been prioritized: hence different institutions implement resettlement according to their individual organisational policies. Therefore, resettlement in Malawi is uncoordinated and has minimal community participation (Kita, 2017). For instance, a slum upgrading resettlement programme was executed in Mzuzu where the slum dwellers were allocated land in a higher area that would have been safe for them. However, due to haphazard planning and lack of community consultation, the resettlers did not settle in their allocated places (Kita, 2017). In the meantime, the Malawian government is planning to implement a nationwide electrification programme, and a water extension programme in Lilongwe: hence people will be relocated, and consultations with the communities are in progress. However, people have already started raising the issue of compensation for the loss of their land and other resources, and most of the people in the communities still have no clear idea of what is going to happen (Mugabi, 2017). According to Sharp et al. (2018), resettlement failure in Malawi is due to lack of awareness prior to execution of the resettlement programme, poor social services in the

host village, lack of fertile land for farming, and also remoteness from the people's place of origin. It was learnt that those people who were resettled in proximity to their place of origin had an opportunity to maintain their social networks and identity in the original land: hence they stayed in the new places (Sharp, 2018). Therefore, this demonstrates that the resettlers' desire to maintain their original land overrides their vulnerability, which is why many resettlers choose to continue living in the affected areas. The same trend has been observed with resettlement programmes that aim at resettling people living along the flood plains in the Lower Shire River valley.

In this decade, Malawi has been experiencing extreme and severe weather events and this has a great impact on the country's socio-economic development (Pauw et al., 2011). Therefore, the Malawian government launched a resettlement programme for people living along the flood plains to protect them from the impacts of flooding which has become severe. Although the whole country is vulnerable to these extreme weather events, the Lower Shire River valley is more susceptible to flooding affecting the farmers living in this region (Mwale et al., 2015). The communities have been employing different adaptation measures that include the use of early warning systems like whistling, drumming and river gauge readings (Vincent et al., 2013). However, evidence suggests that these measures are not adequate; consequently, the government resorted to resettling these people to protect them and their property. However, the politics of power and dictatorship has affected the acceptability of the programme in this region. The section below provides an overview of the resettlement in the Lower Shire River valley which is the focus of this study.

1.3 Environmentally Induced Resettlement in Lower Shire River Valley

Continued exposure to flooding has a psychosocial, physical and economic impact on the people living along the Shire River plains. Mkandawire (2018) found out that due to exposure to flooding, the victims could experience stress, memory loss, and the burden of increased caregiving roles on top of the common loss of food, property and housing. Despite this empirical evidence, the people in this region choose to stay where they are, relying on flood adaptation measures. However, misconceptions emerge concerning the flood victims' choice of adaptation measures aiming at maintaining the flood plains. For instance, Mijoni and Izadkhah (2009) argued that the overreliance on humanitarian support during floods

overrode the acceptability of flood mitigation measures. However, the resettlers based their decisions on the evaluation of socioeconomic activities taking place in the destination area. The resettlers' dependence on the flood plains for farming and fishing encouraged the people to stay put in the flood plains. Mijoni and Izadkhah (2009) added that the targeted population for resettlement did not see resettlement as a viable option as they could not find enough land to facilitate the movement for the entire community. The resettlers indicated that they would want to maintain their culture, social connections and identity (ibid). Although the resettlers were encouraged to move to the upland, the government had not secured land there for them to resettle. According to Kita (2018), the whole responsibility for land allocation for the resettlers was given to the traditional leaders living in the flood plains. Therefore, the resettlers' objections were substantiated, as the provision of land for resettlement depended on the agreement between their own traditional leaders and those of the people who lived in the upland. This meant that the viability of resettlement depended on the outcome of the agreements between the two parties. However, because of the increased demand for land throughout Malawi, these negotiations yielded no result, as the traditional leaders living in the higher areas did not release land for resettlement (Kita, 2018). For instance, in Nsanje, the upland-based traditional leaders were demanding access to the land in the flood plains in exchange for the upland territory for resettlement (Chidanti-Malunga, 2009). This wrangle for land and lack of concerted efforts to provide social services like clinics, potable water and schools frustrates the government's efforts to resettle people in this region.

There is more evidence supporting the claim that resettlement in Malawi is implemented haphazardly with no clear policies governing its implementation. Mkandawire (2018) revealed that Malawi lacks resettlement policies to facilitate the movement of people from the low-lying areas. Therefore, with no clear policy in place, environmentally induced resettlement lacks proper direction: a key reason why the resettlers choose to stay in the flood plains. The importance of having clear guidelines for resettlement cannot be overemphasised. The guidelines would prevent *ad hoc* implementation of resettlement of the kind that has occurred in Malawi. In the absence of clear policy, the resettlement is poorly coordinated and often the affected community become victims of the decisions made on their behalf (Oliver-Smith, 1991). The resettlement in this region is implemented according to the donors' plans, and the

government only coordinates the implementation of the donor. Therefore, each resettlement site employed different approaches based on the funders or the organisation facilitating the resettlement programme in that community. This approach has led to various resettlement outcomes, but most are characterised by resistance and abandonment of the resettlement sites. In addition to this, Mtembenuzeni and Kushe (2018) revealed that the resettlement programme in the districts of Nsanje and Chikwawa has faced a myriad of problems due to lack of community participation throughout the resettlement process, exacerbated by the lack of resettlement guidelines. The policy makers assumed that the flood victims would easily resettle due to their continued vulnerability to flooding, but the people's participation helps in producing people centred adaptation measures. Patel et al. (2015) emphasize that community participation in a resettlement programme builds community ownership on the project and allows the consideration of local norms which allows the communities to decide how resettlement should be implemented. Therefore, the affected communities are given an opportunity to analyse the important elements that need to be considered for them to reconstruct the means to satisfy both their social and economic needs while in the new area. The World Bank guidelines on resettlement recommend constant consultation of the affected community to ensure that resettlement is implemented in ways that respect the rights and interests of the affected people (Kangave, 2012). On the other hand, lack of community participation in the resettlement of the flood-affected people in the Lower Shire River valley has resulted in unsuccessful resettlement. Matthews and Potts (2018) emphasised that lack of consultation could result in resettlement failure when the resettlers resist decisions made without their consent. In this case, lack of community participation in the resettlement processes triggered resistance and led to back and forth movement of the communities after they were resettled.

In 2012, however, the government, through the Department of Disaster Management, signed a memorandum of understanding with the affected T/As to move upland. This agreement, however, has produced no result. For instance, in Nsanje district, T/A Mlolo agreed to encourage his four group village headmen (GVH) to relocate, but it is reported that only one GVH encouraged his subjects to resettle. The resettlers indicated that they could not establish themselves upland because they were just given land for housing whilst relying on the flood plains for farming. Furthermore, the government promised to provide social amenities which

include school and potable water but this did not materialize, which made people continue to stay in the low-lying areas (Kita, 2018).

On the other hand, evidence has shown that the resettlement in this region has been affected by power politics exercised both by the government and the local leaders living in the flood plains. Mijoni and Izadkhah (2009) pointed out that the government lacked the political will to provide the necessary support required for the flood dwellers to move upland. Although DoDMA points to lack of adequate funding to facilitate the process, the fact that resettlement is not prioritized in the National Adaptation Plan (NAPA) is a clear impediment for resettlement in Malawi. Meanwhile, the traditional leaders are unwilling to encourage their subjects to move upland because they are afraid of losing their chieftainship (Šakić Trogrlić et al., 2018). Consequently, the government does not persuade the resettlers to move upland because of the fear of losing votes if it continues with the implementation of resettlement against the people's will (Kita, 2018). Therefore, these factors contributed to the delay in the resettlement of the flood-affected people in the Lower Shire River valley and in Malawi in general.

1.5 Problem statement and rationale

Over the past decade flooding has affected at least 16,000 people in Malawi. Climate change and population growth, which is leading to urbanization and environmental degradation, have contributed to the increased frequency of flooding in Malawi. Furthermore, Malawi lies along the rift valley lake, so is served by several rivers: this leads to increased vulnerability to flooding, more especially in the Lower Shire, where most of the perennial rivers merge (Makungwa, 2016). At least 15% of the Malawian population lives along flood prone areas, most of which are in the southern region (Chidanti-Malunga, 2011). Therefore, support for resettlement becomes a viable position to secure lives, property, and prevent the economic losses incurred by the government's humanitarian programmes. However, resettlement in Malawi has been facing resistance, despite the flood plain dwellers' constant vulnerability to flooding. This non-movement has been attributed to lack of political will, *ad hoc* implementation and lack of community participation throughout the implementation process. Therefore, different movement dynamics have emerged, which have been

influenced by the resettlers' identity, social connections, livelihoods and economic needs among other factors (Seebauer and Winkler, 2020).

Therefore, the resettlers' evaluation of the resettlement programme yielded different movement patterns in the flood plains, and the upland deemed safe for resettlement. The resettlers choose to resettle permanently, to go back and forth between their old and new homes, to refuse to resettle, or to go back to the flood plains after being resettled. These complex movement dynamics reveal an emotional attachment to the flood plains, emanating from a positive evaluation of the flood plains as a unique and irreplaceable place (Scannell and Gifford, 2010, Seebauer and Winkler, 2020). Therefore, this place attachment is based on both tangible and intangible resources, such as land for farming on one hand and identity and social connections on the other. Therefore, previous place scholars observed that these place dimensions are fundamental to the understanding of people's response to changes involving their place, which is the key element in resettlement (Scannell and Gifford, 2010). However, these studies were not conclusive on the significance of place attachment in disaster related resettlement and how place attachment influences the resettlers' decision to resettle. Furthermore, literature linking the three main place constructs of place identity, social bonding and place dependency to show how these factors influence resettlers' resettlement decision processes is lacking. It is therefore of paramount importance to conduct empirical research in order to deepen understanding of how place attachment influences attitudes to the adoption of resettlement and reconstruction as a strategy to mitigate environmentally induced disasters like flooding.

This study therefore aims at exploring the role of place attachment in influencing environmentally induced resettlement decision processes among the flood plain dwellers in Nsanje and Chikwawa. The findings of the research will help in the shaping of resettlement to minimise the observed movement dynamics arising from people's attachment to their land by incorporating the resettlers' place attachment needs in the resettlement programming. Finally, evidence from this research would close the knowledge gap in resettlement literature which could be valuable in formulating resettlement guidelines and policies, not only in Malawi, but globally.

1.6 Study Aim, Objectives and Questions

Research Aim

The study aims at assessing the role of place attachment in environmentally induced resettlement and the associated challenges leading to different movement dynamics during and after resettlement.

Research Objectives and Questions

Objective 1: To Analyse the Trend and Impact of Flooding in the Lower Shire River valley in Malawi

To explain how resettlement has emerged as a flood response measure in Malawi, this study will explore the flooding trend, its severity and its impact on people's everyday life in the Lower Shire River valley. The data collected under this objective will enable this research to assess people's vulnerability to flooding and the flooding trend in order to determine the urgency of disaster response mitigation measures like resettlement. Additionally, this objective will enable this research to evaluate the locally instituted mitigation and adaptation measures adopted by the flood victims living along the Lower Shire River valley in Malawi in order to curb the diverse impacts of flooding.

Objective 2: To Explore the Challenges Associated with Environmentally Induced Resettlement in Malawi

This research objective will be achieved by examining the implementation of resettlement in Malawi, taking as a starting point the existing challenges leading to the resettlers' various movement dynamics. This research, therefore, will explore the people's response to resettlement which has been characterised as four possible movements: permanent resettlement, moving back and forth, returning after resettlement and refusing to resettle. Finally, the impact of these movement dynamics on resettlement in Malawi will be investigated. Therefore, this objective will provide a detailed analysis of the determining factors for these four movements and their associated challenges in achieving sustainable resettlement in Malawi.

Objective 3: To Examine the Role of Place Attachment in Environmentally Induced Resettlements

The third objective of this research is to explain the role of place attachment in environmentally induced resettlement. This objective will specifically look at the significance of place identity, social bonding and place dependency in influencing the resettlers' decisions. Therefore, the significance of these place constructs will be explored in order to determine how resettlement affects people's social and physical connections to their land and the implications place attachment have on environmentally induced resettlement.

1.8 Structure of this Thesis

This thesis has been divided into 9 chapters: the introduction (chapter1), literature review (chapter 2), research methodology (chapter 3), study findings (chapters 4, 5, 6, 7 and 8), and conclusion and recommendations (chapter 9). The introduction highlights the overview of environmentally induced resettlement and the challenges that the resettlers face during and after resettlement. An overview of disasters in Malawi and how environmentally induced resettlement in Malawi is executed has been discussed in this chapter. In addition to this, this chapter briefly discussed the resettlement programme in the Lower Shire River valley, which is the focus of this study. Finally, the chapter presents the research problem and justification, research aim, objectives, inspiration for the study and the structure of this thesis.

The second chapter presents a review of the literature on resettlement and place attachment. It compares the different implementation models and resettlement implementation strategies around the globe to show how resettlement has been implemented and what lessons have been learnt. This analysis helped the researcher to have an informed idea of the model that was used in the study area and how this informed the outcome of the resettlement in Malawi. Secondly, this chapter reviews place attachment theories to understand both the tangible and non-tangible resources that are key for the resettlers' decision making processes. Finally, this chapter presents the conceptual framework of the study developed from the place attachment theories.

Chapter 3 presents the research methodologies that were used in this study. This chapter presents a synopsis of the context of the study area, the sampling method, and the data collection methods as well as the data analysis methods that were used in this study.

Chapter 4 presents the flooding context in the study area and how it has affected the study population. This chapter also presents the community-initiated mitigation and adaptation measures that are put in place by the resettlers themselves as they strive to live with floods. This chapter therefore provides the context of resettlement in the study region.

Chapter 5 discusses the resettlement narratives, highlighting how resettlement affects the resettlers' food security, social disarticulation and identity. This chapter also presents the resettlers' response to the resettlement by analysing their resettlers' movement dynamics: moving back and forth between old and new homes, refusing to move, returning to their old homes and resettling permanently.

Chapter 6 unpacks both the place dependency narratives informing the resettlers' decision to resettle and the observed movement dynamics. This chapter provides a comparative analysis of the availability of physical resources in the new settlement and how it enhances their resettlement decision making processes. This chapter further analyses the implementation strategy of the resettlement to understand how these physical resources were incorporated in the resettlement programme in the region.

Chapter 7 analyses the social bonding narratives that are key in resettlement, and how they construct the acceptability of environmentally induced resettlement. By discussing the resettlers' social networks, neighbouring ties and social integration in the new settlement, this chapter presents the key non-tangible elements that construct a sustainable resettlement ideal for resettlement programming.

The final result chapter, Chapter 8, highlights the place identity concepts that give meaning to a place beyond its physical resources. Therefore, this chapter discusses about place distinctiveness, place congruent continuity and the 'sense of home' through place related self-identity, cultural and community identity. Therefore, this chapter demonstrated how

people identify themselves with a place that influences their choice of a place even when faced with yearly flooding.

Finally, Chapter 9 presents the key findings, conclusions and recommendations drawn from the research findings chapters and their implication for environmentally induced resettlement. The final section of this chapter presents suggested areas for further research.

CHAPTER TWO

LITERATURE REVIEW

2.1 Introduction

This chapter provides an overview of relevant debates on flooding, resettlement and place attachment. Literature on the potential causes of flooding, impact and mitigation measures will be discussed in order to elucidate both local and state led adaptation and mitigation measures. Most importantly, this research will lay emphasise on the literature on environmentally induced resettlement as one of the flooding adaptation measures used around the globe. In their resettlement discourses, scholars have critically analysed various resettlement programmes, looking at the causes, impact and the tensions existing both before and after resettlement. One prominent issue in resettlement has been the people's attachment to their land, which could be shaped either by place identity, physical resources or social bonding. Therefore, this chapter will also review the literature on place attachment, especially on its importance in shaping the flood plain dwellers' decisions to resettle.

The first section of this chapter will discuss challenges that people experience when living with floods. It will focus on the literature on the potential causes of flooding, the factors that expose territories to flooding and the impact it imposes on the people living in the flood plains around the globe. This section aims at bringing forward the debate around people's choices of living with floods and how this threatens their everyday lives.

In order to minimise the impacts of flooding, mitigation measures have been put in place by both the vulnerable communities and the government. Therefore, the second section will review how different communities and governments are responding to the impacts of flooding. The flooding mitigation measures focused on this review include the living with flood mitigation measures mainly employed by the flood plain dwellers aiming at continued habitation of the flood plains. On the other hand, the government and other stakeholders implement resettlement whereby the flood affected people are encouraged to relocate to higher and safer places (Matthews and Potts, 2018). The third section of this chapter will focus on the voluntary and involuntary resettlement in order to understand the resettlers'

responses to resettlement depending on how resettlement was implemented. Therefore, the resettlers' movement dynamics that include moving back and forth, refusing to resettle, returning after resettlement and accepting to resettle permanently will be explored as possible responses observed during resettlement.

However, although resettlement has been advocated for as a flooding mitigation measure, the willingness of the people to leave their original home has been contested hence the four movement dynamics stipulated in the previous section above. The last section of this review therefore discusses about place attachment narratives. This section will bring forward the place attachment concepts of place dependency, social bonding and place identity to understand their significance to informing people's decisions to resettle.

2.2 The Impacts of Floods

In this section, I illustrate the challenge of living with floods and how these challenges have been shaped by the impact of flooding and the mitigation responses that are made. These can be understood by exploring first the causes of flooding, and secondly the impacts of flooding and responses put in place to curb them.

The concept of vulnerability to hazards like flooding has been characterised in terms of the environment's sensitivity to both internal and external shocks, exposure to hazard and the ability to respond after the shock (Bang et al., 2019). The Inter-Governmental panel for Climate Change IPCC (2014) acknowledged the frequency, severity and great damage that environmentally induced disasters such as flooding cause to human life and the environment. The world's sensitivity to the changes in the climate has impacted on flooding frequencies, hence increasing people's vulnerability to flooding. Scientists have attributed the increased flooding frequencies to changes in the climatic conditions due to the increased greenhouse gases in the atmosphere (Ferris, 2015). However, studies conducted around the globe revealed that flooding could also be as a result of poor drainage system, urbanization, mining and development projects (Simperler et al., 2019). Therefore, flooding has proved to be disastrous, and currently, flooding has been increasing in magnitude and severity (Liang et al.,

2017). Globally, the frequency of environmental related disasters such as flooding has tripled in the last decade, affecting the people living along the flood plains (Thomas and Lopez, 2015). Although the whole globe has been affected by flooding, however, its impact has affected people disproportionately (Serdeczny et al., 2017). Argued that some people suffer from the direct impact of flooding due to loss of personal property and life whilst some are indirectly affected due to loss of non-tangible assets like sense of community (Abeka et al., 2020).

Connolly-Boutin and Smit (2016) reported that developing countries are the hardest hit by flooding due to the number of marginalised people relying on the flood plains for a living. The people's vulnerability in this region stems from their reliance on climate related livelihoods (Hallegatte et al., 2018). This is as a result of the flood's impact on crop yield which results in poor harvests subsequently reducing household food security and agricultural based income livelihood sources (Gough et al., 2019). However, poverty pushes people to occupy flood prone areas in search of their livelihood needs (Few, 2003). It has been shown that ineffective adaptation and coping strategies, especially in Asia and Africa, have exacerbated the devastating impact of flooding in this region (Connolly-Boutin and Smit, 2016). Furthermore, people's vulnerability is exacerbated by lack of alternative livelihood sources especially the adoption of off farm activities which could be one of the coping mechanisms (Piggott-McKellar et al., 2020). Therefore, people's vulnerability to flooding is a result of economic, social and political processes over which most people living along the flood plains have minimal or no control (Masson-Delmotte, 2014). Masson-Delmotte (2014) further narrated that these multiple stressors have exacerbated Sub Saharan Africa's vulnerability to flooding.

In addition to this, vulnerability to flooding has been exacerbated by social factors like gender, age, race disability and income levels among others (Hadumaon et al., 2014). Therefore, some groups of people within a community are more vulnerable than others based on these inequalities that exist within a locale. Flato et al. (2017) indicated that people who are marginalized socially have minimal capacity to prepare for disasters, respond when disasters like floods strike but also lack of coping strategies which increases vulnerability. Furthermore, female headed households have been singled out as the most vulnerable groups of people as it has been found out that they have limited access to land, lack of formal employment which affects their income levels to prepare for shocks (Stanley, 2014).

Therefore, vulnerability to environmentally induced disasters like flooding is diverse which needs a holistic approach as these social vulnerabilities play a crucial role in planning disaster response and recovery. However, people's vulnerability to flooding has been magnified by their exposure to the hazard. Bang et al. (2019) characterised exposure as the degree to which one is subjected to a hazard. Therefore, living in fragile places that are threatened by environmental change increases exposure for the people in such areas. Although people might be aware of their vulnerability due to the exposure to which they are subjected by living in proximity to such places, the benefits outweigh the risks of living there (Few, 2003). One of the perceived benefits of living along the flood plain involves livelihood needs, especially in those regions where the majority of the flood plain dwellers are farmers (Few, 2003). Flood plains have alluvial soils suitable for agricultural production due to the flood deposits, hence offer great opportunities to people with agricultural based livelihood needs (Masson-Delmotte, 2014). On the other hand, Tauzer et al. (2019) indicated that poverty has a bearing on people's decisions to occupy a flood prone area, as it has been discovered that the occupants of areas at risk of flooding are mostly the poorest people in a community. Therefore, the combined effect of exposure and poverty makes people more vulnerable because their resources for dealing with the impact of flooding are limited. On the other hand, although people could be exposed to the same hazard, a community's vulnerability varies among the people within a community. Tauzer et al. (2019) argued that the variations within the community due to economic status, social connections and networks affect an individual's vulnerability during flooding. Few (2003) attested that gender, age, ethnicity politics and religion affiliations all play a role in determining vulnerability to flooding among a community. Therefore, dynamics within a community could significantly reveal the ability of the people to cope with the consequences of the shock when subjected to unforeseen circumstances in the flood plains.

Bang et al. (2019) described this phenomenon as the adaptive capacity of the community, which could be challenging for most of the people living in the flood plains due to their socioeconomic status. On the other hand, it has been argued that the ability to adapt depends on one's cognitive appraisal of the threat that the impending disaster would cause (Grothmann and Patt, 2005). Simperler et al. (2019) argued that flood plain dwellers use their

direct experience with flooding to analyse the risks and evaluate ways to adapt to flooding. Therefore, adaptation to a disaster like flooding could either be proactive or mal-adaptive, according to one's conviction about the threat that the disaster poses. However, previous studies revealed that people living in the flood plains chose to adapt by living with the floods, which combines increased vulnerability with minimal coping strategies due to socioeconomic factors (Kita, 2017). Below et al. (2012) argued that while poor people maintain the risk areas, they have socially constructed adaptive strategies; there is, however, a trade-off between one's security and the benefits of living in the fragile areas. In agreement with this, Rubin (2016) revealed that a community's adaptive strategies are influenced by the institutions, power dynamics, access to resources and the established social capital that offers support during the times of disaster. In contrast, Below et al. (2012) found out that most communities rely on social capital as a source of support during disasters, but its effectiveness has proved to be limited. Therefore, with the perceived complexities associated with people's adaptive capabilities in face of induced disasters, there is a need for a holistic approach to curb people's vulnerability to flooding. Therefore, although the community can establish its own adaptive strategies, these strategies have met with limited success; consequently, different stakeholders have pledged support to boost the community's capacity. However, there have been differences in understanding the different levels of vulnerability and the risks that the disasters pose to the people living along the riverbanks.

Flooding has been reported to have both economic and social impacts, leading to community displacement, food insecurity, loss of life, loss of assets and destruction of infrastructure like roads, schools and health facilities, among other consequences. Its devastating impact on human life and assets has been thoroughly documented around the globe. For instance, in 2007, flooding displaced 56,000 households in Mozambique (Artur and Hilhorst, 2014). Two years after this disaster, 55,000 people were displaced in the same region in Namibia, which forced at least 28,000 people into evacuation camps (Anthonj et al., 2015). Flood dwellers along the Limpopo River in South Africa experienced severe flooding in the year 2000 that affected at least 47% of the households in that region (Khandlhela and May, 2006). As a result, people lost their personal assets, which included livestock and crops that the communities had been relying on in emergencies; hence the community was left in poverty, and they relied

on external support for their livelihood needs (ibid). Warner (2010) reported that the series of flooding in 2001, 2007 and 2008 along the Zambezi River valley affected people's life, livelihoods, safe drinking water and health facilities, which led to displacement of the affected communities. The dwelling units in flood plains have been characterised as poorly constructed, and not sufficiently durable to survive severe flooding (Mtembenuzeni and Kushe, 2018). Further evidence in support of this argument is provided by Khandlhela and May (2006), who found out that 90% of the flood plain dwellers lived in grass thatched houses with the superstructure made of sun-baked bricks: a type of housing that will rarely withstand a flood. Therefore, the living conditions in the flood plains made the impact so severe that the dwelling units got destroyed by the floods. Therefore, the impact of floods on their households has caused homelessness, leading to displacement of the affected communities.

Apart from displacement, loss of life has been characterised as another impact of flooding. Studies indicate that most people living along the flood prone areas have found themselves in life threatening situations on one occasion during flooding whilst some have lost their lives. For instance, 700 people were killed in Mozambique during flooding in the year 2000 (Arnall et al., 2013); over 92 died in Namibia (Anthonj et al., 2015). In 2012, Nigeria was hit by worst flooding which displaced 2.3 million people and 363 people died (Echendu, 2020). Bola et al. (2014) indicated that 800 people died in Zimbabwe, while Malawi lost thousands of people due to flooding in 2002. In January 2015, Malawi registered over 200 deaths, with numerous people reported missing due to flooding that affected 17 out of the 28 administrative districts in the country (Mkandawire, 2018). Therefore, SSA has been experiencing flood related deaths whose magnitude varies over the years. Apart from the SSA region, other parts of the world have also been experiencing flooding related deaths around the globe. Okada et al. (2014) reported that flooding claimed 19 lives in the Lockyer valley in Australia which prompted the Australian government to facilitate the relocation of the communities that survived the floods. Similarly, Bangladesh in south Asia has been experiencing devastating flooding that has been killing people living along the flood plains (Mkandawire, 2018). Bangladesh has been hit by over 19 major flooding events, killing several people whose search fertile land for farming brought them to live along its coastal regions (Islam et al., 2018). Floods have wreaked havoc in other times and places. Coastal areas of England, Belgium and

Netherlands were severely affected with flooding in 1953: over 2000 people died (Wadey et al., 2015). In 2010, France was hit by storm Xynthia that caused 47 deaths on top of the severe damage it caused to the infrastructure around the affected areas (Durant et al., 2018). China has not been spared as well to flooding and diverse impact on people's life and loss of property. For instance, Anhui province was affected by diverse flooding in 2016 and over 8.4 million people were directly affected with 80 thousand being displaced (Wu et al., 2019). Therefore, flooding has affected all the continents around the globe and many lives have been lost due to flooding. However, despite this devastating impact, scenario planners have indicated that this flooding severity is expected to increase in the current decade due to the combined impact of climatic changes and human activities: this will exacerbate the impact of flooding on human life (Wadey et al., 2015).

Flooding also has human health impacts. During flooding, many roads become impassable such that there is limited access to health services as both health practitioners and communities fail to go to and from the health centres. For instance, in Trinidad, the 2018 many people lost their lives and left with life threatening conditions due to lack of immediate health support as people had limited access to the health facilities (Boodram et al., 2020). Therefore, people relied on the government evacuation mission to take the victims to the health centres and this was too late in some circumstances (Mohajervatan et al., 2021). However, in developed countries, the flood victims mainly suffer from respiratory diseases and post traumatic distress disorder due to distressing experiences, injuries and bad memories of flooding (Tapsell and Tunstall, 2008). On the other hand, due to poor sanitation, overcrowding and poor water supply, most flood victims in developing countries suffer from both trauma and communicable diseases (Ibid). Brouwer et al. (2007) revealed that most flood plain dwellers in developing countries were prone to water borne diseases like cholera and other water-borne diseases which could be more fatal than the flooding itself. This has been attributed to continued use of contaminated water for domestic use during floods due to lack of alternative sources of potable water. However, the flood plain dwellers continue to rely on these contaminated and unprotected water sources for domestic use, especially when no external support has been provided. In agreement with this argument, in their study Mtembenuzeni and Kushe (2018) found that the flood plain dwellers living along the Shire

River valley in Malawi depended on unprotected wells for both drinking and domestic use. Therefore, the use of unprotected wells during flooding exposed the people to cholera and dysentery among other diseases as the flood plain dwellers continued to use the contaminated water sources. A study carried out in Liberia revealed that the country experienced a rise in water borne diseases in the aftermath of a flood due to the reliance on shallow wells that served as sources of drinking water in the flood plains (Koffa, 2018). Therefore, this exposed the people to a myriad of diseases during and after the floods. On the other hand, it has also been documented that flooding provides a conducive environment for the breeding and survival of disease vectors, especially mosquitoes (Kanstrup et al., 2014). Since mosquitoes are a causative agent of malaria, this increases malarial cases during flooding periods (Patt and Schröter, 2008). Serdeczny et al. (2016) stated that malaria has been claiming lives, especially in sub-Saharan Africa: hence it has negatively affected the flood plain dwellers in the region. Therefore, flood plain dwellers suffer not only from the direct impact of flooding, but also the indirect impacts which have long term effects on people's psychological state such as trauma. Cases of post disaster trauma were recorded in Trinidad after the 2018 flooding; therefore, mental health professionals were deployed to the shelters to provide counselling services to the affected people (Boodram et al., 2020). It was further reported that both the victims and the health personnel undermined the counselling services but rather concentrated on the access to medical treatment for physical illnesses and injuries (ibid). However, evidence suggests that people suffering post traumatic disorders after floods lack confidence to invest in their place and enjoy their everyday life (Tapsell and Tunstall, 2008).

Flooding has a direct impact on agricultural production due to the loss of agricultural land during flooding: this continuous loss has a huge impact on people's livelihood needs. Agricultural production has been projected to reduce by at least 50% by 2050 with increased flooding events hence affecting both national and household livelihood needs (Le Toan et al., 2021). Flooding has a direct impact on crop yield. Evidence suggests that flooding affects food production which in the long run affects food access, contributes to malnutrition and encourages community rural migration (Armah et al., 2010). This has been attributed mainly to low crop production due to the loss of both agricultural crops in the field and communities'

food reserves during flooding (Ibid). Flooding often results in poor crop harvests that would result in malnutrition if emergency food distribution programmes have not been provided for the affected communities. Mallick et al. (2017) carried out a comparative study on the pre and post agricultural production potential of the coastal land in India to assess the potential impact of floods in the sector. The study revealed that at least 43.7% of the agricultural land had lost its value in agricultural production due to siltation, which led to famine in the region. Consequently, coastal flooding has a long- term impact on agriculture due to salt deposits from the sea which affects both the soil salinity and structure (Gould et al., 2021). Therefore, the flooding impact on agriculture has a long-term effect on a country's gross domestic product (GDP) due to low agricultural production, especially in those countries whose income is agriculturally based (Gould et al., 2021). For instance, Mozambique and Guinea Bissau have been projected to experience significant economic impacts on agricultural production due to coastal flooding (Serdeczny et al., 2016). It should be noted that the flooding impact on GDP has also been registered in some developed countries, but the impact is more severe in developing countries, especially Africa (Gould et al., 2021).

Therefore, flooding has both short-term and long-term impacts, and these are multidimensional. This section has demonstrated the effects of floods on the day to day activities of the people living along the riverbanks: these include displacement, loss of life, a rise in diseases and an impact on livelihoods. The impact on livelihoods does not only affect individual households; it has been demonstrated that it has a trigger effect on the national economy, especially in agriculture dependent countries. Such being the case, both the affected communities and the affected countries have been employing different flooding adaptation and mitigation measures to minimise the impact of flooding on the communities living along the flood plains. Therefore, the next section will discuss those measures that have been put in place in order to consider how the communities together with their stakeholders are trying to reduce people's vulnerability to flooding.

2.3 Flooding Mitigation and Adaptation Measures

In this section, I argue that, despite the flood plain dwellers' vulnerability to flooding, they employ measures aimed at enhancing their continuous occupancy of the flood plains. However, there has been a huge debate on the adoption of resettlement, which is increasingly important, although controversy has arisen because of the way in which it has been executed. Therefore, to engage with the debates around these responses, this section will discuss about resettlement, whether voluntary or involuntary, and living with the various flooding mitigation measures adopted around the globe.

2.3.1 *In Situ* Flooding Adaptation Measures

In order to minimise the flooding impact, communities living in fragile areas generally try to minimise their vulnerability to impending disaster by employing different flood adaptation measures. The measures employed around the globe to minimise the impacts of flooding include the construction of raised houses and temporary movement to uplands during the rainy season, while others resort to moving permanently out of the flood plains through a resettlement process. However, evidence has revealed that flood dwellers often opt for living with flood adaptation measures like relying on the raised houses rather than completely abandoning the flood plains through resettlement (Mtembenuzeni and Kushe, 2018). Therefore, these adaptation measures have been widely adopted among the communities living in risk-prone areas in Asia and Africa. In the northern valleys of Pakistan, communities rely on adaptation measures including raised houses and crop diversification (Few, 2003). Similar measures were adopted in Bangladesh, Malawi, Mozambique and Malaysia with other NGOs following suit as they provided improved structures to the communities living in the flood plains (Bang and Few, 2012, Mtembenuzeni and Kushe, 2018). The flood plain dwellers have embraced these measures in order to reduce the impact of flooding, even though these measures, in themselves, pose certain threats.

According to He (2019), the adoption of community led adaptation measures ensures sustainability. This has been argued on the basis that people's decisions on which adaptation measures to adopt depend on the relationship between their daily life and the natural environment in which they live (Stal, 2011). However, household financial capacity

determines the choice of adaptation measures to be employed, especially when structural measures are employed. Abebe (2020) argued that adaptation measures like flood proofing require significant changes, including financial commitments, which have a significant effect on the adoption of such measures. Other scholars have argued that, given the magnitude of current flooding, non-structural measures aiming at raising awareness and promoting community preparedness should be promoted in order to prevent direct impacts (Lumbroso et al., 2008). Munawar et al. (2021) emphasised that raising community awareness about flooding mitigation, prevention and impact would facilitate decision making to adopt measures that facilitate their physical, social and economic resilience. On the other hand, adoption of externally motivated measures normally relies on the willingness of the affected communities to adopt them (Patt and Schröter, 2008). However, studies have revealed that communities have developed so much trust in their locally initiated adaptation measures that their choices of these measures are embedded in people's experience of floods (Bang and Few, 2012).

On the other hand, some flood plain dwellers chose to adapt to flooding by living a nomadic life, spending the dry season in the flood plains and the rainy season in the uplands (Venkateswaran, 2014). It could be deduced that the flood plain dwellers confirmed the arguments that living in the flood plains endangered their lives, especially during the rainy season, when the severity and magnitude of flooding could not be predicted. However, people choosing this adaptation measure take into consideration the benefits from both sites, which include alluvial soils for farming in the flood plain as well as safety in the upper areas (Artur and Hilhorst, 2014). In a study that was carried out in Malawi, it was found that 84% of the flood dwellers were operating in two places, whereby the flood plains were used for farming, while the upland was used for dwelling places (Chidanti-Malunga, 2011). Similarly, a study in south Asia revealed another motive for flood plain dwellers to operate in both places; they could not afford to give up the fishing opportunities in the flood plains (Bavinck et al., 2015). Therefore, this form of nomadism has become a permanent lifestyle for some of the people living in the flood plains. This has been described by some scholars as an unstable life, which has led to the underdevelopment of the flood plains (Oliver-Smith, 1991), although the flood plain dwellers themselves have contested these views. Furthermore, this mobile

lifestyle, arising from the refusal of the flood plain dwellers to take up permanent residence in the uplands, has been seen as impacting on education and other development initiatives, thus exacerbating their poverty (Wilmsen and Wang, 2015). Therefore, considering the demerits of the adaptation measures, both planners and some flood plain dwellers around the globe have resolved on the solution of leaving the flood plains completely, through self-initiated and assisted resettlement. However, resettlement as an adaptation measure has been contested, mainly because of the policies employed. The crucial question is whether the resettlement was voluntary or involuntary. Therefore, the next section will discuss the execution of resettlement, drawing on the literature of development-initiated resettlement, since scholarship on this subject has a long history.

2.3.2 Resettlement as a flooding Adaptation Measure

Resettlement has been an important programme that has been implemented globally with the aim of moving people from their original place to another location. Literature suggest that resettlement could be induced by conflict, development projects like hydropower mega dam construction, climate change and natural disasters like floods, tsunami and drought (Artur and Hilhorst, 2014). Development induced resettlement has a long history of displacing people, especially where mega dam construction projects are involved (Stanley, 2004). Therefore, most of the resettlement programmes, including environmentally induced resettlement, drew on the already existing knowledge of development induced resettlement to inform other forms of resettlement, including environmentally induced (Arnall et al., 2013). While development induced resettlement is mainly advocated as a tool for livelihood and economic reconstruction for people around the proposed project area, environmentally induced resettlement aims at protecting the victims against further disasters (Artur and Hilhorst, 2014). However, other countries like Sri Lanka in south Asia and Mozambique in Africa have implemented both development induced and environmentally induced resettlements (Artur and Hilhorst, 2014, Muggah, 2008). Therefore, there have been similarities in the implementation of these resettlement programmes are being implemented.

The implementation of environmentally induced resettlement because of natural disasters like floods, cyclones, hurricanes emerged in the 1970's (Piguet et al., 2011). Piguet et al. (2011) further reported that between 1980 and 1990 the world already had millions of environmentally displaced people. The IPCC (2014) acknowledged the frequent existence of these disasters in the current decade, indicating that it has an impact on human settlement. However, other countries like Mozambique had already started relocating people due to drought from as early as 1831 (Artur and Hilhorst, 2014). It is also reported that the increased long-term natural disasters like cyclones and drought in Bangladesh and the Sahel region respectively contributed greatly to people's displacement and resettlement by the 1970's (Stanley, 2004). From this period, there is growing evidence attesting to the rising number of people displaced due to environmentally related disasters rather than any other reason in the current decade. Natural disasters have displaced several millions of people, prompting the adoption of resettlement programmes designed to offer people a permanent home (Terminski, 2013). Additionally, reports indicate that flooding is the most common environmental phenomenon, displacing millions of people every year, especially in Asia and Africa, leading to the booming of resettlement programmes in these regions (Kalin, 2010).

A significant example is the resettlement programme implemented along the Mekong Delta in Vietnam due to yearly flooding that affected the stability of the flood plains (Warner, 2010). On the other hand, although resettlement has been advocated as the most appropriate adaptation measure, Stal (2011) and Okada et al. (2014) have contested this view. Stal (2011) and Okada et al. (2014) argue that resettlement may lead to deforestation and soil erosion where resettlement affects land use by clearing land for farming, housing or unsustainable businesses like charcoal burning. Therefore, resettlement could be seen as a contributing factor to the diverse impacts of natural disasters, making the resettlers more vulnerable than before. However, Nikuze et al. (2019) emphasizes that while the key concept for successful resettlement is the willingness of the community to accept the resettlement process, another important element is capacity building for livelihood restoration by the stakeholders for the communities that have agreed to be resettled.

Due to the increased number of resettlement initiatives, the World Bank produced the first guidelines for planning and implementing Development Induced Displacement and

Resettlement (DIDR) in 1980 to ensure that the social and economic consequences of resettlement are minimised (Stanley, 2004). The same concepts have been used in environmentally induced resettlement, due to the similarities in their implementation processes. According to Cernea (1997b), poorly conceptualized resettlement leads to impoverishment, landlessness, homelessness, joblessness, marginalization, food insecurity, loss of access to common property and social disarticulation. Therefore, the aim of the resettlement guidelines was to encourage the implementation of resettlement projects which aim not only to restore the economic and livelihood of the resettlers but also to maintain their cultural values (Cernea, 1997a.). However, it is reported that despite their recognition of the necessity for resettlement, most governments do not follow the resettlement guidelines; hence resettlement is strongly associated with impoverishment (Patel et al., 2002). Therefore, because of the negative impacts of resettlements, resettlers have a negative perception of resettlement thus prompting them to resist to resettle.

Koenig (2002) argued that resettlement is characterised by various forms of social impoverishment. Therefore, many resettlers, have reacted differently to resettlement initiatives, according to their perceived outcomes. Throughout resettlement's history, different resettlement programmes have had different effects, both intended and unintended, on people's welfare and wellbeing. Consequently, resettlers have different perceptions of resettlement, regardless of whether resettlement is being triggered by for development purposes or as a disaster risk reduction measure, especially when it is facilitated by external bodies. The decision to resettle due to flooding could either be made by the affected communities themselves or the state and its stakeholders, and it could be either voluntary or involuntary.

2.3.3 Voluntary and Involuntary Resettlement

Community led resettlement has been referred to as voluntary resettlement and this has been recommended as the most viable option when adopting resettlement as an adaptation measure (Wilmsen and Rogers, 2019). On the other hand, involuntary resettlement has been characterised as being compulsory, whereby the will of the implementers overrides the will of the people to be resettled (Wilmsen and Wang, 2015). Other scholars have described resettlement as involuntary when the resettlers' right to refuse relocation could not be an

option in the resettlement process, so that failure to comply could lead to adverse consequences (Schmidt-Soltau and Brockington, 2007, Ferris, 2015). However, Matthews and Potts (2018) argued that resettlement as a response to environmental factors like flooding could be characterised as involuntary, because it is considered the last resort, undertaken out of fear when flood adaptation measures have failed to offer the required protection. On the other hand, where other communities are willing to abandon the land with which they have formed ties, and be in the forefront of the resettlement process, this could be characterised as a form of voluntary resettlement (Usamah et al., 2012) .

However, there is empirical evidence that resettlement could start as voluntary and end up being involuntary based on the level of community involvement by the implementers. Wilmsen and Wang (2015) noted that most of the involuntary resettlement might have started as voluntary and a critical review of these programmes showed some degree of compulsion in sub-Saharan Africa. For instance, Mozambique is a prominent example, from which several lessons can be drawn, on both voluntary and involuntary resettlement. Warner (2010) indicated that the Mozambican government successfully implemented a resettlement programme in 2007, although it was criticized by the flood plain dwellers. Warner (2010) further narrated that the government was trying to implement an involuntary resettlement which created tension as the community refused to accept that flooding was a sufficiently strong motive for them to leave their ancestors' land. Arnall (2014) noted that most resettlement programmes in developing countries use top down approaches to impose social policies: as a result, the intended purposes are not achieved, as the communities would like to make decisions on the things that matter to them.

Stal (2011) reported that, in the absence of community participation, resettlement could face resistance, starting with the traditional leaders who would be discouraging their subjects from accepting resettlement as this would also impose uncertainty on their chieftainship. Therefore, while the state and international community were coming up with resettlement as an adaptation measure in Mozambique, the community members were not prepared to move upland; consequently, relocating them without consultation of the affected people

made resettlement a failure (Arnall, 2014). However, through dialogue and consultation, the Mozambique government restructured its policies by incorporating people's views, and at this stage some communities agreed to move upland (Artur and Hilhorst, 2014). In addition to this, each household was provided with a 30-meters by 40-meters piece of land for housing and 1 hectare for agriculture, as well as construction materials, and the new location was provided with the necessary social amenities like schools, a health centre and potable water (Okada et al., 2014). Therefore, people-centred resettlement programmes provide an incentive for people to move to higher areas.

Another example of resettlement that started with tensions but later proceeded with continuous discussions between the implementers and the affected communities was the resettlement of the flood plain dwellers of Newtok in Alaska. During the implementation of resettlement, the people initially opposed the idea of resettlement, as they were employing the living with floods adaptation measures (Bronen, 2011). However, due to continuous consultation and negotiations, the community agreed to resettle. According to Wilmsen and Wang (2015), a programme is characterised as voluntary when most of the community agree with the terms before the execution of resettlement. It is assumed that in the long run, the remaining community will eventually agree to settle, as a consequence of this majority decision. Therefore, through this process the Newtok resettlement was implemented: the community itself retained control of the resettlement process until the entire village was resettled (Bronen, 2011). Bronen (2011) reported that although the Newtok community could perceive resettlement as one of the possible solutions for their continued exposure to flooding, there was no unoccupied land for these people to move to. Similarly, a community in Papua New Guinea was ready to resettle, but neither the government nor the community had land for resettlement (Ferris, 2015). Therefore, even if the community perceives itself as vulnerable and resorts to resettlement as the only adaptation measure, unavailability of land could be an obstacle leading to different responses by the resettlers. On the other hand, some resettlement programmes might offer land, but the communities could refuse to resettle on the basis that they lacked connections with the new territory (Edwards, 2013). Therefore, although resettlement could be characterised as either voluntary or

involuntary, the willingness of the resettlers to stay in their original home has been prominent.

2.3.4 Movement Dynamics during Resettlement

This section unpacks the possible movements that are observed during and after people have been resettled. This section is important, as it provides understanding of the resettlers' narratives of resettlement. Evidence presented in the literature about resettlement above showed that while some people resist resettlement, other people accept to resettle. However, two other groups emerge after resettlement. Thus, some people agree to resettle, but in the long run choose to abandon the resettlement site, whilst others choose to utilise the benefits of their old and new homes. Therefore, this section will discuss these four possible movements, highlighting their causes and implications for resettlement.

Although resettlement has been widely adopted, there are different discourses on the subject. Resettlement has been a source of conflict in some circumstances, when the resettlers have refused to cooperate, consequently staying put in the flood plains, which resulted in tensions between resettlers and the state. Refusal to move has been mainly associated with involuntary resettlement especially when the community has not been involved in the conceptualization, implementation and monitoring processes (Artur and Hilhorst, 2014). The process of accepting change could be challenging to some resettlers, leading to tensions between the state and the flood plains dwellers. Some scholars have documented not only changes generated by resettlement in people's livelihoods, resource ownership and control but also the loss of social ties (Usamah et al., 2012). It has been found that resettlers relying on natural resource-based livelihood options like farming and fishing tend to resist resettlement (Bang and Few, 2012). This is mainly because they would not want any disturbance to their everyday life, especially when they compare livelihood sources in the two places. The level of community involvement in the resettlement process is also very important, since it determines the level of resistance when people have been prompted to resettle (Islam et al., 2018). Although resistance has been mainly associated with involuntary resettlement, empirical evidence also suggests that resistance could be experienced even

with voluntary resettlement. Arnall (2019) argued that in resettlement discourses, whatever initiatives have been adopted and processes followed, some people would still resist. Therefore, some people have resisted resettlement despite being vulnerable to flooding and receiving assistance to resettle. This has significantly affected the implementation of resettlement programmes around the globe; hence, community participation is vitally important for minimising the number of people resisting resettlement. Community participation is essential as it ensures that the key factors informing their decisions to resettle have been incorporated in the resettlement programme (Artur and Hilhorst, 2014).

On the other hand, some people could agree to resettle but eventually decide to go back to the flood plain if the resettlement does not meet their needs and expectations. Arnall et al. (2013) argued that due to changes in livelihood options, at least 20% of the resettlers in Mozambique went back to the flood plains after 12 years of resettlement. Limitations on land holding size, which resulted in reduced agricultural production and poor soil fertility in the upper land, also prevented the flood plain dwellers from permanently resettling after initially moving upland (Arnall et al., 2013, Bang and Few, 2012). In a resettlement programme in Cameroon the people who agreed to resettle lamented that they were allocated small and unfertile pieces of land compared to those they previously owned in the flood plains (Bang and Few, 2012). This compromised people's harvests, which, as the resettlers reported, were a source of food and income. Therefore, the resettlers felt that the resettlement programme aggravated food insecurity and led to impoverishment. Further to this, resettlers in Mayon argued that resettlement changed them from producers to consumers as they were not able to produce enough food to take them throughout the year, so people resorted to going back to the flood plains (Usamah et al., 2012). Empirical evidence indicates that although resettlement reduces physical vulnerability to disaster through reduced exposure, but there is increased concern about social and economic vulnerability due to reduction in social capital and livelihood options (Tadgell et al., 2017). This has contributed to the abandonment of resettlement areas by the resettlers, who continue utilising the flood plains despite their vulnerability. Furthermore, evidence suggests that people have returned after being resettled even if they resettled voluntarily and the resettlement program improved their life. For instance, Ferris (2015) provided examples of voluntary resettlement that took place in China

and Vietnam, where the resettlement was characterised as voluntary by the government and it was indicated that the programme improved the resettled people's livelihoods. However, as in other resettlement programs across the world, some resettlers were not entirely happy with the programme, and they went back to their original homes (ibid). López (2019) attributed this behaviour to the fact that resettlement uproots people from an environment that they have bonded with, and that has significant meaning in their life: making the same bond with another place has been seen as a challenge.

Alternatively, some people chose to move back and forth between the flood plains and the upland. Basing their conclusions on observed changes in livelihood sources, norms and values among the resettlers, Artur and Hilhorst (2014) reported that some resorted to operate in both places, motivated by their evaluation of the benefits offered by each place. A study carried out in Malawi revealed that 84% of the resettlers were operating in both places, using the flood plains for farming whilst the upland was used as a dwelling place (Chidanti-Malunga, 2011). Similarly, a study in south Asia revealed that the post tsunami resettlers depended on the flood plains for fishing as this was the main livelihood source for most households before resettlement (Bavinck et al., 2015). This category of people takes into consideration the benefits from both sites which include alluvial soils in the flood plain and marketing opportunities and safety in the upper area (Artur and Hilhorst, 2014). This becomes the permanent lifestyle for this group of people. However, constant movements to the flood plains, where people spend most of the time during the day, compromises wellbeing, especially for children, due to increased school dropout and poverty (Oliver-Smith, 1991). This social disarticulation is mostly observed where people are resettled far away from their previous land as it means spending almost the whole day on the low land. In tandem with this argument, Patt and Schröter (2008) established that, in Mozambique, people were resettled almost 16km away from the flood plains. However, the resettlers' livelihoods need forced them to travel this distance every day, as a result they were reported to have been spending most of their time in the flood plains (Ibid). Therefore, in the long run, resettlers chose to give up their upland residences completely and return to the flood plain since it was where they were able to meet their livelihood needs. Therefore, regardless of the way in which people were resettled, the distance between the two places contributes to the

sustainability of the resettlement, especially where the resettlers still depend on the flood plains for livelihood needs. Furthermore, travelling between two sites was reported as exhausting for the elderly, for lactating mothers and for physically challenged individuals, who consequently resorted to staying in the flood plains, especially during the dry season (Chidanti-Malunga, 2011).

However, some people's consent to resettle is based on their experiences of previous flooding hence permanent resettlement becomes a viable option, if they feel that staying put in the flood plains could increase their vulnerability to flooding. On the other hand, some people continue to live in the vulnerable areas because they do not have the resources to move to safer places and are therefore willing to seize any opportunity that facilitates their movement. They are motivated to seek safer places and reconstruct their livelihood needs while in the new area. Additionally, some resettle permanently because they lost everything during the flooding period: therefore, they cannot go back even if they feel that the living conditions are not as good as they expected (Sharp et al., 2018). On the other hand, people are able to resettle permanently if the resettlement offers alternative sources of economic growth. Oliver-Smith (1991) found that 90% of the resettlers maintained their new location because they were able to improve their lives due to the available job opportunities that allowed them to accumulate more assets than before. Additionally, it was reported that women were quick to accept resettlement, which was attributed to the fact that they suffered the most during disasters, having limited coping strategies (Adams, 2016). Apart from women, the acceptance rate for permanent resettlement was high among young and middle aged people with a minimum level of education, according to a study carried out in Australia (King et al., 2014). Warner (2010) indicated that very poor people, with weak network ties to rely on during extreme flooding, were found to be stable in the new area after resettlement. Additionally, Okada et al. (2014) argued that most of the resettlers were people caught up in poverty. On the negative side, Koenig (2002) argued that resettlement could also make people poorer than before, although it has been noted that the success of resettlement is subjective.

However, in order to minimise the impact of resettlement, which consequently triggers the movements above, it is argued that resettlement should consider 1) transparent recruitment of the people to be resettled, 2) employing deliberate efforts to help the resettlers to adjust and cope with the resettlement process, 3) taking the resettlers through the development and incorporation process and lastly 4) handing the resettlers over after they have established themselves in the new place in order to yield better results for the social reconstruction of the resettlers (Artur and Hilhorst, 2014). However, Arnall et al. (2013) argued that following these steps alone, even if accompanied by offering compensation to the resettlers, does not guarantee that the resettlers will permanently resettle in the new area. Therefore, whatever form of resettlement has been employed to resettle people, different issues arise even if voluntary resettlement policies have been put in place. The resettlers' ideas of resettlement are constructed by their feelings about the entire resettlement programme in relation to their evaluation of the both the lower land and the resettlement area. Evidence suggests that people's attachment to the place that they regard as 'home' affects their feelings about resettlement; hence, place attachment is critical to resettlement discourses. Therefore, the next section will discuss place attachment narratives and how they contribute to the decisions that people make when they are faced with situations like flooding that would make them abandon the places that offer meaning to their lives.

2.4 Place Attachment

In the previous section we learnt that there are different perceptions on resettlement, so that even with clear resettlement guidelines, community participation and provision of improved ways of life in the new settlement, some people would prefer the lower land to the new settlement. This is mainly imbedded in the people's relationship with both physical and nonphysical resources available in the flood plains. This section therefore considers place attachment narratives in terms of how it is conceptualized and its linkage to resettlement programming. The three conceptual dimensions of place attachment will be discussed in this section, as they are significant in conferring place meaning, especially for vulnerable groups of people. In engaging with these conceptual ideas, I will argue, firstly, that people's attachment to the physical environment is due to the availability of resources within a locale: in resettlement literature this is called 'place dependency'. Secondly, this section will discuss

people's attachment due to social factors that include neighbouring, informal networks and social ties. Lastly, the literature on place identity will be reviewed in this section.

2.4.1 Place Dependency

People feel attached to a place that has meaning for their life. Attachments are most strongly formed to a place where the available resources enable people to achieve their goals (Lewicka, 2011). In place attachment theory, this form of attachment is called place dependency (Lewicka, 2011, Scannell and Gifford, 2010). Raymond et al. (2010) argued that place dependency constructs are based on the functionality of the place, mainly in relation to its physical resources. The physical aspect of place attachment is of particular importance in resettlement scholarship as there is substantial evidence that a resettler's response to resettlement is constructed on the availability of physical resources like land, rivers, grave yards and ecosystem services like forests (Raymond et al., 2010).

Evidence suggests that people living along the flood plains form attachments to their land. Land is particularly an important resource for resettlers with land-based livelihoods like farming (Raymond et al., 2010). Consequently, land characteristics in the lower land have been described as the main influencing factor, especially the fertile soils created by flood deposits (Venkateswaran, 2014). Resettlement uproots people from the land that they have been relying on for farming to a different place where the continuity of their livelihood sources is not certain. Therefore, people's response to resettlement could be influenced by the availability of land in the new settlement. Xu et al. (2019) argue that farmers regard land as their source of security that provides both their livelihood and social needs. However, this security is attached to their original land as they can make decisions on what to do with it, hence enhancing their land rights (ibid). Therefore, land ownership and user rights could influence decision making processes in relation to resettlement. On the other hand, Zentella (2009) argued that land is not just the physical resource, but also encompasses the emotions and meaning attached to it. For instance, in Mexico, land is so embedded in people's cultural values that leaving one's original land means disempowerment and loss of cultural identity

(Zentella, 2009). Therefore, uprooting people from the land that informs their culture could result in tensions, especially when they are not willing to forgo their culture.

People living along the flood plains utilise the water bodies surrounding their environment. Therefore, lakes, rivers and streams have been described as other physical features with which people form attachments. According to Verbrugge et al. (2019), water bodies are regarded as a source of food, water, transport and business as well as other non-tangible resources like recreation and identity. Therefore, water bodies are given a meaning by people living nearby, as they are regarded as complementary to the quality life within a locale. Therefore, in light of people's connection with the rivers and meanings attached to them, resettlement could be seen as a weapon breaking this bond. In their study Pradhananga et al. (2021) found that the resettlers' desire to continue living along the flood plains was stronger than their desire for resettlement, despite the fact that the river was the source of their vulnerability due to flooding. Furthermore, evidence shows that people living along the flood plains earn a living through fishing; consequently, water bodies are regarded as income generating activities (Urquhart and Acott, 2014). Urquhart and Acott (2014) found that the Cornwall fishing community was emotionally attached to a place due to the fishing activities that they were engaged in, influencing their preferences in terms of where to stay. Therefore, although fishing could be seen as a normal business, some individuals are particularly closely connected to water resources that facilitate their fishing culture. This implies that uprooting these strongly attached people to a new place would result in tension between the implementers and the fishing community.

It should be noted that within a locale, people have different degrees of attachment to a place due to the availability of the resources stipulated above. Strongly attached people would resist any change threatening their place attachment, even if the alternative place could offer similar resources for facilitating the attainment of their goals (Anton and Lawrence, 2014). Therefore, this category of people could be willing to remain in the vulnerable areas when faced with environmentally induced disaster (Bonaiuto et al., 2016). Bonaiuto et al. (2016) further argued that this strong attachment to place shapes one's

perception of the threatening change so that the perceived effects are underestimated, to ensure that their attachment to the place is not disrupted. However, Berroeta et al. (2015) argued that displacement due to sudden onset disasters strengthens place attachment as people would set a higher value on their distorted place, hence enhancing their emotions and memories. Zheng et al. (2019) argued that these emotions and memories of the previous place are enhanced by the availability of coping strategies in the new place. This entails that people evaluate the new place based on the alternatives to the availability of resources to reconstruct their livelihood needs after disaster. In relation to this argument, Devine-Wright and Howes (2010) found that people perceived resettlement negatively because of the satisfaction that they get from the aesthetic beauty of their original place, which was the basis for their attachment to the place. On the other hand, Bogaç (2009) reported that resettlers in Mozambique failed to form an attachment with their new place after 34 years of resettlement, because they missed the physical resources that were available in their original place. Therefore, it can be concluded that the attachment that people form with a place cannot be transferred easily to a new place after resettlement. There are, however, significant variations in the ways in which people form attachments to a place, especially if one compares people who depend on the surrounding environment for a living with those who do not depend on it to achieve their goals. Therefore, this would trigger different movement dynamics among the resettlers.

Place dependency has proved to be strong in many developing countries, due to the people's reliance on land-based livelihoods which are an integral part of people's livelihoods (Anton and Lawrence, 2014). Gurney et al. (2017) in their study revealed a strong demonstration of attachment due to place dependency among fishermen and farmers, who earned a living by utilising the fertile soils along the riverbanks. Additionally, some people earned a living as tourist guides: hence the environment provided their livelihood needs by selling their services to the tourists (Gurney et al., 2017). Therefore, to outsiders, the place could be perceived as a physical environment while as to the people living in that community, the place offers lifelong satisfaction through the realisation of people's livelihood needs.

On the contrary, Lewicka (2005) argued that people can display strong place dependency due to absence of life alternatives that would enable them to build their livelihood elsewhere, rather than their conscious choices, as it may appear. On the other hand, Anton and Lawrence (2014) indicated that this form of place attachment arises from a positive evaluation of the place's ability to provide resources to achieve this goal. However, it has been argued that people calculate the cost benefits of a particular place before attaching themselves to it: hence place dependency supersedes other forms of attachment (Anton and Lawrence, 2014). Lewicka (2008) added that it is possible for people to be attached to a particular place due to the benefits it offers without identifying themselves with it, so that the place does not form their identity. If people's attachment is disrupted through resettlement, there is a disturbance of place dependency and studies have found that it is a slow process to rebuild this attachment in a new environment (Bogaç, 2009).

2.4.2 Social Attachment

This section brings forward another dimension of attachment, beyond the place's physical characteristics, that is crucial in the resettlers' decision-making process. Social dimensions of place attachment are associated with feeling at home due to the local relationships formed with the people within your immediate environment (Rollero and De Piccoli, 2010). Expressly, human beings are social beings who depend on each other, hence place attachment studies have proved that people's interaction within a locale enhances place attachment (Uzzell et al., 2002). Social attachment to a place is formed through people's involvement and interaction within the community through informal networks (Lewicka, 2011, Scannell and Gifford, 2017, Uzzell et al., 2002). Through these interactions, social bonds are formed which cement ones' belongingness and rootedness. Therefore, people develop strong social ties which in the long run affect people's decisions to leave the place where they have formed these strong ties (Lewicka, 2011). However, although social attachment has a bearing on decision making during resettlement, very little attention has been paid to the incorporation of this place attachment construct in resettlement processes (Scannell and Gifford, 2017).

On the other hand, studies that were carried out to assess the resettlers' social attachment to their place revealed a strong social attachment among low income people who depended on both financial and physical resources from their social groups (Mishra et al., 2010b). This was attributed to the limitations on their resources, which hindered them from changing their place of residence, as resettlement would disrupt their social connections (ibid). Therefore, for communities with limited economic and natural resource capital, their social connections become a crucial part of life (Rogers and Wang, 2006). Similarly, it has been found that gender and age influences the one's attachment to a place due to social bonding (Beggs et al. (1996) . Women and the elderly were reported to have strong social bonds which made them unwilling to resettle, as they were afraid of breaking their well-established social ties (Beggs et al., 1996, Kasarda and Janowitz, 1974). Although it can be argued that people could form new ties in the new settlement, ties take time to build because they are attached to personal feelings and emotions (Rogers and Wang, 2006, Quetulio-Navarra et al., 2017). Guest (2000) pointed out that the people who interact most within their community through their social networks tend to develop the strongest place attachment. Therefore, this could result in resistance when prompted to relocate. On the other hand, social bonding is influenced by beliefs which are shared during social interactions with people living in proximity to each other (Quetulio-Navarra et al., 2017). In agreement to this, Guest (2000) argued that people are more comfortable when interacting with people who share the same social characteristics and this homogeneity is locally constituted. Therefore, resettlers' homogeneity and their local beliefs could be affected during resettlement as the resettlers mix with a host community that might be accustomed to different cultures and beliefs.

Lastly, social attachment has been characterised because of neighbouring ties. Social bonding due to neighbouring ties relies on one's relationship with friends, family and neighbours within one's vicinity (Kohlbacher et al., 2015). Kohlbacher et al. (2015) further established that social bonding was stronger than place dependency as people indicated that they were more attached to their neighbourhood. It has been shown that people with higher numbers of local relationships feel more strongly attached to a place; hence, the more relationships people have there, the more attached they will be to a particular place (Lewicka, 2005). Strong (2016) argued that this is more prominent where the community is homogeneously

composed in terms of ethnicity, culture and socioeconomic factors. This implies that people develop strong bonds because they feel at home with people like themselves, although it is difficult to distinguish between physical and social attachment to the place (Strong, 2016). Therefore, place attachment influences people's attitude towards any change that threatens their continuous dwelling in a particular place that they feel attached to, whether its physical or social aspects are the cause of the attachment (Anton and Lawrence, 2014).

2.4.3 Place identity

While place dependency entails the connection to a place due to the opportunities it offers for functionality and goal achievement, place identity signifies the importance of a place as a source for emotions and self-identity (Mishra et al., 2010b). Rollero and De Piccoli (2010) described place identity as the cognitive structure which forms self-categorisation and social identity. Therefore, place identity consists of memories, ideas, feelings, attitudes, values, meaning and the experiences that accumulate in a place over time (Kohlbacher et al., 2015). This identity is characterised by the narratives that people compose about who they are by relating themselves to a particular place (Yuval-Davis, 2006). Place identity is then characterised as a subset of self-identity formed from experiences of a particular place which satisfies their psychological, social and cultural needs (Anton and Lawrence, 2014). Yuval-Davis (2006) argued that some people's place identity can be so strong that they could sacrifice their own lives to maintain and serve the narratives of their identity. Therefore, people attach different meanings to their place identity, but its overall importance is evidenced by the minimal adoption of some programmes like resettlement (Strong, 2016). Windsong (2010) indicated that people's emotions are attached to the place where they have generational roots, and which they do not want to lose as being there signifies to be '*at home*'. Therefore, even if the place might be characterised as disaster prone by policy makers, the notion of it being home overcomes fear of being affected by the disaster.

Through these interactions and feelings about a particular place, people describe themselves in terms of belonging to that place, hence forming their identity (Hernández et al., 2007). Counted and Watts (2017) indicated that one's identity is enriched by experiences that people

develop by being at a place, and these experiences form self or group identities. Through these experiences which are individually or collectively constructed, people establish a sense of belonging and purpose that is meaningful to an individual. Therefore, the meaning of people's lives is threatened by any change that would destroy their emotional bonding to their place. This entails the conclusion that overlooking this in processes that result in permanent change of people's attachment to their place may trigger undesirable actions by the affected people (Graybill, 2013). To others, being close to a sacred place is crucially important, as it entails their proximity to the spirits or God, and this forms part of their identity: consequently, relocating them to destinations far from these places can be difficult (Counted and Watts, 2017). Therefore, when place attachment is disrupted, it results in different reactions that can affect people's wellbeing in terms of both livelihood and social connections; hence, proximity to one's place of attachment is important.

The concept of place identity entails how rooted people have become in a particular place by attaching emotions to it, although, rationally viewed, that place might appear vulnerable. The longer people stay in a place, the more they are attached to it due to the number of relationships they have formed, the home ownership, and what the physical environment offers to an individual (Johnson, 2012). Therefore, these relationships, the environment, and the length of residence in a place strengthen the place identity. Anton and Lawrence (2014) indicated that people are psychologically invested in a place if they spend most of their time there: consequently, the place becomes part of their identity. It is revealed that the length of residence, the development of shared meanings and social belonging shape one's attachment to a place (Hernández et al., 2007). Therefore, the experiences that people establish within a location over time shape their identity: this can be difficult to give up when they are asked to resettle (Counted and Watts, 2017). However, to others, place attachment can be the result of memories and stories about the place shared by others through their social connections, not necessarily arising from their own personal experiences (Trentelman, 2009). It is, however, argued that length of residence is the main predictor of place attachment as long term interactions with the place lead people to develop personal relationships which form the basis for their social and physical bonding with the place (Trentelman, 2009). Further

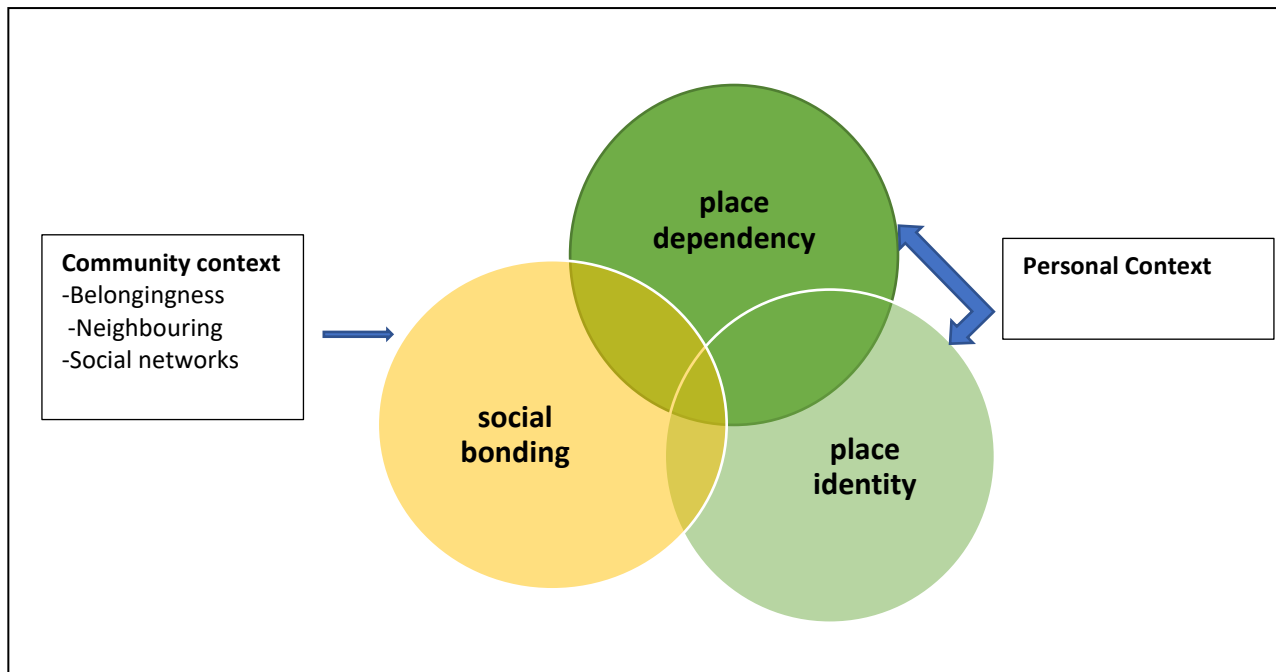
to this, Sampson (1988) indicated that people's behaviour, attitude and emotions are influenced by the time they have spent in a particular place.

2.5 Conceptual Framework

This section provides the conceptual framework that has been adopted for this study: a three dimensional place attachment theory inspired by the four dimensional work of (Raymond et al., 2010). In their study Raymond et al. (2010) described place attachment as a construct of personal based attachment, community influenced attachment and attachment to the natural environment. Therefore, based on these forms of attachment, four elements of attachments were developed: place dependency, place identity, social bonding and nature bonding. According to Raymond et al. (2010) place dependency and place identity were characterised as those bonds that are influenced by people's individual perceptions of the place to which they are attached. On the other hand, social bonding is mainly influenced by relationships with other people within the community (Scannell and Gifford, 2010). Lastly, nature bonding was described as one's attachment to the natural environment, mainly considering leisure and recreation centres (Raymond et al., 2010). However, depending on the researcher's focus, place attachment has been conceptualized in such differing ways that the place scholars have no unanimously agreed concept of their subject (Scannell and Gifford, 2010). Raymond et al. (2010) indicated that this makes it difficult for researchers to adopt one specific place attachment conceptual framework.

Therefore, three place attachment elements, place identity, place dependency and social bonding, have been selected to suit the context and objectives of this study, and provide its conceptual framework. The nature environment bonding has not been included in this study because its components of outdoor and nature-based recreation are not common in the study area. Therefore, the individual and socially constructed place attachment elements have been adopted for this study as the literature presented in the preceding sections has demonstrated that resettlement decision making is both individually and socially constructed (Guest, 2000, Wang et al., 2020). However, these place attachment elements are intertwined and their overlap attesting to the complexity of place attachment. While several studies have adopted

only the place dependency and place identity notions, social bonding has been described as another important factor influencing the emotions attached to a place (Pradhananga et al., 2021). Therefore, a three pole place attachment that included both personal and community attachment would be conclusive in deriving the resettlers' place attachment as illustrated in figure 2 below.



Source: author's own conceptualization

3.0 Chapter Summary

This chapter has presented the narratives around people's vulnerability to flooding, the impact of flooding and the adaptation measures that have been put in place to curb its effects. Thus, it has been argued that vulnerability to floods stems from exposure to factors over which the affected communities have little or no control. It has also been argued that the impact of flooding is disproportionately felt around the globe, with the distinction between developed countries and developing countries being particularly marked. This is attributed to the fact that most of the developing countries' livelihoods is environmentally dependent, which makes them more vulnerable than the other group. The impact of flooding includes the disturbance of agricultural production, as well as loss of property, life and dwelling places. Flooding has also been considered as the causative agent of various diseases such as cholera and malnutrition due to inadequate food intake when the community has lost food during

flooding. In the long run, it has been discovered that flooding could lead to economic impacts where the country's GDP is based on agriculture.

To mitigate its impact, several adaptation measures have been put in place, ranging from community-initiated strategies to state-led measures. It has been shown that people mainly choose to embark on measures designed to enable them to live with floods, like constructing raised houses and flood barriers, or moving between two places however, relocation is a last resort. However, given the magnitude of current flooding, it has been argued that the mitigation measures for living with floods still put people at risk; therefore, resettlement has been widely adopted. Yet objections have been raised to resettlement as it exposes people escaping from flooding vulnerability to other forms of vulnerability, including livelihood loss, social disarticulation and landlessness. Although resettlement has been characterised as involuntary and voluntary, with the latter category being characterised by active participation and consultation with the community, the practicality of this distinction could be contested. It could be argued that these are terms used by the implementing bodies to portray the level of community involvement in the implementation process, especially if the resettlement is championed by other stakeholders. It has been argued that most voluntary resettlement stems from involuntary resettlement, with some people being induced to resettle by the incentives offered during resettlement. Other flood plain dwellers, however, could agree to resettle to avoid facing the consequences of their own decision to remain in the flood plains. Although one could voluntarily resettle, the motivation behind resettlement could be externally influenced. In these cases, people might agree to resettle but eventually re-establish their lives in the flood plains. It has been argued in this chapter that although people are vulnerable to flooding, they still have a sense of natural bonding with their original land. This bonding, which is embedded in experiences of the place identity, social connections and livelihood needs, cannot easily be abandoned because of flooding. Therefore, the last section of this chapter looked at place attachment scholarship with the aim of elucidating the bond that people have with their place, and its relationship to their views on resettlement.

It has been argued that people's emotions about their land is related to their generational roots and people are often reluctant to leave because living there signifies to be '*at home*'. Therefore, even if the place might be characterised as disaster prone by policy makers, the perception that it is home overcomes fears of being affected by disaster. It has therefore been argued that the emotional attachment that is formed within one's environment has a bearing on how people interpret and react to interventions that disrupt their environment. The concept of place attachment explains how people become deeply rooted in a particular place by attaching emotions to it although, viewed rationally, the place might be vulnerable. Therefore, understanding the factors that lead people to feel attached to a place could lead to successful resettlement with the aim of reducing people's vulnerability to flooding.

Lastly, the chapter presented the conceptual framework of this study that has been conceptualised based on the four pole place attachment theory by Raymond et al. (2010). Based on this theory, three place constructs of place identity, social bonding and place dependency have been selected to form narratives of people's decisions to resettle and its associated challenges observed during resettlement process.

CHAPTER THREE

RESEARCH METHODOLOGY

3.1 Introduction

This section outlines the methods that were employed in carrying out the research and providing the fundamental reasons for selecting a particular method. Before unpacking the different methods employed for data collection and analysis for this study, the chapter provides a description of the research approach, study location, sampling techniques and ethical considerations that were adopted during the data collection period. Lastly, challenges and limitations faced during data collection using different tools and methods will be reflected to provide a synopsis of what happened during the research period.

3.2 Research Approach

This study used a case study approach to explore the role of place attachment in environmentally induced resettlement in Malawi. A case study approach allows an in-depth understanding of a complex issue in a real life setting; hence it gives an opportunity for the researcher to answer questions about a phenomenon of interest at hand (Crowe et al., 2011a). According to (Yin, 2013), case studies are used as a tool to analyse a phenomenon in the everyday context in which they occur. Therefore, a constructivist approach was taken, whereby the participants' narratives were employed to gather people's knowledge, understanding and experiences of persistent flooding, resettlement and emotional attachment to the flood plains. Although the case study approach is criticised for lacking a scientific generalisation of the findings, it provides an insight into a phenomenon based on the people's understanding of and feelings about the issue at hand: these narratives could be used in policy formulation and implementation (Crowe et al., 2011a). Baxter and Jack (2008) argued that by using a case study approach a researcher can understand participants' views and actions through their description of the reality in their own environment. Therefore, by using the case study of the Lower Shire valley in Malawi, an in-depth understanding of the movement dynamics taking place during resettlement and the reasons behind these movements was established. Additionally, Yin (2013) argues that the case study approach gives an opportunity to analyse critical events, policy development issues and

programme-based interventions with the aim of addressing the existing gaps. Therefore, by using this approach, the study was able to analyse some of the shortcomings in the implementation of resettlement initiatives and how the concerned individuals and community perceived resettlement as a flood mitigation and adaptation measure.

3.3 Research Location

As discussed in chapter one, section 1.2 and 1.3, this study was carried out in the southern region of Malawi. The southern region is composed of 13 districts with only two districts forming the Lower Shire River valley. Therefore, this study was carried out in the Lower Shire River valley districts of Nsanje and Chikwawa. These districts are located at 107m and 61m above sea level respectively (Mwale, 2015). The Lower Shire River valley borders the Blantyre, Thyolo, and Mwanza districts in Malawi, and Mozambique. The Shire River, which is the largest river in Malawi, runs through this valley from Lake Malawi to the Zambezi River in Mozambique. According to (Mwale, 2015), the slope in this valley fluctuates between 30m to 40m above sea level up to the confluence of the Zambezi River. Due to this topography and the observed changes in the rainfall pattern, the area is susceptible to flooding, creating marshes along the Shire River bank (Baxter and Jack, 2008).

The two districts have a combined land area of approximately 600,000 hectares, of which 60% is the wetland locally known as '*Ntchuwa*' and 40% is the dry land locally called '*Mphala*' (White, 1993, Chidanti-Malunga, 2011). This means that most of the land is prone to flooding with 40% very susceptible to drought. The valley has an estimated 0.5 million people with the majority of the households mainly relying on small scale farming for a living (Adeloye et al., 2015). The farming in this region is both rain-fed agriculture in the dry upland, and wetland cultivation mainly relying on the rivers for irrigation and utilising the soil and moisture left after flooding (Maddox, 2005). These types of agricultural production dates back before the colonial era when the valley resisted adopting the agricultural development plans proposed by the colonialists due to local politics, which is still playing a very important role to date, as far as the acceptability of development initiatives is concerned (Maddox, 2005).

The Government of Malawi conforms to the decentralised structures of the Area Development Committee (ADC) with each ADC being under the jurisdiction of a chief called a

Traditional Authority (T/A) and followed by the Village Development Committee (VDC) under the jurisdiction of a group village headman (GVH) (Mwale et al., 2015). Therefore, the valley has a total of 20 T/As with Chikwawa having 11 T/As and 79 GVHs. On the other hand, Nsanje has 9 T/As and 82 GVHs (Mwale et al., 2015). However, it is reported that only nine T/As in the valley, namely Kasisi, Makhwira, Ngabu, Ngowe in Chikwawa and Mbenje, Mlolo, Ngabu and Nyachikadza in Nsanje, are very prone to flooding (Kita, 2018). The Map below shows the location of Nsanje and Chikwawa in southern Malawi.

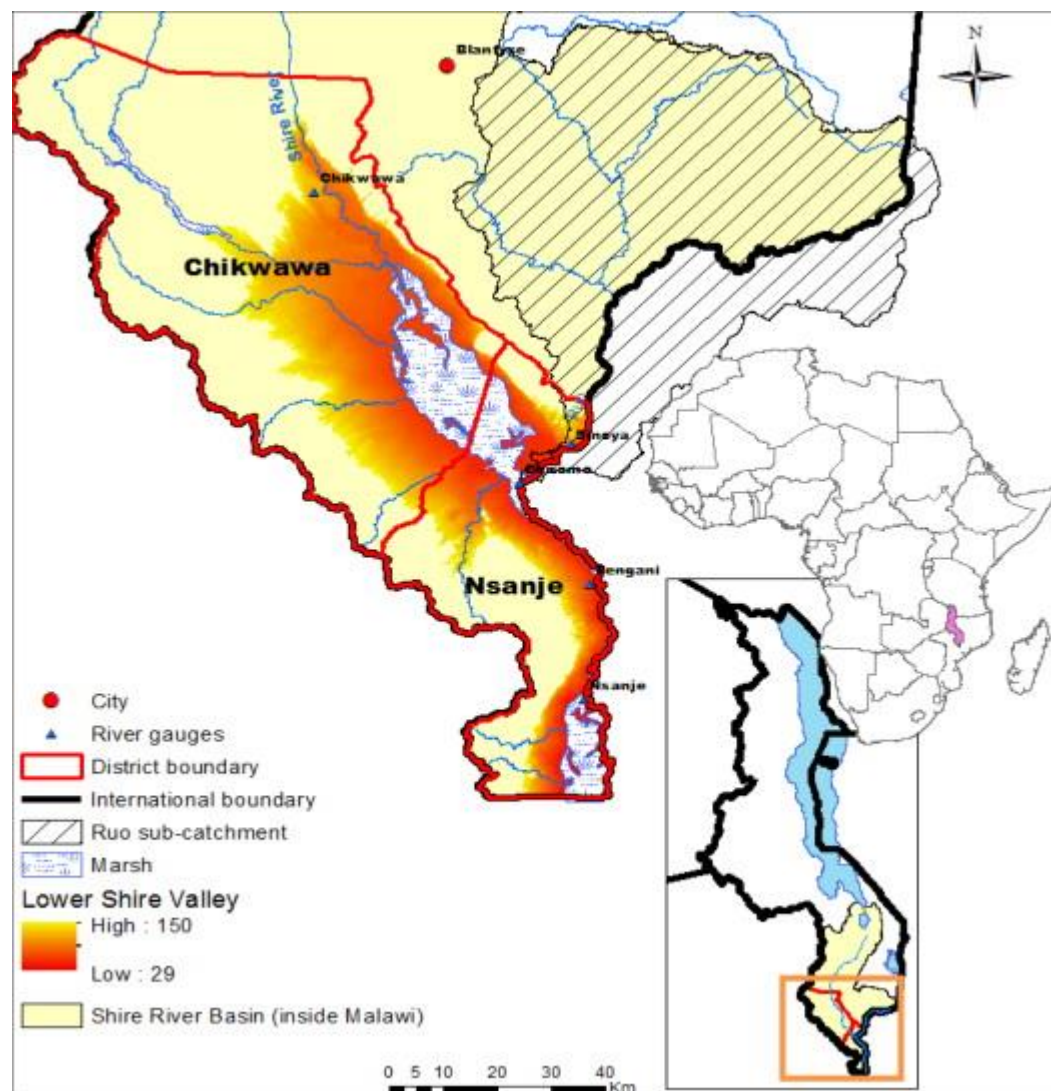


Figure 1 : Map of Malawi showing geographical location of Chikwawa and Nsanje districts.

Source: Mwale et al. (2015)

Poverty levels

Mkandawire (2018) reported that the Lower Shire valley registers the highest levels of poverty in Malawi with over 80% of the population living below \$0.4 per day. This being the case, people in this area derive their livelihood from farming, fishing, livestock rearing, and casual labour locally known as '*ganyu*'. Like most farmers in Malawi, the agricultural production in this region depends on family labour which is the main source of labour for most Malawian smallholder farmers. This exacerbates the high illiteracy levels in the Shire River valley, as children are integrated in the household labour (Takane, 2008). Consequently, these two districts have registered literacy levels of 53% and 52% in Chikwawa and Nsanje respectively, which is below the national average of 65 % (Mwale, 2015). Furthermore, Chidanti-Malunga (2011) indicates that the Shire River valley is susceptible to high levels of poverty due to yearly seasonal flooding, which leaves people in a destitute state as they constantly lose livestock, personal belongings and agricultural crops, both before being harvested and from the household food reserves. Therefore, this region has been targeted for emergency response every year, to take the people through to the next agricultural season.

Climatic and Agricultural conditions

Much of the country experiences climatic changes in terms of high temperatures and erratic rains, but the Lower Shire River valley is particularly vulnerable as it has both flooding and drought. The Lower Shire valley receives an average annual rainfall ranging from 170mm to 967mm which is far below the national average of 1200 mm (Nash et al., 2018) and the mean temperature in this region is 37.6 °C (Nkomwa et al., 2014). It is reported that people in this region have been observing changes in the rainfall pattern: the rains used to be expected in October, but lately it might not rain until January (Sutcliffe et al., 2016). Due to this unreliable rainfall and high temperatures, the production of maize, which is the main staple food in Malawi, is relatively low. The region's main cash crop is cotton, with sugar mainly grown by estate farmers and a few small holders, while the majority plant sorghum, millet, legumes, sweet potatoes and vegetables. People living in the upland rely mainly on sorghum and millet as their staple food, due to poor maize production, unlike those people living along the riverbanks, who rely on irrigation farming to produce a variety of crops, including maize, rice, sweet potatoes and legumes.

Susceptibility to Flooding

Although the area receives less rainfall than most parts of the country, the area is very prone to flooding. Nkomwa et al. (2014) reports that the Lower Shire valley is prone to flooding due to high rainfall in the Shire highland districts of Blantyre, Thyolo and Mulanje. In tandem with this observation, Ngongondo et al. (2011) report that the highest rainfall in the country occurs in the Shire highlands, whereas the Lower Shire valley receives the least rain, which subjects the valley to seasonal flooding as the water flows down into Shire River. Mwale et al. (2015) reported that the Shire highlands receive over 900mm of rainfall, and it exceeds 2000mm in the Ruo catchment area; hence the Lower Shire valley receives much runoff, which is a source of flooding in the area. Nkomwa et al. (2014) further indicate that this makes it hard to predict the occurrence of flooding in the Lower Shire valley, making the population in this region even more vulnerable.

Furthermore, it is also reported that there are high deforestation activities taking place in the Shire highlands: this again causes river siltation, therefore accelerating runoff, making the Lower Shire susceptible to massive flooding (Fisher, 2004). Fisher (2004) further reports that Malawi registers the highest deforestation rate of 2.4% per annum, which is more than any country in the Southern Africa. This leads to increased sedimentation in the rivers which reduces the carrying capacity of the rivers, especially the Shire River and its tributaries in the Lower Shire hence inducing flooding in Nsanje and Chikwawa. Haack (2015) revealed that the soil erosion rate is expected to continue increasing as the population in the southern region continue to rely on forests for fuel wood, building, curing tobacco and tea in the estates, while continuing to clear forests for agricultural production. Therefore, the flooding situation in the Lower Shire is expected to continue subjecting people to cycles of poverty and food insecurity due to continuous loss of personal belongings and food, respectively.

The Lower Shire valley has poor soil drainage characterised by alluvial calcimorphic and hydromorphic soils which account for 44.2% and 24.6% of the total soil respectively (Mwale et al., 2015). However, the presence of the alluvial calcimorphic soils encourages settlement in the flood plain as farmers in this valley rely on river bank production, utilising the alluvial soils brought by floods and the residual moisture to grow different crops. Chidanti-Malunga (2011) reports that there has been a tremendous increase in wetland cultivation along the

riverbanks in the past decade unlike the upland as it is characterised with yearly. Consequently, over 84% of the households in this region hold pieces of land both in the upper land and the wetland to increase their food reserves, although often it is not enough to take them throughout the year (Chidanti-Malunga, 2011, Mijoni and Izadkhah, 2009).

History of Flooding in the Lower Shire

Flooding continues to be the most devastating disaster in Malawi and at least 15% of the population live in flood prone areas, most of which are in the Lower Shire valley (Mijoni and Izadkhah, 2009). In the history of flooding in Malawi, the Lower Shire has been the area mostly affected by floods since the middle of the twentieth century. The region was severely hit by floods in 1942 and 1956; since then devastating flooding has been frequent, notably in 1997, 2001, 2003 and 2006 (Mijoni and Izadkhah, 2009), 2015 and more recently in 2019.

It has been noticed that each year there are differences in severity of the floods. In 1997, floods destroyed the Bangula- Chiromo railway line; in 2001, 110,000 houses were displaced with a death toll of 5; the 2006 floods destroyed 1,749 houses and 24,032 ha of land (Mijoni and Izadkhah, 2009). In 2015, Malawians in 15 out of the 28 districts in Malawi were awakened by devastating flooding as the country received the equivalent of 3 months' rainfall in a single week (Mkandawire, 2018). However, Nsanje and Chikwawa were the most severely affected districts, along with Zomba and Phalombe, which are both in the southern region. According to the Malawi post-disaster needs assessment report (2015), the floods displaced 230,000 people, over 106 people were killed, and 172 people were reported missing from the affected districts. According to the 2019 national disaster report, the 2019 flooding affected at least 16,000 households, with over 50% of the agricultural land affected. Therefore, due to the devastating impact that flooding imposed on people, the national government declared a state of emergency, reaching out to the donor community and all well-wishers to help the people affected by floods. Some people seek refuge in evacuation centres where they receive relief items from the government and NGOs (Mkandawire, 2018) while others usually seek refuge from their relatives and friends who are also trapped in the cycle of poverty (Mijoni and Izadkhah, 2009). Kita (2018) reported that most of the people resorted to relying on their social connections, which included their immediate family, neighbours and friends, whenever there was no external support in terms of relief items during and after the floods.

In April 2019, during the data collection period for this research, it was observed that communities were relying on government food aid due to the 2019 flooding, and they were staying in displacement camps and temporary shelters in anticipation of going back to their original land afterwards.

Selection of the study locations

The Government of Malawi and its stakeholders are concerned by the continued exposure to flooding experienced by the people in this area: it has a severe impact on people's socioeconomic status as described in the preceding sections above. On the other hand, the affected households are reluctant to relocate, arguing that they rely on the flood plains for their livelihood, and also that it is their ancestors' land (Mijoni and Izadkhah, 2009). The continued susceptibility of the region to flooding prompted the implementation of resettlement programmes to protect the lives and property of the people staying in the flood plain. According to Arndt et al. (2019), flooding displaced over 42,000 people in Nsanje and Chikwawa and the government planned to resettle them, however, only 203 families resettled.

This research therefore was carried out in 4 T/As that have been experiencing flooding and have a history of resettlement. In Nsanje, this research was conducted in Nyachikadza and Malemia, whereas in Chikwawa the study was carried out in Mlilima and Kasisi. Although resettlement has been implemented in these areas, the selection criteria were based on how these people were resettled. In Nsanje, the whole of Nyachikadza was declared a disaster prone area by the state, and consequently all households were advised to relocate to the upland; different movement dynamics, however, have been observed over time (Dun, 2011). Therefore, as highlighted in table 1 below, 4 GVHs were randomly selected from Nyachikadza with the aim of developing a deeper understanding of these movement dynamics and the people's perceptions of resettlement following their vulnerability to flooding in the past 10 years. In the same district, GVH Mpomba was purposively selected because of the resettlement programme that was carried out in this GVH following the 2015 flooding. Both T/As in Chikwawa were purposively selected because of the resettlement programmes that were being implemented in GVH Njeredza and Madrum, where different stakeholders were resettling flood affected communities. During the data collection period, people from Mwalija

village in GVH Njereza had just resettled, due to the 2019 flooding, as well as the people from Medrum village were in the process of being resettled by Islamic Relief, which acquired land and was building houses for 50 people who were severely hit by the 2019 floods.

Table 1: Specific study locations in Nsanje and Chikwawa and the state of resettlement as of the data collection period from April to September 2019.

District	T/A	GVH	Resettlement state (April to September 2019)
Nsanje	Nyachikadza	Mpambachulu, Mkupira, Nyachikadza Monyo	Over the past 10 years, they have been encouraged by the government to resettle on their own as they have been vulnerable to flooding every year, however, only a few households resettled.
	Malemia	Mpomba	Ten villages were resettled in 2015 by International Organisation for Migration (IOM) due to the 2015 floods, but over 80% abandoned the resettlement site.
Chikwawa	Mlilima	Medrum	They were in the process of constructing houses for resettlement by October 2019 following the March 2019 floods. Islamic relief organisation was implementing this resettlement programme
	Kasisi	Njereza	The entire village (Mwalija) resettled on its own in March 2019 due to the 2019 flooding. Red Cross, Catholic Development Commission in Malawi (CADECOM) and Welt Hunger Hilfe (WHH) organisations provided housing and potable water to the resettlers.

The research was conducted in both the original land of these sampled communities, and the new area where they resettled or were waiting to resettle, as in the case of Medrum village in Chikwawa. This was done to establish the people's perceptions on resettlement as it was

observed that different movement patterns emerged during resettlement: some people moved back and forth between the two places, some people returned to the flood plains a few years after they had resettled upland, and others resettled permanently, whereas some refused to resettle. This gave an in-depth understanding of the movement dynamics during resettlement and drawing elements of place attachment portrayed due to environmentally induced resettlement. Therefore, the data collection period extended from April 2019 to September 2019. The researcher started by collecting quantitative data, using a questionnaire, from the resettlers who had come from the lower land in Nsanje, then proceeded to collect data from the people who were still living in the lower land. Thereafter, the researcher proceeded with quantitative data collection in Chikwawa. The study proceeded with qualitative data collection in July and August in Nsanje and Chikwawa respectively. Data collection was finalised in September with the researcher visiting both sites to fill gaps in the data collected.

3.4 Research Methods-The Mixed Methods Approach

In order to have a thorough understanding of people's emotional attachment to their place when asked to resettle due to environmentally induced disasters, this study used a mixed methods approach. Therefore, both qualitative and quantitative data collection methods have been used to collect the data that inform the findings of this study. The mixed method approach was employed on the basis that it allowed triangulation of the data in order to have a holistic understanding of the case study (Crowe et al., 2011b). However, according to Robson (2002), the selection of specific data collection methods used in a research depends on time, research specific needs, resources and researcher's skills. Therefore, the researcher selected a set of tools that fitted the above criteria to collect the data for this study. Using this mixed methods approach, the researcher collected both primary and secondary data, using different tools whose advantages and disadvantages were analysed to determine their suitability for this study. Therefore, the flexibility of the mixed methods approach allowed the researcher to collect different types of data relevant for specific objectives and research questions. Therefore, by employing different methods, the researcher collected several data sets that responded to a specific objective, at the same time giving the researcher an opportunity to triangulate information collected with the other methods.

As both qualitative and quantitative data collection methods were used, primary data were collected through interviews with key stakeholders and questionnaires. The study used a range of participatory methods to collect primary data through interviews: participatory photography, participatory mapping and trend analysis methods were used to elucidate the resettlement discourses in relation to flooding, and the ways in which how place attachment is perceived while making decisions about resettlement in Malawi. The study used multistage sampling methods whereby sampling started at regional level, district level, T/A, GVH and village level using both random and purposive sampling methods. This was done with the aim of sampling the villages that have been either targeted for resettlement or resettled before. Additionally, key informant interviews were conducted, whereby participants were sampled at national, district and community level. These people were selected to provide in-depth understanding of resettlement and people's attitude towards it and how this is perceived at each level.

At national level key informants were drawn from the national disaster department responsible for implementing and recommending organisations to carry out resettlement due to flooding in the selected region. The same criteria were used to sample NGOs and government departments that are well informed about resettlement in the region. On the other hand, key informants at community level were selected in collaboration with the community as well as according to the researcher's judgement: the aim was to select influential people in the community, based on length of residency, gender and age group, as all these factors profoundly affect views on resettlement.

3.5 Sampling Design

Both purposive and random sampling methods were used in this study. Punch (2005) argues that purposive sampling enables the researcher to select participants guided by well informed choices depending on the set of data required for the study. Therefore, the researcher was able to select, randomly, people that live in the flood plains, those living in both the flood plains and upper land, and those that have permanently relocated from the identified T/As. Purposive sampling was used to select the region where the study was conducted, according

to its vulnerability to flooding and the implementation of resettlement. After selecting the region, two districts in the region were selected purposively and this sampling trickled down to the T/As, GVH and villages that were selected using both random and purpose sampling depending on the situation of that community.

In order to gather periodic information regarding flooding, the emerging of resettlement and how it has evolved over time in this area, key people in the community were interviewed, and invited to share their experiences and knowledge of the subject matter. Government agencies, non-governmental organisations and civil society organisations implementing resettlement in this area were also purposively selected to gather information about their perspective of resettlement in the study area. Therefore, the study was guided by the narratives from the local community members and key informants' interviews that involved both the community and implementing bodies. Below in Figure 2 is a detailed sampling plan of these groups of people and the targets.

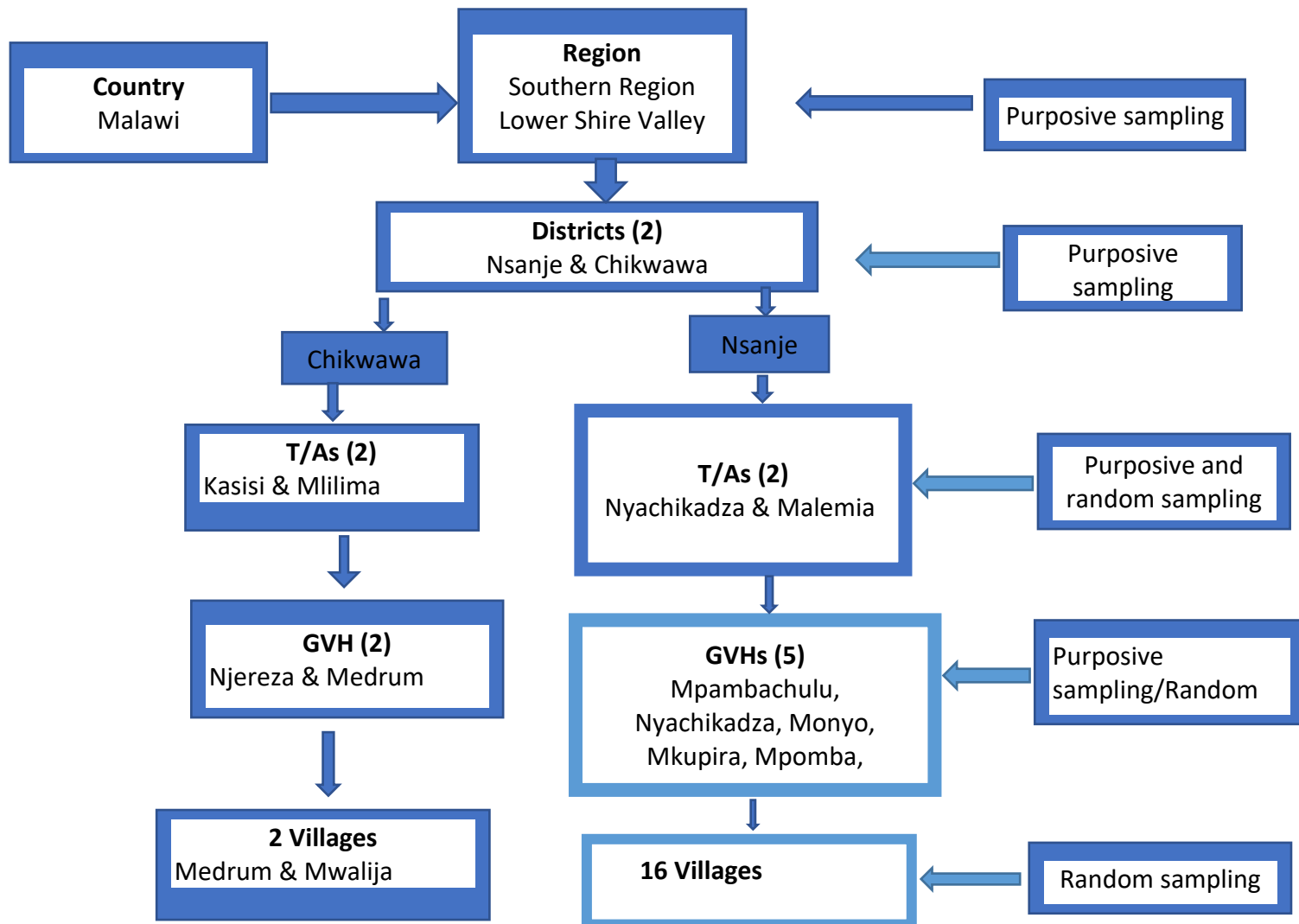


Figure 2: The research sampling design (Author's own extract)

3.6 Data Collection Process, Tools and Methods.

This study used several tools to collect the data that form the findings of this research. Therefore, this section gives a detailed narrative of all the processes, tools and methods that were used to collect the data. As mixed methods approach was used, this study collected quantitative data using questionnaires, while qualitative data were collected using trend analysis, participatory mapping, participatory photography, and in-depth and key informant interviews. The researcher also used transaction walks and observations to have a critical

view and understanding of the participants' day to day lives in an informal setting, both in the upper and lower land. Below, therefore, is a detailed account of each of these methods and tools to provide deeper understanding of how they were used, and which data were collected using that particular method.

3.6.1 Trend Analysis

To understand the hydroclimatic conditions of the study area, the study assembled the rainfall and flooding pattern for the previous ten years, not only as it actually occurred, but also according to the projections of the study participants themselves. Evidence suggests that community knowledge accumulated over time in an environment is a reliable source of information on climate related patterns, especially rainfall trends, frequencies of prolonged dry spells and flooding (Punch, 2005, Uprety et al., 2017). Studies have found out that these locally generated patterns were at a par with the meteorological data, although they were based only on people's experience and understanding of their local environment (Mwale et al., 2015, Uprety et al., 2017). Therefore, the rainfall and flooding trend analyses were carried out to allow the participants to narrate the observable changes in climatic conditions in their area and show how they were linking these to flooding and resettlement. The participants were organised in small groups of eight to ten people and in these groups the participants were asked to draw both the rainfall and flooding trends based on their experiences of flooding and rainfall pattern in area. Five trend analyses were conducted in each T/A, and these were done in 4 homogeneous groups of men, women, the elderly, and youth, as well as a mixed group. In total, 20 trend analysis sessions involving these groups were conducted. Apart from the past trend, the groups were also asked to visualise the rainfall and flooding trends for the next 5 years, based on their experience of these and their knowledge of the area. During this process, the research team facilitated the process by explaining the tool to each small group of participants at the beginning of the process, and also by providing the required stationary. Therefore, the research team played a facilitator's role and in the end the participants were asked questions regarding their trends and how they perceived resettlement as a disaster risk reduction measure due to flooding.

Trend analysis was very useful in this research as it helped the researcher to gather information on the present flooding situation, past trends and future projections by the

community members themselves. By employing this method, community members were able to use their indigenous knowledge to analyse important flooding adaptation strategies whilst the researcher established the differences in views of flooding trends and perceived adaptation measures according to the gender and age of the participants.



Figure 3: A male group writing about the flooding trend for the past ten years in mwalija Village in Chikwawa. (Photograph by author)

However, since this tool required the ability not only to read and write, but also to understand a graph that set the rainfall pattern against each year, the research team needed more time to explain it to the participants, including its requirements, what needed to be done and how it could be achieved. Due to high illiteracy levels in the area, progress was slow, with some groups struggling to find a representative to write down their ideas. When there was no one that the group trusted to do the writing for them, another member of the community, usually a male youth, was invited to help in the writing process, while the rest of the group members were contributing their ideas on the subject matter. At the end of the process, the participants were provided with a drink and a snack to thank them for their time and for taking part in this research: this helped the researcher to mobilise the research participants easily.

3.6.2 Participatory Mapping

Participatory mapping is a method that allows participants to draw their community map and indicate the things that they value within their spatial environment. Therefore, this study allowed the study participants to draw maps of their community based on their knowledge of the area, assessment of the important elements in their environment, and the emotions they

attach to each resource. According to Raymond et al. (2010), one's cognitive value of the environment forms attachment to a particular place, therefore; this tool was used to provide an in-depth understanding of the important resources available within the study area and how people valued each resource. Particularly in resettlement, the visual representation of one's space has a bearing in understanding of the place and it is imbedded within one's mentality and cannot be wiped away even when one relocates.

Therefore, the research participants were asked to draw their representation of their place, indicating the things that mattered to them and whether they could be forgone in times of resettlement. The participants were put into groups of 8 to 10 people and five groups were formed in each T/A. The composition of the groups was based on age and gender: hence groups of women, men, youth, the elderly and mixed groups were formed to produce their community maps. In these groups, the participants were asked to draw their community maps indicating all the important features and, in the end, they were asked to rank the 5 most important features according to their value to their community. Thereafter, discussions based on these maps: the participants were asked why they thought those features were important, and if they were willing to forgo them during resettlement. The participants were also asked to describe the features that were absent from the other place, either the lower land or the upland, depending on where these maps were drawn at that time.

The maps were drawn on a flip chart by one of the group members, and in cases where there was no one who knew how to write, someone from the same community was asked to lead in the drawing of the map whilst the research assistants facilitated the process to enhance community ownership of the produced sketch maps. The research team members observed the process and made sure that each member was given a chance to contribute their views. When the maps were completed, the research team facilitated the discussions based on the maps produced by that particular group. In the end, as with trend analysis, research participants were compensated for their time with a drink and snack.



Figure 4: One of the female groups writing their community map in Chikwawa

(Photograph by author)

3.6.3 Participatory Photography

In exploratory research, photographs are used as a tool for generating in-depth discussion and reflection during the interview process, which leads to a deeper understanding of the subject by the researcher (Creswell, 2014). One objective of this research is to discover the emotional bond that people have with their environment. Therefore, participatory photography was used to give the participants the opportunity to take a picture of the features of the environment, objects and items that are significant in shaping their social and physical bonding to their place. Participatory photography could be performed either by using the photographs collected by the researcher, or by arranging for the research participants themselves to take photos of their community and generating a discussion based on those photos. Grant et al. (2015) indicated that participatory photography is one of the bottom up data collection methods that allow the researcher to explore the topic broadly through community driven discussion, unlike the conventional way of generating a discussion based on the researcher's collected photos, which may reflect preconceived ideas. Consequently, the researcher allowed the participants to take the photographs within their community as in this way they were empowered to own the process as they were well knowledgeable of their community, rather than basing the discussion on the researcher's preconceived ideas. This was seen to be effective, and the research participants were happy to have the camera and take photos in their own time, and according to their own convenience.

To generate data using this method, the participants were put into groups of 8 people based on age and gender. Data was collected from groups composed of men, women, youth, and the elderly, as well as mixed groups. 10 groups were formed in each category, making a total of 50 participatory photography groups altogether. Each group was asked to take the 5 most important photos in their community, according to the agreed opinion of the group. Therefore, a total of 250 photos were collected by the community to inform the findings of this study. These pictures were used as probes to generate a discussion about place attachment in relation to flooding and resettlement in the lower Shire River valley.

In each community, the groups were arranged a day before the actual discussion. On the first day, the groups were mobilised with the help of the community members who were the key persons in the communities. The task was explained to each group, and cameras were handed over to allow the participants to take photos which were used the next day for discussion. Each group was selecting key people that they trusted to take good photos, so the research team trained them on how to operate the camera. In some groups, all the group members received training, whilst in most groups of women and the elderly, a few members were delegated and trained to take the photos after the group agreed on what pictures needed to be taken.



Figure 5: The researcher training the participants in how to use the camera in T/A Malemia in Nsanje (left) and a woman trying to take a photo after the training in T/A Nyachikadza in Nsanje (Right).

(Photographs by the research team)

On the second day, the research participants were gathered in their groups to discuss the photos that have been taken and their meaning. The research team facilitated the discussions while recording the types of photos that had been taken, the reasons behind this and why they had been ranked that way. The participants were able to explain this and indicated whether these features were available either in the lower land or upper land, according to where the discussion was taking place and what that meant for their perception of resettlement. This method allowed the researcher to identify the elements of place attachment according to the significance attached to each photo by the participants. Therefore, this method allowed the participants to describe their experiences and emotions associated with the photos in terms of the meaning attached to them and why they felt that way.



Figure 6: The researcher facilitating a discussion during participatory photography sessions with a group of men (left) and a group of youths (right) in T/A Nyachikadza.

(Photographs by author)

3.6.4 Key Informant Interviews

The study used key informants to generate views not only from government staff both at district and national level, and the key stakeholders, mainly NGOs who were implementing resettlement or DRR activities in the study location, but also key people from the community itself. Sofaer (1999) indicates that the use of a key informant allows the person to narrate his perceptions and interpretations of a situation as reflected within its setting. In this case, by interviewing several key informants, the researcher has been able to gather information on how resettlement is being implemented, the understanding of resettlement and place attachment, and how the matter is being perceived at all levels from which the researcher gathered information through this method.

A total of 50 key informant interviews were conducted, with ten NGO representatives, six government staff and 34 community representatives who provided their insights about resettlement and how resettlement is perceived at community, district, national and policy levels. A set of tailored questions were developed to guide the interviews with the key informants at each level. The researcher took advantage of this method to gather as much information as possible through probing, which allowed her to have a clear understanding of resettlement in Malawi and how place attachment is perceived, as far as the resettlement of flood affected people is involved.

Throughout this process, the researcher observed that the community members and policy makers at national level were sufficiently open and able to provide their views easily. However, there was a great deal of back and forth movement in the scheduling of meetings with government district officials and NGOs. Representatives of the NGOs were particularly cautious about deciding what information they should give out, as they perceived the researcher as a spy. However, the researcher managed to gather the required information after gaining the trust of the key informants and giving assurances that the study was submitted for ethical consideration at her institution.

3.6.5 In-depth Interviews

During the planning phase of the data collection, in-depth interviews were not considered. It was, however, noted during the administration of the questionnaires and other participatory tools that people had interesting narratives about the subject matter which could not be recorded by other means. Therefore, in-depth interviews were conducted to collect this information, which formed an integral part of the results of this study. In total, 47 in-depth interviews were conducted: 27 in Nsanje and 20 in Chikwawa. During the interviews, the respondents narrated their experiences of flooding in the area, and their views on resettlement in relation to their movement dynamics. Most of the people interviewed were women who were found in their homes while their husbands had either gone for piece work (*ganyu*) or to their farmland.

These interviews lasted from 45 minutes to an hour depending on the fluency with which the interviewees described their ordeals as far as flooding was concerned and conveyed their views on resettlement as a DRR measure. During these in-depth interviews, the researcher was able to identify the emotions that people were attaching to their land as they communicated their perceptions of resettlement. These interviews were done after administering all the other tools; hence this facilitated the respondents' trust in the researcher as they were able to explain their views, making this approach successful and useful for the study findings.

3.6.6 Observations and Transect Walks

The research carried out four transect walks, one in each T/A. The transect walks led from the upper land to the original homes of the resettlers. This gave the researcher an opportunity to develop a deeper understanding of the communities, and to learn details of the participants' lifestyles and how they formed their attachment to their homes. Hemmersam and Morrison (2016) reported that a transect walk is one of the participatory methods that not only allow researchers an entry point into the community but also enable them to familiarise themselves with the study site and the participants. A transect walk is also a tool that allows the researcher to carry out some observations that facilitate the learning of the participants' practices and the surrounding environment (Kanstrup et al., 2014).

As a result, this exercise helped the researcher to understand the lifestyle, available resources and day to day life of the study population. It also provided a fresh sense of perspective on the details provided by participants during data collection using the other tools in this study, enabling the researcher to make a clearer comparison between the agricultural activities, housing structures, lifestyle and available resources in the upper and lower lands. In addition to these observations, the researcher was also able to observe the flood victims' movements as they commuted from one area to the other.

During the data collection period, most of the communities in the study area were in camps due to Cyclone Idai; consequently, the researcher was able to observe how people were moving to the lower land in the morning to carry out their activities and returning in the evening, while others were moving to the upland in the morning. These movements were prominent in both T/As in Nsanje, and T/A Kasisi in Chikwawa. Therefore, accompanied by the key people in the village, the researcher conducted observations various times of the day; in the middle of the day, as well as in the morning and evenings. This gave the researcher an insight on the behaviour of the respondents in terms of their movements to and from their camps, which were also designated places for resettlement.



Figure 7: the researcher crossing a river and bridge during a transect walk in GVH Mpomba, T/A Malemia in Nsanje. (Photographs by Pastor Malunga, Mpomba camp manager)

3.6.7 Questionnaire

A questionnaire involves face-to-face interviews that provide insights into the matter under discussion, in order to achieve the research objectives and provide answers for questions arising from the research (Cohen et al., 2017). Therefore, to gather information about individual experiences of resettlement and flooding in Malawi, a semi structured questionnaire was administered to the research participants drawn from the study area. Before the actual data collection commenced, the questionnaire was pretested for logic, consistency and relevance. This helped the researcher to amend the questionnaire, making sure that good quality data were collected, and that all the research objectives and questions were provided for. After all the amendments were incorporated, the questionnaire was administered to 203 people in both districts with 130 being administered in Nsanje and 73 in Chikwawa which is a 5% representation of the 4200 people displaced by flooding in this region.



Figure 8: One of the research assistants administering a questionnaire in Medrum Village in Chikwawa. (Photograph by the author)

In the four T/As where the study was carried out, the respondents were randomly drawn from four groups that were purposively selected according to their movement dynamics in relation to resettlement, thus; returning after resettlement, resettling permanently, moving back and forth, and lastly refusing to resettle. Similer with the other tools above, participants were drawn from both the lower and upper land in each community after a pre-stratified sampling based on their movement. Therefore, 53 respondents were drawn from the group who had resettled in new locations, while 50 respondents each were drawn from the group who moved back and forth between the upper land and flood plains, those that had refused to settle and those who returned to the flood plains. Using the semi structured questions, the researcher gathered information on the respondents' demographic characteristics, their knowledge of resettlement and how this was perceived by each respondent, how emotionally attached the people were to the flood plains, and the reasons behind this attachment.

3.7 Summary of the Data Collection Tools and Methods

The study collected data using different methods and tools; below is a table giving a summary of all the tools that were used, and the targets for which they were employed.

Table 2: Summary of data collection tools and methods

Tool	Number Achieved	Research objective
Key Informant Interviews	48	To understand how resettlement emerged as a flood response measure in Malawi To explore the movement dynamics observed during environmentally induced resettlement To understand the significance of place attachment in environmentally induced resettlement
Trend analysis	20	To understand how resettlement emerged as a flood response measure in Malawi
Participatory mapping	19	To understand the significance of place attachment in environmentally induced resettlement
Participatory photography	50	To understand the significance of place attachment in environmentally induced resettlement
In depth interviews	47	To explore the movement dynamics observed during environmentally induced resettlement
Questionnaires	203	To understand how resettlement emerged as a flood response measure in Malawi To understand the significance of place attachment in environmentally induced resettlement To explore the movement dynamics observed during environmentally induced resettlement
Transect walks	5	To explore the movement dynamics observed during environmentally induced resettlement To understand the significance of place attachment in environmentally induced resettlement

3.8 Field Work and Data Management

3.8.1 Data Management

This research collected both qualitative and quantitative data, using a mixed method approach. The researcher used a field diary to record information that could not be captured by the tools. This field diary was also used to record the information gathered through transect walks and observations. All the data collected using trend analysis, participatory mapping, participatory photography and in-depth interviews were recorded using a voice recorder to let the researcher refer to them in case some information was missed while writing the information on the tools. All the voice notes, as well as the pictures, were stored in the researcher's computer. Data gathered through questionnaires were entered into the SPSS computer package and the hard copies were stored safely in the researcher's office, while data collected using qualitative methods were coded and transcribed by the researcher.

3.8.2 Data Analysis and Interpretation

Qualitative data obtained using trend analysis, key informants' interviews, participatory photography and participatory mapping were analysed using Nvivo 12 Pro computer software. All the data collected using these tools were transcribed in Microsoft word and later exported into the Nvivo software. This software was employed to reveal common themes emerging from the narratives gathered during the application of this study's participatory methods. From the transcripts, common themes depicting issues of flooding, resettlement, place dependency, identity and social bonding were identified. Thereafter, from these thematic areas, codes were developed based on the frequently mentioned issues from the transcripts in order to determine the key issues emerging from the interviews with different stakeholders based on the tool that was administered. The developed codes gave an insight in the data on the issues that affect the resettlement in Malawi and where possible, further issues within a code were analysed using the nodes that were developed within a code. These codes were used to group common themes identified from the discussion with the appropriate communities and key informants, in order to achieve the objectives of this study. Finally, queries were run on specific nodes to produce visual representation of the data which formed the actual analysis of the data by producing descriptive statistics' that has been used in collaboration with the data analysed from quantitative data.

On the other hand, quantitative data collected using a questionnaire were analysed using Statistical Package for the Social Sciences (SPSS). All the data collected using the questionnaire was entered in the SPSS computer package immediately after data collection and all error were eliminated at this stage. SPSS helped the study to establish descriptive statistics which included graphs, percentages, and means from the data gathered by the questionnaires. Therefore, the participants' socioeconomic status and demographics, including their individual understanding of resettlement, was established and presented using the chosen descriptive statistic technique as presented in the results chapters.

3.8.3 Data Reliability

In order to ensure that the researcher gathered and used data of good quality to inform the findings of this study, a data reliability process was conducted. A mixed methods approach ensured that the data were triangulated, and where there were great variations, cross examination of the respondents was performed to understand the variations fully. In view of the amount of data collected, the researcher recruited a team of five young graduates, chosen based on their experience of questionnaire administration and data collection using the participatory tools employed in this study. These research assistants were trained by the researcher on the tools and the study specific needs, so the quality of the data collected was not compromised. Furthermore, the researcher was fully involved throughout the data collection process.

The researcher arranged for random selection of the respondents to the questionnaires, to ensure that there was a good representation of respondents from the entire community. With the help of the community key person, the group that the respondent belonged to in terms of movement dynamics was clearly identified before involving the respondent in the research. All the questionnaires and tools were checked immediately after data collection to make sure that there was no missing information on the tools and all errors were eliminated. On the other hand, the secondary data consulted in this research were not used to form its findings, but rather referenced to support the arguments based on these findings. Therefore, the researcher is confident that the data used for this study accurately reflect the discourses around resettlement and people's attachment to their place. In conclusion, the study's

systematic plan of action and the selection of the research tools and methods met all the requirements of an academic research project.

3.9 Positionality

In order for the study to avoid bias, the idealist human geography approach that analyses human behaviour not just by their narratives but also their actions was used in this research (Harrison and Livingstone, 1979). This approach allows researchers to perform methodological reflection before and during the research, which facilitates critical thinking about complexities in relation to their own positionality (Moser, 2008). Some of the aspects that needed critical reflection during the research period included the gender, culture, race and experience of the researcher, which could have an impact on the research process if not thoroughly considered. Therefore, researchers should know their position in relation to the research settings and research participants (Chavez, 2008).

Griffith (1998) described the insider and outsider approach of researchers working across or within their own culture in terms of positionality, regarding education, gender, culture, race and exposure. An insider is described as someone who has some knowledge of the study participants' place and culture, while an outsider does not have the participants' prior cultural background (Chavez, 2008). Therefore, this study was undertaken from the position of an outsider although the researcher could be regarded as an insider in some senses, since she comes from the same country, she has worked in this region, and was able to understand their language. However, the norms, culture and understandings of the research participants differs from those of the researcher, and she has not worked directly in the study participants' communities, so the researcher was more of an outsider than an insider. Therefore, taking this outsider approach, the researcher detached herself from the culture and norms of the respondents, while also performing an observer's role during the discussions. The researcher did not interfere in any discussion based on the respondents' prior knowledge of the area but rather listened with keen interest to their views. This minimised bias; hence the results of the study are based solely on my field observations and the views of the research participants.

3.10 Ethical Considerations

In order to ensure that the research followed accepted procedure, a number of issues were taken into consideration before and after carrying it out. In conformity with university research procedure, an ethical clearance application to the University of Reading ethics committee was approved before the study's commencement (see appendix 1). The research ethics emphasized voluntary participation, confidentiality and informed consent by the participants; therefore, all these factors were taken into consideration before the field work commenced.

As the research involved interviewing people both at community and policy-making level, as well as viewing confidential documents which were provided on trust, confidentiality was considered and assurance of it was provided to the respondents. Therefore, paramount importance was accorded to research ethics throughout the research period. The researcher provided the research objectives, purpose and methodology of the study to the research participants before the interviews commenced. The participants were given the opportunity to participate voluntarily hence a consent statement was provided and read out to the participants before the commencement of any interaction in relation to this study, to ensure that participation was voluntary. In addition to this, the participants were assured of their anonymity such that the research would not share their information with a third party. Therefore, to enhance this anonymity, pseudonyms have been used throughout this study results sections such that the researcher used common names in Malawi in all the direct quotations that have informed the findings of this study.

Furthermore, participants were assured that the information provided would be used only for the purposes of this research and would be made accessible only to the researcher and her supervisors. The respondents were given the contact details for the researcher and her supervisors so that they would feel free to withdraw from the study for at least 3 months after the research took place and would also be able to request a copy of the study findings if they wished to do so.

RESULTS AND DISCUSSION

CHAPTER FOUR

FLOODING AND LIVING WITH FLOODS

4.1 Introduction

This chapter unpacks the narratives describing people's experiences of living with floods in Malawi. The findings of this chapter relate to the study's first objective: to analyse the trend and impact of flooding in the Lower Shire River valley in Malawi. Therefore, this chapter explores the lower land's flooding vulnerability by looking at the flooding trend in the area and how it affects people living there. This chapter also explores the drivers of flooding as well as the locally instituted adaptation measures adopted to curb flooding's diverse impacts.

The first section of this chapter explores the community narratives about flooding, mainly discussing the observed changes in both flooding severity and intensity in the study area. The section also explains the challenges faced by the people living along the flood plains during and after flooding. In the second section, I will discuss community narratives about the drivers of flooding in the study area; a discussion of the mitigation and adaptation measures will follow in the third section. Finally, I will discuss the policy makers' perspectives on flooding and mitigation measures in order to compare the community narratives to the policy makers' narratives of flooding vulnerability and adaptation measures in the Lower Shire River valley. The narratives from both the community and the policy makers will help to enhance understanding of the perceived vulnerability of the people living in the flood plains. At the end of the chapter, a summary of the flooding narratives in Malawi will be discussed.

4.2 Community Narratives of Flooding in the Lower Shire River Valley in Malawi

The empirical findings of this study reveal that the respondents have experienced changes in the flooding trends and flooding severity in the past ten years. No clear pattern of flooding has emerged, which marks a major difference from the previous decades, when the resettlers were certain of the flooding pattern, which had a clear timeline. This was advantageous to the resettlers, as they were able to make advance preparations to avoid the adverse impacts of flooding. However, due to the changes in the current decade, the impact of flooding in the

region has been severe, resulting in severe damage to their surrounding environment as well as loss of life. As in the rest of sub Saharan Africa, flooding has been rampant from the early 1980s, with flooding accounting for over 50% of the local disasters (Birhanu et al., 2016). However, according to the respondents, the Lower Shire River valley has been experiencing flooding from as early as 1967, although it was not life threatening, as it has been in the past ten years.

Using the trend analysis, the respondents revealed that they have experienced at least four flooding episodes in the past ten years during the 2001/2002, 2011/2012, 2014/2015, 2016, 2017 and 2018/2019 rainy seasons. However, the most prominent floods were the 2015 and 2019 floods: where every respondent was able to recall their onset and their impact on their households. The trend analysis, based on people's experience and memory of the past years in the study area, revealed that the intensity and frequency of floods had increased. This finding confirms what the Malawi meteorological data showed: the region received above normal rainfall in 2014/2015, which resulted in severe flooding. The respondents indicated that they used to experience yearly flooding due to continuous rainfall and this type of flooding was characterised by quick and unexpected water flow in their houses (flash floods), but the water dried up quickly. In addition to this, the area was reported to be susceptible to flooding due to the overflow of the rivers around the area including Shire River (fluvial floods), and this type of flooding had a clear pattern: according to the participants, it occurred at intervals of at least 5 years. The resettlers differentiated the magnitude of these floods: flash floods were associated with good harvests whilst fluvial floods were associated with severe damage over a wide area. As a result, the frequency of fluvial floods, whose trend has become unpredictable, was reported to have affected the flood plain dwellers' planning to avoid huge impacts on their natural environment. During trend analysis in T/A Nyachikadza in Nsanje, one group narrated the changes they have been experiencing in the flooding trends:

"we used to experience flooding every five years, and this made it easy for us to prepare for the floods, but it is unpredictable now. This has affected us hugely, because we were aware that we would have four years free from flooding when we could accumulate assets and food reserves in anticipation of flooding in the fifth year" (trend analysis group# 5, Nsanje).

Therefore, due to the uncertainty of the flooding pattern, the community suffered from loss of life, and also loss of personal belongings that included livestock, household assets and food, that exacerbated poverty in this region. Apart from the observed changes in the flooding pattern from defined to unclear, the respondents indicated that the severity of the fluvial floods has also changed, which makes a greater impact on their lives, as narrated below:

“The 2019 floods were more severe and devastating than the 2015, and the rest of the floods in the past. We have been experiencing flooding in this area, but this year the whole village including the areas that we regard as higher and dry places were submerged within hours. We lost everything” (key informant from Mwalija village in Chikwawa).

A 67 year old lady from GVH Mkupira in Nsanje also attested to this change:

“In the past, the floods were good for agricultural production, non-destructive and not severe . For instance, in 2012, we were displaced but we were able to return to our homes to continue farming within a month, however, since 2015, we have been experiencing most destructive floods that left the entire village destitute” (Doreen, GVH Mkupira, Nsanje).

The resettlers were able to narrate about the previous flooding in 2002, 2012, 2017 but they particularly stated that the 2015 flooding was destructive. This was alluded to the fact that people were caught unawares as the 2015 floods came at night which was out of the norm. Therefore, the combined effect of minimal anticipation of flooding and the timing of the floods contributed to the severe damage caused by the recent floods. The resettlers further indicated that, before these changes, they were able to monitor the floods before any severe damage could be caused. Therefore, this unprecedented trend has made the resettlers to divert from their normal custom of gauging the floods whilst in their households. One respondent, a 78 year old woman with a disability, recalled how the situation has changed over time:

“In the past we were able to monitor the situation when it was raining to determine whether the water levels were destructive or not before we took action. However, the recent flooding

does not give us time to prepare, and we just woke up in the middle of the night in water, as it happened in 2015” (Malita, GVH Mpomba, Nsanje).

Therefore, the participants were able to demonstrate their knowledge of the changes in both weather and flooding patterns which have made it impossible for their local management systems to provide adequate preparation for flooding events. Consequently, staying put in the flood plains during the rainy season was perceived as risky by the resettlers. The participants in Nsanje recalled that from 2009 they have been to the evacuation centres for four times, which was reported to be more frequent than before. Therefore, the resettlers started putting in place some measures to reduce their risk.

To understand the participants’ perceptions of their own vulnerability, based on their accounts of the severity of flooding, this research had to establish the participants’ anticipation of future flooding trends. In fact, the resettlers were concerned about this, showing a high level of awareness that flooding trends would continue to be severe, therefore threatening occupants of the flood plains. Due to observed rainfall trends, the people in Lower Shire River valley anticipated more severe flooding in the future than before. Therefore, the discussions with all the 19 trend analysis groups revealed that they expected severe and frequent flooding with no clear timeline. As shown in Figure 9 below, the community’s assessment of the flooding trend has changed from at least five years, as reported in the previous section, to every year. The participants in GVH Medrum anticipate experiencing another severe flooding during the 2021/2022 rainy season, just two year after the 2019 flooding.



Figure 9: A community generated prediction of yearly flooding in the next 10 years based on experience of flooding in GVH Medrum, T/A Mlilima in Chikwawa. (Photograph by author)

Therefore, this clearly showed that the resettlers were aware of the climatic changes and the consequences for their choices of where to live as they were able to visualise both the current flooding trend and the perceived future trend. The resettlers perceived that the flood plains would continue experiencing frequent floods. This finding conforms to the findings by Serdeczny et al. (2016) that the sub-Saharan region of Africa will continue to experience extreme weather events leading to severe flooding and other climatic related impacts. The next section therefore discusses the resettlers' understanding of the causes of flooding in the Shire River valley.

4.3 Community narratives on the causes of flooding in the Lower Shire River Valley

In this study, the resettlers pointed out several causes of flooding ranging from natural causes to human activities within the Lower Shire River valley and the Shire Highlands. The findings of this study reveal that 68% of the respondents believed that flooding in their area was due to their geographical position, being surrounded by a network of rivers, and 44% of the

respondents indicated that flooding was because of human related activities (deforestation and poor agricultural practices), whereas 74% believed that it was due to variabilities induced by climate change, and 26% declared that it was merely acts of God signifying the end of times.

One of the drivers indicated by the resettlers was based on geography: the area is served by a network of rivers, including Shire River tributaries as well as streams emerging from those rivers. Therefore, this network of rivers exposes the resettlers to both flash flooding and fluvial floods, due respectively to excessive rainfall and the overflowing of rivers, which the resettlers described as very common in their area. Apart from the small rivers and streams, the resettlers pointed out that the Shire River itself poses a threat of flooding, especially at its confluence with the Luo and Zambezi rivers. The research participants in T/A Nyachikadza explained that their vulnerability to flooding was not of their own making, but because they were geographically positioned close to the confluence of the Shire River. One key informant expressed this view in these terms:

“I feel that flooding in this area is due to the many rivers that have surrounded us. There are many streams that have emerged from the Shire River into our community. Besides this, we are living between the points where the Shire River meets other big rivers, especially Ruo River in the upland, whereas down here it meets the Zambezi River. Therefore, when these rivers are full, we are the people to suffer flooding” (KII, Nsanje, June 2019).

Therefore, the resettlers were aware that their geographical location contributed to their vulnerability to flooding. The resettlers’ sentiments conform the argument of Makungwa (2016) that the vulnerability to flooding in Nsanje and Chikwawa is exacerbated by the presence of perennial rivers that emerge around this area. This contributes to flooding around this region even if the rainfall has taken place in the upland, since they are at the confluence of all these rivers that connect Malawi with Mozambique through the Zambezi. Nkomwa et al. (2014) reported that flooding in the Lower Shire valley has worsened due to the high rainfall which is received in the Shire highland districts of Blantyre, Thyolo and Mulanje.

On the other hand, the resettlers narrated that the overflow of the rivers has been influenced by the erratic rainfall that has been experienced in this area recently, unlike that of the past decade. These changes in the rainfall pattern were attributed to anthropogenic changes in the climate. Using the community's local knowledge of the rainfall trend, the study found that 94% of the respondents indicated that they had observed changes in the onset and offset of rainfall. During the trend analysis and key informant interviews, the community reported that they had been experiencing erratic rains which were described as destructive.

“This area experienced normal rainfall during the 2001/2002 and 2011/2012 growing season and above normal rainfall during 2014/2015 and 2018/2019 with low rainfall in 2016/2017 and 2017/2018” (trend Analysis # 1, T/A Kasisi, Chikwawa).

This either resulted in flooding during the normal to above normal rainfall years, or drought during the years when they experienced low rainfall. The community reported that, due to the changes in the rainfall pattern, the region experienced flooding in March 2019, a period that was previously regarded as the end of the rainy season. Denis, a 58 year old man from GVH Nyachikadza, said that they had even experienced three episodes of flooding during the 2018/2019 rainy season, which was unprecedented: *“During the 2018/2019 rainy season alone we experienced floods in December, February and March due to continuous and heavy rains something that we have never experienced before”*.

Agreeing with these sentiments, Koffa (2018) indicated that the changes in rainfall pattern, frequency, and intensity have aggravated flooding in most parts of the world. The study participants expressed their knowledge of the correlation between the floods and the rainfall pattern. The participants indicated that they were prone to flooding during the years they experienced heavy rains. This was shown in their combined rainfall and flooding trend analysis captured in Figure 10 below.



Figure 10: Women in Chikwawa writing their combined rainfall and flooding trends in their area. (Photograph by author)

Apart from experiencing erratic rains and being a hub for rivers, the participants explained that other factors also contributed to their susceptibility to flooding. During the discussions, both the community and key informants revealed that the area is susceptible to flooding due to the human activities taking place both upland and in their community. These human practises include deforestation, poor land management, poor water management and poor farming practices in the upland. One government key informant said, *“the flooding in Lower Shire is tricky, although it has been worsened by climate change, but deforestation in the Shire highlands and poor infrastructure in the lower land exposes people to devastating impacts of flooding”* (Gov-KII-July 2019).

Similarly, the resettlers were convinced that the economic activities taking place in the upland have accelerated deforestation which in return has resulted in siltation. Siltation has contributed greatly to their vulnerability to flooding due to the accumulated silt raising the water table: hence the rivers could not hold more water during the rainy season. The resettlers, however, attributed all these human activities to their counterparts living in the Shire highlands. The resettlers indicated that people living upland were engaging in the charcoal burning business and in clearing land for construction, as well as timber production. Therefore, the consequences of all these practices were felt by the people living in the Lower

Shire River valley as stipulated below by Yohane, a 52 year old man from GVH Nyachikadza in Nsanje:

“The people living upland are the source of misfortune in this area. We are exposed to flooding due to their activities, especially deforestation. People are clearing the forests upland for charcoal burning, timber production and buildings. All these activities accelerate flooding down here” (Yohane, Nsanje, June 2019).

Although some resettlers felt that the activities taking place upland were the source of the flooding in their community, a significant number of the people believed that the floods were merely an act of God signifying the end of times. Some people indicated that flooding was as a result of the punishment from God and their ancestors who were angry with the current behaviour of the people in their community. One respondent, Hanna, a 65 year old lady from GVH Mpomba in Nsanje, said that she believed that flooding was a sign that the world was coming to an end:

“Our ancestors lived here but they did not experience the current flooding levels. Additionally, nothing has changed in the environment around us, yet flooding is becoming more severe every year. This is God trying to warn us that He is coming soon as it is already documented in the Bible that people will experience severe disasters towards the end of times” (Hanna, Nsanje, June 2019).

Therefore, it can be deduced that the people in this community perceive flooding as the will of God based on their belief in the powers above. However, this belief that flooding is due to punishment from their ancestors for bad behaviour like theft, lack of respect and promiscuity indicates that cultural beliefs play a role in manipulating the resettlers’ understanding of the climatic changes taking place. Consequently, attributing flooding to their beliefs has an influence on the resettlers’ response to the impact of flooding as it means that they have no role to play in minimising the impact of climate change. However, the sheer variety of the resettlers’ perspectives on the causes of flooding signifies that they are aware that there cannot be one clear method of dealing with the floods in this area. Whitmarsh (2008) argues that the belief in the ancestors and God as causative agents of flooding is embedded in

political and cultural beliefs, as well as people's preferences for either dealing with the causes of flooding or continuing with business as usual.

Having looked at different perceived causes of flooding, this study proceeds to the next section, which discusses the impact of flooding experienced by the resettlers living along the Shire River valley.

4.4 The Impact of Flooding in Lower Shire River Valley

The people of the Lower Shire River valley have been subjected to different episodes of flooding, varying in their severity and impact on individual and community assets. These flooding events left the communities with bitter memories of how floods have been unfolding in their area. The most undisputed fact was that the floods impacted this region in many ways, including loss of life, infrastructure and livelihood, as well as psychological trauma. Studies elsewhere have shown how floods affected people's life, livelihoods, safe drinking water, education system, health facilities and the national economy (Warner, 2010, Islam et al., 2018) . While studies in Europe showed that flood related death tolls have been decreasing due to improved flood forecasting and protective structures, the situation proved different in most developing countries (Siegrist and Gutscher, 2006). The most frequently mentioned flooding in the study area were the 2015 and 2019 floods, in which the community reported to have lost their loved ones on top of the most frequently mentioned losses of agricultural crops, food and livestock. A female respondent in Nsanje described how her community lost one of its members during the 2015 flooding in GVH Mpomba in Nsanje:

"We had heavy rains in 2015 and the whole village was flooded. While a few people had managed to go upland in time, most people were caught up here. The only place that was safe was the school building in our village; therefore, when the water became overwhelming, we climbed to the roof of the school. While we were still waiting to be rescued, I witnessed the tragic death of one man in our village. There was a man in our village who was epileptic, and we were together on the roof of the school. Unfortunately, while we were there, this man had a seizure and he fell into the pool of water that we were afraid of. No one could rescue him, he sadly died, and his remains could not be found for a traditional burial" (Susan, Nsanje, September 2019).

This reveals how precarious life could be for people living with floods, especially the vulnerable groups in society who could be caught up in difficult situations where everybody's life is threatened.

Flooding due to the overflowing of Shire River has exposed some people to life-threatening situations during and after flooding. Aggregated reports of the 2015 flooding in Malawi revealed that at least 176 people were confirmed dead during the floods, and many were unaccounted for (Douglas, 2017). Apart from these direct deaths due to flooding, cases of crocodile attacks during flooding and throughout the year are very common in the study area. The communities in both Nsanje and Chikwawa indicated that crocodiles have attacked some of the people in their community, that spreads fear among the flood plain dwellers. One person who survived such an attack was Yohane from T/A Kasisi in Chikwawa. Chimwemwe was attacked on his way to their neighbour to collect a canoe to evacuate his family, as this is the area's main reliable source of transport during flooding.

"I lost my right leg during the 2015 flooding when I was searching for a canoe to evacuate my family upland. I just felt that something had grabbed my leg, I immediately knew that it was a crocodile. I started fighting with it while calling to people for help. Luckily, we managed to overpower it but when I was taken to the hospital, my leg was amputated" (Chimwemwe, Chikwawa, August 2019).

Chimwemwe still lives in his village in the lower land while depending on his wife and children for most of the household livelihood needs, especially farming. Although this was just one isolated case, its impact could be felt by the entire household and community, due to limitations faced by injured individuals in obtaining resources for their families. Crocodile attacks along the Shire River banks have a long history: they pose challenges to the flood plain dwellers during floods, fishing and when fetching water for domestic use (Mtembenuzeni and Kushe, 2018). However, during the 2019 floods, the community reported that neither flooding nor crocodile attack related death was registered although the flooding was more severe than the preceding floods. The community attributed this to their speedy evacuation to safer places, having learnt from the 2015 floods that led to the death of some community members because they were reluctant to move upland. Other studies attributed this to the intensified

awareness and capacity for building on flood warning systems of the village civil protection committees, who helped the communities to evacuate during flooding (Adeloye et al., 2015).

The sample community faces housing problems during flooding as it was reported that most of their dwelling units were affected during preceding floods. Nsanje and Chikwawa districts are among the poorest districts in Malawi, so that the loss of houses during flooding severely aggravated their situation. The study found that most of the people lost their houses: this was evident in T/A Kasisi in Chikwawa, where the entire village was affected. The village headman narrated that only one household out of the 365 under his jurisdiction survived the 2019 floods:

“My village has 365 households, but during the 2019 flooding, only one house survived because it was newly built with burnt bricks and cement. However, the rest of the houses used simple building materials because it is expensive to have a good standard house” (Village headman, Mwalija, August 2019).

The case above underpins the fact that most of the people in this community are poor. The participants were able to acknowledge the need for flood resilient structures, but sourcing building materials and labour for such types of houses was reported to be challenging. Attesting to this, Douglas (2017) indicates that poverty increases vulnerability to flooding, with poor people being more vulnerable than those with a stable financial resource base. This study found that 64% of the study population lived in traditional houses made of unburnt bricks, built with sand and grass thatched, while only 2% had permanent houses. Studies conducted in Chikwawa agree with these findings, stating that the majority of the people live in poorly built houses made of mud bricks, subjecting them to high risks during flooding (Mwale, 2015).

Respondents also narrated how flooding has had a severe impact on their livelihoods. People in this area continue to suffer from the loss of their livelihood assets, especially their agricultural crops, both in store and in the field. Most of the people living in the Lower Shire River valley derive their livelihood from subsistence farming, livestock rearing and casual labour. However, all the livelihood strategies practised in this area are sensitive to

environmental factors such as flooding (Adeloye et al., 2015). Therefore, due to the persistent flooding experienced in this area, the resettlers indicated that the floods have had a great impact on their livelihood through loss of crops in their farmland, their food reserves and livestock. In agreement to this, it was reported that Malawi suffered a total loss of over 64,000 hectares of land during the 2015 floods with a food equivalence of 22,177 metric tons for Chikwawa and Nsanje districts alone (Douglas, 2017, MVAC, 2015).

During the study period, the study community had very recently experienced the 2019 floods, and most of them were in the process of reconstructing their lives to overcome the shock of losing all their belongings, including agricultural crops in the field. Unlike Chikwawa, where the study population practised farming both in the flood plains and upland, Nsanje was a location where only wetland farming was practised. The community living in the flood plains in Nsanje, locally known as “*Nyantchuwa*”, depend on rice production which is practised in the flood plains during the rainy season. Therefore, this community suffers from the loss of their main cash and food crop during every series of floods. One man narrated that he was anticipating harvesting at least 250 bags of rice which he could sell to cover his children’s school fees and other household needs. However, his plans did not materialise because his field was flooded, like those of the rest of the people in the community, and he lost everything.

“As soon as I heard from the radio about the possibilities of flooding this year, my family and I evacuated upland, but I could not take my field with me. Although I am alive, I am dead when I think of the loss, I have incurred due to flooding this year. I anticipated harvesting at least 250 bags of rice; however, my entire field was washed away by the floods in March. My plans were to use the money for paying school fees for my 2 children at Bangula Secondary School, but I am now hopeless” (John, Nsanje, June 2019).

Due to several flood warning interventions issued by the government and other stakeholders through radios and community meetings as well as personal networks, some people were able to move upland well in advance. However, their farmland, in the flood plains from which they derived their livelihoods, became vulnerable due to continuous rainfall and fluvial

flooding. Farmers were psychologically affected as they failed to figure out their livelihood strategies after the floods, hence they felt hopeless, as reported by John above.

On the other hand, some communities took the risk of staying in the same area despite flood warnings being issued. Mtembenuzeni and Kushe (2018) reported that farmers in this community preferred to risk their lives by staying in their houses in anticipation of protecting their fields from flooding, and to continue with their rice farming. However this would often not be the case, and they would end up losing their food reserves and personal assets as well as the crops in the field, as it would be too late to move upland (Mtembenuzeni and Kushe, 2018). The case below is the narrative of a young couple in Nsanje who described how they lost their 700kgs of maize during the 2019 floods as they were in the process of moving upland.

“The floods started like the normal floods that we know hence we could not see the need to move upland. However, later that day, we were shocked to see that water had filled all our houses and the whole village. It was at this point when we started arrangements to move upland. We hired a canoe; however, it could not take our two kids, personal belongings and our 10 bags of maize of 70kgs each that we harvested last year. I evacuated my wife and kids first leaving our 10 bags of maize hoping that I would take them on the second trip. It took me four hours to come back and upon coming back I found that the situation was worse: I could not find any trace of my house. All the food was gone. I went back to the camp empty handed” (Mr and Mrs Banda, Nsanje, June 2019).

Therefore, experience of repeated flooding has led to people’s vulnerability in this area: analysing the flood levels leads people to take risks as they base decisions on their indigenous knowledge of flooding without making allowances for its increased severity. The community relied on the wooden canoes to evacuate upland. However, it was reported during the study that most of the asset and food loss occurred due to the capsizing of the canoes that had been used during evacuation. The resettlers reported that people would want to preserve their household assets and save lives at the same time, but this often led to loss of all the assets and sometimes loss of life as well, when they lost control of the canoes.

This community continue to suffer to the impacts of flooding, which has led to employ desperate measures in order to save lives and property. However, the resettlers have employed mitigation and adaptation measures that would make living in the flood areas viable. Therefore, the next section will discuss the measures that the communities have put in place to enable them to continue living with floods in the Lower Shire River valley.

4.5 Community Flooding Mitigation and Adaption measures in Lower Shire River Valley

As discussed in the previous section, flooding in the Lower Shire River valley has a great impact on the people's life and their socioeconomic status. To mitigate its impact, several community-initiated strategies have been put in place in order to minimise the flood related losses experienced in this region. Consequently, the people living in the flood plains of Lower Shire River valley have embarked on several flood mitigation and adaptation measures at both household and community level. These mitigation and adaptation measures ranged from constructing raised houses and flood barriers to planting trees and grass along riverbanks. It has also been established that some people relied on praying to their ancestors for protection during floods to prevent destructive flooding. However, in light of the magnitude of current flooding, empirical evidence has suggested that non-structural mitigation measures aiming at raising awareness and promoting community preparedness should be promoted and adopted in order to prevent direct impacts (Lumbroso et al., 2008).

This study found that the people's beliefs and culture has had a great impact on how the Lower Shire River valley community copes with flooding. A belief that ancestral protection could be obtained by using traditional medicine to keep the floods away and praying to the ancestors for help by offering sacrifices locally known as "*nsembe*" was expressed in both Chikwawa and Nsanje districts. In Chikwawa, participants indicated that they have been using traditional medicine to prevent floods from entering their households, a tradition that has been passed on from one generation to another. However, since 2015, people reported that they noticed changes in the effectiveness of these medicines in preventing flooding. In relation to this, a 62 year old lady who has lived in this community since she was born said;

"Our ancestors were using traditional medicine to prevent water from coming into our village. We have been using the same ever since. However, for unknown reasons, this is no longer

working as evidenced by the 2015 flooding that affected everybody in this community” (Mwadaine, Chikwawa, July 2019).

Another participant in the same community added,

“We used to hear from the radio about destructive floods in the east bank although we are both along the Shire riverbank. We were not shaken because we had our own traditional ways of preventing the floods in our community, but this is now history” (Felix, Chikwawa, July 2019).

In Nsanje, the community declared that they relied on sacrifices offered to a god with superhuman powers called ‘*Mbona*’ whom some people have been worshipping, and who is believed to bring good fortune. Therefore, people reported that the elderly were talking to *Mbona* asking him to bless them with good rains that would be productive but not cause destructive flooding. Therefore, according to their beliefs, this mitigation measure has been effective as evidenced by the absence of flood related deaths in their area in the past. However, recently, the community was surprised when they lost a few people during the 2015 floods:

“Our community has been experiencing floods for a long period of time, but we have never had any death due to flooding until recently during the last floods in 2015. We give credit to our ancestors who have been protecting us from disastrous flooding through the sacrifices we have been offering through Mbona” (Mayikolo, Nsanje, May 2019).

However, the community attributes the ineffectiveness of their prayers to their ancestors to the misconducts of the youth. Therefore, severe flooding in this region is due to ancestral punishment. Maxwell, a 72-year-old man of Nsanje, said, *“due to people’s misbehaviour nowadays, especially the youth, our god is angry with us, hence these frequent and uncontrollable floods. If people do not change, we will continue to experience destructive flooding”*.

These strong beliefs and myths about flood immunity due to ancestral powers leaves communities with a sense of disbelief and betrayal, once they are hit by flooding (Cook, 2018).

Consequently, it must be concluded that their strong belief in ancestral protection has negatively affected the study community's preparedness for flooding. However, now that the community is aware of the unreliability of their beliefs and myths as a means of preventing flooding, they have employed other adaptation measures.

Another measure put in place was the use of flood tolerant buildings. In the study area, especially in Nsanje, the resettlers indicate that they rely on the raised structures called 'tchete' and the use of locally found materials as measures of adaptation to flooding. *However, the community theory of relaying on mad made structures as a flood proofing measure disagrees with de Ruig et al. (2020) recommendations that the use of concrete floor is an effective wet-flood proofing measure.* Figures 11a and 11b below show an example of *tchete* that was built after the 2015 floods, and another structure with a raised mud foundation in Nsanje.



a) Tchete

b) Raised house

Figure 11: Locally made flood resilient structures in T/A Malemia, Nsanje. (Photographs by author)

Although most people had the tchete as a spare house that would be used only during the flooding period, the community reported that they have now resorted to using a tchete as their main house. This is due to frequent flooding, which means that the resettlers need to build two houses (both a tchete and a main house) every year. For instance, the tchete above was at least 1.3 metres above the ground. Like many people in this community who live very close to the river, the owner built this tchete a few metres from the unprotected Shire riverbank: the researcher could see the river from his house during the time of the interview. Unfortunately, his precautions were insufficient. He expressed his surprise that his household was affected by flooding during the 2019 floods:

“This is an improved version of the tchete I had during the 2015 floods. I have made it very high above the ground to ensure that I am resilient to any type of floods. However, during the recent flooding, I was shocked to see that this whole house was flooded”. “I was confident that I was well protected from the floods. I did not evacuate my belongings upland.... I have lost everything. I nearly lost my life too.... by the time I was thinking of going upland, the whole village was empty” (Mavuto, Nsanje, May 2019).

The evidence presented here shows that people living along this flood plain have been exploring means of living with floods. However, dependency on these locally made structures could be ineffective, considering looking at the severity of flooding in the area. Mtembenuzeni and Kushe (2018) reported that some NGOs facilitated the building of improved raised structures in Chikwawa to ensure that people had some place to shelter within their community. However, the effectiveness of such structures was questionable because the quick onset of flooding made people unable to reach these raised structures in time (*ibid*). Therefore, a holistic framework in addressing the needs of the flood dwellers and policies that enhance community capacity on flood management could be encouraged and this would be effective when the programme is properly coordinated by all relevant stakeholders (Munyai et al., 2019).

Another mitigation measure employed in the Lower Shire River valley was the use of locally found building materials to prevent further loss during flooding. Unlike the people in the flood plain of Chikwawa, who used either burnt or unburnt bricks, people living in Nyachikadza and Mpomba in Nsanje used locally sourced materials, which included reeds, grass and timber, with a mud foundation, as seen in Figure 11b above. The community indicated that although they would have loved to have modern houses, however, due to the area’s vulnerability to flooding, these types of structures were deemed just as safe and flood resilient by the flood plain dwellers. The superstructure of the houses was made of reeds with a mud plastered interior to allow water to penetrate the building during flooding, preventing injuries due to falling houses, and making it easy to rebuild after flooding. On the contrary, to someone outside this community, these structures could be considered as the products of people who

lacked the financial muscle to build durable houses. However, for the people living in the flood plains, they are a means of building resilience to persistent flooding in the area.

Douglas (2017) reported that people living in vulnerable situations develop strong community cohesion as they mobilise themselves to find ways of making their places habitable. In tandem to this, it was revealed that the communities in the Lower Shire River valley were mobilising themselves to plant trees and different types of grasses along the riverbanks. It was noted that these initiatives were mostly community initiated, especially in the communities still living in the flood plains in Nsanje; they were not adopted by the upland dwellers in the same district and in Chikwawa. Due to seasonal flooding in the area, several streams have emerged, as discussed in section 4.3. Therefore, the community resorted to building water-blocking structures using locally sourced materials, as seen in figure 12 below, to prevent flooding from these emerging streams.



Figure 12: Community led initiatives preventing emerging water streams from flooding their community in Nsanje. (Photograph by author)

Therefore, knowing their vulnerability to flooding, the people of the Lower Shire valley deployed several ways to minimise its impact on their community. However, it has been argued that these isolated efforts to protect households or communities are ineffective and often just divert the impact of flooding from one community to the other as the river changes

its course (Douglas, 2017). Similarly, farmers in Pakistan failed to protect their community from flooding when similar measures were employed and it was reported that this led to loss of food insecurity due to loss of crops in their field (Ullah et al., 2019). However, it could be argued that the predisposing factors for flooding are beyond community control, hence uncoordinated adaptation and mitigation measures lead to different vulnerabilities when the measures employed fails to achieve the intended purpose.

It has been noted from both qualitative and quantitative data that the people of Lower Shire River valley are exposed to flooding due to their location beside a network of rivers, the environmental conditions in the Shire highlands and other socioeconomic factors, as discussed in the previous sections. The floods have caused extensive damage to their livelihood, exacerbated poverty and even caused loss of lives during extreme flooding years such as 2015. Therefore, some resettlers choose to alternate between the flood plains and the upland to minimise the impact of flooding. However, this means that the resettlers must have resources which would enable them to manage both houses, especially in the upland, where they would need to rent a house until their homes in the lower land are habitable. Therefore, the resettlers have deemed this unfeasible without external support, especially from the government and its stakeholders. Therefore, the next section will discuss the policy makers' views of flooding in the Shire River valley and the mitigation and adaptation measures they are employing to assist these vulnerable communities.

4.6 Policy Makers' Perspective on Flooding and Adaptation Measures in the Lower Shire River Valley

This section aims at understanding the perspectives of the government and its stakeholders on this region's vulnerability to flooding, and the adaptation and mitigation measures that have been put in place. The first part of this section will discuss, first, the government's narratives on the drivers of flooding, and, secondly, the adaptation measures that have been implemented in Lower Shire River valley.

As discussed in Chapter 3, section 3.6.4, key stakeholders in the government and private sector were interviewed, in order to get their perspectives on the drivers of flooding, the impact of flooding and the mitigation measures that have been put in place. Therefore,

interviews with the key stakeholders in the government, both at national and district level, revealed that flooding has exacerbated poverty in the Lower Shire and Malawi in general. One key informant revealed that the impact of these environmentally induced disasters affects government development plans as it has a multisector impact on agriculture, health, education, infrastructure and the environment. Therefore, the government is concerned with its continuous impact on people's lives.

Unlike the communities living in the Shire River valley, the key informants attributed the continuous vulnerability to flooding to poor infrastructure that exposes communities to the devastating impacts of flooding. One government official indicated that:

"We have noted that houses and other buildings in this region are not flood resilient. They are built of poor materials without raised foundations, which makes them highly vulnerable during flooding". He further indicated that *"as government staff, we have been raising awareness of the importance of flood resilient houses, but this is not put into practice"* (GoV KII #1, July 2019).

One key informant attributed this to the poverty of most of the people in this region, which emanates from the continuous local impacts of flooding and drought. However, according to the inhabitants themselves, as discussed in the previous section, their houses are built with local materials to prevent accidents from falling houses; furthermore, they are less time consuming to maintain. Therefore, while the government is raising awareness of the need for durable structures, the local people themselves perceive their present practice as their traditional way of adapting and building resilience after flooding.

On the other hand, one KII working with one of the NGOs in Nsanje had a conviction that the people's vulnerability to flooding in this region was man-made. According to the KII, both the community and the government politicize the extent of flooding in order to gain political credit by assisting the people. Referring to the 2015 floods, he observed,

"With my 7 years' experience working in this area, I have noted that both the government and the local people themselves do amplify the impact of flooding in this region. For instance,

during the 2015 floods, most people who were in the camps were not supposed to be there because it was meant for only those people whose houses were destroyed. However, according to our vulnerability assessment report, we noted that others who were in the camps just had their agricultural crops, kitchens or toilets. On the other hand, the government directed that everyone affected should be in the camps, so everybody went to the camps. In the same year, there were speculations about hunger in these districts, so people took advantage of this to be in the camps for a prolonged period to benefit from the free food distributions from DoDMA and other multilateral agencies” (NGO KII# 3, June,2019).

These sentiments highlight the different perspectives on people’s vulnerability to flooding in the region, which has a direct impact on the execution of humanitarian projects and the perception of the lifestyle of the people in the valley. In times of flooding, the affected households depend on relief food and materials provided by the state, non-state actors and well-wishers. During the study period, the researcher was privileged to witness the affected communities receiving several kinds of relief items ranging from food and seed to household utensils and clothing. Interviews with the people after they had received their relief packages both in Nsanje and Chikwawa revealed that people felt marginalised due to flooding as they queued to receive their food items. One individual said that he felt ashamed to be depending on food from government relief programmes whose packages were not even adequate. The study community also expressed their anxiety about how they could live without knowing when they would have another ration before they could start providing for themselves.

On the other hand, many people in Malawi, including the stakeholders that were interviewed, believe that people in this region are fond of making themselves vulnerable in order to benefit from free items. In contrast to the people’s perception of their reliance on food aid, Mijoni and Izadkhah (2009) argue that the people of this region perceive emergency relief items as a norm, which overrides the acceptability of flood mitigation measures in the long run. Therefore, there is a general misconception about people’s vulnerability in this region, as the stakeholders feel that people’s vulnerability is human induced whilst the flood plain dwellers feels that flooding leaves them destitute, leading to their reliance on food aid. However, these misconceptions have a considerable bearing on the implementation and acceptability of mitigation measures since the community members have their own perception of

vulnerability to flooding. Therefore, having a common understanding of the causes and impacts of flooding in this region is key to building community resilience.

As a mitigation measure, the state went further to declare most of the low lying areas as flood prone, implying that no one is supposed to live in those areas. Due to this declaration, the government withdrew all the social services from these areas, including schools, health services and any further infrastructure development. One key informant from the government indicated that *“the government declared most communities including these areas where you are carrying out your research as flood prone areas, hence everyone needs to relocate to the surrounding upland places”* (GoV KII#3).

According to several studies conducted in this region, it is reported that the government has been advocating relocation, however this policy has received mixed reactions from the wider community (Chawawa, 2018, Kita, 2018, Chuma, 2018). This study found out that the low-lying areas are denied some of the basic needs, which include extension services, schools, health services, and infrastructures like markets and roads, as a means of forcing them to refrain from living there, even with flood adaptation measures. During participatory mapping, the community members in Nsanje described the services that had been withdrawn from their community: *“we used to have a school with well-equipped teaching materials and teachers, however, since the 2015 floods, they have transferred all the teachers because this is a flood prone area”* (Participatory mapping # 5, Nsanje).

Therefore, children in Nsanje were attending upland schools which were at least a 2 hour walk away, and the crossing of rivers was inevitable. The community indicated that as a result their children opted to stop going to school since this was too strenuous, as well as dangerous. The researcher asked some of the children who were following their parents during a transect walk why they were not in school. One child quickly responded in the Sena language, *“yatchekiwa na majiwa”* (it has been closed due to flooding). Therefore, flooding has impacted education as children are left at home. This could be responsible for the area’s low literacy level (Chidanti-Malunga, 2011).

One key informant who used to be a teacher in the low lying areas of Nyachikadza indicated that, following the government directive, all his fellow teachers left the community, but because he had attachments to this place, he stayed to continue teaching at least the junior classes. However, after the floods in 2019, he was told not to go back to this place again and was allocated another school upland. Similar narratives appeared in the health sector, where people reported that there was no health post in their community because the health workers were transferred after the 2015 floods. The community indicated that they were depending on their social networks upland and on the Mozambican side for access to both school and health services. During the group discussions, it was indicated that the community is recognised only during elections, as the government establishes a polling station in the lower land. The community members declared,

“We don’t have any government service in this community. We rely on our relatives in the upland or Mozambique for schools for our kids. Surprisingly, it is only when they want us to put them in power that they establish polling stations in our community. We have just voted during the 2019 elections right in this village. Once we have voted, no government official will set foot in this village.” (Participatory mapping # 9, Nsanje).

The same group reported, *“we don’t have roads in this community even for the ambulance to come to help us when we are sick. We are the ambulance ourselves because when someone is sick, we take off that person’s door and men use it to carry him to the hospital upland.”*

Therefore, the community’s narrative clearly shows how they are trying to make the flood plains habitable by finding means to cope with their situation. Despite the government’s declaration that this place is uninhabitable, the community has chosen either to use available local resources or to do nothing, as observed in the case of the school dropouts.

Furthermore, the government has gone further to discourage all development partners from implementing their programmes in the flood plain. Although there are a number of NGOs working in different sectors in Malawi, and the Lower Shire River valley is one of the regions particularly heavily served by many NGOs, people living in the flood plains lack these services (Mwale, 2015). During the group discussions, it was revealed that there was no presence of

NGO projects in the lower land although they were reported as key to implementing development programmes in these districts. One NGO representative indicated that since the government directed them where to work in the district, they were told not to implement their programmes in areas that were declared as flood prone. Therefore, those communities that continued to live in the flood plain felt abandoned by the state due to their defiance the government directive to relocate upland.

The declaration of these areas as flood prone is taken a further step whereby the government and its stakeholders have been encouraging the people to move upland. Although one government KII indicated that people are encouraged to move upland in a voluntary manner, the way the resettlement programme is implemented in Malawi makes the issue more complex. As the discussion in the preceding sections has shown, it can be concluded that the government is in a way trying to force people to abandon these places by taking away all the social services and discouraging their development partners from working in these areas. Therefore, since the use of resettlement as an adaptation measure is a complex issue, provoking different narratives from both the resettlers and the policy makers, it will be discussed in the next chapter. Therefore, the next chapter aims to bring into critical focus the narratives of the resettlement in Malawi. It will discuss how resettlement is being implemented as a disaster risk reduction measure in Lower Shire River valley and how the communities to be resettled have reacted to resettlement as a mitigation measure to flooding.

4.7 Chapter Summary

This chapter has demonstrated how the people living along the Shire River valley have been impacted by flooding and how they are dealing with it to maintain their life in the flood plains. This chapter has also illustrated how the policy makers perceive flooding and people's vulnerability to flooding as well as the mitigation measures. Therefore, this chapter has revealed that while the resettlers have observed the increased changes in flooding, they have tried to cope with it by employing living with flooding adaptation measures like building raised houses and blocking the flow of water in their community. On the other hand, the government employs measures encouraging relocation of the flood dwellers to higher and safe places. However, people from this region have reacted differently to the government's

call to relocate from their original land to new places within the district. Therefore, there are different perspectives on how the insiders (communities) and outsiders (government) perceive the community's vulnerability to flooding. It is the core of this research to understand these contested views on resettlement as a response to flooding in the region. Therefore, the next chapter will discuss the complexities of resettlement as a response to flooding in the Lower Shire River valley.

CHAPTER FIVE

RESETTLEMENT AND MOVEMENT DYNAMICS IN LOWER SHIRE RIVER VALLEY

5.1 Introduction

This chapter examines the resettlement programme in Malawi, using data collected from a questionnaire, key informant interviews and in-depth interviews. The results presented in this chapter contribute to the second objective of this research: exploring the challenges associated with environmentally induced resettlement in Malawi, mainly focusing on its implementation and the associated movement dynamics. Therefore, this chapter examines the resettlement discourses with reference to the manner in which resettlement was executed, mainly looking at the nexus between voluntary and involuntary resettlement and the resettlers' response to this policy. Furthermore, it investigates the resettlers' response to resettlement by analysing the four emerging movement dynamics due to resettlement: 1) resettlement, 2) returning after resettlement, 3) moving back and forth between the two places and finally 4) refusing to resettle.

The first section discusses the general overview of resettlement as an adaptation measure, mainly focusing on the perspectives of the government and implementing partners on resettlement. It further examines the nature of resettlement that has been implemented in Malawi to determine the level of community participation and decision making in various forms of voluntary or involuntary resettlement. The third section examines the resettlers' response to resettlement through a detailed discussion of the resettlers' narratives on their choice to resettle, return after resettlement, move back and forth or finally refuse to resettle. Finally, a summary of the findings in this chapter will be discussed.

5.2 Resettlement Discourses in the Lower Shire River Valley

This section unpacks the resettlement narratives, mainly focusing on the implementation of resettlement, the policy makers' perspective and how this has shaped the outcomes of resettlement in Malawi. While chapter 4 showed that the communities were living with flooding adaptation measures, despite the diverse impacts of flooding and the government's classification of the area as vulnerable, this section examines the implementation and adoption of resettlement, which was mainly initiated by the government and its stakeholders.

To understand the government's perspective on resettlement, the study conducted key informant interviews with key government personnel from DoDMA and key stakeholders spearheading DRR in the region, as discussed in chapter three. The personnel from DoDMA indicated that resettlement was the only transformative process that would reduce people's vulnerability to flooding in the Lower Shire River valley. In addition to this, resettlement was perceived as a cost benefit tool to minimise the resources that are used in this region every year for disaster response.

"Nsanje and Chikwawa are among the top five districts in Malawi receiving both climate change adaptation and flooding response. Therefore, moving these people upland would minimise the costs that the government incurs in responding to flooding in this region" (GOV KII# 2, Lilongwe, July 2019).

As a result, moving the people living in the flood plains in Nsanje and Chikwawa was initiated as a means of saving money that the government would otherwise use as an emergency response during flooding. However, this argument has been contested because this region is prone to both flooding and drought. Therefore, whilst the people living along the flood plains are prone to flooding, their counterparts in the upland eye marked for resettlement are prone to drought, so the resettlers would still need government support irrespective of where they lived. However, according to government personnel, the government has an obligation to facilitate resettlement in the region, because of the severity of flooding in the past ten years.

It was also revealed that the government of Malawi adopted resettlement in conformity with international commitments like the Sendai Framework, that stipulates that the state has a duty to protect people living in vulnerable areas. Moving people from the flood plains is one way of protecting them from being subjected to persistent flooding. On the other hand, interviews with some NGOs working in the DRR sector in this region perceived resettlement as an inappropriate response to the situation in the region. One NGO representative observed;

“I don’t think moving them upland will be effective because this programme has been advocated for several years. These people have their own local strategies for building resilience. In my opinion, if the government and all the NGOs had agreed to find ways of refining these measures, these flood plains would still be habitable” (NGO#7, Chikwawa).

Although it has been argued that living with floods encourages local communities to maintain their low lying areas, as stipulated by this KII, the applicability of this concept has been contested (Ferdous et al., 2019). Similarly, Artur and Hilhorst (2014) argue that non-state actors have been advocating living with floods, which ironically justifies their existence as they continue to support the communities facing devastating flooding.

The resettlers themselves also had conflicting views on resettlement. Although 82% of the respondents in this study regarded resettlement as a flooding adaptation measure, this was not the preferred form of external support from the government and its stakeholders. 86% of the respondents said they would prefer it if the government dealt with their flooding problem by building water control structures, especially dykes, along the Shire River valley. Some of the people from the study population perceived the state’s preference for resettlement as an irrational decision whose motive was not clear. Among the targeted community, there were rumours that the government would want to use their land to open agricultural schemes once they have been moved upland. One elder in Nsanje said;

“The government has been planning on taking our land for a long time to open agricultural schemes. This started during the one-party system over 40 years ago, but they did not succeed so they can’t succeed now” (Com KII# 18, Nsanje). Another person added; *“the government wants to sell our land to foreigners, and once we have been moved, the government will build the dykes that we have been crying for”* (Joseph, Nsanje, May 2019).

Therefore, the resettlers have been suspecting that the government is capitalising on their vulnerability to flood as a means of acquiring their land once they agree to resettle. Evidence has shown that, because resettlement relies on the resettlers’, inadequate information and awareness produces undesirable results (Patt and Schröter, 2008). It can thus be concluded that resettlement processes require a holistic approach which not only concentrates on

moving the people, but also raises awareness of the programme's goals, creating a common understanding. The resettlers, especially in Nsanje, reported that they could not resettle even if the government tried to use force to resettle them. During the trend analysis exercise with a youth group, they indicated that they were not ready to resettle even if the government used force: *"No single reason can frighten us into leaving our land because of flooding. Even if the government provides housing and land for farming upland, we can't leave our land."* (Trend analysis, Nsanje, June 2019)

The resettlers' narratives agree with the findings of Kita (2017) that lack of awareness and information sharing on programmes like resettlement, where people have to leave their place of origin, instigates tensions. During in depth interviews with the resettlers, it was also revealed that despite the government's advocacy of resettlement, there was inadequate consultation with the resettlers. As Ruth, a 55 year old lady from Nsanje, observed, *"We understand the government is initiating resettlement; however, they have never consulted us. They discuss this with the local leaders not us."*

Various studies have revealed that lack of consultation with actual people to be resettled causes resettlement initiatives to fail (Matthews and Potts, 2018). In this study, I further found that, while decisions to resettle are made at different levels, 92% and 42% of the respondents make their decisions at household and village level, respectively. Therefore, these institutions have a great role to play in communicating information about resettlement in Malawi.

On the other hand, other people in the same community felt that resettlement was the best way to reduce their vulnerability to flooding. However, the community pointed out that the government was not doing a lot to help them to resettle. One key informant said, *"I do support the government's idea for us to move upland, and I am ready to permanently resettle. However, what the government knows is about encouraging us to move whilst doing nothing to provide us with the necessary resources to reconstruct our lives"* (Mwadaine, Chikwawa, July 2019).

Matthews and Potts (2018) argue that an *ad hoc* implementation of resettlement overlooks the process of empowering the community to enable a smooth transition, encouraging the

adaptation of the resettlers to their new home. In agreement with this, several studies have reported that the resettlement in Malawi is *ad hoc* and uncoordinated, hence exposing the resettlers to further risks (Chawawa, 2018, Chuma, 2018) .

5.3 Dynamics of Resettlement in Malawi

Resettling people living in flood prone areas could be a challenge if the affected community do not provide their consent to relocate to higher and safer places. This is because people form such strong bonds with their environment that any efforts to disrupt them could be easily disputed (Adams, 2016). However, resettlement becomes easier if the resettlers themselves are willing to forgo their attachment to their place, hence resettling voluntarily. As described in Chapter 2, voluntary resettlement is a pro-poor process that has the interest of the resettlers at heart and encourages them to actively participate in all stages of the resettlement process (Wilmsen and Wang, 2015). This type of resettlement has been recommended as a viable option for resettling people and it has proved to be effective (Ferris, 2015).

However, although the Government of Malawi characterised the resettlement as voluntary, evidence presented here has shown that this was not entirely the case. As discussed in the preceding sections, the resettlers are still in doubt about the viability of resettlement, despite acknowledging that they are very vulnerable to flooding, as discussed in Chapter 4. Discussion with the government key informants indicated that the resettlers were offered resettlement as a choice, and the government just facilitated the resettlement, hence characterising this as voluntary. On the other hand, the government declared the flood plains uninhabitable and forbade development partners to work in the flood plains, which could be a way of encouraging the people to resettle. This therefore means that people were indirectly forced to resettle, since they had been deprived of other services like schools. One government key informant indicated that

“The Government of Malawi is implementing a voluntary resettlement and people have a choice whether to move upland or not. However, the government has withdrawn all its services and we have instructed all the teachers and health personnel including NGOs to avoid the flood plains. We hope that eventually all the people living in the flood plains will decide to

move upland with these measures in place coupled with persistent flooding” (GoV KII #1, Lilongwe, July 2019).

Therefore, the government was indirectly forcing people to choose alternative places free of flooding while assessing the impact of the withdrawal of services from their area. According to Erdal and Oeppen (2018) this type of resettlement does not conform to the definition of voluntary resettlement, especially when the choice to remain would lead to a poor quality of life.

Additionally, the resettlers felt that their decision to resettle was influenced by external bodies like the government, and not their own choice. Most significantly, both communities in Nsanje and Chikwawa indicated that they were more likely to listen to their traditional leaders and family members when asked to resettle than to the government. Although 82% of the study population indicated that resettlement was the most viable measure for adaptation flooding, 55% indicated that their decision to resettle was influenced by the government and NGOs. It should be noted that the study found that resettlement was strongly prioritised as an adaptation measure by the resettlers in Chikwawa, while as only 56% of the resettlers in Nsanje perceived resettlement as the viable option. This therefore explains the factors contributing to resistance by some resettlers, as the current resettlement in this region is mostly driven by the government.

As discussed in Chapter 1, section 1.2, critical analysis of resettlement in the study area revealed that the resettlement in Malawi was a reactive process implemented in an *ad hoc* manner. The key government officials acknowledged that the resettlement process mainly depended on strategies employed by the implementing partners. As a result, it emerged that the government’s key role was to coordinate the resettlement process. However, this situation appears to have led to the lack of coordination in the programme, especially as the resettlers themselves were not considered as key stakeholders. One key government informant explained that these shortcomings were due to the fact that the government did not have enough funds to implement resettlement, and was consequently unable to take control of the implementation strategies:

“The government relies on the strategies employed by the NGOs implementing resettlement so that it just coordinates the process between the implementers and the resettlers. For instance, CADECOM, Red Cross and Islamic relief are implementing resettlement in Chikwawa, but each NGO has its own strategy based on its organisation’s policies for resettlement. Therefore, the government is there to support these NGOs to help those communities that are willing to move upland” (GoV KII # 2, Lilongwe, July 2019).

Consequently, the implementers’ goal was to achieve their intended outcomes whilst overlooking the key concepts of the resettlement process. For instance, apart from the lack of community participation, which has been discussed in the preceding section 5.2, the resettlement in all four study locations was implemented differently as it was facilitated by different NGOs. One contested issue that emerged during the discussion with both the resettlers and the key informants was the provision of land for resettlement. Land, which is a very important resource, especially for smallholder farmers, has been characterised as a resource of vital importance in determining the resettlement process (Vanclay, 2017). Vanclay (2017) further argued that the resettlers have land entitlements, so voluntary resettlement holistically considers the land rights of the resettlers.

However, on the contrary, the conditions for resettlement in Malawi were vague, not only about the continuity of resettlers’ land ownership but also about the acquisition of land for resettlement. In the study area, although the resettlers were encouraged to resettle, acquiring plots for housing upland was the resettlers’ responsibility. They were encouraged by the government to keep land in the flood plains for farming whilst living upland. This was more evident in T/A Nyachikadza and in Mwalija Village resettlement sites in Nsanje and Chikwawa. Therefore, this created inequalities among the resettlers since resettlement depended on the ability to access upland territory. According to Wilmsen and Wang (2015), the key element of voluntary resettlement is the improvement of the settlers’ welfare, unlike involuntary resettlement, where resettlement leads to social disarticulation. According to the key informants, the government did not have unoccupied land that could be allocated for resettlement. Therefore, the government was encouraging the resettlers in T/A Nyachikadza and Mwalija village to facilitate their movement by discussing with their upland counterparts. One government official narrated;

“The government does not have land for resettlement, but we have been facilitating meetings between T/A Nyachikadza and upland traditional leaders to provide land for resettlement for the people of Nyachikadza. However, nothing tangible has been realised from these meetings, so we just continue encouraging individuals to find land upland for their safety during flooding” (Gov KII#5, Nsanje, June 2019).

A discussion with the traditional leaders in T/A Nyachikadza confirmed the sentiments of the government key informant, adding that a consensus was not reached, leaving the resettlers to continue to facilitate their own movement:

“The meeting with our upland counterparts has not been effective. The government facilitated the meeting between us and T/A Ndamera whom the government approached with a request to give us land for resettlement. However, T/A Ndamera set the condition that he would not provide land unless we gave them equivalent land in the flood plains in return. Therefore, we have not agreed to this as we feel that they have connived with the government to take our land” (Com KII# 15, Nsanje, June 2019).

The evidence presented above shows lack of commitment from the government as it shifted its responsibilities to the resettlers. The World Bank recommendations on resettlement stated that the implementing government should be responsible for acquiring land for resettlement and ensure that there was clear documentation of land tenure issues (World-Bank, 2004). Consequently, lack of consideration of the resettlers’ land for resettlement leads to landlessness, which affects the resettlers’ wellbeing.

Similarly, the resettlers in the Mwalija resettlement site in Chikwawa facilitated their own movement before few NGOs stepped in to assist the resettlers. Although the Mwalija community were living in the flood plains, they had upland holdings which they were using for rainfed farming. Therefore, after the 2019 flooding made the flood plains uninhabitable, the community decided to use their agricultural land upland for resettlement. The discussion with the government officials hailed this as a good example of voluntary resettlement that had been implemented in Malawi. However, a number of NGOs, Red Cross, CADECOM and

Welt Hunger Hilfe (WHH), facilitated their resettlement through the provision of housing and potable water. One government key informant observed that; *“we are assured that this community has been successfully resettled because they were not forced. As the government, we are also happy that different organisations came forward with different support to ensure that these people have resettled”* (GoV KII# 4, Chikwawa, July 2019).

However, several resettlement studies have shown that resettlement is a complex process, and the provision of infrastructure alone could not solve people’s problems (Matthews and Potts, 2018). Also, worth noting is the fact that the resettlers in Mwalija village had just resettled three months prior to the data collection, so they were in the establishment phase of the resettlement process. In other words, it could be too early to establish whether the resettlers would stay in their resettlement site until the next rainy season. On the other hand, the resettlers in Medrum village in Chikwawa and the Mpomba resettlement site in Nsanje were provided with both land and housing. Therefore, the resettlement in Malawi was implemented differently, according to the policy of the implementing NGOs.

Seebauer and Winkler (2020) revealed that a complex resettlement programming facilitates both positive and negative evaluation of the resettlement process, which leads to the blossoming of complex patterns within the resettled community. Therefore, these different narratives could lead to the emerging of different groups of people among the resettlers. This study established that despite the absence of a clear implementation strategy, some people agreed to resettle permanently, either through their own initiatives or with the help of the state. On the other hand, another group of people refused to resettle, while other people had once resettled but decided to go back in the flood plains, and lastly others chose to operate in both places. The next section will therefore provide a discussion on these movement dynamics, based on the resettlers’ perceptions of the resettlement process in the study area.

5.4 Movement Dynamics due to Resettlement

This section provides a detailed analysis of the four movement dynamics observed during and after resettlement in Lower Shire River valley. The resettlers in this region were categorised in four groups based on their response to resettlement. Therefore, this section critically unpacks the resettlers’ narratives and the determining factors contributing to the resettlers’

choice to permanently resettle, refuse to resettle, return after being resettled, or, finally, move back and forth between two places. The narratives about the movement dynamics were drawn from the four case studies forming the findings of this research: each case study was unique in terms of the way the resettlers responded to resettlement. Therefore, key narratives of permanent resettlement were drawn from Mwalija resettlement site while as narratives about refusing to resettle after resettlement were drawn from the case studies of T/A Nyachikadza and GVH Mpomba in Nsanje. Additionally, the narratives about returning to the original place after resettlement were mainly drawn from T/A Nyachikadza and GVH Mpomba in Nsanje where people were resettled over 5 years before the commencement of this study. Finally, this study draws on findings from all the case studies to unpack the narratives of moving back and forth as this movement has been portrayed from all the four resettlement sites constituting the findings of this study.

5.4.1 Permanently Resettled.

In this study, permanent resettlers were characterised as those people who maintained their occupancy in the new settlement with daily trips to the lower land for farming. As discussed above, the resettlement did not provide new farmland, so almost 95% of the those that resettled relied on the flood plains for farming. Therefore, this section aims at describing the characteristics of the people in this category, and the reasons behind their decision to resettle.

A key example of the permanent resettlement was drawn from the Mwalija resettlement site in Chikwawa. The inhabitants of Mwalija Village of T/A Kasisi in Chikwawa resettled spontaneously after the Cyclone Idai in March 2019. This community is situated 6 Km southeast of Chikwawa district council, enroute to the Kapichira hydroelectric power station. Mwalija village has 365 households with a total population of 1242 people. Due to the 2019 flooding, the entire village evacuated to Njeleza camp. It was while still at the camp that the community decided to resettle permanently in the upper land. It was reported that, despite warnings about the flooding trends in the past, this community had been so reluctant to resettle that they had continued to base their livelihood on the flood prone areas (Mtembenuzeni and Kushe, 2018). During this research period, the communities of Mwalija village had been at the new settlement for only three months, with some NGOs taking a

leading role in this resettlement process. The community sourced external support from the Red Cross, which was building 100 houses for the most vulnerable group within the community, who included the critically ill, the elderly and very poor households. Since the Red Cross was the first NGO to step in, most of the elderly members of the community, as well as other significant community figures in the community, like the village headman, were supported by this NGO. On the other hand, CADECOM was building houses for 60 households, whereas WHH, that came last, provided building materials for the remaining 205 households. It should be noted that apart from providing either building materials or housing, these NGOs also drilled boreholes, so at the time of the research, the community was served by 4 boreholes. During the research, the organisations were in the process of facilitating the building of these houses, so the entire community was busy during this period. Some of the homes in the resettlement site are shown in figures 13 and 14 below.



Figure 13: A one bedroomed raised foundation house handed over to some of the resettlers by CADECOM in Mwalija Village resettlement site. (Photo by author)



Figure 14: A transitional house handed over to some resettlers by Red Cross at Mwalija village in Chikwawa. (Photo by author)

The community reported that while at the evacuation centre, they received several kinds of material to build their temporary shelters in anticipation of going back to their original homes after the floods. However, the community started rebuilding their homes upland using the materials provided at the evacuation centre. One community key informant said,

“The government gave us tarpaulins to build temporary shelters at the evacuation camp. However, while we were at the camp, our GVH called for a meeting with the entire community to discuss the possibilities of settling on our upland agricultural holdings. It was therefore at this point that the entire community agreed to abandon the flood plains permanently because everyone could recall how dangerous the floods were. After this meeting, we started moving our tarpaulins from the camp and building our temporary shelters here, where we have resettled, before the Red Cross stepped in to start building houses for the elderly” (Comm KII# 11, Chikwawa, August 2019).

It was revealed by both the community and the government that this community had been encouraged to move upland since 2015 but had been reluctant to do so. One government key informant indicated that;

“The government has been encouraging these people to move upland since 2015 but they were resisting resettlement. After the 2015 floods the government started constructing a

borehole upland to enable them to resettle but no one agreed.” He further indicated that “we are not puzzled that this year they have decided to resettle on their own because the entire community was affected, so they have come to believe that the flooding would continue to be intense and destructive” (GoV KII# 4, Chikwawa, July 2019).

While these narratives suggests that the resettlers were reluctant to resettle prior to the flooding in 2019, the resettlers indicated that lack of government will, to facilitate their smooth resettlement contributed to their perception of resettlement. The community indicated that they were not able to resettle before the 2019 flooding because they did not see resettlement as an adaptation measure at that point. On the other hand, they found fault with the government for failing to provide enough science-based information on the anticipated severity of the flooding:

“In 2015, the government was just telling us to move upland and there was no formal discussion with the entire community. The government knew that the next floods would be more severe, but this information was not passed on to us. Therefore, we did not understand why they were encouraging us to resettle, hence everyone was unwilling to move upland. But now we have decided on our own to resettle because we have seen the consequences of our decision to stay in the lower land” (Comm KII# 18, Chikwawa, August 2019).

One lady described how she convinced herself to move upland despite failed efforts by the government in the previous years to encourage them to resettle:

“Our village is located between Kachewere River and Shire River; however, we have been safe all along up until 2015. Therefore, although the government has been encouraging us to resettle, we refused. According to our local knowledge, flooding has never been as intense as it was this year; therefore, no one forced us to come here. The entire village stayed in water for at least 2 days on the small island where the FISD was building an irrigation scheme. Therefore, with that experience, we do not need anyone to tell us to be in a safe place, so our resettlement decision was made promptly” (Ndaipamo, a 62 year old lady of Mwalija Village in Chikwawa).

Therefore, a collective decision was made by this community to move upland as soon as they started to experience severe flooding. One contentious issue arising from resettlement is the availability of land, as discussed in section 5.3. Edwards (2013) argued if the resettlers were not happy with the land that they had been provided to resettle on, even the provision of other basics needs might not persuade them to resettle. Therefore, as already stated in section 5.3 above, this community had initiated their resettlement by opting to resettle on their individual upland holdings, where they used to practise rain-fed agriculture. The study established that most of the people in this community had at least two pieces of land: one in the upland, where they used to practise rain-fed agriculture, and one in the lower land. After resettlement, however, they had to build homes on their upland holdings. This was the case because there was no unoccupied land available to resettle since the government did not provide their community with land for resettlement. As a result, the decision to resettle on their agricultural land made them change its use to sites for dwelling places.

Unfortunately, this decision had dire consequences as it meant that they would need other pieces of land for farming to maintain their agriculture-based livelihood. Although the community was able to acknowledge that the change in land use would lead to food insecurity, a fact confirmed by the findings of many studies on resettlement (Arnall, 2014, Wilmsen and Wang, 2015), protecting their lives was considered essential at this point. Most of the people in this village have indeed become worried about their food security soon after resettlement; this could make them abandon the new settlement if livelihood reconstruction is not considered by the government. This view was expressed by the community during the group discussions:

“We are happy that we are reconstructing our lives here, but I do not know how I would be able to feed my family without farming. Now, the government is supporting us with different food items through their flood response programmes. Like yesterday, we received a 50 kg of rice, and several other NGOs that I do not even know have been supporting us. However, we know that this will not be forever” (Chikondi, Mwalija, July 2019).

Therefore, although this community is being protected from floods, it is evident that their vulnerability has shifted from flooding impacts to their livelihood needs. Scholars have argued

that newly resettled people have been observed to be pessimistic about the future, which mainly happens if ways of meeting their livelihood needs are not made clear during the resettlement process (Nikuze et al., 2019). Therefore, this continued worry about the future informs people's decisions on whether to continue living in the resettlement site or adopt other movement dynamics.

Furthermore, in-depth discussions with the community revealed that this was not the first time the Mwalija people had relocated. It was noted that there had been back and forth movement between these two sites due to flooding in the lower land and lack of social services in the upland. One key informant in the upland declared,

"This is the original Mwalija village. Our ancestors used to live here until 1968; however, due to lack of social services, especially potable water, they went to the lower land. Therefore, since then, we were well established in the lower land until the devastating floods in May this year" (Nedson, Chikwawa, August 2019).

Therefore, this explains why the resettlers had a positive attitude to resettlement without being forced. That is to say, the new settlement was perceived as their original home; hence going back to their roots seemed a better option amidst the flooding. However, it was further revealed that this community returned to the lower land in 1968 because the community experienced a high mortality rate which was attributed to their ancestors' disapproval of resettlement. This was attributed to a poor quality of life: the resettlers had no access to services like schools, health facilities and potable water in the new settlement. Although one might think that the same factors might affect the sustainability of the resettlement, however, the resettlers vowed to continue occupying the new settlement, due to their diverse experiences of recent flooding. The entire community had resettled, as in the other resettlement programmes, with the exception of one household that refused to resettle: this family was still living in the flood plains during the data collection period. The next section will therefore discuss this group of people that refused to resettle, mainly looking at the case study in T/A Nyachikadza, in Nsanje.

5.4.2 Refused to Resettle.

This section elaborates on the narratives of resettlers who have resisted resettlement due to lack of trust of the resettlement process, lack of incentives to resettle, like land, and lack of awareness of the programme as a whole. Therefore, although some people from all the four case studies agreed to resettle, as represented in section 5.4 above, at least 60% of the respondents indicated that they could not imagine any reason that could make them resettle in the upper land. However, segregated data per district in the study showed that the people from Chikwawa were willing to resettle subject to certain conditions, especially if given materials to resettle in the upper land. On the other hand, during the group discussions, respondents from both Nyachikadza and Mpomba in Nsanje revealed that they were not willing to leave the flood plains on any terms. One person indicated that even at gunpoint he would not consent to leave the flood plains;

“Even if the DC himself could come here to force me to go upland, I cannot accept. Even at gunpoint, no one will accept. Even if they can manage to put me in their car, by the time they reached the resettlement site I would have jumped and found my way here again,” declared a 26 year old man from T/A Nyachikadza, in Nsanje. Another lady, Maria, from the same community, equated herself to a fish in the sense that once they leave the flood plains they will die. *“We are like fish; we were born in the water so we cannot go anywhere. If fish is taken out of the water, it dies, so the same will happen to us once we leave this place”* (Chiyembekezo, Nsanje, May 2019).

These narratives were common in T/A Nyachikadza where both men and women were stating clearly that they could not afford to leave their land. These sentiments suggested that there were more underlying factors which made people decide to continue living in the lower land. Some suggested that they did not perceive resettlement as a flood adaptation measure, but the government should consider building a dyke along the Shire Riverbank. The resettlers indicated that they had already discussed with the government their views that resettlement was not the best adaptation measure compared to the dyke that they wanted however, the government nevertheless insisted on resettling them. The use of dykes has been reported to be effective in major Dutch cities and Shanghai however, the effectiveness depends on high level of maintenance (Yin et al., 2020). Therefore, the use of dykes could not be effective in

most developing countries like Malawi due to lack of funding for building durable dykes and maintenance costs.

Probing further during the group discussions with the resettlers in T/A Nyachikadza revealed that the resettlers were refusing to resettle because they were not given land. Although the provision of land and other social services has been characterised as the backbone of successful resettlement (Wakuma Abaya et al., 2009), this community has not been provided with any of these resources. In agreement with these findings, at least 90% of the respondents in this study revealed that the availability of land for resettlement could influence their decision. Therefore, the resettlers focus on this as their basis for refusing to move upland, thus creating tension between themselves and the government. Consequently, the Government of Malawi labels the people of Nyachikadza as stubborn because they do not want to act on the government directive to abandon the flood plains. To force them to resettle, the government has deprived them of all social services such as schools and health services, as discussed in section 5.2.

According to the government officials, the people currently have the right to choose to refuse to move upland because there is no binding document to enforce involuntary resettlement of the people living along the flood plains. Therefore, the government plans to use the resettlement policy as a tool to force the people to resettle, as those refusing would be prosecuted, as reported below:

“The resettlement policy is in draft form and once this has been passed into a law, those people still living in the lower land will be prosecuted. In the meantime, we cannot force them to resettle; the government can only restrict the social services in these places so that the people will move” (Gov KII # 6, September 2019).

This statement vividly conforms the earlier contention in section 5.3 that although resettlement in Malawi is framed as voluntary, the people in the flood plains face serious consequences if they refuse. Therefore, the tensions between the government and people refusing resettlement could be expected to increase when this law is put into effect.

This research further revealed the fact that efforts to resettle a few households failed, as the inhabitants wanted their whole community to be resettled at once. Therefore, they refused to resettle as individuals or part of the community. During the study, it was established that they refused an offer to resettle as many as 50 households. One government official gave the following information:

“We recommended that one NGO, which is keen on resettlement programmes, should help in resettling these people. The NGO was allocated land in T/A Ndamera which is the nearest area to their original land where they could resettle and have easy access to their farmland. However, the people from T/A Nyachikadza refused to resettle. The NGO wanted to build 50 houses targeting the elderly from different villages within their area, but they said that they could resettle only if their entire T/A was to be resettled at once. As a result, these houses were diverted somewhere else where people agreed to be resettled” (GOV KII#1, July 2019).

Therefore, despite the resettlers being in a vulnerable situation, they consider social cohesion as paramount; the policy makers and implementers did not consider this when trying to resettle these floods affected people. On the other hand, evidence suggests that resettling the entire community becomes expensive as it requires good planning and resource mobilisation (Wakuma Abaya et al., 2009). Another interesting factor, however, was that although almost 90% of the people from T/A Nyachikadza were still living in the lower land and refused to resettle because they wanted their community to be resettled together, most of their traditional leaders were living upland. This study established that the T/A Nyachikadza himself, (locally called ‘*gogo chalo*’, meaning, owner of the land) securely established upland and he had a big piece of land in the adjacent community of T/A Ndamera, where his subjects refused to resettle. Therefore, this meant that he just executed his leadership roles in the lower land whilst being safe upland. Most of the people, however, continue to live in the flood plains and only move upland during the rainy season where they either stay at the evacuation camp or rent a house in the surrounding community.

5.4.3 Returned after Resettlement

This section examines the resettlers’ narratives about their decisions to go back to the flood plains after being resettled. Some resettlers agreed to move upland, but decided, in the long

run, to go back to the flood plains. This section discusses the resettlement in Nsanje, where several resettlement programmes have been implemented in response to flooding. The study was carried out in two communities, Malemia and Nyachikadza, and each case study produced different narratives about the execution of resettlement, and why the resettlers decided to return to the flood plains.

One key example of resettlement that experienced a high return rate from the upland to the flood plains is the GVH Mpomba resettlement site in Nsanje. The people of GVH Mpomba in T/A Malemia have been affected by floods for over ten years, but efforts to move them upland were not feasible, due to the unavailability of land. GVH Mpomba is one of the communities in T/A Malemia that has been living along the flood plains. This community is composed of 17 villages and the entire community was severely affected during the 2015 flooding, which prompted the government to search for land to resettle them. Therefore, their T/A, Malemia, provided upland territory for this community to resettle. The community was allocated land 7 km away from their original home; it takes them approximately 2 hours to get there on foot. However, it emerged that there was not enough land to accommodate the entire GVH, so only 10 out of the 17 villages were allocated land to construct their houses. Each household was provided with 15 by 20 meter plots of land on which to build their, and no additional land was provided for any other use. Although the resettlers indicated that this land was too small for their houses, considering the sizes of their families, their plea was not taken into consideration. Forsyth and Peiser (2021) argued that resettlement is not just a technical task, but it is a social process that involves a mutual agreement between the government and the affected community. This the resettlers in Malawi lacked a voice in the resettlement process: that could prevent many people from fully committing to the resettlement agenda (Artur and Hilhorst, 2014).

However, one NGO working in the area, International Organisation for Migration (IOM), stepped in to construct 50 houses for the resettlers, targeting mainly the elderly and the most vulnerable people in the community. According to the study participants, the selected people were obliged to provide bricks while the NGO provided labour, iron sheets, cement and timber. However, during the time of the study, only 6 out of the 50 houses that had been built by the NGO were still intact as the rest of the houses were affected during the floods in 2019.



Figure 15: One of the resettlement houses provided by IOM at Mpomba resettlement site, T/A Malemia in Nsanje. (Photo taken by author)

The findings of this study revealed that out of the ten villages that were provided with land upland, people from only seven were still living in the resettlement area. This means that three villages had entirely abandoned the resettlement site whilst the other seven villages still had a few people remaining there. The study participants attributed the abandonment of the resettlement site to the distance between the resettlement site and their original land, as people were still practising their livelihood activities in the lower land. One lady indicated that *“when we had just resettled here in 2015, this place was crowded, but immediately the lower land became habitable after the floods, people started going back”*. It was revealed that it was at this point that different movement dynamics emerged among the resettlers. Koenig (2002) argued that most resettlers characterise resettlement as social impoverishment and this makes the resettlers to react in various ways to resettlement initiatives. Therefore, while some were collecting materials to build their houses, especially most of the people that were not assisted by the NGO, others resorted to completely abandoning the new site. Some people were moving back and forth, whereby they were spending some time in the flood plain and later returning to stay in the upland, as discussed in section 5.4.4 below.

Apart from other factors to do with livelihood reconstruction and place attachment, the resettlers indicated that the land given per household was not enough; at the same time, the

place became too crowded. This is in tandem with another resettlement study that was carried out in Africa and Asia whereby the resettlers indicated that the provided land for resettlement limited was too close to each other such it limited the resettlers economic and social activities (Jorge and Melo, 2021). Therefore, this prevented the resettlers to build bigger houses but also maintain their privacy in the new settlement. Consequently, the resettlers in Nsanje indicated that the houses were smaller than those they had in the lower land, while others claimed that they were substandard, which contributed to the loss of most of them during the 2019 flooding. While most of the resettlers planned to have a house with burnt bricks, they were told that the project was a race against time, so unburnt bricks were used for the houses at this site. The fact that over 90% of the houses were inhabitable after barely four years is attributed to this use of transitory material. Therefore, all the people that lived in the resettlement area had to go to the evacuation camp due to the stormy rains that caused a lot of damage during the 2018/2019 rainy season. Therefore, this community lived a life of helplessness, which increased their vulnerability. One lady said that although they had access to amenities like electricity, a road, and iron roofed houses, she felt marginalised in the resettlement site:

“I felt that we were suffering whilst upland. Although I had access to better facilities like maize meal, a road and these iron roofed houses, this did not matter to me. I discussed it with my husband, trying to get him to agree that we should go back, but at first, he was telling me to wait and hoping that we would get used to it. However, we failed to adjust to our life there, so we returned to the flood plains in 2017” (Yasinta, Nsanje, June 2019).

Therefore, resettlement is a complex process which should not only consider provision of and access to resources, but rather adopt a holistic approach by allowing the resettlers to be part of their resettlement programme from inception to implementation (Schmidt-Soltau and Brockington, 2007, Ferris, 2015). On the other hand, the abandonment of the resettlement by the majority of the resettlers gave an opportunity to those still occupying the resettlement site to use the deserted plots. Therefore, the returners lost their upland territory, even though they would still need somewhere safe to run to during flooding, which happened in 2019 when the flood plain dwellers were destitute. One lady who abandoned the resettlement site

after a year explained how her neighbour, who maintained her upland territory, accommodated her during the 2019 flooding:

"I had a small house at the settlement house, but I decided to go back to the flood plains because the allocated piece of land was small. My neighbour kept her land, so when myself and the other people had left, she took four plots and built a big house as well as a gowelo (a small house for teenage boys). However, during the flooding this year, I was destitute, so my neighbour accommodated me and my family in her house until the flood plains were habitable. I wish I had kept my piece of land" (Sitifana, Nsanje, June 2019).

What this example suggests is that the returnees continued to be so vulnerable that they need a safe place during flooding, but the reasons for their decision to return outweigh the justification for resettlement. Furthermore, the returnees are assured of safety during the floods because of their well-established networks upland, where they would seek refuge in times of need.

Another thing to note is that the site in the Mpomba resettlement area was served by a borehole and the use of toilets was recommended to the resettlers in the new settlement, to improve health and hygiene. However, this was not in harmony with their cultural beliefs, so the resettlers' determination to maintain their former practices gave rise to conflict with the host community. Therefore, some resettlers, who found the situation intolerable, resorted to returning to the flood plains where they would be free from outsiders' insults. These problems arose because the inhabitants of the lower land were not used to having toilets, due to environmental conditions in their area: the high water table affects the durability of the pit latrines (Mtembenuzeni and Kushe, 2018). Therefore, the resettlers indicated that this cultural difference made it hard for them to integrate with the host community. One lady indicated that she could not cope up with the hosts' attitude towards their health and hygiene practices, so resorted to abandoning the resettlement site:

"In the lower land, we were not used to using toilets, therefore, it was difficult for us to adjust there. The host community used to call us various names and said that we were unhygienic."

Therefore, I could not manage to associate with this community, so I came back where I was accepted the way I am” (Ruth, Nsanje, July 2019).

Conversely, conflicts between host communities and resettlers leading to changes in lifestyle due to resettlement have been documented in several resettlement programmes (Arnall et al., 2013, Xue et al., 2013). Evidence suggests that resettlers tend to adjust, but this takes time: this has been learned, for example, from the case of the resettlers in Mozambique, who took at least two years to adjust fully to their new environment (Lumbroso et al., 2008). Consequently, those who fail to adjust to the new life consider going back to the lower land as their only option; this has been observed in the case of the resettlers discussed in this section. However, others might choose to utilise the benefits of both places; therefore, the next section investigates this category.

5.4.4 Moving Back and Forth

Another frequently described movement dynamic occurred among the group of people that opted to operate in both places. As discussed in Chapter 2, studies conducted in Mozambique found that this category takes into account the benefits of both places, including alluvial soils in the flood plain and the social services and safety offered by the high ground (Artur and Hilhorst, 2014). Therefore, movement becomes a permanent lifestyle for this group, and they normally have a house and other asset in both locations.

This study discovered that 70% of the resettlers lived in the resettlement site during the rainy season and then went back to the flood plains where they would continue with their everyday life. Therefore, during the dry period, only a few people remained in the resettlement site because they spent most of their time in the flood plains. This was vividly clear during the research period: the resettlement site was fully occupied after the flooding in May but thereafter, only a few houses at the resettlement site were occupied. Data established using a questionnaire showed that only 44% indicated that they could resettle permanently if they were provided with land for both farming and dwelling, whereas 20% reported that no incentive could make them resettle permanently. Although this has been characterised by many resettlers and policy makers as the better option, this nomadic lifestyle compromises

the resettlers' welfare and long term prospects, especially where education, asset accumulation and healthcare are concerned (Forsyth and Peiser, 2021).

It was revealed during the discussions with the community that people in this category either rented out their upland houses and got a little income or left their children and relatives to take care of them. One woman in Nsanje indicated that she was staying in one of the resettlers' houses and paying MK5000 (£4.57) a month. It is believed that people just wanted someone to take care of their houses until they come back when the flood plains become uninhabitable.

On the other hand, some resettlers revealed that they opted to move back and forth because the new settlement was very far from the flood plains on which they relied for farming. For instance, the resettlers in Mpomba resettlement site were over 10 km away from their original land, so most of them found commuting between these places very difficult. Therefore, they chose to establish themselves in the flood plains where they had temporary houses, used at least half of the year, during the dry season. Simultaneously, this group of people also had other houses upland, or they would rent houses until the flood plains were habitable. This finding agrees with Oliver-Smith (1991), who reported that this behaviour is mostly observed where people have been resettled far away from their previous land, as observed in this case, where people were resettled at least 7 km away.

This study established that most of the people in this group were the elderly because they found it difficult to commute between the two places in order to continue with farming activities in the lower land. In relation to this finding, one elderly lady in Nsanje stated;

"I am 78 years old, and I was given this house to resettle, but there is no land for me to continue farming. Therefore, this prompts me to continue relying on my land in the flood plains because I cannot manage to be commuting every day and besides, there is nothing I can do here" (Annie, Nsanje, June 2019).

One lady in her late 60's who was also resettled in 2015 at Mpomba camp added;

“At my age it is difficult to be commuting to the lower land for farming. I would have loved to resettle permanently, but this would have affected my household’s food security. Therefore, I opted to stay in the flood plains for farming and go back to the upland during the rainy season” (Bernadeta, Nsanje, June 2019).

These narratives suggest that the design of the resettlement programme did not take into consideration the resettlers’ livelihood, which depended on their ability to move back and forth. Furthermore, this implies that the resettlement site was at a great distance from the lowlands, so that most of the resettled people who were categorised as elderly and vulnerable could not manage to make daily trips for farming. As the participants’ narratives reveal, the choice of permanent resettlement exposed this group of people to further vulnerability, especially food insecurity, as their livelihood reconstruction had not received proper consideration. On the other hand, some scholars have argued that, even if people have been resettled very near to their original land, the relationship that people form with that land prevents them from resettling permanently (Lopez-Carr and Marter-Kenyon, 2015).

As evidenced in this chapter, some people refused to resettle even if they were given the opportunity to choose where to go, and others were provided with land for housing but still failed to resettle permanently. Therefore, the next chapter will explore further the people-place relationship that leads people to form strong attachments with their homes, contributing to the resettlers’ refusal to leave familiar places, even if they are vulnerable to flooding.

5.5 Chapter Summary

This chapter has demonstrated how resettlement is implemented in Malawi by analysing different resettlement programmes in Nsanje and Chikwawa, including the ways in which the people’s response to this process leads to different movement dynamics. According to the material presented here, it can be concluded that the outcome of every resettlement programme depends on the willingness or reluctance of the resettlers to resettle. This is because people’s choice of where to live is based on deep-rooted and complex preferences such that even if the government could provide land and housing, this would not automatically guarantee compliance. Therefore, if the resettlers are unwilling to resettle, they

will abandon the resettlement site. This conclusion is based on the evidence presented in this chapter concerning movement dynamics among the resettlers in both voluntary and involuntary resettlement programmes implemented in Malawi.

Where voluntary resettlement is concerned, the subject of one of the case studies in Chikwawa facilitated their movement by being willing to convert their agricultural land in the upper land into their dwelling places. However, this research showed that, although the community were able to facilitate their own resettlement process, the flood plains continued to be significant for their everyday life. People continued to access several basic needs in the lower land which some have found difficult to forgo, like the graveyards, while, where other resources are concerned, adjustment will be a long-term process. Furthermore, the people's habit of making continuous comparisons of their life in both places could undermine the resettlement process by preventing people from resettling permanently.

Secondly, this study revealed that the life of new resettlers lacks certainty, as the process of reconstruction takes time. This was evident in Mwalija village, where resettlers were already concerned about their future. They had decided to resettle in order to protect themselves from the floods, but appropriate measures were not put in place to cater for their livelihood needs. As it has already been reported, resettlement results in marginalisation, social disarticulation and landlessness (Ferris, 2015). This study also revealed that the resettlers felt marginalised, while landlessness also affected the social and cultural aspects of the community's life. Variations in the support provided within the same community, in the case of Mwalija, as well as the same district, in the case of the Nsanje resettlement sites, introduced a degree of inequality and marginalisation. These inequalities could be reduced if the resettlement package were standardised by the government, whose responsibility is to coordinate the resettlement process.

In addition, this study has also shown that land is a contentious issue in any resettlement process. It appears from the narratives in this chapter that resettlers are interested in establishing themselves in a place where they are happy. Therefore, it has been demonstrated that, in most cases, giving resettlers land to which they do not have any attachment does not yield significant results. The community in the Mwalija case study preferred to resettle on

their individual land, to maintain their land entitlement rights, rather than in one central location. However, the people from Mpomba resettlement site in Nsanje responded to their situation by returning to their original home, although they were given land that assured their safety during flooding. In the case of Nyachikadza in Nsanje, the community were unwilling to resettle in the adjacent T/A, pointing out that there were significant differences between these two areas. Therefore, willingness to resettle is based on the conviction that the new area will provide more satisfaction.

Lastly, this study established that withdrawing basic resources like schools, health services and roads to influence the people's decisions about resettlement has proved to be a difficult process that does not make them change their mind. On the other hand, the resettlers had a misconception that the government was encouraging them to resettle to take their land, hence contributing to the tensions between the state and the resettlers. However, this misconception could be attributed to the lack of community participation throughout the resettlement process. Therefore, due to this communication gap between the two parties in this resettlement process, the government perceived the resettlers as stubborn.

In summary, it has been demonstrated from all case studies that the resettlers preferred to be resettled as a community, while maintaining their land and cultural values. Therefore, lack of deliberate efforts to incorporate these elements into resettlement has resulted in the movement dynamics described in this chapter. However, some people stayed in the resettlement site, not because they were contented with the resettlement, but because they did not have another option. Others tended to go back to the flood plains where they felt accepted for who they were. A third group preferred to utilise the benefits from both sides. Therefore, the next chapter synthesises the relationship between people's attachment to their environment in relation to the movement dynamics portrayed in this chapter. This will enable this study to reveal the motivating factors that affect people's movements and the elements of resettlement that are valued most by the resettlers. In the long run, it is believed that these place attachment discourses would be useful in providing a basis for an acceptable preferred resettlement model that would lead to sustainable resettlement.

CHAPTER SIX

PLACE DEPENDENCY

6.1 Introduction

This chapter explores the role that place dependency plays in influencing people's decision to resettle. Place dependency entails attachment to a place due to the use of the physical resources within a place in order to achieve one's goals (White et al., 2008). As discussed in Chapter 2, proximity to physical resources is congruent with the realisation of one's goals and enhances a positive attachment to a place. However, this has a negative impact on resettlement, especially if the new settlement has limited access to the physical resources necessary for meeting one's goals. This suggests that attachment due to physical resources is embedded in the characteristics and utilisation of those tangible resources that satisfy action-oriented goals. Consequently, the continuous habitation of a place is critical to nurturing a strong attachment to a place, as people maintain their interaction with it (Mishra et al., 2010b).

On the other hand, as discussed in Chapter 4, resettlers are moved from a place to which they have established an attachment due to familiarity and utilisation of its resources. Therefore, resettlement interrupts this interaction, especially when people are moved from places that are valued for facilitating the achievement of their goals. Using both qualitative and quantitative data, this study established the meaning that people attached to their place of residence, due to its available physical resources, which had a direct impact on the acceptability of resettlement programmes in the study area. The study therefore established that the people of Lower Shire River valley in Malawi are attached to their ancestors' land, which facilitates the achievement of their food security goals, their houses, and the surrounding network of rivers that are utilised for fishing and as a source of water for both irrigation and domestic use. Lastly, the decisions of the people of the Lower Shire River valley about resettlement were embedded in their interaction with various elements of the social infrastructure, like clinics, schools, police stations and boreholes, as they enhanced the quality life at their place of residence. In this study, these place dependency elements will be discussed, and they have been classified according to the goals achieved by using the available resources in the study area.

The first section of this chapter discusses the place attachment constructs based on the availability of physical resources, especially the quality of the land, as it facilitates the availability of food within the households in the study area. Secondly, this chapter analyses the role that the availability or lack of social infrastructure (schools, clinics and the police station) in a place plays in informing people's decisions to resettle. The third section provides policy makers' perspective on place dependency, especially how this has been incorporated into resettlement programming in Malawi. The fourth section will critically analyse the resettlement programme in Malawi by discussing the implications of place dependency, based on the narratives generated in the preceding sections, in order to identify the gaps which consequently contribute to the four movement dynamics discussed in Chapter 5. A summary of this chapter's key findings will be provided in the last section.

6.2 Place Attachment due to Physical Resources

This section investigates the resources available in the study areas for achieving people's goals. It therefore argued that people's attachment to their original land is based partly on the availability of land for farming, and rivers for fishing and irrigation farming.

6.2.1 Proximity to Agricultural Land

The study has shown that 95% of the people in the study population depend on farming as their main source of livelihood, while the rest depend on piece work (commonly known as *ganyu*), fishing and small-scale businesses. It was reported that people in this community grew different crops, including maize as the main food crop, as well as rice, sweet potatoes, beans, vegetables and fruit. According to the resettlers, the flood plains are the food hub within the region because of the alluvial soils deposited by the floods. On the other hand, the upland is dry, and they mostly grow drought tolerant crops like sorghum and millet because of the deteriorating soil fertility and lack of water for crop production. Therefore, it is evident that the resettlers' preference is the flood plains, where they can practise farming and realise their goals. During the study, some households living in the lower land reported that, in a normal year, some households could not only harvest enough produce for their households, but also sell some to take care of their household needs. Patricia of T/A Nyachikadza reports:

“I get a lot of benefits from the lower land which I cannot find anywhere else. I depend on this land for farming, and I always have good yields. For instance, during the 2017/2018 rainy season, I planted rice from which I harvested 85 bags and I sold 30 bags to take care of my household needs. I also planted maize and beans the same season using residual moisture and I harvested 15 bags of maize and 8 bags of beans. In total, I realised Mk200, 000 (£200) from the sales of these crops of which I managed to keep some for my family, and I also bought 2 goats and 10 chickens. However, I lost these assets during the 2019 floods, but I hope to get them back from this year’s winter planting” (Patricia, Nsanje, June 2019).

These sentiments about the productivity of the land were echoed by several respondents in both districts. They indicated that the land in the flood plains was fertile due to the flood deposits from the upland where they use fertiliser, such that farming in the flood plains requires no fertiliser. Therefore, there was clear evidence that the flood dwellers preferred to maintain their land in the flood plains as it facilitated the realisation of their food security goals more efficiently than the upland where they were asked to resettle. One respondent, who refused to resettle, compared the benefits from the two places in terms of her household food security goals; she indicated that she preferred the lower land as it offered better opportunities to take care of her household than the upland, even though the area was prone to flooding.

“Although we have been experiencing severe flooding here in the lower land, I am not going anywhere because I am able to get all I want here. I am farming and, as a result, feeding my six children. However, there is no farming activity taking place upland because the land is infertile and dry. Therefore, I am better off here, so no matter what happens, I cannot permanently leave my village” Elufe, a 40-year-old mother of six children (Nsanje, June 2019).

Therefore, the narrative above presents a positive attachment to the lower land, as Elufe was able to achieve her daily needs, whereas the achievement of the same goals in the new settlement was uncertain. Like other people still living in the lower land, the people who agreed to resettle, and were living in the upland during the time of the study, also expressed uncertainty about the availability of sufficient resources to ensure their livelihood. A 94 year

old man, Mr Nyandoro, was one such person: he moved upland after the 2015 flooding but could not provide his household with the necessary food for survival. As a result, Mr Antonio has been commuting to the lower land to farm and coming back upland during the rainy season. This is his story:

“If I stay here (upland) throughout the year, “mnadyanji kuno” (what will I eat here)? I have my fertile land there where I grow maize, rice, sweet potatoes and beans but the people here depend on millet because this is a drought prone area with poor soils. The farming here is not as productive as in the lower land, therefore staying here makes me unproductive too. I am not used to this idle life and lack of food in my household. As a result, I opted to continue farming in the flood plains to have a variety of food crops in my household, as we used to have before resettlement”. Narrated by Nyandoro of Mpomba GVH in Nsanje (Nsanje, June 2019).

In agreement with these narratives, the findings from quantitative data showed that at least 84% of the respondents relied on the lower land for farming while only 16% started farming upland after resettlement. This study found that the resettlers regarded the flood plains as a more important place than the upland, mainly because of the availability of fertile land for farming. The segregated data, as presented in Figure 16 below, shows that 88% of the respondents in Nsanje and 76% of the respondents in Chikwawa depended on the flood plains for farming, and therefore preferred them to the upland.

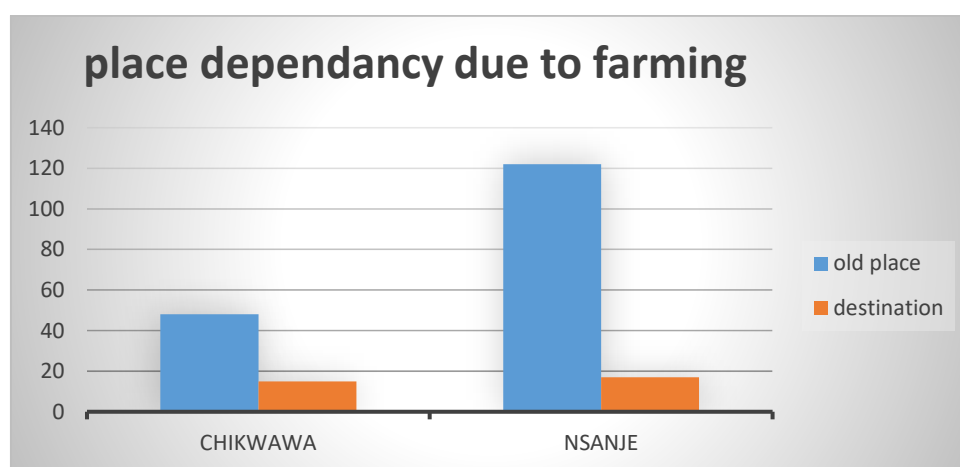


Figure 16: shows the resettlers’ strong attachment to the flood plains where they are able to farm and provide for their household needs. (Source: extract from study findings)

Therefore, even though some respondents were still living in the resettlement area, they exhibited an attachment to their original homes, mainly by utilising the fertile land there. However, it could be argued that the participants' place dependency was exacerbated by the different conditions that they were subjected to in the resettlement area, like the unsuitability of the land for agricultural activities. Consequently, the resettlers were still relying on the flood plains, whose characteristics facilitated the achievement of their food security goals, hence continuing their former attachment. Lewicka (2005) argued that place dependency attachment could be based on the absence of alternatives that would enable resettlers to meet their livelihood needs in the new settlement. Previous research on place attachment attests to these findings that people with land-based livelihood sources have a strong attachment to the land, due to place dependency, compared to those who earned a living somewhere else (Mishra et al., 2010b). Agreeing to this, a group of respondents during participatory mapping indicated that it was better to die from the floods in the lower land than dying in another person's land with hunger.

"We are ready to die of floods in this place rather than die of hunger upland. There is no land for farming upland that is as productive as our land here. Therefore, moving us from here would mean finding a different way of killing us. This land is all we need to keep us alive" (PM-Group 7, Chikwawa, July 2019).

Similarly, another respondent in Nsanje declared:

"Even at gunpoint, I cannot forgo my livelihood needs in the name of resettlement. Our ancestors have lived with these floods, and they survived. I am not wiser than my ancestors. I would not want to go to bed hungry because I had left my land due to flooding: a situation which has been there even before my ancestors" (Pamela, Nsanje, June 2019).

Therefore, it would be difficult for the resettlement programme to overcome this positive attachment to the land in the flood plains if no proper strategies were put in place to address it. However, this could be best addressed by the resettlers themselves through engagements that allowed them to suggest how their attachment to this untransferable physical resource could be incorporated in their ideal resettlement programme. Li (2014) observes that land is

a form of property that cannot be carried from one place to another, and that people attribute meaning to specific places based on their characteristics. As evidenced in the participatory photography exercise, all the groups ranked their agricultural land as the most important asset available in their area. The researcher further asked the community if they were able to forgo their land in the flood plains due to severe flooding. 92% of the groups indicated that land was a significant asset that could not be forgone under any circumstances, as they compared the yields in the flood plains and upland in the same period of the research, as shown in Figures 17 and 18 below.



Figure 17: Shows the dry and unproductive upland: compare with Figure 18 below showing differences in the land productivity at the same period between the lower land and upland. (Photo by PP group # 18, in Nsanje)



Figure 18: Shows the agricultural land in the flood plains producing maize (left) and tomatoes (right); taken the same period as Figure 17, indicating higher productivity of the flood plains. (Photos by PP group # 18, in Nsanje)

Therefore, the resettlers' attachment to their land in the flood plains was based on the productivity of the land: the evidence presented here shows that the upland could not be

favoured by the resettlers, who were farmers. In addition to its higher productivity, the lower land enabled the farmers to practise crop diversification, and crops were planted at different times, according to the availability of residual moisture. This therefore meant that farmers were harvesting their crops different times of the year, thus hence enhancing food availability in the region. Discussions with both the government and the resettlers revealed that the flood plains are the food hub for the district because crops are grown at least twice in a year, using the residual moisture from seasonal flooding, unlike in the upland. Alluding to these findings, Chidanti-Malunga (2009) reported that the upland was the main food producer in the region until the mid-1990's, when rain-fed agriculture was no longer sustainable. Therefore, wetland food production in the flood plains became the main food producer for the region, due to the productivity created by the seasonal flooding (ibid). This clearly confirms the resettlers' views, giving objective reasons for their attachment to the flood plains, which has affected the sustainability of resettlement in this region.

6.2.2 Presence of Network of Rivers

Another physical resource forming people's attachment to the place, due to its utility, is the Shire River and a network of other rivers that facilitates fishing and other off-farm activities. The study established that some people were either refusing to resettle, moving back and forth, or returning after resettlement because they were earning a living from fishing. Therefore, living in proximity to the network of rivers surrounding their place was a prerequisite to staying in the flood prone area. The Shire River, whose tributaries emerge from this location, was reported to be an important physical resource that helped people to meet their consumption and income needs. At least 18% of the resettlers reported that fishing was their main source of livelihood. Out of this percentage, some were fishermen while others were only responsible for providing fishing merchandise like boats, fishing baskets and fishing nets. Therefore, because of these diverse benefits from the surrounding rivers, the resettlers developed a sense of attachment to the river which outsiders could perceive as a source of their misfortunes. However, the flood plain dwellers were so proud of living close to the river that some of them, as evidenced by the narratives below, found upland life unbearable:

“I started fishing when I was a young boy, so I cannot do without fishing. My choice of where to live depends on the ability of the place to fulfil my needs; therefore, as long as I am able to continue fishing here, I cannot go anywhere else” (Limau, Nsanje, June 2019).

Similarly, Praise of Chikwawa declared that his fishing business was so firmly established in the lower land that going upland would affect his business:

“I am a well-known boat making expert employed both by people in this village and ‘angoni’ (fish vendors from the city). I have an established network of customers who hire my boats whenever they would like to go do fishing as well as when they want to buy fish on the other side of the river. Therefore, this place offers me the satisfaction that I want rather than the upland, where I cannot continue with my business” (Praise, Chikwawa, August 2019).

From these narratives, it appears the respondents consciously associate themselves with the river only because it offers continuity to their fishing business, but their subconscious preference of the flood plains to the upland reveals their place attachment. However, studies on place attachment among people with various environment dependent livelihood sources have established that fishers have a stronger place attachment than other people (Mishra et al., 2010b). In terms of gender, this study established that both men and women showed strong place dependency due to fishing. In the study population, women stated that living in proximity to the river source was a prerequisite because they were earned a livelihood from fishing. It was reported that there was a specific period of the year when women went fishing, and normally this was done in shallow waters when the streams were drying out. This type of fishing by women is locally called *“mulembwe.”* Therefore, during discussions with women’s groups during participatory photography, the Shire River emerged as one of the physical resources that they felt to be part of them. One women’s group in GVH Nyachikadza in Nsanje stated:

“The Shire River is one of the major resources in our community. During flooding, several streams emerge from this river, and this gives us an opportunity to practise fishing. Every woman in this community participates in mulembwe. We do not need sophisticated tools to do this: we use panga knives, fish traps and even our hands, just collecting the fish in shallow

waters. After collecting the fish, each one of us decides what to do with it, but mainly it is for sale upland and for our household consumption” (PP group # 47, Nsanje, September 2019).

It emerged that when these streams dry up, some women could continue with the fish selling business by buying from the fishermen along the Shire River, as fishing from there was deemed dangerous by the women, due to crocodile attacks. Although this type of fishing was a seasonal phenomenon, it facilitated place dependency among the women, who relied on the rivers to promote their independence and household wellbeing. Britton (2012) discovered that the lack of alternative livelihood sources encourages women living along the shores to meet their needs in this way, which promotes their financial independence. It should be noted that fishing is popular in this region because livelihood sources among the study population are limited. Additionally, fishing was reported as less intensive business that hardly required any capital; considering this, both men and women find it difficult to embrace other businesses upland. Therefore, the Shire River and the network of rivers along the Shire River valley have proved to be a vitally important resource among the study population, however, its benefits have not been easily transferable.

Apart from fishing, the community in Nsanje, unlike that in Chikwawa, reported another benefit of the Shire River. The people living in the lower land in T/A Nyachikadza and Mpomba relied on the Shire River for water for domestic purposes, which, to outsiders, could appear as backwardness. Grimason et al. (2013) argue that the use of Shire River water for drinking, including unprotected wells that communities dig close to their homes, should be discouraged, as it is a threat to public health. However, to the people living along the Shire River, water borne diseases are a concern for the people outside their community because they have been relying on this water for the rest of their lives. One respondent in Nsanje stated:

“We do not struggle here about where to get water for both drinking and domestic use. We source water straight from the river and we do not have to queue for hours to get water like what they do upland. This river provides everything for us.” (58 year old man, Jeromy of Mpamba GVH, Nsanje, July 2019).

The same opinion was expressed by one of the youth groups during discussions using the participatory photography tool. They declared:

“Some people say that this water is not safe, but even our ancestors used to drink this water, and nothing happened to them. However, if you outsiders dare to drink this water you can get sick because your bodies are weak. As for us, when we are upland, we look forward to coming back because the water from the boreholes does not taste nice. We are used to our water here and when we drink this water, we feel that we are at home” (PP group No. 13, Nsanje, July 2019).



Figure 19: Shows an open well (left) and a woman drawing water from an open well in the lower land in Nsanje as the area is not served with potable water, so they rely on the earth dug open wells for water for drinking and domestic use. (Photos by research participants in Nsanje using PP)

On the other hand, some people who resorted to resettling upland had conflicting ideas on the reliability of the unprotected water sources in the lower land, as shown in figure 19 above. During a participatory mapping discussion with resettlers upland, it was revealed that some people were happy to reconstruct their lives upland, and one of the reasons was the availability of potable water there. The group said that they were aware that the unprotected water sources they were using before resettlement could be a source of water borne diseases such as cholera, but they had no alternative that time. Therefore, resettlement facilitated their access to potable water, as narrated below:

“Whilst living in the lower land we were drinking water from the open wells, and we could also draw water for drinking straight from the Shire River. That time, we did not have a choice although we knew that the river was used for bathing, a toilet and drinking water”. The group continued, “Even the open wells are not safe for drinking either. I remember we used to bathe in other people’s wells at night and the owners would continue drawing water from the well the next day since they were not aware of what happened” (Participatory Mapping #7, Nsanje, July 2019).

Therefore, the narratives above indicate that the more the people continue living in a place they feel attached to, the stronger their place attachment becomes, compared to that of people who have disassociated themselves from this place. Therefore, the evaluation of a place by different individuals varies according to their goals and aspirations, and includes the resources offered by the place for the achievement of food security and wellbeing related goals. People may also base their evaluation of a place on the presence of institutions such as schools, health centres, and police stations, and facilities such as water points: these were all mentioned as important physical resources in a community. Therefore, the next section will discuss the significance of these features in the Lower Shire River valley for the enhancement of people’s place attachment behaviours.

6.3 Place Attachment due to Social Infrastructure

In this section, it is argued that the presence or absence of social infrastructure like schools, clinics, police station and water points does not necessarily affect attachment to a place. Nevertheless, there is clear evidence that social resources like schools, clinics, police stations and water points promote the physical health and psychosocial development of the community (Lenzi et al., 2012). Consequently, the presence of these physical resources encourages a positive self-concept, supported by a sense of self-efficacy and belonging, leading to the development of place attachment (ibid). Where the people living along the Shire River valley are concerned, their previous way of life, combined with the availability of social resources determines their willingness to forgo their place.

6.3.1 Presence of Social Infrastructure

During data collection using participatory tools, the community was able to identify the resources available or missing in both the lower land and their upland destination. In Nsanje, people living along the flood plains were not served by any of these resources (schools, clinics, roads and a police station). As discussed in Chapter 5, on the process of resettlement, the government had withdrawn all these services from this area. On the other hand, the resettlers in Chikwawa, especially at the Medrum site, experienced no change in terms of access to these resources, because the resettlement site was within a walking distance to their original home. However, in Mwalija village, the new settlement was not yet served with a school, police station and permanent clinic, although they had these resources in the flood plains. Therefore, the resettlers in Mwalija village continued to utilise the flood plains for some resources, like the school and boreholes, whilst they were being served by a mobile clinic within the new settlement. It is therefore noted that the resettlers in Chikwawa had better access to these resources than those in Nsanje.

Interestingly, the resettlers in Nsanje indicated that they were attached to the flood plains even though they were not served by any element of the social infrastructure. On the contrary, the resettlers in Chikwawa indicated that they were attached to the lower land because their village had all these resources. This means that depriving the resettlers in Nsanje of these resources could not persuade them to move upland, which shows strong attachment to the flood plains in general. Attesting to this argument, Gebre (2002) argued that strongly attached people would be willing to sacrifice their wellbeing in their efforts to maintain their place of attachment. However, the few people who resettled permanently in the same district indicated that they felt at home in the upland due to the presence of potable water, which made a difference from their lifestyle in the lower land, as discussed in section 6.2. One resettler in GVH Mpomba said that he had formed attachments with the upland, and would never go back to the lower land because they were drinking unsafe water:

“We used to drink water from unprotected sources but here in the upland we are drinking water from the borehole. The health surveillance personnel are even providing chlorine at the borehole to help us drink safe water. I am used to the water here and I cannot drink that water

again, so I always carry water from here when going to the fields in the lower land” (Brenda, Nsanje, June 2019).

On the other hand, the resettlers in Chikwawa indicated that the availability of social infrastructure was of paramount importance in determining where to live. Therefore, due to inadequate resources in the new settlement, especially the absence of boreholes and a school, the resettlers relied on the flood plains to access these services. This indicated that the availability of these resources influenced their resettlement decisions, leading to their preference for the flood plains. A 43 year old lady, Felista of Mwalija village, indicated that she missed “home”, because of the availability of adequate boreholes with a reduced waiting period in the lower land. As she stated:

“There were enough boreholes in the lower land, unlike here where we need to wait for at least an hour to fetch water. To avoid a long waiting time, people are drawing water as early as 3am. Therefore, I decided to go back to the lower land to do my household chores, especially washing clothes and bathing my children. I also bring drinking water from the lower land, using a bike. I always think of going back because I am suffering here” (Felista, Chikwawa, July 2019).

Another respondent from the same community stated:

“I am very far from the water point, but in the lower land, the borehole was very near to my house. I am not used to lining up for water. In my whole life, I have never seen people fighting for water until I came here where people have been fighting for water at the borehole. This makes me think about the lower land.” (Doreen of Mwalija village, Chikwawa, July 2019).

The narratives above attest to the fact that communities’ attitudes towards a place are not homogeneous, and individual attitudes would be determined by personal satisfaction with a place (Adams, 2016). This explains differences in people’s responses to the changes experienced after resettlement: in the case of Chikwawa, the resettlers wanted to maintain the lower land, due to the availability of water sources; on the other hand, the resettlers in

Nsanje expressed mixed reactions that varied according to the strength of their bond with the lower land. Therefore, understanding the resettlers' needs before resettlement could help in determining their level of attachment and the resources that matter to them.

6.3.2 Proximity to Health Services

The role of healthcare facilities in fostering attachment to a place created a dilemma for people living in the lower land in Nsanje: they could not make a compromise between staying in their ancestors' land and living in proximity to a clinic. The community in Nsanje expressed different views on the relationship between their attachment to the lower land and the availability of this social resource. Although the community that had resettled upland expressed their love of their new home, thanks to the easy access to health services, the people still living in the lower land could not be induced by the lack of a clinic to abandon their attachment to this place. One group in lower land of Nsanje during the participatory mapping commented:

"Our place is deserted. We do not have any social services here, including a clinic. The government wants to punish us because they want us to move upland. However, that cannot force us to leave this place. We do not mind that they cannot provide an ambulance here because we consider ourselves as an ambulance since we carry the sick people by ourselves to the hospital". The group continued, *"Can you see our house doors? They are made of local materials for a purpose. When someone is sick, including pregnant women, we just remove the door and use it as a stretcher to carry the patient to the hospital. The good thing is that there is such good cooperation and oneness in this community that, in such a situation, all the men come together to help to carry the person to the hospital upland"* (Participatory mapping# 7, Nsanje, July 2019).

Therefore, this community employed ways to help them cope with the situation. Some resettlers indicated that they normally relied on traditional medicine and natural herbs to curb minor diseases like coughs and body pains, to minimise the number of times they had to go to the hospital, which was upland. On the other hand, in Chikwawa, the population expressed their discontent with the upland, due to absence of a health centre. Using the participatory photography tool, the resettlers in Chikwawa expressed their opinion that a

clinic was one of the physical resources that was missing in the new settlement but available in the lower land. Therefore, statements expressing willingness to maintain the lower land were common among the resettlers, who had spent barely three months in the new settlement. Resettlers declared:

“We were better off in the lower land where we sought medical attention within our community. However, since we came here, it has been hard to access medical attention because the hospital is far away. We wish we had gone back to our original place where we had all the resources including the clinic” (PP group No 48, Chikwawa, August 2019).

Women also described how resettlement deprived them of the ability to seek health support during pregnancy. One lady, who used to be a traditional birth attendant in her village before the clinic was built in their village, indicated that since they resettled in March that year, she had resumed her duties. Namoyo (not her real name) said that she had delivered two children at home because the mothers could not make it to the hospital in time. Thokozani said in this respect:

“I used to be a traditional birth attendant 20 years ago. But with the coming in of new rules, we were advised to stop, and encourage women to go to the hospital to give birth. Luckily, a clinic was built in our community, so it was easy for pregnant mothers to give birth at the hospital and have access to both antenatal and postnatal advice. However, since there is no clinic here, and the nearest clinic is at the boma which is nearly 10km away, women are not going to their antenatal clinics. Therefore, from March to date, I have facilitated the birth of two children from two new mothers. I know I was not supposed to help them, but because they were stranded, I offered to resume the work I used to do in the past. I wish they had built a new clinic here quickly.” (Narrated by a 62-year-old woman, ‘Thokozani,’ Chikwawa, August 2019).

Concurring with the narratives above, it was further revealed that, at the time of the research, one woman could not make it to the hospital on time, so gave birth on her way to the hospital at the *boma* (8km from the new settlement). Therefore, the lack of a clinic in the new location enhanced the resettlers’ memories of their original place. This means that there is a high

probability of this community returning to the lower land, to which they have formed an attachment due to the availability of social resources, including a clinic. In tandem with this argument, Adams (2016) argued that dissatisfaction with a place due to resource constraint is a subconscious attribute of place attachment, emanating from people's positive evaluation of their original home.

6.3.3 Education Services and Social Protection

In terms of school availability as a social infrastructure, the lower land in Nsanje was not served with one, so this did not have significant influence on people's decision to resettle; in this respect, the case of the resettlers in Chikwawa was different. A key finding on the attitude of the resettlers in Nsanje was that people in this region were lower primary school dropouts. This was observed in both the youth and the elderly, with few respondents proceeding to secondary school. The resettlers indicated that this was because they had to walk long distances to access schools. One key informant, a teacher in the lower land in Nsanje, made the following observations:

"I have been teaching in the lower land for over ten years. Most teachers were refusing to teach in the lower land, so I was the only teacher there managing only the junior classes. I agreed to teach in the lower land because this was my home, so I wanted to help my community. However, after the 2015 flooding, I was informed by the government that this place had been declared a disaster-prone area, so the school had been closed. However, I noted that this did not influence the people's decision to move upland and people continued their normal life even when the school was removed, although it has contributed to high school dropout rate and illiteracy levels" (Com KII # 27, Nsanje, August 2019).

The narrative above reveals that the deprivation of a social resource like a school did not necessarily influence people's decision to leave their place of attachment, but rather revealed strong place attachment to the lower land. On the other hand, a few families in this community did relocate upland for their children to have access to schooling. Similarly, the community in Chikwawa showed a positive attachment to their original place because there was a school in the same community, unlike in the new resettlement site. The people from the Mwalija resettlement site in Chikwawa reported that children were still going to school in

the lower land, so the respondents reported that they were failing to form positive attachments to the new settlement site for this reason. One respondent explained:

“My son cannot go to school during the rainy season because children need to cross a river on the way to school. This is so risky for children and because of this I am thinking of building a small house there where I will be staying the rest of the year and come back here during the rainy season. This way my son will not drop out of school” (Thandizo, Chikwawa, September 2019).

In addition, the youth were mainly concerned about the school football ground, that was the only place the youth could socialise in their community. Therefore, all the youth groups that participated in the study on Mwalija settlement site stated that the school football ground was the most important element of social infrastructure: that made the lower land significant, unlike the new settlement. Using the participatory photography tool, one youth group pointed to the football ground as the resource that made them miss the lower land, as shown by the following exchange:

Q: Can you rank the pictures you have taken and why?

A: Our group ranked the photo of the football ground as the most important feature because that is where we meet to socialise and relax during our free time

Q: Is this feature available in both places?

A: There is no playground here but only in the lower land.

Q: So which place do you feel at home in and why?

A: The lower land because of the playground. We were used to playing football on the school ground. Now, we still go to the lower land to have access to the playground

(PP No 49, Chikwawa, August 2019).

These narratives agree with a study in Mozambique where the resettlers' attachment to the original land was based on the appeal of the school, including the playground (Strong, 2016). Therefore, this shows that different social groups have various needs, hence uniformly designed resettlement programmes would result in different movement dynamics if these differences were not addressed at the onset of resettlement.

In addition to schools, social protection was another determining factor for the resettlers' preference of where to stay. Where social protection is concerned, the resettlers in Chikwawa were more worried about security in the new settlement, as it lacked a police station. They reported that they felt less sense of protection in the upland compared to the lower land, where they had a police station. During a group discussion using participatory mapping, the following statement was made by a respondent:

"Every day we hear that something has been stolen but that was not the case in the lower land. We are not protected here and, to make things worse, these houses that the Red Cross built for us, are very prone to theft because a person can just cut these trampolines. This has made us afraid to leave our homes in quest of protecting our property. (PM No2, Chikwawa, July 2019).

In addition to this narrative, one respondent stated:

"I do not have peace of mind here unlike in the lower land, where we felt protected because of the police station in our community. I managed to rescue my goats and five head of cattle during the floods, but now I have only three cows and two goats because the rest were stolen. This never happened when we lived in the lower land. I miss life in the lower land" (Lucia, Chikwawa, August 2019).

Similar narratives emerged from Nsanje, where people reported that they felt a sense of protection when living in the flood plains, but not in the new settlement. Although this community had not been served by a police station, their protection had been facilitated by a degree of social cohesion that had no counterpart in the upland. Security offers the fulfilment of personal goals; therefore, this arouses emotions that are connected to a specific place (Kyle et al., 2005, Hesari et al., 2019). Therefore, people preferred to live in their original land where issues of theft were less common.

6.3.5 Proximity to Local Markets

Apart from provision for education, healthcare and safety, the resettlers mentioned the availability of local markets as a determining factor for their preference of a place to live. The communities declared that living in proximity to the market had a symbolic meaning for them. Apart from being a place where they would sell their agricultural produce, this was a place where people met and interacted with each other, thus fulfilling a double role in their community. Therefore, as members of farming communities, the respondents reported that the markets were an integral part of their community. For instance, the community in Nsanje relied on the market upland and declared that markets were important to them; however, their attachment to the lower land was not affected. Although previous studies have found that the absence of facilities such as markets affects the quality of living in a place (Christiaanse and Haartsen, 2017), the community in Nsanje chose to maintain their lower land, although it was not served by any social facility. On the other hand, some people reported that they had formed attachments to the upland because of the markets that provided easy access, not only for selling their agricultural produce, but also for other business opportunities. One respondent indicated that he chose to settle upland because of the presence of customers for his carpentry business. He declared that the market facilitated the realisation of his goals:

“Since I came here my business has improved because of the market. When I was in the lower land my business was not improving because there was no market to sell my products. For me, I now regard this place as home, and that lower land is just the place where I was born” (Mwawina, Nsanje, June 2019).

On the other hand, the resettlers in Chikwawa were missing their home because their new settlement had no market. The respondents indicated that the market played an integral part in their community, as in the narration below:

Market in the lower land was very important to us. We were selling our agricultural produces within our community, and we were buying cheaper things there. However, we do not have a market here. We need to travel almost 8 km to access a market. Life was better in the lower land where we had everything within our community” (PP No 21, Chikwawa).

Furthermore, the market was seen as a place where people could facilitate their social interactions whilst selling their produce. During participatory mapping in Chikwawa, it was learnt that the market was used as a place for meeting people and updating each other on the developments within their lives and community. Therefore, the absence of a market in the upland made the new settlement less desirable, as stated below:

“We miss those market days when we were in the lower land. This was a place where we could meet each other to socialise and relax. During festive seasons, the market in our community was an interesting place because we could find everything that we wanted but also show off what we had been saving for during the year. So, the absence of a market here makes this place boring” (Participatory mapping #17, Chikwawa, August 2019).

Therefore, people attributed different meanings to the market, depending on the functions attached to this physical resource. Although outsiders might think that the resettlers’ access to the economic functions of physical resources such as markets was the only important element when choosing alternative places for resettlement, but the resettlers’ emotional attachment to the physical resource would also be influential. In their study, Christiaanse and Haartsen (2017) stipulated that people’s general belief about the presence of a market in a community affected their perception of resettlement, hence it was observed that its absence made resettlers to go back to their original land. Therefore, to the community in the Shire River valley, it was not the access to the market that mattered but the availability of a designated place where people could go to sell their produce and socialise. It can be argued, therefore, that the significance of markets as a physical resource in this community was evident in forming their positive evaluation of a place’s ability to facilitate the achievement of their goals.

Therefore, strong feelings of place attachment due to physical resources were revealed by the study participants, as evidenced by their statements cited above. The presence of different physical resources was significant in attaining the various personal goals which, over time, form an attachment to a place. The narratives above demonstrate people’s strong attachment to the lower land, where they could find most of the physical resources necessary

to facilitate their livelihood and wellbeing goals. However, it has also been shown that communities are not homogenous: consequently, the level of attachment due to physical resources differed among the study participants. This was more evident in Nsanje, where the absence of social resources like the clinic, school, police station and potable water dismantled some people's attachment, although most of the community prioritised their livelihood needs over their wellbeing. Therefore, the community attachment to the lower land was very strong, although these resources were removed due to the area's vulnerability. However, the process whereby a strong attachment develops to places where the availability of physical resources facilitates the achievement of one's goals has an influence on the evaluation of a proposed place for resettlement. In this regard, the next section will discuss the implications for resettlement of this form of place attachment

6.4 Policy Makers' Perspective on Place Dependency during Resettlement

This section discusses the stakeholders' perspectives on place dependency and how the resettlers' concerns are taken into consideration in resettlement programmes in the area being studied. From the previous section, it was evident that the residents in the study area had such a strong functional attachment to the flood plains that resettlement aggravated the pain of losing their home. However, resettlers in this region have been misjudged, regarded as opportunists who live in the flood plains only to benefit from handouts from the government and stakeholders (Mtembenuzeni and Kushe, 2018): the basis of the resettlers' arguments for staying in the flood plains has not been understood.

The key informants interviewed in this study revealed that the resettlers were showing the movement dynamics as described in Chapter 5. Most of them attributed this to the resettlers' place dependency goals: they were mainly in search of fertile farmland, social services and support for other livelihood strategies such as fishing. It is a fact that the resettlers' place dependency was not considered in the resettlement programming: in particular, where farmland was concerned, the government encouraged people to maintain the flood plains where they were meeting their functional goals. One key informant stated:

“The resettlers are still moving back and forth in search of their livelihood needs, especially farming in the lower land. As government staff, we are encouraging them to continue farming in the lower land wherever possible” (Gov KII #1, Lilongwe, July 2019).

However, this government official quickly stated that the resettlers were not settled very far from their previous land. It was argued that settling them near the original place helped the resettlers to maintain their ancestors’ land and resources in the lower land, so the government felt that the people’s place attachment needs were met in the study area. However, this contradicts the resettlers’ perception, as presented in section 6.2, where resettlers stated that they could not manage to go to the lower land daily because it was too far from their new homes. Therefore, based on the government’s view that the resettlers were resettled within commuting distance, the policy makers failed to understand those resettlers who were still reconstructing their life in the flood plain.

“We know that the resettlers have formed an attachment with their original place: that’s why the resettlers are asked to identify new places within their local community. We are not resettling the flood affected people in a totally new location, rather encouraging them to go to surrounding communities that are deemed safe” (Gov KII # 1, Lilongwe, July 2019).

This was possible in Chikwawa, for instance, where the new settlement was only 3 km away from their previous land; on the other hand, in Nsanje (Mpomba resettlement site), the two sites were almost 10 km apart. Therefore, this did not prove to be compatible with the resettlers’ goals, so most of them were spending most of their time in the lower land where their functional goals were met. On the other hand, Taylor (2009) argued that that people’s relationship with their home proved to be complex, so the argument that the resettlers’ place dependency needs were taken into consideration by resettling few kilometres from their original land could be contested. Therefore, although the government claimed that the resettlers’ place dependency needs were considered in the resettlement process in this community, the resettlers claimed the opposite.

According to the perspective of an NGO working in the same region, the communities were not permanently staying at the resettlement sites because their place dependency needs

were not considered in the resettlement process; furthermore, this neglect encouraged the resettlers' back and forth movement between the high ground and the flood plains. The NGO representative put it bluntly:

"These people we are trying to resettle depend on their ancestors' land for farming and other livelihood needs. I feel that there is no political will to engage the resettlers and understand their needs. The land upland is rocky, and these people are not used to rain-fed agriculture, but nothing is being done to make sure that the resettlers maintain their self-reliant upland. Intensifying irrigation farming upland could help some resettlers to remain in the upland" (NGO KII # 3, Nsanje, June 2019).

These narratives indicate that the government does not encourage the community's sense of continuity with their livelihood needs, although it has moved them to a different location to deal with those needs. Guillard et al. (2019) argue that the resettlement implementers are obliged to facilitate the resettlers' sense of continuity in terms of their way of living, wellbeing and livelihoods, despite being in a different place. This, therefore, would encourage the resettlers to respond positively to resettlement as the alternative place becomes competitive with the original place. However, other stakeholders have a different perspective on the resettlers' reaction to resettlement, based on their place attachment behaviours. Another NGO KII stated that the things that the resettlers considered while resettling were not important compared to their lives, which were threatened by flooding. He stated:

"People in the lower shire are stubborn and lazy because of the handouts they receive during flooding. They are saying that they cannot resettle because of land for farming, graveyards and the Shire River. If they are open minded, they can reconstruct their lives upland like other people who are living in these areas. However, the only problem is these human rights organisations; otherwise, these people would have been left without support during the next disasters to see if their ancestors would save them. I am sure with time they would resettle on their own" (NGO KII # 6, Nsanje, August 2019).

Therefore, from the sentiments above, it is clear that there are different perspectives among the policy makers on the resettlers' response to resettlement, particularly their place

attachment. This highlights the lack of understanding of people's attachment to the physical resources, especially land, which have been passed on from one generation to another. Therefore, given these differences in perspective among the stakeholders and the resettlers, the efficacy of resettlement could be questioned. Lipset (2013), in his study of the people living along the flood plains in Papua New Guinea, found out that the resettlers lost trust in the policy makers, but not in their ancestors, whom they considered responsible for meeting their livelihood needs. These sentiments emanated from the resettlers who felt that the policy makers were not considering their place dependency needs. Similarly, the resettlers in the Lower Shire River valley felt that their place dependency needs were not considered in the resettlement in Malawi, hence their reliance on the flood plains where their functional goals were met. Therefore, although place dependency was not considered crucially important to the implementation of resettlement in Malawi, it has a considerable bearing on its outcome.

As discussed in Chapter 2, several people and place related studies have argued that communities relying on local resources took responsibility for the protection of the place satisfying their needs, despite its vulnerability (Lipset, 2013, Taylor, 2009, Cross et al., 2011). In this study, it has been shown that resettlers were willing to sacrifice their lives and well-being by staying in the area to which they had formed attachments, in order to meet their place dependency goals. Therefore, the resettlers' concerns emanated partly from the limitations of the upper land resources that were intended to satisfy their wellbeing and livelihood needs. The resettlers' strong emotional attachment to their ancestors' land was thus reinforced by the shortcomings of the proposed resettlement site. Uzzell et al. (2002) argued that, due to strong place attachment, most resettlers would use their own strategies to deal with disasters to avoid compromising their place dependency in a different location. Nevertheless, although the resettlers' place dependency needs were not considered during the formation of the resettlement programme, some resettlers showed a willingness to move upland, and agreed to reconstruct their livelihoods there.

Another point worth making is that the policy makers were aware that the resettlers were dependent on the physical resources of the flood plains for farming and other physical structures to satisfy their needs. However, evidence presented here shows that no deliberate

effort was put in place to address these needs. One key informant from the government indicated that the resettlers were dependent on farming in the lower land, and their refusal to move was due to the fact that they had not yet experienced severe flooding:

“The resettlement is voluntary, so if the resettlers are not willing to move upland because they want to maintain their ancestors’ land, we will leave them, otherwise, when they are affected by severe flooding, they will move on their own. Once people have moved upland, the likelihood of losing people’s lives, houses and crops will be in the past. In this year’s floods, we lost 60 people, and 672 were injured, so with increasing casualties and severity we are hoping that people will forgo their attachment” (KII Govt #2, Lilongwe, July 2019).

On the other hand, one key informant stated that, during the 2019 flooding, the government did not provide evacuation equipment such as boats and canoes, and the community used their own initiative to relocate upland. Therefore, the community in this region faced punishment for their decisions to remain in the flood plains due to their place attachment needs. One key informant working in the government at the district council stated:

“Since the government declared the lower land a disaster-prone area, all government resources like schools, clinics and road works programmes have been removed. However, most of the people have maintained their houses in the lower land, on the basis that they cannot leave their ancestors’ land. The government proposed an initiative to resettle them in the nearby T/As of Ndamera and Chimombo, but they are still refusing, although these places are close to their original land. We cannot force them to move upland if they do not want to commute to the lower land for farming while they have safe houses upland. Due to their non-compliant behaviour, the government did not support them with evacuating materials like boats during the floods in 2019. They used their own means to go to the evacuation camps” (Govt KII #.4, Nsanje, June 2019).

A discussion with community key informants in T/A Nyachikadza in Nsanje confirmed that during the 2019 flooding the government did not provide the boats as they used to do. It was revealed that one political aspirant for their constituency helped them to evacuate using her own resources, as she was in the process of campaigning to be a member of parliament (MP)

for the local area. However, it was also revealed that, due to the physical resources available in the lower land, the community was not willing to forgo their place attachment because of the government's measures to force them upland. One key informant in the community commented:

"The government does not understand how we feel about leaving our ancestors' land. This land means everything to us. Unless the government understands the value, we have for our land, then people will still live here. There are other means of dealing with flooding than separating us from the land that has all the resources we need for survival" (Joseph, Nsanje, July 2019).

These statements reveal that the resettlers could not envisage life beyond the physical resources available in the flood plains. Although this was the case, there was clear evidence that the policy makers were certain that resettlement was the only solution to their problem, while most of the community were unwilling to forgo their place dependency needs. The community were willing to protect their land, despite the efforts of the policy makers to protect them from flooding, whose impact, according to the available evidence, will continue to worsen (Kaján, 2014). Therefore, the lack of mutual understanding for the motivating factors to resettle and the underlying causes of resettlement by the policy makers and the resettlers has implications on resettlement. Therefore, the next section will provide a detailed discussion on the implications of people's place attachment, arising from available physical resources, on resettlement implementation strategies.

6.5 Implications of Place Dependency on Resettlement Policies

The place dependency insights from the previous sections showed that place dependency could not only negatively affect resettlement but could also affect the designing of resettlement policies. This study therefore argues that overlooking place dependency in resettlement undermines the disaster adaptation measures put in place by policy makers and other planners.

The literature suggests that there is increased evidence that resettlement initiatives that overlook the people's relationship with their place often result in the *ad hoc* policies which

induce tensions between the planners and the affected communities (Adger et al., 2011). Similarly, this study revealed a disparity between the narratives of the policy makers and the affected communities in terms of how place attachment is valued. Although it has been argued that policy makers should be responsible for putting in place adaptation measures aimed at reducing uncertainties during disasters like flooding, these are likely to fail if issues that matter to the affected communities go unaddressed.

This study also found that the designated resettlement sites were rural towns with good road networks including social structures like schools, a clinic, markets and electricity. Although, to the planner, these were preferred places promoting modern ways of life to the resettlers, however, the resettlers did not value these resources more highly than the physical resources available in the flood plains. This does not mean that strongly attached people do not value these social services, whose absence has an impact on their lives, as evidenced by the people's narratives. Different ways to cope with this situation were developed, as evidenced from their narratives on how they found substitutions for these resources. This is not a new phenomenon for strongly attached people, as similar studies have revealed that at least 45% of the people facing resettlement mentioned the significance of these resources in forming their resettlement decisions (Qiu et al., 2020). Therefore, policies based on assumptions about the needs of the affected populations have proved ineffective. It is therefore fundamentally important to place the aspirations and needs of the resettlers at the centre of programmes affecting people-place bonds.

Another element in this study is the community's intense attachment to the land in the flood plains, which qualified their support for resettlement, despite their vulnerability to annual flooding. It has also been revealed that the communities were not willing to forgo what they valued, despite the government's introduction of various restrictions in services that would facilitate the abandonment of the flood plains. Adger et al. (2011) argued that understanding the affected communities' relationship with local physical resources should be deemed a norm in designing resettlement strategies. This, therefore, entails that the strategies that enhance people's place attachment goals should be promoted. Some place attachment researchers have a conviction that, in the long run, the strongly attached people will end up as the losers if they continue to experience extreme climate variability, which causes disasters

such as flooding (Mearns and Norton, 2010, Kronik and Verner, 2010). However, employing resettlement policies that undermine people's place dependency, especially that of people relying on local physical resources for their livelihood sources, would not achieve the intended goals. It is therefore of paramount importance that strategies aiming at relocating people should not be homogeneous but consider the specific place goals of a particular individual. Mearns and Norton (2010) argued that, although the affected community might be categorised as farmers, resettlement could face different outcomes, according to the community's specific interests and attachments. They further argued that pastoralists might be more in favour of resettlement as this would be more consistent with their goals, unlike agriculturalists, whose place attachment has proved to be stronger. It is, therefore, on this basis that the people's social context should be thoroughly evaluated before employing resettlement strategies, as this would determine their level of attachment.

The narratives of the study's participants, both the policy makers and the communities, revealed that there was inadequate dialogue between the two parties in executing the resettlement programme. Although the government personnel claimed that the community was involved in the resettlement process (section 6.4), the community members had a different perspective on their involvement in the resettlement processes (Chapter 5). The community members revealed that they were informed of the need to resettle but were not involved in discussions of the resettlement process and how it should be executed. One key informant, for instance, stated that the decisions were made at a higher level, so people's place attachment needs were not considered in the resettlement programme:

"Resettlement is a good mitigation measure; however, it has not been satisfactorily executed by the government. Our needs are not taken into consideration; as a result, most of the people are refusing resettlement because they cannot leave their farmland" (Com KII No. 17, Nsanje, June 2019).

This revealed the basis of the tensions arising from resettlement in the study area. This lack of understanding of the resettlers' perspectives on the importance of the physical resources in their area resulted in misconceptions about the resettlers' response to resettlement. As discussed in Chapter 5, different movement dynamics were observed, whose most important

cause was the need to utilise physical resources in the flood plains. Therefore, the presence of physical resources should not be neglected in resettlement policies, as this has proved to be important to the resettlers, especially those who depend on physical resources for a living. Strong (2016) asserts that place attachment contributes to the happiness of resource deprived individuals with limited income and livelihood sources. Therefore, understanding the resettlers' views and incorporating them into the resettlement strategy ensures the resource-dependent individuals' satisfaction with the resettlement process. It is a fact that, if resettlement were executed with consideration for the resettlers' needs, it would have been a highly efficient adaptation measure (Adams, 2016). This is because people are emotionally attached to the place that satisfies their needs; therefore, any decision formed on their behalf without considering this relationship lacks community support (Chuma, 2018).

Finally, this chapter has demonstrated that the policy makers had minimal understanding of physical resources as a source of place attachment, consequently finding it difficult to comprehend the importance of the relationship between people and their place in informing decisions about resettlement. Specialist scholars in this field have argued that policy makers need to understand the role of place attachment as a prerequisite for collective decision making and community engagement (Mishra et al., 2010b). This could be possible only if the resettlement formulation and implementation processes were inclusive, enabling policy makers to understand the perspective of the affected community. However, in most resettlement programmes, this dialogue has proven to be a difficult process; devising effective implementation that takes into consideration the needs of the affected communities have been a challenge (Ojha et al., 2016).

Similarly, in the study area, although consultation meetings have taken place, the project participants argued that their views regarding their place dependency were generally disregarded during the resettlement process. This has been attributed to the lack of political will to ensure that the principles established during the consultation processes would be applied to the programme implementation procedures. On the other hand, the empirical evidence suggests that place protective actions by the resettlers are embedded in a lack of political will to understand and implement need based policies (De Dominicis et al., 2015). Consequently, communities fail to comprehend the call to resettle if the programme seems

to ignore things that matter to the affected community. Therefore, there is a need for the government to share understanding of the people's relationship to their place and the factors that create their attachment, with the aim of incorporating them into the resettlement programming. To achieve this, both community participation and political will are crucially important.

6.6 Chapter Summary

The chapter highlighted the role that place dependency plays in the resettlers' resettlement decision processes. This study revealed that a place's physical resources enhance people's ability to realise their goals, generating a reciprocal relationship with the people living there. This relationship enhances people's positive evaluation of that place, so that any policies deemed to have an impact on this relationship would meet resistance.

In this study, it was established that the resettlers formed a positive relationship with their place due to the availability of land for farming, and rivers for fishing and irrigation farming. Subsequently, the flood plains gave the resettlers an opportunity for crop diversification, either through residual moisture or irrigation farming from the network of rivers in the flood plains. Therefore, the presence of land for farming was evaluated as important element enabling the resettlers to meet their needs. Consequently, the resettlers formed a close bond with the flood plains. However, this positive attachment to the flood plains had a negative impact on resettlement initiatives that were aimed at protecting the resettlers' life and assets. The resettlers perceived resettlement as a threat to their food security and displayed place protective characteristics by refusing to believe that any other place could enable them to meet their livelihood goals. It can therefore be concluded that positive attached people cannot be easily persuaded to leave the place that they are attached to, and this is also connected to the length of residence in a particular place.

Secondly, the research also revealed that the resettlers had a positive attachment to a place that facilitated their wellbeing, especially if it offered social resources such as clinics, water sources, schools and police stations. However, it appeared that even though the government withdrew these resources from the flood plains, especially in Nsanje, the resettlers' bond with the place was unaffected. On the other hand, the resettlers who chose to stay upland

permanently had easy access to these resources, but this did not change their attachment to the flood plains. This clearly indicated the characteristics of positively attached people, who would often be committed to their place, despite the place being negatively evaluated by outsiders. This strong bond, therefore, has a negative impact on resettlement programmes that would separate the resettlers from their place of attachment.

Similarly, the few people who accepted resettlement also exhibited place attachment behaviour, due to their constant reliance on the physical resources in the flood plains. This could be done unconsciously: the resettlers stated that even if they were upland, they missed their good life in the flood plains where all the social resources were available. Therefore, this study concludes that the resettlers' needs are not homogeneous, despite being in the same locality and faced with the same risks of disaster, such as flooding. A person's decision to resettle is dependent on the positive evaluation of the alternative place, but this does not automatically terminate their bond with the previous place. Therefore, there is a need for inclusive resettlement policies that take the resettlers' views into consideration: understanding their place-related needs could lead to the provision of resources that would facilitate both their livelihood and well-being.

Thirdly, although place attachment was deemed important by the resettlers, the resettlement programme did not provide for their place dependency needs. Therefore, this prompted the resettlers to demonstrate their place attachment behaviour by either refusing to resettle, moving back and forth, or returning after resettlement. The government, however, considered these place attachment behaviours "*stubborn*", as they displayed non-compliance with its resettlement initiatives.

It can therefore be concluded that programmes affecting the people-place bond should be executed in agreement with the affected community, since they must be the main actors if the programme is to succeed. It has been shown that the resettlers view their place of origin as the source of everything that meets their needs and it facilitates the achievement of individual goals despite being vulnerable to annual flooding, as in the case of the study area. On the other hand, the resettlement planners' focus is on protecting people's lives, however, from the narratives in 6.2, the resettlers prioritized their place dependency needs over their

lives. Therefore, if the process of change is not clearly communicated to the affected community, and the programme fails to show consideration for the community's needs and ways of dealing with their place attachment, resettlement could remain a source of conflict in the study area.

However, people are not only attached to physical resources. According to the literature presented in Chapter 2, place attachment is also socially constructed, arising from neighbouring, belongingness and rootedness. Therefore, the next chapter will critically analyse these place constructs, to unpack the significance of these socially constructed attachment narratives.

CHAPTER SEVEN

SOCIAL BONDING DIMENSIONS OF PLACE ATTACHMENT

7.1 Introduction

Place meaning is multifaceted, involving experiences and interactions with both the physical and social dimensions of a locale. In this chapter, I will argue that people are rooted to places that enhance their social bonding and such places become more meaningful with the relationships the resettlers make with their neighbours, family and wider community. However, these relationships are built over time hence length of residence and familiarity of a place are crucial in determining one's social bonding to a place.

In Chapter 6, I demonstrated how people's decisions to resettle are based on the availability of physical resources deemed important for the goal realisation of the resettlers. These included the physical resources that are mainly used to support an individual's wellbeing, like land, rivers, schools and clinics. However, evidence suggest that place attachment is formed not only by physical resources, but also the human social interactions that build people's networks and identity in the long run (Ellis and Albrecht, 2017). Therefore, resettlers also consider the connections with people within their community that enable them to maintain their long-time relationships, social ties and networks (Elliott and Yusuf, 2014).

At community level, social bonding, developed through the formal and informal networks to which people belong, plays a significant role in enhancing place attachment. As discussed in the literature review (Chapter 2), social interactions with neighbours, family and the entire community enables people to address their shared problems which in turn strengthens their attachment to a place (Mishra et al., 2010a). Therefore, in this chapter, I will examine the important role played by people's relationships with neighbours and family in resettlement. It should be noted that these relationships within a community shape both the formal and informal networks. Therefore, one's sense of belongingness in a place could influence decision-making processes, so narratives in this section will show how the study population in Nsanje and Chikwawa are influenced by their networks. Therefore, these networks, as well as one's relationship with immediate surroundings, translate into an attachment to a place, especially where one place is considered more important than another.

Using a questionnaire, in-depth interviews, participatory photography and key informant interviews, this chapter critically analyses the social bonding narratives expressed by the resettlers. In particular, as discussed earlier in Chapter 2 (section 2.4.2), the three dimensions of social bonding, which are neighbouring, belongingness and rootedness, will be discussed to demonstrate the role they play in facilitating the resettlement decision making process.

Therefore, I will first discuss the neighbouring narratives, demonstrating the resettlers' perception of resettlement, based on their attachment to their immediate surroundings, and their feelings about resettlement, arising from these neighbouring constructs. Secondly, I will analyse the narratives about social networks, including both the formal and informal networks in which the resettlers are engaged, to demonstrate their significance in formulating resettlement decisions. Thirdly, I will discuss the resettlers' social integration with the host community and how it perpetuates their attachment to the flood plains. This section looks at the resettlers' interaction with and acceptability in the new settlement, based on their involvement in different development programmes in their new home. The final section will present the conclusion highlighting the key findings from the presented social bonding theory.

7.2 Neighbouring

Neighbouring attachment means one's emotional bonding to one's immediate environment (Raymond et al., 2010), including family, friends and neighbours living nearby. In this section I argue that the resettlers' immediate community, consisting of family, friends and neighbours, have a commitment to supporting each other in their everyday life which outsiders cannot envisage. Therefore, programmes like resettlement would probably face resistance from communities where everyone has responsibility on each other. Thus, resettling individuals breaks the existing ties which are crucial to the resettlers; the case is different when people are resettled as a community and are free to choose who should be in their vicinity.

7.2.1 Neighbouring Ties with Family

The people in the study community rely on their customary land, which has involved them in kinship ties affecting both agricultural and non-agricultural activities. This means that the resettlers live on land which has been inherited from their parents. Therefore, their immediate contacts are relatives who, according to their culture, have claims on their ancestral land. This arrangement was seen to be very important in the study area as it

provided the resettlers' immediate social ties. It was revealed that the resettlers' primary support network consisted of their immediate neighbours: in this case, their own relatives, including children and siblings. The resettlers indicated that whenever they needed material support, they would seek help from their family before going to friends and neighbours outside their kinship ties.

In most instances, it was noted that a compound was occupied by parents and their children, so that, even though they were living in separate houses, they were doing most things together as one big family. This meant that these families were combining their resources, especially food, but also, they reported that they were mostly cooking and eating together. Therefore, targeted resettlement, which was implemented in every case apart from Mwalija village, affected the resettlers' social bonding. For instance, one family in Nsanje recounted the ordeal they suffered when their father was among the 50 people in their village who were targeted for resettlement. Knowing that going to the new site would separate him from his children, he refused to resettle. Although his children had their own families, they relied on each other for any help including food, fetching water, firewood and farming. However, the implementers claimed that limitations in funding and land availability in the upland forced them to resettle only people who had been selected because of their vulnerability. Therefore, people with strong social ties resisted resettlement to maintain contact with their immediate families. Mateyu narrated in box 1 below;

Box 1: Mateyu of Nsanje refused to leave his family behind

Mateyu is a 68-year-old man from T/A Nyachikadza in Nsanje. He has two wives and four children. He was one of the people who refused to resettle because the resettlement process did not allow him to resettle with his whole family. Mateyu and his wife were the only household members targeted for resettlement: he could not resettle with his entire family due to limitations on the land allowed per household. Mateyu's compound had 6 houses, for his two wives and four children. They were used to living together and doing everything as a family. During the time of the research, Mateyu and his family were living in the upland, where they rented 6 houses in proximity because they did not want to be far from each other. Mateyu explained that everybody was responsible for providing food for the family, so that the food brought by his children was not just for their own households, but for the entire family. He said, *"I stay in the same compound as my children to make sure that our social bonding is not disturbed. I cannot live very far from my children because we depend on each other. That is why, even when we are here, waiting to go back to our place when it is habitable, we are staying together as one big family. I do not want this spirit of togetherness to be destroyed because of resettlement. There is no social life upland; people live as individuals, not a family"* (Mateyu, Nsanje, June 2019).

As stated in Chapter 5, section 5.3, the resettlers from Mwalija village resettled in their own upland territory, therefore people were at liberty either to keep their neighbours or choose new neighbours, according to the level of interaction between them when they were living in the lower land. Therefore, the community reorganized itself: hence people were able to live in proximity to those individuals who satisfied their social attachment needs. For instance, Aida, a visually impaired lady from Mwalija village in Chikwawa, stated that she agreed to resettle upland because she was living in proximity to her daughter, who was providing all the support she needed. Therefore, Aida was fortunate enough to continue living near her daughter even after resettlement. However, Aida declared that if she had been targeted for resettlement on her own, leaving her extended family behind, she would have refused to resettle, as stated below:

“Regarding my condition, I rely on my daughter to take care of me. I lost both my husband and 8 children, so I have only my daughter to rely on. Therefore, separating me from my daughter would not have been a good idea. If that were the case, I wouldn’t have agreed to come upland, but now I don’t have any problem with this arrangement. I value the relationship I have with my daughter, and she is still taking care of me, as we used to do in the lower land” (Aida, Chikwawa, September 2019).

From the narratives above, it was revealed that the elderly (60 years and above) had stronger social bonding due to neighbouring than any other social group in the study population. The elderly relied more on their strongest social ties, which meant their immediate family, and especially support from children and grandchildren. Therefore, the elderly relied heavily on their social network for their daily living as they were unable to provide for themselves the resources required for their wellbeing. In tandem with these findings, previous studies also established that the elderly was the social group that set most value on their established neighbouring ties (Wang et al., 2020). Therefore, resettlement gave the elderly a sense of insecurity, arising from the fear of being separated from their family and friends, with whom they had previously established ties. However, this study has shown that the resettlement programme in the study area prioritised the resettlement of the elderly, even if they would be separated from their family and friends when they move upland. Therefore, although the elderly was the priority group during resettlement in all sites, due to their vulnerability to flooding, the resettlers perceived this as a disruption of their social attachments.

In this study, I also established that some people returned in the lower land as they felt lonely and helpless whilst upland because they were separated from the people who provided their support. One such person was Tadala, who stated that, despite being given a house upland, she opted to going back to the lower land where her family was. Tadala, who is a 62-year-old widow, returned to the lower land barely 3 months after resettlement because she did not have anyone to take care of her in the new settlement. Tadala had abandoned her house and during the time of the study, she was at the camp because the abandoned house subsequently collapsed due to flooding. She declared:

“I was given a house by IOM in 2015 because my house in the lower land fell down due to excessive flooding. I was targeted to benefit from one out of the 50 houses that were provided because I am a widow and elderly. None of my children met the criteria to be given a house upland, so they were just given land to build their own houses. However, they could not manage to build their own houses, so they went back to the lower land after the floods. I stayed here alone with people that I was not familiar with for three months. Life was so unbearable for me: I was not able to find food, or fetch water and even firewood on my own. I rely on my children to provide all my support. Therefore, this prompted me to go back in the lower land so that I could stay with my family, that looks after me. I will only resettle permanently if my family resettles too” (Tadala, Nsanje, June 2019).

These sentiments imply that it was challenging for the elderly to establish new reciprocal networks, because they are not perceived as sufficiently productive, so they rely on previously established social networks (Kumar and Patra, 2019). Therefore, people felt isolated if relocated to a new location where they did not have networks. This led to abandonment of the resettlement site, as evidenced by the narratives above.

7.2.2 Neighbouring Ties with Friends

This section narrates the social bonding narratives that emanates from the self-formed relationships with individuals in their surrounding community based in the mutual understanding of the individuals. In this study, it was significant that the resettlers valued the relationships with their friends as a source of support during flooding as well as their challenges in general. Therefore, it was noted that, while all the resettlers were busy getting acclimatized to the new environment and embracing new ways of life, most of them were struggling especially where targeted resettlement was implemented.

As discussed in Chapter 5 that the resettlers’ place dependency needs were not incorporated in the resettlement process, which therefore meant that most of the resettlers’ households were food insecure. Therefore, maintaining the social ties established whilst in the lower land was not possible in the new settlement. Some elderly people pointed out that the resettlement changed their social connections, so that people never cared for each other anymore after resettlement. It was stated that people were free to share food with each other

in the lower land, but this spirit of sharing changed drastically after resettlement. One respondent, a resettler in Nsanje, recalled that, in the lower land, her grandchildren were taken care of by their neighbours when she was not at home. She described the changes in neighbouring ties she had observed in the upland:

“In the lower land, I was relying on my neighbours when I was not home. I have three grandchildren and I spend most of the time in the field. When we were in the lower land, I was not conscious of the time to come back home to cook for my grandchildren because I knew that my neighbours would take care of them. But here, spirit of caring for others has vanished and now my grandchildren are aware that no one can give you free food here” (72-year-old Jacqueline, Nsanje, July 2019).

On the other hand, although all the resettlers experienced changes in their social networks, especially where neighbouring was involved, most of the middle-aged people and the youth were able to establish new relationships with the host community. Building new relationships was, however, a slow process for many resettlers; this phenomenon has already been established by other place scholars (Quetulio-Navarra et al., 2017, Rogers and Wang, 2006). They argue that forming new social ties with the surrounding environment is an emotional process whose time scale differs (Quetulio-Navarra et al., 2017, Rogers and Wang, 2006). However, in my study, I established that some resettlers were able to form social ties with their neighbours one year after resettlement. These included a 43-year-old, Leonard, who indicated that he was not initially certain about the life upland, especially where his neighbours were concerned, but was eventually able to associate with the host community and build mutual relationships:

“When I first arrived, life was difficult because I didn’t have any social interaction with my neighbours from the host community. At times I was thinking of going back because I missed the interaction that I had with my family, friends and neighbours in the lower land. However, with time, I started interacting with the host community and I have built new social ties. I can

confess that I have been given farmland by my new neighbour and I am now growing millet which we were not growing in the lower land” (Leonard, Nsanje, June 2019).

However, while the same group of people (youth, men and middle-aged) were able to form significant relationships, a few people in this category failed to make ties with their neighbours and this prompted them to go back to the flood plains. Ergene and Berker (2009) found that some people failed to form attachments thirty-four years after being resettled. This was because social connections evolve from personal feelings and emotions inspired by one’s immediate surroundings (ibid). Furthermore, social inequalities like gender, age and power dynamics within the community have been reported as factors exacerbating the differences in formation of social ties in a new settlement (Zheng et al., 2019). For instance, Zheng et al. (2019), argued that women are likely to form networks slowly than men as the latter spend time with friends on leisure activities hence forming relationships in the process unlike women. Similarly, influential people like traditional leaders are likely to form bonds quickly than others as they are trusted and respected people within the community (Badri et al., 2006). Therefore, formation of social ties with neighbours could be a long process for some people like women as they embrace change of place as a result of disaster induced resettlement. Similarly, some resettlers in Nsanje and Chikwawa reported that they returned to the lower land because they failed to make new relationships with their upland neighbours. One respondent gave the following explanation:

“I did not make significant relationships with my neighbours when I was upland, but here, my neighbours are very important to me. For example, although I am not a fisherman myself, but my neighbours are fishermen, so they share fish with me when they have gone fishing. We help each other not only with food but farming too, so this relationship makes life here interesting. In the upland, this type of life does not exist, so if you do not have anything, you will suffer as no one wants to befriend you. This prompted me to come back in the lower land” (Fungayi, Nsanje, June 2019).

In accordance with Fungayi’s narrative above, the resettlers reported that they got a lot of support from their neighbours that include not only material support, but also provision of

labour during farming. This support from their neighbours influenced their place relationship, which they valued after resettlement. The changes in their social connections made the upland unbearable, resulting in various movement dynamics that included going back and forth or completely abandoning the resettlement. On the other hand, this support was not reported by people who resettled upland permanently. This was sometimes attributed to the fact that people were busy reconstructing their lives, as in the case of Chikwawa. However, in Nsanje, the community composition contributed to the situation, as the resettlers were mixed with people from different ethnic backgrounds. For example, the resettlers in T/A Nyachikadza resettled at Ntowe trading centre, which was a hub for people from different places who were staying around the trading centre for business and work, as well as the Mozambiquan political refugees who resettled there due to the civil war. This meant that people in this area had such different values that helping each other was not common, and the resettlers were reported to have emulated this culture. Therefore, this lack of sense of community in the upland contributed to the abandonment of resettlement sites, since most of the resettlers were poor farmers, accustomed to giving and receiving communal aid in times of need, so neighbouring played a significant role in their lives.

7.2.3 Neighbouring Ties with Community

This section narrates the support that the resettlers render to each other within their community which was not beyond their village headman level based on their community norms. The resettlers reported that during disasters, the people in their community were crucial in helping each other to evacuate as one resettler stated below:

“Although I don’t have a canoe, but I am assured that I will be able to evacuate upland using the canoes that people have in this community. For instance, my neighbour has a canoe, so I rely on him during flooding when the water is too deep to continue living in our houses. He transfers his family first, then I always know that I am the second person to use the boat before it is given to other people. When I finish, I also give it to another family until the entire community has been evacuated upland. Therefore, there is oneness in this community hence we can’t leave without each other” (Moses, Nsanje, July 2019).

The resettlers continued to reiterate that the change in the physical environment affected their culture of dependency. The change from communal social perspectives to individualistic ways of living is a typical phenomenon after resettlement. Billig (2016) reported that resettlement diminished the collective characteristics that united the community prior to resettlement. Similarly, in Nsanje and Chikwawa resettlement sites, the resettlers reported the observed changes in their community life. The resettlers said that resettlement made people to stop caring for anybody but their immediate family, whereas when they were living in the lower land they lived as a family with their neighbours. Therefore, the community narratives reflected the emotional processes that people invest in their place due to the relationships formed with their neighbours, which cannot be traded easily for a new place.

As discussed in Chapter 5, the resettlers in Malemia and Nyachikadza in Nsanje were required to build their own houses in the upland, whereas at Mwalija in Chikwawa, resettlers were required to contribute some of the building materials for their new dwelling. During this process, the resettlers pointed out how their sense of community began to dwindle. The resettlers indicated that in their communities, neighbours and the entire community come together to help each other when building their houses either after flooding or for new couples. The resettlers indicated that the owner of the house was responsible for sourcing materials whilst the rest of the community provided labour. This meant that a house superstructure could be completed within a week, so living in the flood plains was easier than outsiders could envisage. The resettlers described how they relied on their neighbours to reconstruct their houses in the low land, unlike in the upland where everyone was responsible for building their own house, irrespective of gender.

“In the lower land, we live like a community. Flooding is part of our life and the collapse of houses during this period is very common. However, immediately after flooding, we come together and help each other to build these houses, so that within a short period of time our lives have come back to normal. But this is not practised when we go upland. Everyone builds their own houses unless they have money when they will pay someone. Surprisingly, even the

men in our village will charge you money when you ask them to help you build your house. The life here is very different. People mind their own business unlike in the lower land” (Pondamali, Nsanje, June 2019).

The community narratives reflected the changes in their community cultural perspectives as observed during their house reconstruction processes; it was a community responsibility in the lower land, unlike the upland, where it was an individual responsibility. In relation to this, one lady described how she suffered when building her house in the new upland settlement:

“I am in a polygamous family; my husband was building for the second wife, so I had to build this house alone. I was responsible for sourcing all the materials as well as building the house because I could not wait for my husband to finish that house and build this one. There are a lot of women who built their own houses in this village. But if we were in the lower land there would have been no way I could build this house alone because the entire community would have helped. However, here everyone is busy.” (Tawina, Nsanje, July 2019).

During one of the transect walks in the lower land, I was privileged to find a house that had just been constructed for one community member, demonstrating their social bonding. The resettlers indicated that this was a practice that was not only meant to help each other but was also a means of enhancing their oneness as neighbours. It was observed that the whole community was involved in the building process. In appreciation of the work by their neighbours, it was learnt that the owner of the house was responsible for providing food and drinks to everyone who participated, including children. Figure 20 below shows one of the houses that was built by the community during the data collection process in Nsanje.



Figure 20: Shows a one-day community constructed house for one of the community members in Nsanje as part of social bonding; and the second picture shows children displaying the drinks that were provided during the work by the owner of the house. (Photo by researcher, June 2019.)

Therefore, these community initiatives were variable assets for the entire community and, depending on their social ties, everyone was voluntarily participating in the community activities. This therefore diminishes the comparative benefits of resettlement because this social integration was not available in the upland, due to the change in social values experienced as the resettlers mingled with the host community. On the other hand, Fried (2000) argued that resettlers failed to utilise the available options in the new settlement by sticking to their previous social ties, hence limiting their ability to cope and move on in the new settlement. Therefore, the resettlers' zeal for maintaining their former neighbourhood ties in Nsanje and Chikwawa meant that they were not ready to form new networks with the host community and learn new ideas that would help them deal with everyday life in the host communities.

Many resettlers lamented the fact that the grouping of dwellings in the resettlement sites made it impossible for them to maintain their former social bonds with their neighbours, family and friends. However, resettlement offered an opportunity to building new social ties with other resettlers, with whom they had weaker ties prior to resettlement. Some respondents expressed their joy because they were able to form new ties with people from

their original community and the host community. One of the resettlers from Chikwawa declared:

“I am happy here because I have had the opportunity to choose my neighbours and I am looking forward to making new relationships with the people around me. In the lower land, I had such a bad relationship with my neighbour that we lost trust in each other. I was afraid she might even poison me so coming here was a relief for me. I am at peace now and I will never go back to the lower land” (Linda, Chikwawa, August 2019).

Another respondent also reported that resettlement had contributed to the building of strong bonds with her relatives because they were no longer living together after resettlement. She stated:

“I chose not to keep my neighbours because we were not getting on well. I am staying away from my relatives because everyone has resettled in their own land. Staying away from each other has made the relationship with my relatives very strong because we just visit each other when we need to. I am no longer quarrelling with anyone, so I am happy with this arrangement” (Janet, Chikwawa, August 2019).

Therefore, social bonding due to neighbouring aroused different responses, depending on the strength of the ties before and after resettlement. However, the majority of the resettlers were happy with their neighbouring social ties which proved to be significant in different ways, especially in times of need. I can therefore conclude that the emotions that people invest in their place cannot be easily traded with a new place, thus proving that, as discussed earlier, forming new relationships after resettlement is difficult. The literature suggests that, since people are social beings, they are happy to live around people with whom they can easily associate and form mutual relationships (Sharp, 2018). These relationships are associated with a particular physical environment, as it has been noted in this research that neighbourhood bonds changed after resettlement. This implies that social bonding is a function of the satisfaction attached to one's environment, which in turn affects the likelihood

of resettling in a new location. However, apart from forming relationships with neighbours, people also form social bonds through their participation in and belonging to a community's formal and informal networks. Therefore, in the next section I will discuss the resettlers' attachment to their surrounding environment due to belongingness in different forms of networks within their locale.

7.3 Social Networks and Place Belongingness

Another concept of social bonding is place belongingness, which entails one's membership of both formal and non-formal organisations, institutions and networks within a place (Raymond et al., 2010). In this study, I have established that the resettlers' attachment to the flood plains was directly linked to their membership of community social networks that included Village Savings and Loan groups (VSL), church groups, and also to their adoption of various leadership roles in their community. The empirical evidence from this study showed that 71% of the resettlers in Nsanje and Chikwawa had a more enhanced sense of belongingness in the lower land than in the upland: the reasons behind this will be discussed in the following sections of this chapter.

7.3.1 Participation in Village and Savings Groups

In this study, I have established that one of the factors contributing to the resettlers' choice of place of belonging was their participation in different groups, including VSL. Almost 80% of the resettlers reported that they belonged to a VSL group. VSL groups are informal saving and lending groups whose members rely on their social networks to form either homogenous or heterogeneous groups (Mwansakilwa et al., 2017). Therefore, these informal groups were reported to be significant in the study area, especially among women. At least 80% of the women reported that they belonged to these VSL groups whose members were selected according to the trust placed in them by other group members. The resettlers who belonged to these groups said that resettlement affected their saving culture, since some of the groups ceased to be operating after resettlement. The resettlers indicated that it was difficult not only to form new groups upland but also to gain sufficient trust to be accepted by an existing group. Therefore, many women reported that they lost their sense of belonging because after

resettlement they were not members of any group, and consequently felt isolated. These sentiments were common where the resettlers were not resettled together with their neighbours: as one resettler in Nsanje said;

“Whilst in the lower land, I belonged to a VSL group which was composed of 24 women from my village. The group members were selected because of their behaviour and since we stayed together for a long time, we knew and trusted each other. However, since I came here, I have not joined any VSL group because I do not know the people here very well” (Chinsinsi, Chikwawa, July 2019).

Another respondent added,

“I used to be an active member of my VSL group before we resettled, but, since we came here, I don’t feel motivated to join any group because I don’t trust the people. I don’t even know my neighbours very well so I cannot trust them with my money” (Yamikani-, Nsanje, June 2019).

These findings suggest that membership of these groups was influenced by trust that was gained by living in the same place for a long time. This meant that the resettlers were able to build relationships that influenced their participation in different groups, including VSL, as shown in the narratives above. Although women’s participation in these groups has been considered as a means of enhancing their belongingness, these groups also enabled them to enhance their social bonding and develop new social networks. Therefore, considering how these groups are formed, it appears that the resettlers were deprived of their sense of belonging, which made them feel isolated after resettlement, and which might influence their subsequent decision to go back to the lower land.

However, as discussed in Chapter 5, the resettlers in Mwalija in Chikwawa and Malemia in Nsanje were resettled as a community, and consequently reported that resettlement did not disrupt their social networks. This meant that they were able to stay in their VSL groups. On

the other hand, the impact of resettlement on their participation in these groups was evident, because it affected their socioeconomic status. This meant that the resettlers no longer had surplus money, so were unable to maintain the saving habits they had established before resettlement. Therefore, their sense of belongingness was affected, as reported below:

“The only group that I belonged to was VSL but since we came here, we have stopped meeting because we don’t have money to save. I was planning to use the money that I would have saved to buy livestock, so since we have stopped, owning livestock will remain a dream. I was benefiting a lot from these groups because, apart from saving, we were also discussing different topics like family planning. Therefore, coming here has really affected us” (Chisomo, Chikwawa, August 2019)

Therefore, participation in these groups was a source of the community’s social capital, especially women, who reported that they had benefited from such groups. The literature suggests that participation in these groups is a social resource which enhances interpersonal relationships, interaction, cooperation, and collective action among its members (Musinguzi, 2016). Therefore, lack of participation in such groups had an impact on their interpersonal relationships, which take time to build.

7.3.2 Belongingness due to Church Affiliation

Apart from belongingness in groups like VSL as stated above, the resettlers recorded how resettlement affected their membership of the churches that they belonged to. This study has revealed that the resettlers’ relationship with the church was very important in this community. This was because, apart from being places of worship, churches were considered as social resources enabling people to enhance their social networks and form new bonds that extended beyond worship. On the other hand, other people held positions in the church groups such as the choir, church executive committee and various groups. The resettlers, however, reported that moving from the lower land meant that they were going to places where these positions were already held by existing members so that their own claims would

not be recognised. The resettlers' participation in church life was considered as a means of enhancing their social capital, serious problems emerged when a particular church was unavailable at the new settlement. One resettler expressed her concerns on this issue.

"I am a member of 'Sons of God church' and unfortunately this church is only available in the lower land. So, staying here makes me feel empty. I always think of going back because if I die here, I don't know if they will come to my funeral" (Chikonzero, Nsanje, June 2019).

Therefore, belonging to church was part of feeling included and accepted in a community, not just in this life but even after death. Lack of the church which they belonged, and to which they felt an attachment based on the relationships formed there, kept other resettlers thinking of going back after resettlement. On the same note, one respondent, who was a pastor, registered his reluctance to resettle because his church could not be moved upland. Pastor Kachele declared, *"I am a pastor of Word of God church and we managed to build our church here. So, I cannot move upland leaving the church members behind. Although some church members resettled, most of the members are here"* (Nsanje, June 2019).

Although the narrative above shows resistance to resettlement by the pastor as an individual, it also has a bearing on the acceptability of resettlement for the people belonging to this church. This is because churches made a crucial contribution to the study community's welfare by enhancing the resettlers' social connections and belongingness. Even more importantly, in the study area, churches proved to be essential to their members because they were extending their social networks through acts of charity. The church's social aspect was described by some resettlers who were assisted by the church during and after resettlement. It was noted that this assistance was directed to members of the church. Therefore, belonging to a particular denomination was so beneficial to its members that changing places would affect their membership of their former networks. Sophie of Nsanje explained how the church helped her to build her house in the upland:

"I resettled here in 2015, but the house that we built after resettlement collapsed due to the 2019 flooding. However, my husband had been sick so I could not manage to do everything on my own. After that, we lived in the tents while waiting to build another house when my husband recovered. Seeing that my husband was not getting better, I started making bricks. To my surprise, the members of my church stepped in to help my family, since they were aware of our situation. The members helped me with the brick making and afterwards they came and built a house for us. I will never leave this church and I thank God that this is the same church I belonged to whilst in the lower land" (Sophie, Nsanje, September 2019).

As argued by Brown and Brown (2003) that churches play an integral part in the process of boosting people's social interaction; the resettlers felt that their membership of a church was not just a means to exalt their spiritual life but also a source of social support. Therefore, belonging to formal groups like church enhanced people's social bonding and this was dependent on the place where their church was situated. Therefore, being in a place meant forming interactions with people in different settings which facilitated one's willingness to continue living in a place.

7.3.3 Belongingness due to Leadership Roles

As discussed above, some people got attached to a place where they held leadership roles, as evidenced by the narrative of the pastor narrative who refused to resettle because that would have meant leaving his congregation in the lower land. I further found that people holding key positions in society were reluctant to resettle because they belonged to an elite group in the community. One of the elite groups prominent in preserving their sense of belonging, due to their positions in the community, consisted of the traditional leaders. They would have ceased to be recognised as important people in the new settlement, so they preferred to remain where they felt relevant to their community. This was evidenced by most of the elites, including traditional leaders, the chiefs' aides, known locally as *Nduna za mfumu*, and other people holding significant positions in local society.

Lee and Robbins (1995) argued that the sense of belongingness makes people experience a greater sense of common humanity among other people within the same place, so they

experience frustration if their feelings are not recognised. This was a typical reaction expressed by traditional leaders whose subjects resettled in another community: their inability to exercise their powers within another person's jurisdiction undermined their elite status. In this study, I established that 78% of the resettlers indicated that they felt more respected in the lower land than in the upland. Therefore, the place attachment experienced by people holding various leadership roles in the community emanated from the respect that was paid to them in that place. This respect gives such powerful support to their sense of belonging to an elite group that moving to different places, where this degree of respect was not forthcoming, could affect their sense of belonging. One traditional leader who resettled in 2015 described how he felt about his place belongingness;

"In the lower land, everyone knew who I was but here I am not recognised. This affects my position in society. Even the people who used to respect me in the lower land do not regard me as an important person; therefore, given a chance, I would prefer to live in the lower land where I belong to an elite group of people" (Nsanje, June 2019).

Another traditional leader, who refused to resettle and was still living in the lower land, based his decision on similar feelings, as recorded below:

"I am respected here because I have people that I govern. If I do not have my own area of jurisdiction who will respect me? Ruling people whilst in land that belongs to somebody else is challenging, so you lose the respect that you deserve. Therefore, I cannot resettle because I would be reduced to nobody in society" (Nsanje, July 2019).

These narratives therefore meant that people felt that they did not belong to a place where their authority was not recognised, which consequently affected their choices of where to live. In the end, people felt frustrated and failed to accept the changed status resulting from resettlement. This feeling therefore prompts people to lobby for continued occupancy of the places that enhance their place belongingness (Zhang et al., 2018).

Apart from the traditional leaders themselves, those closest to them also felt that resettlement would deprive them of the power and respect they enjoyed within their community. During participatory photography, one group in Chikwawa presented a photo, Figure 21 below, showing one person in the centre with others around him. During the discussion, the group indicated that the photo represented their social position in a society where those with positions were able to summon and discipline people in the community.



Figure 21: Depicts the elite's leadership roles, that enhance their social attachment due to the respect and recognition of their community. (Photo by PP # 48, Chikwawa)

In the same group, as discussions progressed, one person who was recognised as '*nduna ya mfumu*' by the group members said, "*I am a close aide to the village headman here. When I go upland, I can't have this privilege. I do not want to be "nyamphena" (a common villager). I would rather be here than upland*" (PP # 48, Chikwawa, September 2019).

Therefore, resettling means losing the power and the respect that people enjoy in their community, especially when their village is integrated with another village in the host community that already has established structures and social institutions. This therefore enhances social attachment, not only among the elite, but also among ordinary community members, who indicate that they prefer to be under the jurisdiction of their current traditional leaders and elders. These interactions and community-based social differentiation motivated people to stay in the flood plains and continue addressing the community's problems, which in turn strengthened their social attachment to their home (Mishra et al., 2010a).

Furthermore, this social attachment, as witnessed by their belonging to different social groups and positions in the society, strengthens the resettlers' rootedness to the place. Therefore, by feeling a sense of belonging to a particular community, the resettlers felt being at home through the relationships that they have established over time. This therefore enriches their rootedness to the place where they feel accepted. In the next section, therefore, the resettlers' perspectives of rootedness due to their social interactions within a community will be discussed.

7.4 Resettlers Social Integration in the New Settlement

In this section I will argue that inadequate social integration of the resettlers with the host community enhanced the resettlers' attachment to the lower land. This argument is based on the fact that, despite their resettlement, the resettlers' involvement in the community programmes was so limited that they were left feeling that they were not fully embraced as part of the host community.

Using the quantitative data, this study revealed that over half of the resettlers felt isolated and excluded because they were not involved in various activities taking place in the new settlement. At least 98% of the resettles in T/a Nyachikadza, 88% of the resettlers in Mpomba and 67% of the resettlers in Medrum felt marginalised. The higher percentages in these sites could be explained by the fact that the resettlers in these sites were mixed with the host community, unlike Mwalija, where the resettlers resettled in their own upland territory, as discussed in Chapter 5. During the in-depth interviews, the resettlers revealed that, despite being resettled, but they were not recognised as part of the host community. This was mainly evident during the registration processes of various development and disaster management programmes taking place in the upland. This therefore meant that resettlers were treated as visitors in the upland while maintain their belongingness in the lower land. This could be attributed to the fact that the resettlement programme in this region focussed only on the quantifiable aspects of resettlement while overlooking the process of integrating resettlers with the host community.

Although some resettlers felt isolated in the new settlement, others, did not want to be fully integrated in the upland village. Their views varied according to the way in which they were resettled as well as the community to which they were moving. For instance, one resettler in Medrum village in Chikwawa was waiting for the completion of his upland house but was indifferent about resettlement because he did not want to be part of the host village. Christopher indicated that he was emotionally attached to the people and the leaders in the lower land, so he was not happy to be under the leadership of a different person. He declared,

“I am happy that I have been allocated a house at the resettlement village, but I am not certain about some things. They have made it clear that once you go there, you will belong to that village. This is where the problem is, hence, I do not want to leave my village. I am used to the norms of this village and our village headman knows me better, so I am not left out in every programme in our village” (Christopher, Chikwawa, August 2019).

Christopher’s fear was not caused by the resettlement itself, but by the prospects of leaving his social circle, where he had formed networks, and of being integrated in the host village. This meant that he would lose out when targeted programmes were implemented in the village because normally only a few people benefited. Therefore, his rootedness in the lower land stemmed from the fear of feeling left out in the new area where he did not have connections with his new neighbours and the community as a whole. It should be noted that these social connections in the villages are very important as they institute one’s social capital which is boosted by one’s kinship and neighbouring ties (Kong et al., 2019). The resettlers’ main concern was their eligibility during the distribution of relief items, including subsidy programmes, whilst in the new settlement.

The area’s vulnerability had seen the resettlers relying on relief items, but there were usually not enough for the entire community, so the number of beneficiaries was limited. The resettlers reported that the traditional leaders were often responsible for identifying the beneficiaries with the help of the village development committee, that selected recipients according to set criteria. The resettlers were considered as outsiders whilst, ironically, they were at home after being resettled. This meant that the host community could not

acknowledge that the resettlers' vulnerability entitled them to be included in various programmes as they were not considered part of their community: this consequently affected the resettlers' choice of habitation. As I elucidated the resettlers' fears during the research, I discovered that the people who resettled still belonged to the lower land because they were included in its programmes, not those of the upland where they were staying. This was observed during the execution of two humanitarian programmes that were taking place during the data collection period. A typical example appeared in T/A Nyachikadza in Nsanje, where registration of beneficiaries for a 2019 flood response programme implemented by UNDP included both the resettlers and those still living in the flood plains. Therefore, an individual who had resettled prior to the 2019 flooding was still considered in this flood response programme.

During the same period, Churches Action in Relief and Development (CARD) was providing maize seed for winter cropping for the 2019 flood victims at Mpomba evacuation camp. On that occasion, it was observed that the beneficiaries included those who resettled in 2015 and the people who continued living in the flood plains. Therefore, ironically, although the resettlers were complaining that they were not included in similar programmes by the host community, this would have entailed receiving a double portion from both the lower land and the upland where they had resettled. Kale et al. (2019) argued that social integration is a two-way process in which both the resettlers and the host community have a duty to incorporate each other in different aspects of their day-to-day life. However, the resettlers were not pleased with such arrangements, and consequently they felt that they were not socially accepted in the host community. Therefore, some resettlers, who felt left out, contemplated going back. Thomas, a resettler in Nsanje, declared:

"Although we are here, we are not involved in any social programme like food for work or public works. This clearly shows that we do not belong here. When you try to persuade people in power here to consider us, they start calling us various names. Therefore, I would rather go back to where I am accepted than live here where I feel side-lined" (Thomas, Nsanje, June 2019).

Concurring with Thomas above, another resettler from Mpomba observed: *“We are here as visitors because we are not considered as part of the community here. When they are considering people for any programme, we are told that we are not part of the programme”* (Alinane, Nsanje, June 2019).

Therefore, the treatment of the resettlers in the upland confronted them with a dilemma, intensifying their need to stay where they felt accepted. Apart from the resettlers themselves, their traditional leaders shared the same feelings that they were not accepted upland. The traditional leaders had expected they would be part and parcel of the elite in the new settlement. However, it emerged that they were not given any power in the new settlement: only in the lower land where they were recognised as traditional leaders. Due to this, some of them abandoned the new settlement and persuaded their subjects to leave the upland. Therefore, a traditional leader might be seen living in either the lower land or the upland, but the people he ruled could be in both locations. This caused confusion, not only among the resettlers, but also among the traditional leaders themselves when they were considering how they should execute their duties.

During the discussion with the T/A Nyachikadza, who was staying upland, he explained that despite being the T/A, he did not have power over any issues in the upland. This meant that he was responsible for people living in the lower land and those that had resettled in different places. On the other hand, some traditional leaders found this arrangement so hard to contend with that they either refused to resettle or abandoned the resettlement sites. One village headman in Nsanje indicated that he abandoned the upland because his expectations were not met there. The village headman indicated that he had expected to retain the powers he had before resettlement, but, on the contrary, he was not recognised. Andrea explained:

“When I was living upland, I was not involved in any decision making as I was not recognised as one of the traditional leaders. Therefore, I was executing my leadership roles in the lower land where most of my subjects were. In the long run, I decided to come back so that I could be close to the people I govern” (Andrea, Nsanje, June 2019).

Narratives like Andrea's were common among traditional leaders in all four sites where the study was carried out. Nevertheless, the government officials and the NGOs spearheading resettlement believed that the local leaders' sentiments were due to the politics of power within the community. However, Sharp et al. (2019) attributed the resettlers' narratives to land tenure insecurities whilst away from their ancestors' land, where the local leaders had full control. Therefore, these insecurities, coupled with their minimal access to networks within the new settlement, made it difficult for the resettlers to become integrated in their new community. In the long run, the resettlers preferred to live where they had a sense of community; this desire for rootedness caused various movement dynamics among the resettlers.

7.5 Chapter Summary

In this chapter, it has been demonstrated that the non-tangible resource within a locale influence the resettlers' decision on where to stay, despite the perceived vulnerabilities of the place. These non-tangible resources include the resettlers' social networks and neighbouring ties. Feelings about being accepted within a new community are also influential. Using both the qualitative and quantitative data, this study revealed that the resettlement programming in the study area did not adequately consider the resettlers' social bonding. However, although some resettlement programmes, like Mpomba in Nsanje and Mwalija in Chikwawa, resettled the entire village, social networks and community integration often proved to be a source of concern for resettlers. Therefore, this prompted the back-and-forth movement of the resettlers, as well as complete abandonment of the resettlement sites. In Nyachikadza and Medrum, where people were resettled as individuals, resettlement resulted in social disarticulation due to loss of neighbouring ties and social networks: the resettlers' integration in the community was compromised.

The majority of the resettlers indicated that resettlement had an impact on their neighbouring ties. In this community, kinship ties were very important to people with such strong social attachment that they preferred to live in proximity to their immediate families and other relatives, unlike those with weaker social attachment. It has been noted that kinship ties influenced social bonding, which helped to make the places meaningful to the resettlers. Before resettlement, the resettlers were used to living in proximity to their family,

relatives and friends and this influenced their social bonding. Therefore, neighbours acted as an immediate means of reassurance in times of shock but were also helpful with many other aspects of their day to day lives. These neighbouring ties were influenced by the presence of ancestral land that was shared among siblings. Therefore, many resettlers felt that resettlement resulted in social disarticulation, leading some to abandon the resettlement site.

From the resettlers' narratives, it was discovered that the elderly had stronger social bonds than the rest of the social groups in the community. It was learnt that the elderly relied more on their strongest social ties, primarily their immediate family, especially their children and grandchildren. However, this study established that the elderly formed the priority group in all the resettlement sites, so in some instances they were given land or housing without consideration of their social networks and neighbouring ties. This, therefore, had a negative impact on the acceptability of resettlement in circumstances where the elderly beneficiaries felt isolated from their immediate family and friends. On the other hand, the middle aged and the youth were able to establish new networks with their new neighbours, although this was a slow process for many. However, some resettlers failed to make ties with their neighbours and this prompted them to go back to the flood plains.

Secondly, the resettlers' involvement in both formal and informal networks within a place influenced their decision-making processes during resettlement. The resettlers' presence in self formed groups like VSL were significantly affected after resettlement. This was attributed to the fact that the resettlers had no trust in the other upland people. Therefore, lack of trust on the new neighbours reduced their participation in such groups. Similarly, it was learnt that the resettlers' affiliation to a church, including the roles they played there, influenced their choices on where to stay. The resettlers showed that they were keen to maintain their affiliations, as these were not only places of worship but also hubs for social gatherings with elements of charitable work. Therefore, the resettlers evaluate a place according to their potential for social networking, and this included place of worship.

Lastly, this study has revealed that the resettlers' inadequate social integration with the host community perpetuated the resettlers' attachment to the lower land. This was evident where the resettlers were not involved in developmental programmes like fertilizer subsidies and

food for work programmes. Therefore, the resettlers felt marginalised and not fully embraced as part of the host community, which enhanced their attachment to the lower land. However, it has been argued that social integration is a two-way process, because the resettlers were also targeted for specific programmes from which the host community did not benefit. It can therefore be concluded that putting in place measures specifically designed to address the resettlers' social bonding needs could avert resettlers' attachment from the lower land. However, people's attachment to a particular place due to their social bonding helps to build their identity, which has proved to be an element of place attachment often overlooked by the resettlement implementers. Therefore, the next chapter will discuss the contribution made to resettlers' attachment to their land by place identity, which is a crucial element in forming people's sense of rootedness.

CHAPTER EIGHT

PLACE IDENTITY AND EMOTIONAL TIES

8.1 Introduction

As discussed in the literature review, the place scholarship shows that the meaning attached to a place varies according to the views of different individuals (Lewicka, 2008, Hernández et al., 2007, Scannell and Gifford, 2010). In Chapters 5 and 6, I demonstrated how the resettlers' attachment in the study area was due to the physical resources enhancing their ability to meet their livelihood needs and the social interactions developed within a place, respectively. On the other hand, the literature suggested that place is also used as a means of distinguishing oneself from others, which builds positive self-identity and a sense of continuity within a place (Lewicka, 2011). This is what is referred to as place identity, which builds the resettlers' rootedness through the memories, feelings, attitudes and experiences accumulated within a place. Therefore, the aim of this chapter is to explore the meaning attached to a place by the resettlers and how this influences their decisions either to resettle or not, which subsequently contributes to the movement dynamics discussed in Chapter 5. This chapter will therefore unpack the concepts of place identity and rootedness, to achieve the third objective of this thesis: aiming to explore the role of place attachment in resettlement. Therefore, drawing data from both qualitative and quantitative findings, the people's perceptions of resettlement in relation to their attachment to specific places, due to rootedness and place identity, will be discussed. Data informing this chapter's findings were drawn from in-depth interviews, key informant interviews, participatory photography and the questionnaire.

This chapter is divided into four sections: the first focuses on the resettlers' emotional ties, demonstrating people's feelings about a particular place. The discussion in this section will bring forward the resettlers' feelings about both the lower land and the upland, which gives a better understanding of the decisions made by the resettlers when they were prompted to resettle. Secondly, the chapter discusses about the attachment due to the ancestral ties: the influence of the beliefs about the ancestral powers available in the lower land as an influence of place identity. The third section discusses the community constructed place identity based on the resettlers' practices in the flood plains. The fourth section discusses the place related narratives related to place motivated self-identity, showing how place characteristics

enhance an individual's identity. Finally, the chapter concludes with a summary of key findings from this chapter.

8.2 Emotional Ties

In place scholarship, resettlers are said to make a positive evaluation of a place if being in that place makes them feel good and emotionally attached to it (Knez, 2005). Therefore, this positive evaluation strengthens emotional ties, making a person proud to be associated with a particular place. In the long run, this emotional attachment becomes embedded in one's day to day life, hence influencing identity.

Similarly, in this study, the resettlers' narratives expressed a positive evaluation of their original place, indicating the formation of emotional ties. The data collected using a questionnaire revealed that 67% loved being in the flood plains, 85% indicated that the flood plains were their favourite place and 60% felt more safe and secure in their original land than upland. However, only 33% indicated that they could not leave the lower land even if it were hit by a disaster, because the lower land provided everything they needed in their daily life. Therefore, this implied that at least 33% of the resettlers were strongly attached to the lower land and emotionally connected to this place in comparison to the upland. However, emotional attachment could also be inspired by resource availability, as discussed in Chapter 6, on place dependency.

The evidence derived from the in-depth interviews and the participatory processes showed that the resettlers valued the lower land more highly than the upland, which affected their willingness to accept the resettlement programme. However, although this was the case, some resettlers started developing bonds with the new settlement, embracing it as home by taking steps to ensure that it provided the same satisfaction as the lower land. On the other hand, people have different degrees of attachment to the same place, so those most strongly attached to their previous home would not easily form an attachment to a new settlement (Bonaiuto et al., 2016). These contrasting attitudes appear in the resettlers narratives. For instance, Madalitso, who resettled after the 2019 flooding, is an example of those resettlers who easily formed attachments to the upland after resettlement and became emotionally

connected with it. She indicated that she had developed an attachment to the upland, and stated that she loved living there and greatly preferred it to the flood plains:

“I prefer living here because it is safe, so I have peace of mind. We will no longer be living as seasonal nomads whereby during the rainy season we are upland and later living in the lower land. I love this place, so I feel at home here and I will develop this place so that it can be adorable. I have already started rebuilding this one-bedroom house that the government built for me. I am extending this to a three-bedroom house since I am not considering going anywhere” (Madalitso Chikwawa, August 2019).

This narrative showed that this resettler was able to embrace the new settlement and felt happy to start associating herself with the upland instead of the lower land, due to the problems her family faced during flooding. Similarly, other resettlers in the study population, especially from Chikwawa, expressed their desire to feel at home upland where they resettled. On the contrary, the resettlers in Nsanje showed that they were so strongly attached to the lower land that, although they agreed to resettle, they were still emotionally attached to the lower land. They indicated that they loved the lower land most and felt more at home in the lower land, although they were living upland. A 62-year-old Pemphero of GVH Mpomba is one resettler who declared that, although he experienced a good life upland, he was emotionally connected to the lower land.:

“Despite that life looks good here like staying in an iron roofed house, easy access to electricity and clinic, the lower land is very special to me. I love the simple life in the lower land more than here, hence that place will remain my home and I will always keep my ‘nyantchuwa’ identity” (Pemphero, Nsanje, June 2019).

Therefore, this narrative demonstrates that, despite agreeing to resettle, some resettlers had a strong attachment to the lower land. Therefore, this meant that there was a strong possibility that the resettlers holding these views might go back when the need for safety might have less priority than their desire for a home where they felt satisfied with the way of life.

In resettlement scholarship, the evidence indicates that people form identity with the place where they were born and have spent most of their time (Ratcliffe and Korpela, 2016). On the contrary, this study revealed that some resettlers living in the lower land formed attachments to the lower land despite being born upland; they had migrated to the lower land for various reasons. Therefore, I can conclude that the experience accumulated over time whilst living in the flood plains contributed to the resettlers' identity irrespective of whether they were immigrants or not. Typical examples were cases where people moved from the upland to the lower land due to marriage. In the long run, these people identified themselves with the flood plains and indicated that this place was very special, and they were emotionally connected to it. Furthermore, this feeling of belonging to the flood plains made this group of people develop such a positive evaluation of the low land that they refused to resettle, even if the area was declared disaster prone. For instance, Raima, a widow with five children, declared that, although she was born upland and came to the lower land when she got married, she had developed an attachment to her new home. Raima, who was among the people who refused to resettle, declared:

"I relocated to this place when I got married to my late husband. Although I came here when I was an adult, I have developed an attachment to this place, hence this is what I call home. This place provides everything I want, and I feel good when I am here. Therefore, I cannot go far away from home, where I have fully embraced the culture which has become my identity. I just love this place" (Raima, Nsanje, June 2019).

This narrative concurs with Lin and Lockwood (2014), who stipulate that place identity is a socially constructed process that emanates from interactions with the surrounding environment over time. Therefore, some people could be emotionally attached to a place, although they were not born there, through continuous interaction with the physical resources coupled with social resources. Therefore, through interactions and associations with a place over time, people develop a sense of belonging which forms their identity (Hernández et al., 2007).

In this study, I also established that the resettlers' affection for their place was not affected by their social group or their vulnerability to yearly flooding. It was further established that,

although the government and its partners were employing resettlement as an adaptation measure, the majority of the resettlers considered their emotional ties to the lower land more important than the problems posed by the floods. Therefore, the resettlers established their own ways of dealing with them: this strategy was considered preferable to forgoing their place identity. For instance, Tichitenji of Nsanje indicated that she was willing to die in the flood plains rather than move upland, despite having two disabled children who needed support during evacuation. The 47-year-old mother of 7 explained:

“This is my home, and I can’t go anywhere even if this place is prone to flooding. I love being identified with this place; I feel special to be here. I get everything I need here and my connection with friends and my ancestors makes me complete. Although I have two disabled children who have mobility difficulties, we are happy to be ‘home’” (Tichitenji, Nsanje, June 2019).

Therefore, even if Tichitenji and her family were asked to resettle and made aware that the government had declared the lower land a disaster-prone area, she chose to preserve her identity, despite being more vulnerable than the rest of the community. This clearly shows the depth of the resettlers’ rootedness and its contribution to the formation of their identity. In tandem with these findings, Adams (2016) revealed that 40% of the resettlers resisted resettlement to preserve their self-identity, despite being vulnerable to disasters. Therefore, resettlement is not always perceived as an immediate solution by the flood plain dwellers, for whom it may constitute a threat to the uniqueness of their identity, cultural norms and values (Cummings et al., 2012). They always think about how the place they have been living satisfies their various personal desires before thinking about the consequences of living in the flood plains.

In the study population, I further found that some people were so strongly attached to the flood plains that they could not accept resettlement even a few kilometres from the lower land, although they had such easy access to the flood plains that they could continue utilising their physical resources. Therefore, empirical evidence suggests that strongly attached people have deep emotional associations with their homeland. For example, the resettlers in Nsanje (T/A Nyachikadza) said that even if the new settlement were close to their ancestors’

land, this still meant losing their identity as they would mix with another ethnic group upland. One of the resettlers declared,

“I love my place; I can’t forgo this place. Even if the government decide to resettle us near the boma, which is the nearest safe place that we go to for safety during flooding, I could not stay there permanently. I feel like a human being when I am here, not anywhere else” (Elufe, Nsanje, June 2019).

In addition to this narrative, one household in Chikwawa agreed to stay behind in their village although the rest of the community resettled almost 3 km away from the lower land. The discussion with the family revealed that their decision was based on the love they felt for the place, so they were happy to be the only family living in the lower land. Rhoda from Chikwawa declared,

“Even if the whole village has moved upland, we will continue staying here. We love this land, and we know that many people have just gone upland to benefit from the houses that the government is providing and with time they will come back. Although it is as if we were staying in the bush now, and sometimes we feel insecure, we are not going anywhere. I am sure we will get used to this environment in the long run” (Rhoda, Chikwawa, August 2019).

Therefore, due to strong attachment, some resettlers chose to take risks by continuing to occupy the flood plains despite being the only household there. Thus, the decision to resettle is based on emotions, personal commitment and love for one’s environment. Consequently, during the field visit in the lower land where this household remained whilst the rest of the community had resettled, I established that some neighbours started spending nights in the flood plains, to make sure that there was company for the family that was still living in the lower land. If more people decided to go back in the lower land to which they were emotionally attached, and which they regarded as unique, this could have an impact on the resettlement programme that was regarded as successful by the government. Thus, strongly

place-attached resettlers base their decisions on the positive aspects of a place, rather than the negative impact it could have if they continued occupying it (Wang and Xu, 2015). Therefore, the combined effect of the resettlers' desire to live in harmony with their ancestors, their community constructed identity and emotional ties greatly contributes to the impact on resettlement among the study population.

8.3 Ancestral Ties

As discussed in the literature review, Chapter 2, people's desire to continue living in a place that is congruent with their beliefs influences their attitude towards a change of location (Wang and Xu, 2015). In agreement with this scholarship, in this study I established that the resettlers' decisions about resettlement were influenced not only by the desire to maintain their personal identity (section 8.2) but also their belief in their ancestors. Therefore, this section will discuss about the resettlers attachment to their ancestors and how it influenced their decisions regarding resettlement. The belief in ancestral continuity involved ideas about living in proximity to the ancestors' graveyards which signifies being at home and source of ancestral blessings and protection by one's ancestors.

Using KII, participatory photograph and in-depth interviews, it was revealed that the desire to continue living in proximity to their ancestors' graveyard was key to the resettlers' cultural identity. During the discussion, using participatory photography, the resettlers took pictures of the most significant features which they considered when deciding where to stay. Out of the 40 participatory photography groups, 16 mentioned the significance of staying on the original land, due to the presence of their ancestors' graveyards, as seen in figure 22 below.



Figure 22: Picture of the graveyard taken during participatory photography, demonstrating the significance of the resettlers' ancestors in the lower land. (Source: PP # 12 in Nsanje, captured on 6 June 2019)

During the discussions, it was learnt that the resettlers believed that living in proximity to their ancestors' graveyard was an assurance of their protection and blessings, and made people feel at home. Therefore, since graveyards could not be carried along during resettlement, resettlers displayed various movement dynamics: some refused to resettle, as they could not bear to leave their ancestors behind. On the other hand, some agreed to resettle but did not feel at home as they believed that they had left their source of blessings in the lower land: this therefore made them either go back or maintain both places. During the in-depth interviews, one respondent indicated that he refused to resettle because he believed the new settlement was too far away, which meant that he could lose all the blessings from his ancestors. Bob of T/A Nyachikadza in Nsanje explained:

"Although this place is prone to flooding, I cannot resettle because my ancestors were born here, and they were buried here. They are the source of my blessings. I have good harvests after the flooding because the land is blessed by my ancestors, therefore, if I move somewhere else, I won't be harvesting as I do here" (Bob, Nsanje, June 2019).

This concurs with Laniel (2016), who argued that people's belief in the ancestors' supernatural powers was a strong basis of continuity identity, which proved difficult to break. Likewise, the resettlers in the Lower Shire River valley firmly believed that their blessings were influenced by their ancestors. This belief, therefore, has the potential to cause a major setback, if it is not brought into perspective during the execution of resettlement. It is so hard to abandon that it continued to be maintained by the resettlers even after resettlement. Therefore, some resettlers reported that they went back to the lower land as they felt that they were no longer blessed whilst upland. Other resettlers, like Mercy of T/A Malemia in Nsanje, believed that their ancestors were not happy of the resettlement programme, and they kept dreaming about their ancestors when they resettled; see box 2 below:

Box 2: Mercy's misfortune emanating from the ancestors due to resettlement.

Mercy is a 59-year-old widow who is staying with her three grandchildren in the lower land after returning from the new settlement. Mercy was affected by the 2015 flooding, so she moved to the evacuation camp. Fortunately, Mercy was one of the beneficiaries of the resettlement programme implemented by IOM in T/A Mpomba, in Nsanje. However, Mercy has not been happy, despite being given a house and assured that she was safer than when she was in the lower land. Mercy explained that, during her stay upland, she noted that her decision to resettle was not approved by her ancestors, hence she suffered misfortunes. In addition, Mercy's late father kept appearing in her dreams, she said; *"Since I came here, my late father has been appearing in my dreams, telling me that I have deserted him. One day he told me that he was not happy with my decision, hence I needed to go back; otherwise, my ancestors would abandon me."* Nevertheless, Mercy continued living upland, although she was contemplating going back. However, Mercy continued to experience different signs that her ancestors were not happy and, during the 2019 rainy season, her house in the resettlement area fell and she suffered a leg fracture. Mercy said, *"Because I have been ignoring my late father's dreams, life has been hard for me in the upland. The house I had upland fell on me and I broke my leg. This is a strong sign for me that my ancestors left me and if I had continued living there, I would have died. Therefore, I am happy that I have reconnected with my ancestors, and they are happy to see me back home"* Narrated Mercy of T/A Mpomba in Nsanje.

Therefore, choosing resettlement meant forgoing the ancestral blessings that were made available to those living in the community where they were buried. In resettlement scholarship, this phenomenon has been described as one of the invisible losses incurred during resettlement that are often considered unimportant. As discussed in Chapter 2, Witter and Satterfield (2014) in their assessment of the invisible losses of resettlement concluded that resettlement disconnects the resettlers from their ancestors, which leads to loss of place continuity, identity and belonging. This therefore means that people with strong attachments to their place and their ancestors were convinced that they were losing their connectedness and identity if they resettled.

On the other hand, other resettlers believed that their ancestors would follow them anywhere, so felt that there was no need to be in proximity to their graveyard. This divergence in beliefs could be attributed to the level of one's attachment to a place. Therefore, those with weak attachments would accept resettlement, knowing that their ancestors would be with them, irrespective of their location at any particular time. Therefore, this attitude that their ancestors will continue blessing them wherever they are, is stated below:

"There are graves everywhere, therefore I can settle anywhere. My ancestors can trace me wherever I am to bless me, so I do not need to be where they were buried. I have not experienced anything indicating that my ancestors are angry with me since I resettled" (Moyenda, Nsanje, June 2019).

On the other hand, Laniel (2016) argued that, although this belief in supernatural blessings from the dead might be held by few people in a community, this minority could persuade the whole community to adopt this belief. Therefore, in the long run, it affects the identity of the whole community. This has been particularly important if the belief emanates from very influential people in the community, like traditional leaders and other elite members of their society. In accordance with this argument, I found, during this study, that the traditional leaders had strong place attachment, based on their beliefs about the blessings they received from their ancestors if they lived in the village where they were buried. For instance, one traditional leader in Chikwawa agreed to resettle and allowed his entire village to move upland, but he deserted his house in the new settlement. It was argued that he was afraid of

the consequences from his ancestors that were left behind in the lower land, as one key informant explained:

“Our local leader did not come with us here. He was among the first people to be allocated a house when we decided to resettle here, but he does not stay here because he is afraid of making the ancestors angry. Therefore, if the ancestors are angry, the whole village will be cursed, so he only comes here when there is something that needs his attention” (Com KII 27, Chikwawa, July 2019).

Therefore, this belief of the traditional leaders had a great impact on the resettlers, who also firmly believed that their ancestors would forsake them because they had resettled upland. Unlike the resettles in Nsanje, the resettlers in Chikwawa had the privilege of resettling only a few kilometres from their previous village, so that it was possible to maintain the graveyard in the lower land. However, this was possible only during the dry season, because going back to the lower land during the rainy season would be difficult, as they had to cross a river to access the graveyard. However, opening a new graveyard in the new settlement was deemed taboo such that even their traditional leaders were not ready to do that. The community in Mwalija village believed that opening new graveyards would lead to many mysterious deaths in the community because the ancestors would be angry. It was believed that even the traditional leader directing the opening of the new graveyard would be the first one to die, because he had provoked the spirits, so no one was ready to risk his life. However, this clearly indicated the resettlers zeal to preserve their belief about their ancestors. Therefore, resettling meant losing the powers derived from their ancestors, and the supernatural benefits of their protection and blessings (Witter and Satterfield, 2014).

Furthermore, some people preferred living in proximity to their ancestral’ land. At least 25% of the respondents indicated that they felt at home when living in the same community where their ancestors had lived. The resettlers indicated that they felt a sense of belongingness in the original land, as opposed to the upland, where they felt separated from their ancestors. Therefore, the resettlers’ loss of their ancestors’ land had an impact on the resettlement programme. Some resettlers indicated that they were happy to resettle, but they preferred to be resettled close to their original village, so that they could maintain their ancestors’ land.

This way, the resettlers would feel at home since they would be connected with their ancestors. The resettlers felt that resettling far from their original land took away their 'sense of being home', hence losing their place continuity congruent identity. Some resettlers, who lost loved ones whilst in the lower land, felt connected to the dead by virtue of living in the same community. This affected the resettlers so strongly that some felt the need to go back, especially in Nsanje, where they were resettled very far from their original place. A resettler in Chikwawa said that he had agreed to resettle because he felt that he was still connected to his children, who were buried in the lower land, since they resettled only a few kilometres away. However, he indicated that if the resettlement site had been very far from their original home, he would have resisted resettlement. Chalira explained,

"I am happy that they made us resettle here where I have easy access to the lower land; otherwise, I would not have agreed. This is the place I call home where I feel connected because I have buried my 9 children in the lower land. Therefore, I cannot go anywhere far away, leaving them behind. I will be buried at home where all my children and ancestors are" (Chalira, Chikwawa, August 2019).

Nabanda, a mother of 3 from Nsanje, added,

"I don't mind leaving everything and resettling, but what about the graveyard? I call this home because I know my place to be buried when I die is here. I cannot be buried anywhere apart from my home. Therefore, resettlement cannot give me a 'home'. I feel complete when I am here" (Nabanda, Nsanje, September 2019).

Therefore, the resettlers' idea of being at home was equated not only with the burial place of their ancestors, but also with their own burial place, which preferably should be 'home'. Therefore, the idea of being at home was interpreted not only as having land ownership that was passed on by their ancestors, as stipulated in Chapter 5 on place dependency, but also, thinking ahead about their burial site, as they would not want to be separated from their ancestors. Therefore, this perception affected the acceptability of resettlement. Elucidating this argument, one resettler, Bertha of Nsanje, reported that she had never been away from

her village because she did not want to lose her identity and be disconnected from her ancestors. Bertha explained,

“I have never been out of this village. Even when I was a girl, I could not accept suitors who wanted to take me out of this village. As a result, my husband followed me here and he died whilst we were staying in this village. Therefore, I cannot leave everything now in the name of resettlement” (Bertha, Nsanje, July 2019).

Therefore, this narrative shows how some resettlers were so strongly rooted to their home that their idea of being at home could not be threatened by the severe flooding that they were experiencing. On the other hand, the government and resettlement implementers, despite knowing that the resettlers’ rootedness in the flood plains was perpetuated by the idea of being at home due to the presence of the resettlers’ graveyards, did nothing to address this. One government official stated that the resettlers’ continual narratives about their graveyards were just intended to ensure that they received an unending supply of handouts. From the government’s perspective, the resettlers’ claims about the benefits they received from their ancestors were not important. Therefore, nothing was proposed by the implementers on how to deal with the resettlers’ beliefs. It was further discovered that the only solution was to leave those whose beliefs were most deeply rooted to continue living in the flood plains until severe flooding forced them to resettle. One key informant stated:

“Although we have successfully resettled people, others are refusing because of their ancestors’ graveyards. This is baseless: they just want to continue receiving relief items. As the government, we cannot force them to resettle, so they will soon resettle when they have been hit hard by the floods soon” (Gov KII #3, Lilongwe, July 2019).

Further investigation of the views of both the implementers and the government officials revealed that there was no plan to incorporate this belief in the resettlement process, as the resettlers’ concerns about their dependency on their ancestors for blessings, protection and being at home were considered to be unsubstantiated. Therefore, the government was not prepared to address the resettlers’ place continuity identity concerns, despite knowing that this had an impact on the outcome of the resettlement programme in the district. The model

employed by the government predicted that when the resettlers were severely affected by flooding, they would forgo their belief and identity. However, some people's place identity was so strong such that they could sacrifice their own lives to maintain their identity (Yuval-Davis, 2006). Therefore, overlooking this in processes that result in the permanent change of people's attachment to their place may lead to prolonged and failed resettlement initiatives (Graybill, 2013). As presented in this study, the resettlers displayed such strong place attachment attributes in relation to their place identity that living in their ancestors' vicinity was key in making decisions on where to settle. In addition to the significance of graveyards, the resettlers' zeal to remain in their original land was based on their need to maintain their community norms that they considered as part of their identity. Therefore, the next section discusses about these community constructed narratives influencing the resettlers place identity.

8.4 Community Identity

During this study, the resettlers showed some resistance to resettlement, due to the fear of losing their community identity, based on commonly accepted practices in the flood plains. These practices include the isolation of a woman who has just given birth, the ceremony performed by parents whose daughter is pregnant before marriage, the ceremony performed after a girl's first period, and their beliefs on health and hygiene. Therefore, this section will discuss these community practices and how they influence their identity.

The desire to maintain these community-based practices was prominent in Nsanje, where the resettlers were resettled very far from their original home and scattered among the host community; the case was different in Chikwawa, where the whole community was resettled. This meant that the resettlers in Chikwawa maintained continuity of their practices and beliefs, despite resettlement, whereas the resettlers in Nsanje needed to amalgamate with the host community. However, the resettlers in Chikwawa confessed that their community identity was of supreme importance: consequently, if the resettlement had taken place in a different community, some would have refused to go. Charles, a 72-year-old widower, declared:

“I am happy to resettle because flooding is becoming severe nowadays. However, if they had asked me to go somewhere far away, and especially outside Chikwawa, I would not have agreed. I am a Mang'anja, so my values, culture and practices cannot be respected anywhere else. I am not ready to learn new practices either” (Charles, Chikwawa, August 2019).

The desire to maintain the resettlers' group identity was expressed in these narratives; if it were not addressed, it could affect their decisions on resettlement. Therefore, one's identity is enriched by experiences developed by being in a place, and these experiences form self or group identities (Counted and Watts, 2017). Subsequently, these experiences in a place develop into bonds between people who perceive their local practices as the best: these affect resettlement decision processes if the resettlement is not only performed in a remote location but also requires integration with another community.

Resettlers in Nsanje described the significance of one of their cherished practices within their community called '*kupita mbdzade*'. *Kupita mbdzade* was described as a practice that forbids a mother who has just given birth to share a bathroom with other people within the household. This means that the new mother is given her own bathroom for a period of 6 months and if this rule is not obeyed it is believed that the child will die. This practice was a concern for many resettlers in Nsanje, who indicated that it would be impossible upland, partly because limitations of space prevented the provision of a spare bathroom, but also because it could not be integrated in a new environment. During the discussions using participatory photography, the resettlers took a picture of a bathroom that signified its importance in their community, as seen below.



Figure 23: A bathroom used for mbdzade only (a woman who has just given birth) for six months to avoid bringing bad luck to the rest of the household, which would happen if they shared the same bathroom. (Picture by PP# 37, Nsanje, August 2019).

Similarly, the resettlers pointed out the same practice during in-depth interviews:

“I have grown up in this area and I am very conversant with our values and cultural practices here. I am proud to be called nyantchuwa and I value our norms which differentiate us, the ‘Nyantchuwa,’ from the people upland. We have our unique practice called ‘mbdzade’ which is very important to us. If this is not followed, it leads to the mysterious death of the child. So, do the people living upland practise mbdzade?” asked Melifa, a mother of 5. Melifa continued, “We are able to practise this here because we have enough land where we can make a temporary bathroom for mbdzade, which would not be possible upland because there the space is limited, so a lot of families are restricted to one bathroom. We cannot let our community practices die because the government is forcing us to leave our ancestors’ land” (Melifa, Nsanje, June 2019).

Therefore, these narratives show that the resettlers were able to analyse the resettlement process, in order to find out if their values and practices would be accepted and respected in their resettlement area. Since the resettlement took place in a rural town centre, some of

these practices would be impossible due to limitations on the place allotted to each individual. Furthermore, mixing with people from different areas raised additional problems: the practice of *mbdzade*, for example, would vanish if it were not practised by the host community, as implied by Melifa's narrative above. Guest (2000) argues that people are more comfortable when maintaining their interactions with people of the same belief, and this homogeneity is available within a local area where people have lived for a long time. Therefore, understanding the key practices constituting the resettlers' identity could be ideal for any resettlement programme designed to allow the resettlers to maintain their cultural identity in the new settlement.

In addition to this practice, the resettlers were sceptical to resettle upland because of the conviction that it could lead to extinction of the practice locally known as '*kupita mphepo*'. *Kupita mphepo* is a special ceremony practised by the parents of a girl who has fallen pregnant before marriage. It is believed in this community that if this was not done, the girl's parents would die. The resettlers gave the following explanation:

Box 3: Discussion with PP # 6 in T/A Nyachikadza in Nsanje, July 2019

Q. Can you explain the meaning of these pictures?

A. We took this picture of girls signifying our culture, whereby girls are taught good behaviour, including one of the practices called 'kupita mphepo'. Girls are taught that they must be careful to avoid teen and unexpected pregnancies because they will kill their parents.

Q. How is this possible?

A. If a girl is pregnant, she needs to notify her parents as soon as possible so that they can perform a ceremony called 'kupita mphepo', which prevents them from dying.

Q. Do they practise this ceremony upland?

A. No.

Q. Can you forgo this practice?

A. No. Even if our land is hit hard by floods, we will still be here.

The discussion with this group revealed that the resettlers were rooted in their community practices, which were part of their identity. Although the resettlers ranked their community practices as the last thing they would think about in their resettlement decision making, this

ceremony was significant, as it appeared from the discussion above that they were not ready to forgo it, due to severe flooding. Therefore, the resettlers determination to maintain their identity was reinforced by the conviction that resettlement could lead to the death of many people in their community.

Furthermore, the resettlers pointed out that the people living upland did not perform any ceremony when a girl had her first menstruation. In the lower land, it was revealed that there was a practice which mandated girls to notify their parents about their first period. This practice allowed the parents to perform a ceremony that aimed at keeping both the child and the parents safe. Therefore, the resettlers believed that if all these were forgone, it would lead to the mysterious deaths of elders in the community. Therefore, parents were sceptical about relocation because their children would eventually lose their community constructed identity and emulate the lifestyle of their fellow youth upland. These research findings concur with the findings of Mijoni and Izadkhah (2009), who argued that people in this region did not see resettlement as a viable option, as it did not offer an environment conducive to cultural practices and identity continuity. Consequently, although some people agreed to resettle, in the end they either returned to the lower land or chose to operate in both places.

Lastly, the resettlers' health and hygiene practices differed from those of the host community. The resettlers reported that people living in the lower land did not believe in using the pit latrines, which was a common practice in the host community. During the participatory photography discussions, the resettlers revealed that, in their community, they were not used to using pit latrines like the host community. It was learnt that the resettlers relied on either the bush or the water when they wanted to relieve themselves. Therefore, using a toilet where people could spot you going in and out, was considered as a taboo by the resettlers. However, by virtue of being resettled, they had to emulate the practices of the host community, which some found so hard that they ended up going back to the lower land. A 25-year-old lady, Josephine, recounted how she persevered, despite being initially shamed by the host community because of their cultural differences:

“When we first came here it was difficult to understand the way of life of the host community. In the lower land, there was no toilet, so we were either using the bush or the water. However,

coming here we noted that our colleagues were using the pit latrines. Although different organisations had built toilets for us in the new settlement, we were not using them because that was not the culture we were coming from. Consequently, the host community were saying that we were messing up their community. However, I did not let this make me to go back in the lower land; I learned their way of life and managed to continue living here. However, most of the people who could not bear the shame went back in the lower land” (Josephine, Nsanje, June 2019).

According to the above narrative, the resettlers’ ways of living were deemed shameful by the host community, which resulted in some people going back to the lower land, since they could not accept to embrace the culture of the host community. Therefore, safeguarding the resettlers’ identity relied on the continued occupancy of their preferred physical space. However, some people became emotionally connected with a new place, especially if they had encountered practices and beliefs which were the same as those that had formed part of their identity (Anton and Lawrence, 2014). This implies that the resettlers had not been given advance preparation for what to expect, including life in the new settlement, before resettlement. However, people’s identity is based on their experience of their home environment, and evolves over time, it becomes hard to change, even after resettlement. Therefore, the resettlers strove to maintain their place continuity, distinctiveness, and belongingness.

However, apart from basing resettlement decisions on their zeal to continue with their community practices and feeling at home, some resettles indicated that living in the lower land made people feel so good, respected and secure that they did not want to leave their ancestors’ land. Therefore, the next section will discuss place related narratives that reveal the important contribution to people’s identity made by emotions arising from being in a particular place.

8.5 Personal Identity

As discussed in Chapter 2, section 2.4.3, people distinguish themselves from others by their experience of a specific place, and this influences their identity (Jarratt et al., 2019). Therefore, association with a particular place influences one’s choice of a place of residence,

so people with strong place identity, based on the belief that their place is unique and distinct from the alternative, find it hard to resettle. In this section I will argue that the resettlers' choice of a place was directly influenced by an attachment so strong that they felt their personal identity was enhanced by associating themselves with the flood plains.

Using both quantitative and qualitative data, I have found that the resettlers distinguished themselves by association with the lifestyle and values of their original home in the flood plains than those of the upland. Binary questions requiring 'Yes or No' answers were asked regarding place based personal identity statements such as 1) which place they identified themselves with most strongly and 2) which place was unique and enhanced their values and lifestyle, as outlined in table 3 below. 73% of the resettlers indicated that they identified themselves with the lower land rather than the resettlement area. Similarly, 81% indicated that they were emotionally attached to the lower land because the place had a meaning and preserved their values and lifestyle, enhancing their sense of identity. This therefore meant that the resettlers had a stronger attachment to the lower land than the resettlement area, because the lower land was significant to their personal identity.

Table 3: Percentage of resettlers indicating their personal identity perspectives regarding the lower land after resettlement.

Place Self-identity Statement	Flood plains	
	NO (%)	YES (%)
I identify myself as <i>nyantchuwa</i>	27	73
I am identified with the lifestyle and values of the lower land	19	81
The lower land means a lot to me	28	72

During the research period, I observed that the flood plain dwellers were happy to be identified as "*Nyantchuwa*", which distinguished them from the rest of the people in the region. Even the resettlers who agreed to resettle were proud to be known as *Nyantchuwa*, although they were living upland. Similarly, the host community continued addressing the resettlers by their previous identity as "*Nyantchuwa*", and the resettlers indicated that they were happy with that. Felix, a resettler in Nsanje, said:

“Although I have been here for 4 years, the people around here identify me by my lower land identity ‘Nyantchuwa’. I am proud to be called this name, as it distinguishes me from the rest. Their way of life here is different from what I am used to in the lower land, so I am happy to maintain my identity”, (Felix, Nsanje, June 2019).

Therefore, although some people agreed to resettle, they maintained their previous identity. On the other hand, many people who refused to resettle pointed out that one of the reasons why they wanted to continue living in the flood plains was to maintain their identity. Therefore, the resettlers were using this identity to describe themselves whenever they were among other people. This was mainly influenced by length of residence in the flood plains, which meant that this was the only place where they had lived, and they associated themselves with. This is in tandem with the findings of Gustafson (2001) who reports that length of residence influences people’s memory and experience throughout their life stages. Therefore, these place uniqueness attributes in relation to length of residence were evident in the people who refused to resettle. For instance, a 38-year-old mother of 7 said that she has been living in the lower land since she was born, hence living with floods was described as part of her identity. Tolinya declared:

“I am Nyatchuwa, and people call us nomads because we spend some of our time upland when our community has been struck by floods. This is who we are, and we will always be. This has been practised by our ancestors, so it is part of us. This is what makes me who I am, and I am proud of it since this has been my lifestyle since I was born” (Tolinya, Nsanje, June 2019).

In addition to these sentiments, 67-year-old Matampa of Nyachikadza in Nsanje also indicated that he could not go far from his original place because this meant taking away his identity. Matampa explained:

“I need to be in proximity to my home because that’s what forms my identity. I was born and raised in the flood plains; therefore, I am used to living close to the river which will be different

when I go upland. People even identify us by where we live, and this cannot be changed. Floods are part of our identity” (Matampa, Nsanje, June 2019).

The resettlers’ length of residence in the lower land and their experience with flooding has influenced their identity and understanding of a place. On the other hand, the resettlers’ personal identity was enhanced by the history of their ancestors who lived and died in the lower land. Therefore, the resettlers mentioned that their ancestors lived in the flood plains, which influenced their decision to remain there. The flood plains therefore formed part of the resettlers’ identity and were closely involved with their lineage. Consequently, the resettlers perceived that leaving this land would destroy their legacy of staying and enjoying the water related environment. Therefore, they embraced the place’s characteristics by employing adaptation measures for living with floods, as stated in Chapter 4: this, in the long run, was their means of preserving their personal identity.

On the other hand, although the majority of the resettlers indicated that their personal identity was enhanced by proximity to the Shire River, resettling people on the upper and safer side of the Shire River did not satisfy the resettlers’ personal identity needs. This was evident in GVH Mpomba in Nsanje and Mwalija village in Chikwawa, where resettlement took place on the upper side of the Shire River. However, it was noted that some resettlers failed to form attachments with the upland, despite being resettled close to the river that they claimed to be part of their identity. For instance, Michael from GVH Mpomba in Nsanje explained his decision to return to the flood plains because he failed to establish an identity with the new settlement, despite having access to the Shire River:

“I am used to staying close to the river and this is part of me. However, I failed to form an attachment with the upland although Shire River was within walking distance of the place where I resettled. Although this was the case, I was not feeling at home. I did not feel the same compared to when I was living in the lower land, so I feel attached to this part of the Shire River where I have spent most of my life. It did not feel the same even though I had access to the same river as here. The life there was idle there but when I am here, I am always busy. This is who I am: not the idle life I was having upland” (Michael, Nsanje, June 2019).

Therefore, place based personal identity is place specific: consequently, arriving in an alternative place with the same characteristics does not guarantee a decision to resettle permanently. Therefore, despite remaining close to the Shire River, the resettlers did not feel that the river's proximity reinforced their identity: their main focus was on the different lifestyles in the two places. The resettlers' argument concurred with the findings of Ginting et al. (2017) that personal identity is negatively correlated with changes in place of residence, as people have a positive evaluation of the place that enhances their identity.

I also found out that the resettler's sense of self was imbedded in their assets. The resettlers indicated that possession of assets like land, livestock, a house and being food secure, gave people an identity within their community. Therefore, loss of these assets, which was an effect of resettlement frequently reported by the resettlers, was regarded as loss of identity. This led resettlers to choose the place where they were respected due to the ownership of assets. So, their preferred home was not just where they felt safe but also where their personal identity would be recognised. Neliya resettled in Nsanje, but she felt that resettlement made her lose her identity since she lost her valuable asset after resettlement. She said:

"Although I am known as 'nyantchuwa' here in the upland, this is just a name because I am like any other person here. Every nyatchuwa has land, which is their personal asset, and they cherish it. I have my ancestors' land in the lower land, and this gives me an identity, but here I am "nyamphena" (nobody) because I don't have any land here" (Neliya, Nsanje, July 2019).

In agreement with this, another household in Chikwawa said that they lost their personal belonging, which made them move from the class defined by the community as wealthy into the poor category. This feeling made some resettlers in Chikwawa consider going back to the original place, although they had resettled less than a year before. Bophani declared:

"I had a nice house including livestock before the floods, however, as of now, I don't have anything. In the lower land, I was respected because of these assets that I had, but here I am not respected as I do not have any livestock. Besides, I had a big house but because I do not have a choice now, my family is living in this polythene made house that I was given by the

government. Resettlement has indeed humbled me; it has taken away my identity. I do not feel like a human being anymore. Given a chance I would go back in the lower land because that is where I feel like a human being because of the respect that defined who I was then" (Bophani, Chikwawa, August 2019).

Therefore, the resettlers believed that the lower land was a better place than the upland, despite being prone to yearly flooding, because it provided resources that enabled people to distinguish themselves from others in terms of the assets they possessed. These assets were regarded by the resettlers as the source of their personal identity, according to the social categorisation in their community. Therefore, apart from the physical qualities and functionality of the place, its contribution to the resettlers' social identity had a bearing on the resettlement decision making process. However, according to Wang and Xu (2015), one of the attributes of strongly attached people is the desire to nurture their personal identity by maintaining and developing continuity with the place where this identity evolved.

8.6 Chapter Summary

This section presents the key findings of this chapter, which has demonstrated the influence of place identity on environmentally induced resettlement. Using the four thematic areas of emotional ties, ancestral ties, community identity and personal identity I can conclude that place identity plays an influential role in resettlement decision processes. This means that the resettlers' perception of resettlement is directly influenced by their analysis of the impact of resettlement on their place identity. Therefore, the resettlers with strong place identity negatively perceived resettlement, so they were likely to resist it. On the other hand, resettlers with weak place identity could easily be influenced to resettle, although in the long run, motivated by their own decisions or the influence of strongly attached people, some would return or chose to be operating in two places. In addition, I have also concluded that the resettlers' decisions to resettle are not based on unrelated place attachment factors, but on the combined impact of place uniqueness, culture and emotional ties. Therefore, place related narratives should be intensively analysed if resettlement is to achieve its intended purpose, as place identity is a complex factor, combining personal and social aspects of the self (Devine-Wright, 2013).

Using both quantitative and qualitative data, it was evident that the resettlers distinguished themselves with reference to the lifestyles and values of their original place, which they believed to be unique. Therefore, over 70% of the resettlers said that they associated themselves with the values and lifestyles of the flood plains, from which they formed their identity. Similarly, at least 81% of the resettlers indicated that they were emotionally attached to the lower land because of its significance in preserving their personal identity. This meant that the resettlers had a stronger attachment to the lower land than the resettlement area. Therefore, although the upland could be characterised as better off, due to the availability of resources including electricity, good housing and access to roads, the resettlers were not emotionally connected to this place. This had a huge impact on their resettlement decision process. For instance, although some agreed to resettle, they indicated that they would maintain their identity and they were happy to be recognised as '*nyantchuwa*'. The place uniqueness identity attributes were influenced by length of residence in the lower land and experiences accumulated during their stay.

One of the issues that played an important part in the formation of the resettlers' identity was the fact that they were used to staying in proximity to the Shire River. However, although the resettlers were aware of the consequences of living close to the river, alternating between upland and lower land was recognised as part of their identity. It can therefore be deduced that the resettlers perceived living with flood strategies as part of their identity, contrary to the government's perspective of flooding in the area. Furthermore, this chapter revealed that personal identity statements were common for all the resettlers irrespective of age, gender and role in the community. However, the influence of the elderly and the elite on the resettlers' resettlement decision processes could not be underestimated, even though many other community members showed strong place uniqueness identity.

Regarding ancestral ties, the resettlers had a strong conviction that their ancestors were a source of blessings and protection. Secondly, the resettlers' beliefs and way of living were some of the major issues that were considered influential in shaping the resettlers' identity. Therefore, the resettlers' desire to continue living in the lower land was justified as a means of maintaining their everyday life, and also accessing blessings and protection from their ancestors. Although a significant number of the resettlers believed that they could be blessed

and protected regardless of where they were, the majority believed that resettling upland would bring bad luck. Therefore, this meant that the resettlers' needs to continue living in the community where their ancestors were buried was significant in the study population. The overall finding suggests that resettlers want to maintain their ancestors' land thus leading to resistance to resettlement, returning to the lower land after resettlement, or operating in two places. Although belief in supernatural powers is very hard to destroy, exclusive consultation with the resettlers on possible ways of preserving the lower land as a cultural heritage site after resettlement could be explored.

Furthermore, from the in-depth interviews and participatory photography, it was learned that community practises were considered to be very significant in shaping the people's identity. Therefore, the resettlers' view is that resettlement would lead to the extinction of community practices like '*kupita mphepo*' and '*kupita mbdzade*' that were not popular upland. Equally important to the resettlers was the continuity with their everyday life, especially their health and hygiene practices that were defined as part of their identity. The resettlers' reliance on the river and the bush as their toilet proved hard to forgo, as using pit latrines was a norm upland. Therefore, the resettlers' culture, which informed the uniqueness of the place, could be described as complex, but it was worth making the effort to learn about it more thoroughly, in order to understand the resettlers' priorities.

Finally, in terms of the place based emotional ties in relation to resettlement, the resettlers showed much stronger emotional attachment to the lower land than the upland. Subsequently, the resettlers were so determined to live in the lower land that at least 33% indicated that they could not afford to resettle even if the lower land were hit by devastating floods. Conversely, the government officials believed that those resettlers refusing resettlement or returning after resettlement would soon be forced by impending floods to settle in the upland. This therefore revealed a great mismatch between the resettlers' and the government's perspective on motivating factors for resettlement. The findings of this chapter have also revealed that the decision to resettle is based on emotions, personal commitment and love for one's environment. Therefore, the narrative expressing place based emotional ties, which use mainly positive constructs in their evaluations of the lower land, have a negative impact on resettlement. In other words, the resettlers with strong place-

based emotional ties would always base their decisions about living in the lower land on the positive appeal of the place rather than the negative impacts of flooding.

The findings of this chapter also confirm the scholarship arguing that place identity is a socially constructed process emanating from the interactions with the immediate environment which form one's identity. However, this identity is established not only by length of residency, depending on one's stages of development in life, but also on the resettlers' preferences for the ideal place satisfying all requirements for the identification of self. This was mainly evident in situations where the resettlers migrated to the lower land for various reasons, including marriage. A typical example was a situation where a lady migrated to the lower land for marriage but, despite losing her husband, vowed never to relocate upland because she preferred her new home. Therefore, it can be concluded that place-based emotional ties have such a negative impact on resettlement that, if they are not properly analysed at the inception of any resettlement programme, most resettlers will be defaulters. Therefore, the combined impact of the resettlers' desires to live in harmony with a place that promotes emotional ties, attachment to the ancestors, self-identity, and together with place attachment in general, contributed to the impact on resettlement in the study population.

CHAPTER NINE

CONCLUSION

9.1 Introduction

The main aim of this study was to assess the role that place attachment plays in environmentally induced resettlement and establish the associated challenges that lead to the resettlers' observed movement dynamics. Therefore, this chapter highlights the study's key findings, relating them directly to the study objectives, and thus answering the research questions arising from this investigation. It starts by presenting the key findings relating to flooding discourses in Malawi that fulfil the first objective of this study. Thereafter, the key findings in relation to resettlement discourses in Malawi will be discussed, which respond to the study's second objective. Finally, the key findings on place attachment, focusing on the three place constructs of place dependency, place identity and social bonding, will be discussed. Furthermore, this chapter highlights the empirical, theoretical and methodological contributions of this research to the already existing flooding, resettlement and place attachment scholarship. This chapter also surveys the study's practical implications, highlighting key factors that could be considered in order to effectively implement sustainable resettlement programmes. This chapter concludes by presenting the study's limitations as well as suggesting areas for further research on this subject matter.

9.2 Key Findings

9.2.1 Objective 1: To Analyse the Trend and Impact of Flooding in the Lower Shire River valley in Malawi

Using both qualitative and quantitative data, the study findings presented in Chapter 4 revealed that floods have been increasing in severity and intensity in the past 10 years. Using the study participants' knowledge and experience of the local climate revealed that, although flooding has been observed as long ago as the 1960's, its severity and frequency have been increasing since the early 2000s. This observed trend has been widely reported across sub-Saharan Africa, and is attributed to climate change, which has been exacerbated by population growth, deforestation and sea level rise (Serdeczny et al., 2016, Douglas, 2017, IPCC, 2014). The people's vulnerability to flooding in this area is mainly influenced by its

geographical position, which leaves the communities vulnerable to flash floods and groundwater flooding, as well as river flooding. Therefore, these combined factors continue leaving the flood plain dwellers in Nsanje and Chikwawa at a greater risk than inhabitants of other regions in Malawi.

Additionally, this study established that, even before resettlement, the resettlers were aware that the lower land was very prone to flooding, hence confirming the government and stakeholders' perception of the area's vulnerability. However, the resettlers attributed the lower land's vulnerability to flooding to the deforestation caused by charcoal burning and settlement activities taking place in the Shire Highlands. Therefore, from this perspective, it could be deduced that the perception that the flood plain dwellers' vulnerability was entirely due to poor environmental management activities, like deforestation, taking place upland, makes the flood plain dwellers to refrain from taking the responsibility of the environmental changes taking place in their area. On the other hand, from the evidence of the flood plain dwellers' experience of flooding, it was predicted that the combined effect of deforestation and climate change would pose a challenge of severe flooding in the future in their region. Furthermore, the findings of this study revealed that the resettlers were aware of the increased flooding trends and their potential impact. This emerged from their narratives about changes in the floods' severity and onset: in the past, the resettlers had been able to monitor the flood levels before evacuating. However, between 2015 and 2019, the resettlers revealed that the floods were so rapid that many people lost their lives and assets (Chapter 4, section 4.2).

In terms of the floods' direct impacts, the study has revealed that the flooding has been affecting people's socioeconomic status, and consequently the region's poverty levels. The continued loss of life and household property, including housing, household assets, crops and household food reserves, is an indisputable fact, widely reported by the resettlers. The aftermath of the floods was evident in the resettlers' ways of life, even though they received various forms of humanitarian support from several NGOs. However, the resettlers' economic reconstruction after flooding was limited, which contributed to their reliance on humanitarian support throughout the year. It should be noted, however, that the resettlers' resilience to flooding differed in Chikwawa and Nsanje; this was due to the types of asset owned by the

resettlers. During the study period, the majority of the resettlers in Chikwawa reported to have owned livestock like cattle, goats and chickens although they were greatly affected by the 2019 floods. However, this was not the case in Nsanje, as only few resettlers reported that they had ever owned chicken and goats before being resettled.

One significant finding of this study is that there were differences in the socioeconomic status between the resettlers in Nsanje and Chikwawa. Although both populations were prone to flooding, the people of Chikwawa had assets like livestock, so they were better off than those of Nsanje. As discussed in Chapter 2 section 2.2, livestock ownership is regarded as a measurement of wealth, assessed according to the number of animals possessed per household; consequently, livestock ownership gives farmers great resilience to shocks like flooding. Therefore, this entails that the resettlers in Nsanje were highly vulnerable to flooding: as a result, they were unable to reconstruct their livelihood after flooding, unlike their counterparts from Chikwawa. However, the resettlers' lack of important assets like livestock could be attributed to their nomadic lifestyle, as they move back and forth between the flood plains and the upland, during and after flooding, as discussed in Chapter 5, section 5.4. Secondly, this could also be attributed to varying levels of exposure to different ways of life: the people of Nsanje were more reserved and depended much more on their cultural norms than that of Chikwawa; see Chapter 8, section 8.3.3.

The findings of this study also revealed that the direct impacts of flooding have been given more attention by the resettlers themselves, the government and its stakeholders. However, the resettlers suffered some indirect impacts of flooding, to which they were not paying much attention. According to a study that was carried out in Italy, it was revealed that road network disruption, household displacement and business disruption were some of the reported indirect impacts of flooding (Armaroli et al., 2019). Nevertheless, the authors found that the disruption of households was not a major issue compared to the others (ibid). On the other hand, the findings of this study contradict these conclusions, as it has been revealed that household disruption had a great impact on the resettlers in Nsanje and Chikwawa. The resettlers revealed that flooding caused a huge disruption to their households, when households were separated at the camp after flooding as they waited to go back to the flood plains and when one family member had been targeted for resettlement (Chapter 5). These

findings appeared vividly in cases where parents chose to leave their children with a relative upland or on their own in a rented house to be safe and have access to schools. This practice appeared with significant frequency in the study population, although it was restricted to families with strong social networks in the upland.

Another critical finding of this study was the psychological impact of flooding on the resettlers which appeared in the narrations recounting both the trauma experienced due to the loss of loved ones and the memories encountered during evacuation. These findings concur with a study that targeted people who had experienced flooding, in order to assess its psychological impact. This study looked at anxiety, depression and post-traumatic stress disorder: it revealed that depression was high among people who had experienced more than one flooding event (French et al., 2019). However, although my study's findings indicated that the resettlers were affected psychologically, this was more prominent among those people who had suffered severely during the previous floods rather than those who employed evacuation measures at the floods' onset. However, no deliberate effort was put in place to provide psychosocial support to the resettlers.

In order to mitigate these impacts of flooding, as stipulated above, the community employed their own local adaptation and mitigation measures. The resettlers revealed that they relied on drumming, radio, water level monitoring and word of mouth as early warning systems. However, this study revealed that the resettlers' decision to evacuate relied on their own personal judgement as the instructions concerning the impending disaster issued through the radio were not followed. The attitude of the resettlers in Chikwawa and Nsanje was not atypical: Tewari et al. (2015) also found that the resettlers depended on their indigenous knowledge to make judgements on the impact of the looming floods. This attitude was attributed to socially constructed insightfulness, which included the community's social networks as well as the positive evaluation of the place (Tewari et al., 2015). This being the case, in Nsanje and Chikwawa, evacuation was a last resort when all other means of trying to live with the floods had failed. Therefore, this contributed to the loss of life and property during the 2015 flooding, when the community was still monitoring the water levels when they experienced rapid and disastrous flooding.

As demonstrated in Chapter 4, the results revealed that the resettlers preferred living with flood adaptation measures that allowed them to continue occupying the flood plains, despite their vulnerability to flooding. However, empirical evidence showed that locally employed measures are often reactive, non-sustainable and developed in an *ad-hoc* manner, and are consequently not effective (Dedekorkut-Howes et al., 2020). In support of this observation, the evidence presented in Chapter 4 (section 4.5) demonstrated that the resettlers explored different ways of adapting to the floods, but they were unsuccessful. For instance, the resettlers relied on the raised structures locally known as '*tchete*', the use of mud-built houses that would easily allow water to penetrate during flooding, riverbank restoration and building water blockage structures along the riverbanks. However, these were found to be insufficient to protect the resettlers from flooding, especially given the severity of the recent floods. Evidence presented in Chapter 4 suggested that these uncoordinated efforts failed to protect the communities because the factors that made the area vulnerable to flooding were beyond the community's control.

Assenting to the fact that some of the community-led adaptation measures were not effective, the community believed that building a dyke along the Shire River was the only solution to their vulnerability to flooding. The community was aware of the cost implications if this structure were to be commissioned, so they relied on the government's support. However, although the resettlers had been discussing this flood mitigation measure with the government, it seemed impossible due to the associated costs and its impact on the environment. According to Dedekorkut-Howes et al. (2020), dykes are effective in prevention of coastal flooding, although evidence has shown that dykes not only have a negative impact on the environment but could also cause even worse floods in the long run. Discussions with the key informants revealed that the government had no plans to embark on this project, despite the resettlers' claims that the government agreed to build a dyke to prevent flooding around this area. From this perspective, this study revealed that the resettlers' only hope of counteracting their vulnerability was the installation of the dyke and they were convinced that the government would embark on this project after sourcing funds for it. On the other hand, the government ruled out the use of structural measures to combat flooding in this area. Consequently, the government recommended that the flood plain dwellers should resettle where it was deemed safe. However, this adaptation measure has been contested by

the resettlers, mainly because of their reluctance to forgo both the tangible and non-tangible resources available in the flood plains, as stipulated in result Chapters 6, 7 and 8.

9.2.2: Objective 2: To Explore the Challenges Associated with Environmentally Induced Resettlement in Malawi

The key finding of this objective is that the challenges associated with resettlement in Malawi are mainly due to lack of a guiding framework for resettlement which allows effective community participation in all stages of resettlement. Therefore, lack of community participation builds uncertainty into the resettlers' decision to permanently move upland, especially when their place attachment needs have not been considered. Although the government officials described resettlement implemented in the study area as voluntary, evidence presented in Chapter 5 of my study showed that the resettlers were not fully engaged in the resettlement process. One characteristic of a voluntary resettlement is the step-by-step involvement of the people to be resettled: they have the right to plan how the resettlement should be conducted, and also where they should resettle. The resettlers' involvement in the resettlement process is also key in establishing the resettlement programme's sustainability, ensuring that the resettlers' identity (Chapter 8), social bonding (Chapter 7) and place dependency (Chapter 6) have been considered. However, this study found that resettlement in Nsanje and Chikwawa was a reactive process that was given more attention during the rainy season, and more specifically when the community had already been displaced. This could be attributed to the lack of implementation guidelines for resettlement, as it emerged during the KII with government officials that there is no resettlement policy in Malawi. Some resettlement scholars have recommended that the adjustment of a sustainable resettlement should be based on five principles. These principles comprise 1) proactive implementation, 2) participation and communication with the resettlers, 3) compensation for both tangible and intangible losses, 4) livelihood reconstruction and 5) permanent resettlement (Tadgell et al., 2017). However, empirical evidence in this study has shown that the resettlement in Malawi does not follow any of these principles, although the Malawi government has been implementing resettlement for over two decades. The emphasis of these principles is to ensure that there is permanent resettlement: failing to apply them leads to various movement dynamics among the resettlers.

According to the findings of this study, the resettlers in Nsanje and Chikwawa were displaying four different movement dynamics, namely 1) moving back and forth between the upland and flood plains, 2) returning to the flood plains after being resettled, 3) refusing to resettle and 4) resettling permanently (Chapter 5, section 5.4). These movement dynamics indicate that the resettlers have not fully embraced the idea of completely abandoning their original land. Secondly, these dynamics indicate that resettlement outcomes are highly context dependent. For instance, at Mpomba resettlement site in Nsanje, 10 villages were given land for resettlement and 50 houses were provided for vulnerable groups of people in the community. However, by the time of this research, 90% of the people had gone back to the lower land and the houses were deserted. Those that were remaining relied on the lower land for farming, but these sites were almost 10km apart which made it difficult for the resettlers to commute, so they were moving back and forth (see Chapter 5, section 5.4). On the other hand, the people of Nyachikadza in the same district were not allocated land for resettlement but instead persuaded to find land in the neighbouring communities. Therefore, the majority of the people in this community refused to resettle, as they remained in the lower land, and moved upland only during flooding (see Chapter 5, section 4). However, the resettlers in Mwalija village in Chikwawa were classified as resettled, as the entire community had moved upland 5 months before the commencement of this study. These resettlers utilised their own upland holdings to resettle and the new settlement was barely 3km away from the flood plains. This, then, was an advantage to the resettlers because they were able to utilise resources in the flood plains, including graveyards, the school and farmland; the people of Nsanje, on the other hand, either found no land available for resettlement, as in Nyachikadza, or were resettled 10km away, as in the Mpomba resettlement site. However, since the resettlers in Mwalija had not been resettled for as much as a year, the other movement dynamics, especially moving back and forth and returning, were not observed, apart from a few families who refused to resettle.

The findings in my research revealed that the resettlers continued to rely on the flood plains, despite being vulnerable to flooding: their various movement dynamics were motivated mainly by their search for fertile farmland and their desire to be close to 'home'. It should be noted that these movement dynamics were constructed at both individual, household and

community level. However, the elderly mainly fell into the returned, resettled and refused to resettle categories, whilst as the youth and middle aged were mainly associated with moving back and forth. This was mainly attributed to the distance to be travelled to the lower land for farming, since even those who resettled permanently were making daily journeys to the lower land for farming (see Chapter 6, section 6.2.1). Therefore, in conclusion, these dynamics could be attributed to the lack of coordination and communication before and after resettlement: the government should have facilitated a programme which allowed the resettlers to plan their resettlement by employing measures to enable them to maintain their place attachment needs.

9.2.3 Objective 3: To Examine the Role of Place Attachment in Environmentally Induced Resettlements

The findings of my study highlighted the multifaceted nature of place meaning when resettlers choose a place that promotes the feeling of being 'home'. The resettlers' sense of home was portrayed using three place constructs: place dependency, social bonding and place identity. Therefore, a combination of these factors has critically affected the resettlement in Malawi: empirical evidence showed that the resettlers' place attachment needs, based on these three place constructs, were not adequately addressed (see Chapters 6, 7 and 8). Therefore, the resettlers preferred the flood plains, whose appeal was based on the availability of both tangible and intangible resources.

The study findings in Chapter 6, section 2, showed that the resettlers' decision to resettle was based on the availability of physical resources such as 1) land for both agriculture and dwelling, 2) the Shire River and its tributaries for fishing, and as sources of water for irrigation and household use, and 3) social institutions like schools and clinics. Land was regarded as a very important resource in the study community. However, the resettlers preferred the land in the flood plains not only because its fertility facilitated agricultural production but because it had generational ties (see Chapter 8, section 2). In terms of productivity, the resettlers were able to diversify their agricultural production, so that the main crops grown included rice, sweet potatoes, beans and maize (see Chapter 6, section 2); on the other hand, the situation was different in the upland, where people relied on drought tolerant crops, especially sorghum, because of a combination of infertile soils and drought. Therefore, the flood plains

facilitated the resettlers' goal realisation, unlike the upland: this influenced the resettlers' movements from the upland to the flood plains either by refusing, moving back and forth or returning after being resettled. Worthy of notice was the fact that the land in the flood plains was regarded as very special and blessed as it had ancestral ties, being passed on from one generation to another (see Chapter 8, section 3). This land also was regarded as a source of ownership and a legacy that could be passed on from one generation to another, unlike the land in the upland, whose ownership was not certain (see Chapter 6, section 1). Therefore, the resettlers believed that there was no other place for them other than their ancestors' land, so their decisions about resettlement were mainly influenced by looking at their culturally accepted land rights.

The findings in my study established that the resettlers in the lower land relied on other off-farm activities, especially fishing, which was not just for domestic consumption but also a source of income (see Chapter 6, section 5.2). Therefore, some people were either refusing to resettle, moving back and forth or returning after resettlement because they relied on fishing as a source of income. These movements were mainly induced due to lack of alternative livelihood sources for the resettlers since the resettlement programmes in Nsanje and Chikwawa did not factor in this element. Therefore, living in proximity to the network of rivers in the flood plains was a prerequisite for maintaining established ways of life.

On the other hand, although the flood plains in Nsanje were not served with physical resources intended to enhance people's well-being, like schools, clinics and police stations, the resettlers' place attachment was not altered (see Chapter 6, section 3). Although the importance of these resources cannot be over emphasised, the resettlers, especially in Nsanje, showed strong attached to the flood plains despite the absence of these resources. However, this finding differed from the state of affairs in Chikwawa, where the resettlers agreed to move upland although the flood plains was served with a school and clinic, unlike the upland (see Chapter 6, section 3). Therefore, the resettlers continued relying on the flood plains for access to a school that was still operational despite the resettlement. It can be concluded that the strongly attached people would be willing to sacrifice their wellbeing in the quest to maintain their place of attachment, which demonstrated their love of being 'home'.

Secondly, place attachment discourses were based on the social networks, family and neighbours which constituted the resettlers' social bonding. In Chapter 6, section 2, the findings revealed that the resettlers relied on their family for immediate support in their everyday life. In the flood plains, the resettlers were living in proximity to their immediate family and more distant relatives, which was due to the fact that the resettlers lived on their ancestral land. Therefore, the critical finding in this regard is that resettling people as a community is a preferred mode of resettlement that enhances the resettlers' social bonding. Programmes like resettlement, that disturbs people's social bonding, would probably face resistance if the community were not involved in the design process: this would give them an opportunity to decide who their neighbours would be in the new settlement (see Chapter 6, section 2). In this study I also found that the elderly had stronger social bonding, due to neighbouring, than any other social group in the study population. The elderly relied more on their strong social ties, thus their immediate family, for support in their everyday life: most of this support came from their children and grandchildren. Apart from neighbouring, I established that the resettlers' membership of the community social networks that included village savings and loan groups (VSL) and church groups, as well as their adoption of various leadership roles in their community, influenced their resettlement decisions (see Chapter 7, section 3). Resettlement was facilitated by familiarity with a place and the long-term development of social bonding constructs based on trust. Therefore, lack of incorporation of these place related constructs forced some resettlers to go back to the flood plains where they had already established social networks.

The last significant place construct that produced a positive impact on resettlement was place identity. The finding presented in Chapter 8 showed that the resettlers distinguished themselves from other people living upland with reference to their place of residence, thus forming an identity with the flood plains. The significant finding in this regard was that although some people resettled permanently, they preferred to maintain their distinctive identity by calling themselves a distinctive name, *Nyatchuwa*, and also by maintaining the lower land social norms (Chapter 8, section 2). On the other hand, the majority of those who refused to resettle revealed that they wanted to maintain their identity, hence failing to resettle despite being vulnerable to severe flooding. It was discovered that length of

residence in a place influenced the resettlers' day to day life, which was perceived as unique to their local environment. Therefore, the resettlers were happy to maintain an identity which was unique to the flood plain dwellers. The findings revealed that '*Nyatchuwa*' was originally a local name based on their proximity to water sources (see chapter 8, section 3). However, the resettlers' preference for living in the place that formed their identity was so strong, that even if they were resettled near an upland water source, they would identify themselves with their former place. This was evident in Mpomba and Mwalija resettlement sites in Nsanje and Chikwawa respectively, where people were resettled on the other side of the Shire River. The resettlers chose to return to the flood plains or move back and forth between lowland and upland, as they preferred to live in a place with which they were identified.

Lastly, one key finding, revealed in Chapter 8, section 4 was that the resettlers' place identity was closely related to asset ownership, especially involving land and livestock (goats and cattle). Therefore, resettlement made the resettlers landless, which translated to loss of their identity to the resettlers (see Chapter 8, section 2). On the other hand, possession of these assets signified wealth in the local community, so the greater amount of land and livestock, one has, the more respect one receives, according to the community's hierarchy of wealth. Therefore, loss of these assets, which was an impact of resettlement frequently reported by the resettlers, was regarded as loss of identity. This, therefore, contributed to the resettlers' abandonment of the resettlement site, or their refusal to resettle upland, where they would not be respected, due to loss of assets.

It can be therefore concluded that, although the resettlement implementers characterised resettlement as a flooding mitigation measure, the resettlers' loss of identity, social connections and access to tangible and intangible factors that fostered their sense of place dependency had an impact on the resettlement programme. Evidence provided here shows that some resettlers were happy to resettle, but they preferred to be resettled close to their original place in order to maintain their identity, social bonding and place dependency; therefore, resettlement programming should be inclusive, and people centred.

9.3 Contribution to Knowledge

My research has critically analysed the execution of resettlement, using the place attachment theory. There are limited resettlement studies that have looked at resettlement using place attachment theory. In his study, Cernea (1997b) describes the risk and reconstruction model that analyses 6 important factors to consider during resettlement. Cernea shows how resettlement results in landlessness, homelessness, joblessness, food insecurity, social disarticulation, and increased morbidity. However, resettlement has a further impact on people's connection to their land as the flood plain not only entails physical and geographical space for the resettlers, but also encompasses experiences, practices and symbolic meanings attached to the land (Adams, 2016, Artur and Hilhorst, 2014). Therefore, my research went beyond describing the physical resources that are lost during resettlement, to include the non-tangible resources, especially identity and the other concepts emerging from the social attachment narratives. Therefore, my research has made a significant theoretical contribution to resettlement narratives. Although empirical evidence suggests that resettlement affects the resettlers' tangible and non-tangible resources, most resettlement programmes fail to take account of the latter.

Empirically, my findings revealed that the resettlers were attached to the flood plains, both because of the physical resources that gave rise to their place dependency (Chapter 6) and the non-physical resources that were related to their social connections (Chapter 7) and personal identity (Chapter 8). The resettlers attributed their strong attachment to the flood plains to the presence of fertile land, but it also had a less tangible appeal. It was passed on from one generation to another, hence representing the family's generational ties (Chapter 6, section 6.2). These ties are enhanced by the physical resources shared within a family, in the long run ensuring the continuity of family wealth. Therefore, the presence of land in the study community not only facilitates the realisation of the resettlers' livelihood goals, especially where farming is concerned, but also facilitates intergenerational wealth. This finding concurs with Piggott-McKellar et al. (2020), who analysed 203 resettlement case studies, and discovered that land productivity and the quantity of land provided after resettlement influenced the resettlers' permanent occupancy of the upland (Chapter 2).

On the other hand, my study subjected to further analysis the other dimensions of place attachment, such as social bonding. Raymond et al. (2010) emphasized that social bonding constructs should be highlighted when conceptualising resettlement as the resettlers' place bonding roots forming from social interactions within a locale. However, this has not been employed in resettlement programming. Rogers and Wang (2006) analysed the social dimensions of resettlement, articulating how resettlement affects people's social connections as they integrate with the host community. However, this study did not extend to analysis of the social dimensions that people consider before and after resettlement. Therefore, my research revealed that the resettlers' attachment to their social environment was revealed by their desire to live in proximity to the family, friends and neighbours that were crucially important to their day-to-day life. In agreement with this finding, Elliott and Yusuf (2014) indicated that social bonds which are enhanced by one's immediate environment, helps the resettlers to cope with the new environment. This therefore influences the resettlers to maintain the new environment hence resulting in a sustainable resettlement. Furthermore, my study found that the resettlers valued their belongingness and membership of formal networks like churches and non-formal networks such as VSL and leadership roles (see Chapter 7, section 7.2.2). The resettlers argued that familiarity with their community gave a true definition of being at home, a place where they had established relationships within their surrounding environment and felt trusted by everyone in their neighbourhood (see Chapter 7 section 7.2.3).

Another key contribution of my research to resettlement theory is the link between resettlement and place identity constructs that affects resettlers' decisions about resettlement. According to place theory, people use place as a means of distinguishing themselves (Ertorer, 2014), which builds on the sense of continuity with a place as narrated by the resettlers, as argued in Chapter 8. Therefore, my study highlighted the resettlers' sense of being rooted in the flood plains, due to enormous cultural pressures, including the belief that the dead remained among the living as a source of blessings, and the desire to live in proximity to their ancestors (Chapter 8, section 8.4). My study found that the resettlers held strong beliefs, associated with living in proximity to the water, so that resettling people only a few kilometres from their original place faced resistance. Therefore, my research has contributed to the understanding of place identity in resettlement, showing that it must be

discussed with the resettlers before anybody embarks on a resettlement programme, as failing to do this leads to unsustainable resettlement.

Furthermore, unlike other resettlement research, my research went further to analyse the movement dynamics appearing during and after resettlement, basing my interpretation on place attachment constructs. Therefore, my study found that, however eager the government might be to resettle people, complex movements emerged whereby the resettlers chose to move back and forth, return to the flood plains, or completely refuse to resettle, but to continue farming on their ancestors' land. These movements were influenced by the quantity and quality of land, as it was discovered that the upland was served with dry and unfertile land, which was not even readily available to the resettlers, hence their preference for the flood plains. Therefore, by analysing these movements, my study has contributed to resettlement theory with the concept that place dependency is a determinant factor for the majority of the resettlers: consequently, incorporating this in a resettlement programme minimises the observed movements. Therefore, I can strongly argue that place attachment is a very important concept that needs to be explored and incorporated in resettlement programming to encourage permanent resettlement, hence eliminating the other movement dynamics described in this study.

Furthermore, my research also has a methodological contribution to resettlement literature. My study used several participatory methods, especially participatory mapping, trend analysis and participatory photography. These methods not only empowered the participants with the sense that they owned the process but showed how bottom-up approaches could be used in data collection (see Chapter 3, section 3.6.3). Significantly, the use of participatory photography has made a great contribution to resettlement literature, as few studies, if any, have used this tool to identify the resources that form place attachment. Participatory photography has proved in the course of this study to be a significant tool, enabling the research participants to initiate a discussion based on the photos collected by themselves, whilst the researcher generated data from this discussion, as discussed in Chapter 3. In addition to this, participatory photography enriched the findings of this study by facilitating the collection of data that the researcher could not envisage and found hard to describe in words.

Additionally, although the data generated using the participatory photography tool was consistent with the other tools, its use generated more details about complex issues affecting the resettlers' decision on where to live. As shown in this study, discussion with the policy makers showed that they attributed little importance to the resettlers' place attachment needs like their social connections (see Chapter 7) and cultural beliefs (see Chapter 8, section 8.3). However, these issues were significant in the resettlers' decision processes. Therefore, learning from the finding of my study, participatory photography could be used to discuss more complex issues, during, before and after resettlement, which would enable the policy makers to determine which place features were most significant in forming the resettlers' preferences regarding where to stay. This, in the long run, will ensure sustainable resettlement, especially when the resettlers' concerns, expressed during the discussion using the generated photographs, have been incorporated in the resettlement programme.

9. 4 Implications for Practice and Policy

Empirical evidence from the findings of my study shows that the resettlement in Malawi is unsustainable, due to lack of resettlement policy, lack of effective community participation in all stages of resettlement, lack of resettlement with development strategies, and also the politics of power. Firstly, discussions with both policy makers and the resettlers reveal the absence of a coherent resettlement policy in Malawi; consequently, resettlement is a reactive process with *ad hoc* implementation strategies. The need for a detailed policy to achieve a sustainable resettlement programme has been emphasised by several scholars (Cernea, 1997b, De Dominicis et al., 2015, De Wet, 2006). Although the World Bank developed its resettlement guidelines in 1980 (Stanley, 2004), the government of Malawi does not have any as reported by other scholars too (Nicholson, 2020, Chawawa, 2018). Therefore, this results in the implementation of unsustainable resettlement programmes that undermine not only the people's livelihood reconstruction but also their emotional attachment to their land. Resettlement guidelines, however, encourage the implementation of projects which aim at restoring the resettlers' economic status and livelihoods, while also maintaining their cultural values (Scudder et al., 2005). Therefore, the first step to achieving sustainable resettlement is the development of a resettlement policy (Cernea, 2019, Zaman, 2002). The findings of my

study (Chapter 5, section 3) indicate that the resettlers' movement dynamics could be directly linked to the lack of resettlement policy, as their needs were not incorporated in the resettlement programme. Attesting to this argument, Cernea (1997b) indicates that poorly conceptualized resettlement leads to impoverishment, landlessness, homelessness, joblessness, marginalization, food insecurity, loss of access to common property and social disarticulation. In agreement with this, the case study in Malawi showed that shortcomings in policy resulted in uncoordinated implementation which failed to provide the necessary targeted support for the affected communities both before and after resettlement. Therefore, resettling people in Malawi would require the political will to institutionalise a resettlement policy which has been in draft form for several years, according to the government key informants interviewed in this study.

Secondly, developing a policy alone is not effective in achieving sustainable resettlement, but another interlinking concept, community participation, should be considered. Practically, resettlement needs to be a participatory process involving not only the government and the community's elite, but the entire community, whose decisions are key in implementing a viable resettlement programme. According to Patel et al. (2015), community participation ensures programme sustainability, as well as the ownership and incorporation of acceptable social norms within a community. The holistic approach to resettlement ensures that there is a consensus on how resettlement should be implemented, focusing on where they are resettled and what to expect in the new settlement. Evidence has shown that community led resettlement yields better results than state led, since the process is owned by the resettlers themselves if they take part in the planning, monitoring and implementation of their resettlement (Sharp et al., 2020). However, the resettlement in Malawi has proved to lack effective community participation, especially that of the most vulnerable people. This study revealed that the resettlers were considered as recipients of the preconceived programmes formulated by the policy makers. Although the government has been in constant discussion with the local leaders concerning land acquisition (Kita, 2018), this represents only a minimal percentage of the people in the community. However, the World Bank guidelines on resettlement recommend constant consultation of the affected community to ensure that resettlement is implemented in harmony with the rights and interests of the affected people (Kangave, 2012). Consequently, lack of community participation in the resettlement of the

flood affected people in the Lower Shire River valley results in unsuccessful resettlement. Attesting to this argument, Matthews and Potts (2018) emphasised that lack of consultation could result in the resettlement's failure when resettlers resisted decisions made without their consent. In this case, lack of community participation in the resettlement processes triggered resistance and led to back and forth movement of the communities after resettlement.

Thirdly, policies to promote resettlement in combination with development should be promoted during environmentally induced resettlement. Empirical evidence suggests that resettlement with development strategies have not been incorporated in resettlement programmes in most developing countries: this omission has contributed to the resettlers' tendency to opt out of the programme (Brooke et al., 2008). Support for this view can be found in my observation that a significant reason for the resettlers' emotional connection with their ancestors' land was the presence of physical resources in the lower land. Therefore, policies designed to promote the cultivation of agricultural products in the lower land and additional value infrastructures in the upland for crops like rice and sweet potatoes might be explored. It is also worth promoting the resettlers' already established off-farm businesses, especially fishing, by providing improved processing facilities upland, which would attract their attention. If this resettlement by development strategy would be employed, in the long run, the less attached people and those whose attachment was mainly based on place dependency would eventually start withdrawing from the flood plains. However, to achieve this, a mutual agreement should be employed to make sure that these off-farm activities had been discussed and approved by the resettlers.

Lastly, my research has revealed that the resettlers' cultural beliefs make a significant contribution to their unique identity, hence they perceive resettlement as a threat to the survival of their culture. Therefore, the government could explore ways of preserving the resettlers' beliefs through the promotion of cultural days and by making the lower land the focal point for their social-cultural beliefs. This will ensure sustainability of their culture even after resettlement. As demonstrated in Chapter 8, section 8.3.3, the construction of the resettlers' idea of home was based on the uniqueness of their place and their belief that their ancestors were a source of protection, safety, and good fortune. This was portrayed though

the resettlers' narratives about their willingness to live in proximity to their ancestors' graveyards. However, practically, the resettlers cannot carry their ancestors' graveyards with them during resettlement; attempts have been made to include excavation in other resettlement programmes, but this has proved to be an expensive process which most developing countries cannot afford (Witter and Satterfield, 2014). It requires not only financial commitment but land, which has already been proved to be scarce, as the resettlers could not be given upland territory for resettlement. Therefore, using a bottom-up approach, the government could enter into discussions with the flood plain dwellers, allowing them to describe possible ways in which they could preserve their culture and explain which crucially significant elements could be preserved as part of their cultural heritage. Beal et al. (2019) indicates that maintaining the sustainability of their cultural heritage is regarded as an income generating activity by the community. Therefore, support for the cultural heritage in the lower land in Nsanje and Chikwawa, if properly coordinated by the Ministry of Civic Education, Culture and Community Development as well as the Ministry of Trade, Industry and Tourism, could be explored. This would ensure that the community's cultural beliefs had been preserved, while being managed by designated people within their community.

9.5 Proposed Areas for Future Research

My research investigated the role of place attachment in resettlement, looking at three place constructs: place dependency, social bonding and identity. However, place theory is so multifaceted that each of these three constructs is complex in nature, so could be studied as a constellation of separate constructs. On the other hand, evidence presented in my study has shown that the policy makers mainly consider the reconstruction of the physical aspects of the loss incurred during flooding when encouraging people to resettle. However, resettlers lose their sense of identity and social connections during flooding, which the people implementing resettlement in the study area did not consider as important aspects of resettlement programming. My study, therefore, has highlighted the fact that place identity and social bonding are important elements in any resettlement programme. Therefore, a longitudinal research project, focusing on the resettlers' perception of their place identity and social bonding after staying 5 years and above at the resettlement site, would reveal whether the resettlers' values were maintained after resettlement. This would give a clear

understanding of the extent of the significance of place identity and social bonding after resettlement, and lessons could be drawn by the resettlement implementers.

Secondly, my study categorised 'resettlers' as those who kept moving back and forth, refused to resettle, returned to their original home, and resettled permanently. However, these categories were relevant at the time of the study, as resettlers can fall into different categories over time. On the other hand, a fifth group of people could emerge, whose response to the conditions of resettlement motivated their migration to totally new places (Evrard and Goudineau, 2004). In the course of this research, it was revealed that some people opted to stay in other neighbouring communities beyond the areas designated for resettlement. However, although it would have been interesting to learn the reasons for this choice, it was outside the immediate scope of this research. A detailed study would be needed to investigate the people's stated reasons for preferring totally new places to the resettlement sites. Therefore, it could be interesting to understand the movement dynamics of the people who moved away from the resettlement sites as well as the flood plains, to discover the factors determining their movements and learn how they are coping with the loss of their place attachment. This study could be commissioned by using the ancestral registry, enabling the people still living both in the lower land and the resettlement site to trace the whereabouts of their relations, who would be the primary respondents of that study.

Thirdly, my study established that the resettlers had informal social networks both upland and across the border with Mozambique, especially in Nsanje. The resettlers declared that these social networks were important, both during flooding and when preparing to resettle. For instance, the resettlers in Nsanje reported that they were closer to the Mozambique side than the Malawi side, so they were transferring their assets to their relatives and friends in Mozambique. On the other hand, those who had connections upland were seeking refuge with their family and friends' upland until the government stepped in with humanitarian assistance. In this regard, it would be useful to understand the importance of these social networks and how they affect the resettlement programme, bearing in mind that, whilst the government feels that these people are vulnerable, they have their networks that help in times of need. Therefore, a study could be commissioned targeting both communities in

Malawi and Mozambique. This will contribute to the understanding of the significance of these social networks for both communities, and to drawing lessons on how best both governments could factor in the significance of these relationships in resettlement programming.

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11.0 APPENDICES

Appendix 1: Ethical Clearance Form

School of Agriculture, Policy and Development	 University of Reading
ETHICAL CLEARANCE GRANTED	
Form 2. MSc PhD Staff Ethical Clearance Submission Form	
PLEASE allow a minimum of 3 weeks for this process. You must not begin your research until you have obtained consent as evidenced by this form returned from the APD student Office signed and dated. Ethical Clearance cannot be granted retrospectively.	
This form can only be used if the application : • Does not involve participants who are patients or clients of the health or social services • Does not involve participants whose capacity to give free and informed consent may be impaired within the meaning of the Mental Capacity Act 2005 • Does not involve patients who are 'vulnerable' • Does not involve any element of risk to the researchers or participants • Does not involve any participants who have a special relationship to the researchers/investigators	
If any of the above apply, please refer to the APD Ethics Chair to decide whether an application can be made through the APD review process or whether the application needs to be referred to the full University Committee.	
It is the applicant's responsibility to check for any particular requirements of a funder regarding ethical review. Some funders may require that the application is reviewed by full University Committee and not the devolved School committee.	
Full details of the University Research Ethics procedures are available at http://www.reading.ac.uk/internal/res/ResearchEthics/reas-REethichomepage.aspx and you are encouraged to access these pages for a fuller understanding. Some helpful advice is available on this link http://www.reading.ac.uk/internal/res/ResearchEthics/reas-REwhatdoinneedtodo.aspx and the FAQs are particularly relevant.	
<u>ALL QUESTIONS MUST BE COMPLETED.</u>	
APD Ethical Clearance Application Reference Number : 001001	
1. APPLICANT DETAILS:	
Main applicant name: Name of academic supervisor/project investigator: Email Address (decision will be emailed here): MSc Student PhD Student Staff Member Other (please specify)	Babra Ntapara kavuta Alex Arnall b.kavuta@pgr.reading.ac.uk ☐ ☒ ☐ Click here to enter text.
2. PROJECT DETAILS:	
Title of project: Assessing the role of place attachment in environmentally induced resettlement: a case study of Shire River Valley in Malawi	
Please provide a lay summary of the project, including what is being investigated and why: The aim of the study is to explore how the bonds and connections that people make with their homes influence their decisions to resettle or not due to yearly flooding, and how people's bonds produce different movement dynamics during and after population resettlement. The study will examine how resettlement has emerged as a flood response measure, explore the role of place bonding in the execution of resettlement projects, and look at the related challenges associated with flood-induced resettlement in Malawi. The geographical focus of the study will be the Lower Shire river valley districts of Nsanje and	
Form 1. APD MScPhDStaff Ethical Clearance Application Version 1.0 Last updated 30/11/15	

Appendix 2: Household Survey Questionnaire

Consent Letter

Dear Sir/Madam,

I am Babra Ntapara, a PHD student from the University of Reading in England. As part of my study, I am here to conduct research on how people's ideas about home, and their connections with places where their homes are located, change during resettlement projects in response to flooding. The findings of the study will be used solely for writing the report for this research and no name will be associated with it. The aim of this discussion is to learn more about your experiences and knowledge of the resettlement that the Malawi government and its partners have been implementing in the Lower Shire River Valley. Therefore, you have been randomly selected to participate in this research due to your involvement in the resettlement programme being implemented in your area. Please note that there is no right or wrong answer. Therefore, you can feel free to express your own thoughts, ideas and opinions regarding flooding and resettlement based on your understanding and experience working in these flood prone districts.

This discussion will last for one hour and thirty minutes; with your consent, this discussion will be recorded. Your participation in this research is voluntary and there is no implication if you decide to withdraw from now until 1st December 2019 as, beyond this period, I will have started data processing. If you choose to opt out before 1st December 2019, any information you might have provided will be destroyed at this stage. You are not obliged to provide reasons why you have opted out of this research.

Please take note that our discussion is confidential and be assured that it will not be shared with any third party apart from my supervisors, Dr. Alex Arnall and Dr. Henny Osbahr of the University of Reading in England. Your views will be kept anonymous, meaning that people's views are not being associated with their names. I will provide codes for each participant, and these will be used to replace the names of individuals taking part in this research project. If you have comments or questions about this research please contact me

on b.ntapara@pgr.reading.ac.uk and my two supervisors, Dr Arnall on a.h.arnall@reading.ac.uk and Dr. Osbahr on h.osbahr@reading.ac.uk, or you can call them on +44 (0)118 378 8314.

This research project has been reviewed in accordance with the research procedures of the School of Agriculture, Policy and Development Research Ethics Committee and has been given a favourable ethical opinion for conduct. By participating in this research, you acknowledge that you understand the terms and conditions of participating as stipulated above and that you consent to these conditions. For additional information regarding this research, including access to the research findings, please do not hesitate to contact me or my research supervisors through the contacts provided above. Many thanks in advance for your participation. Please feel free to ask any questions and seek clarification before we commence our discussion today. Thank you.

HOUSEHOLD QUESTIONNAIRE

Ref No:..... research assistant initials.....

District..... T/A..... GVh.....

Village..... Date Time :.....

1. Basic Information

Name of respondent :.....

age :..... Sex : 1) male 2) Female

Household type. 1) Male HH 2) Female HH 3) Child HH, 4) Elderly HH

Household size:..... No of children living in the same HH (under 18)..... adults (above 18)

Marital status: 1) Married 2) divorced 3) single 4) widow 5) widower 6) Other (please specify).....

2. Education & Literacy of respondent

1 What is the highest year/form you attended in school? (record the highest year attended)				
	None (1) Primary (2) Secondary (3) College (4) University (5)			
2 If primary or secondary school was not completed, what was the reason for leaving school?				
	Lack of school fees (1)	No access to school (2)	Our culture (3)	Other (specify) (4)

3	Do you read newspapers or magazines?			
	Yes, regularly (1) "	Yes, occasionally (2) "	No, never (3) "	
4	Do you listen to the radio?			
	Yes, regularly (1) "	Yes, occasionally (2) "	No, never (3) "	
5	Do you watch television?			
	Yes, regularly (1) "	Yes, occasionally (2) "	No, never (3) "	
6	Do you own a mobile phone? 1) yes 2) No			
7	If you own a mobile phone, what other information do you receive through your phone apart from calling?			
	Good farming practices (1)	DRR related information (2)	Crop prices (3)	Onset and offset of rainfall (4)
				Other (specify) (5)

3. Household and Land Characteristics

7a	How much land does your household own? (Please state to the nearest ha plots in each category.) For non-agricultural land please state its use (e.g. dwelling, commercial land, market area).		Agricultural	
			Non-agricultural	
7b	Total land size: (both agriculture and non-agriculture)			
8	How would you describe the tenure of this land?			
	Freehold (privately owned) (1) "	Leasehold (2) "	Customary (3) "	Other (please specify) (4) "
9	How did you acquire your land?			
	Patrilineal (1) "	Matrilineal (2) "	Given by government/NGO (3) "	Other (please specify) (4) "
10	Is the land registered in any household member's name?			
	Yes (your name)(1) "	Yes (partner's name H/W) (2) "	Not registered (3) "	Other (please specify) (4) "
11	Type of household building material (please observe)			
	Permanent (iron, tiles, concrete, brick, stone) (1) "	Semi-permanent (mix of permanent & traditional) (2) "	Traditional (unfired mud bricks, grass thatching) (3) "	Temporary (tent) (4) "

12 House ownership									
	Owned by occupants (1) "	Rented (2) "	Rented (but not by you) (3) "	Living in communal housing (4) "					
13 How many rooms does your house have?									
	1 (bed sitter) (1) "	2 (bedroom and common room) (2) "	3 (two bedrooms and common room) (3) "	Over 4 (three bedrooms and other rooms) (4) "					
14 What type of fuel does your household use for cooking?									
	Electricity (1) "	Natural gas (2) "	Liquefied petroleum gas (3) "	Kerosene (4) "	Charcoal (5) "	Wood (6) "	Straw (7) "	Agri crop residues (8) "	Animal Dung (9) "
15 Where do you usually do the cooking?									
	In the house (1) "	In a separate building (2) "	Outdoors (3) "				Other (please specify) (4) "		
16a What is the main source of drinking water for members of your household?									
	Tap water (1) "	Unprotected well (2) "	Borehole (3) "				River (2) "		
16b Where is this water source located?									
	In own dwelling (1) "		In the same village (2) "			Elsewhere (3) "			
16c Is the water at this source always available?									
	Yes, always (1)		No, occasionally there is no water (2)			No, regularly there is no water. (3)			
17 Does your household have any of the following? (please tick appropriately)									
	Electricity (1) "	Radio (2) "	Telephone (3) "	Computer (4) "	Refrigerator (5) "	Other household assets (please specify) (6) "			
Does anyone in your house own any of the following? (please tick appropriately and state owner)									
	Watch (1) "	Mobile (2) "	Bicycle (3) "	Motorbike (4) "	Oxcart (5) "	Car/Truck (6) "		Other (specify) (7)	
18 Does any member of your household have a bank account? (If yes, please state who)					Yes (1) " who		No (2) "		
19a Does your household own any livestock?					Yes (1) "		No (2) "		

19b If yes, please tick & state the number of each animal?					
cattle (1)	Horse/donkey (2)	Goats (3)	Sheep (4)	Chicken(poultry) (4)	
..	..	..	..	..	..

4. Availability and accessibility of social services

20 Of the following services, which ones are available in your current place and original place? If you have not moved, only indicate presence in your present community				
	1. Old (present)	2. New	3. Both	4. Neither
1. School				
2. Market				
3. Farmland				
4. Hospital				
5. Potable water				
6. Other				

5. Livelihood sources

21 What is your main source of livelihood?							
farming(1) ..	fishing (2) ..	Business (3) ..	Formal work (4) ..	ganyu (5) ..	remittances (6) ..	Artisan (7) ..	Other (specify) (8)
22 Have you carried out any work (other than in your own home or land) in the last seven days?							
Yes, formal (paid) work(1) (please state) ..	Yes, ganyu (2) ..		(3) Yes, other informal work (please state) ..	(4) No ..			
23a If no, have you worked in the last 12 months?							
Yes(1), formal (paid) work (please state) ..	Yes, ganyu (2) ..		(3) Yes, other informal work (please state) ..		(4) No ..		
23b if yes, how often do you do this work?							
Throughout the year (1) ..		Seasonal (2) ..			Once in a while (2) ..		
24How are you usually paid for this work?							

In cash (1) "	In kind (2) "	Both 1 and 2 (3) "	None (4) "		
25 What is your monthly income? (MKW)					
Less than 1000 (1) "	1000-5000(2) "	6000-10000(3) "	11000-20000(4) "	21000-30000(5) "	Over 31000 (6) "
26a Is there anyone else in your household apart from you who works?					
Yes (1) "			No (2) "		
26b If yes, who?	Husband (1) "	Wife (2) "	Child (3) "	Other (4) (specify)	
26c If yes, what kind of work?					
Formal (paid) work (please state) (1) "		Yes, ganyu (2) "		(3) Yes, other informal work (please state) ♦	
26d How much do they earn a month?					
Less than 1000 (1) "	1000-5000(2) "	6000-10000(3) "	11000-20000(4) "	21000-30000(5) "	Over 31000 (6) "

6. Agriculture

27	What are the main 4 crops that you grow on your household? (please rank the top four)			
	1.			
	2.			
	3.			
	4.			
28a How do you take care of your crops to get high yields?				
Apply fertiliser (1) "	Apply manure (2) "	Practise conservation agriculture (3) "	None of the above (4) o	
Proceed to question 28c				
28b If none of the above, what do you do and why?				
28c	If you use fertilizer, how often?			
	always (1) "	occasionally (2) "	Rarely (3) "	other (4) "

29 How did you source your fertiliser?				
Bought (full market price)(1) "	Bought with a coupon (2) "	Received from NGO(3) "	Received from my social network (4) "	Other(specify) (2) "
30a. Do you practice irrigation farming?				
Yes (1) "		No (2) "		
30 b If yes, what type of irrigation system do you use?				
Residual moisture (1) "	Simple irrigation using a well (2) "		Canal irrigation(3) "	Other (4) specify "
31 If yes, do you grow crops all year round?				
Yes (1) "		No (2) "		
32 How would you rate your harvest crop yield this year?				
No crop yield (1) "	Less than average (2) "	Average (3) "	Better than average (4) "	
33 How does this compare to last year?				
Worse (1) "		Much the same (2) "		Better (3) "

7. disasters

34a Which of the following are the common disasters in your area?				
Drought (1) "	Flooding (2) "	Strong wind (3) "	Crocodile attack (4) "	Other (specify)
34b Can you please rank the top 2 disasters and their severity (Use the following Codes: 1. Most severe 2. Moderate 3. Less severe)				
disaster		severity		
1.				
2.				
35a How often have the most severe disasters above been taking place?				
	disaster	frequency (Codes: 1.Regularly 2.Occasionally 3. rarely)	Has it changed in severity in the past 5 years? (Y/N)	How? (Codes: 1 Increased 2. Decreased.)

1.				
2.				
35b	What do you think are the causes of the highest ranked disaster in 34b above?			
(1) a result of climate variability and change	(2) acts of God		(3) because of bad government policies	
(4) our spirits/gods are angry	(5) a result of human activity		6. Other(specify)	

8. Weather and Climate change

36	Have you noticed any changes in the climate and related weather pattern in this area in the past 10 years? Yes (1) " No (2) " Don't know (3) "					
37	If yes, what evidence is there that climate is changing in your community?					
	Change in onset of rains (1) "	Change in cessation of rains (2) "	Increase in disaster occurrence (3) "	Erratic rainfall (4) "	Change in temperature (5) "	Other (specify) (6) "

38	Which of the following do you consider as the main effect of climate variability and change experienced in your community?					
	Flooding (1) "	Dry spells/drought (2) "	Stormy rains (3) "	Disease outbreak (4) "	Other (specify) (5) "	
39	What is the major disaster that affects your area?					
	Hailstorm (1) "	Dry spell/drought (2) "	Strong winds (3) " "	Floods (4) " "	Earthquake (5) " "	Disease outbreak (6) "
40	How do you source information on changes in the climate?					
	NGO (1) "	Indigenous knowledge (2) "	Local government(3) " "	News/radio (4) "	Community members (5) "	Other (specify) (6) " "

41	What do you think causes these changes?					
	Industry (1) "	Burning fuels (2) "	Deforestation (3) "	Agriculture (4) "	Transportation (5) "	Other (specify) (6) "
42	Are some community members more affected than others? (if no, go to q44) Yes (1) " No (2) " Don't know (3) "					
43	If yes, who do you think out of the following groups are more affected?					
	Tick appropriate		How are they more affected?		Why do you think this is?	
	Men (1)					
	Women (2)					
	Boy (child) (3)					
	Girl (child) (4)					
	The elderly (5)					
	The ill/sick (6)					
	Minority groups (7)					

9. Resettlement

44	Do you consider resettlement as:				
	Adaptation "			Failure to adapt "	
45.	Apart from resettlement, what do you think could be done to prevent further losses due to flooding?				
1.	Build flood resilient structures in the flood plains	2. Pray to God/spirit/gods	3. Building water control systems along the river network	4. Practise conservation measures in the Shire highlands	5. Other (specify)
46.	How often do you experience flooding in this area?				
	1. yearly	2. once in a while	3. every two years	4. rarely	
45	To what extent has the recent flooding affected your perception of resettlement as an adaptation measure?				
	Not at all (1) "	A bit (2) "	Moderately (3) "	Significantly (4) "	Very much (5) "
46	How important is resettlement as a flooding adaptation measure?				
	Not at all (1) "	A bit (2) "	Moderately (3)	Significantly (4) "	Very (5) "

47	At what level are decisions to resettle made?				
	Individual (1) "	Household (2) "	Village (3) "	District (4) "	
48	Have you resettled before? Yes " No				
49	If, no why?				
1.	I have not been given land in the destination area	2. I like it here because of presence of livelihood sources	3. I don't want to lose my identity	There is no social service in the destination area	4. I can't leave my ancestors' land
5.	Specify				
50	Which of the following best describes you: 1). Resettled 2). Refused to settle. 3). Moving back and forth 4). Returned. 5). Other (specify).....				
51	If you refused to settle, if you were asked to resettle by the following, whom would you listen to? (use ranking codes below)				
	1. Government - national?		2. Councillor		
	3. Government - district?		4. Family members		
	5. Village head?		6. NGO		
	7. TA		8. Neighbours		
	9. Paramount Chief		10. Church Pastor		
	11. MP				
	Not at all (1)	A bit (2)	Moderately (3)	Significantly (4)	Very much (5)
52	Who drives the resettlement agenda? Please rank them				
	1. Politicians				
	2. Traditional leaders				
	3. Government				
	4. Members of your village				
	5. NGO				
	6. other (specify)				
	Not at all (1)	A bit (2)	Moderately (3)	Significantly (4)	Very much (5)
53.	How difficult is it to act upon advice to resettle from the current drivers of resettlement?				
Very difficult (1)	Difficult (2)	Slightly difficult (3)	Neither easy nor difficult	Slightly easy (5)	Easy (6)
					Very easy (7)

			(4)						
54. Why do you think resettlement is being implemented and advocated by the sources above?									
1. To prevent further losses of life and crops		2. To take our current land		3. To kill our culture and identity		4. Other (Specify)			
55.	What do you think are/could be the consequences of resettlement? (Rank them)								
	1. Landlessness "								
	2. Joblessness "								
	3. Homelessness "								
	4. Marginalization "								
	5. Increased morbidity "								
	6. Food insecurity "								
	7. Loss of identity "								
	8. Social disarticulation "								
55	How is your community involved in the resettlement decision making processes?								
Not at all (1)		A bit (2)		Moderately (3)		Significantly (4)		Very much (5)	
56.	As an individual, have you ever been consulted about your ideas on resettlement?								
1. Yes (if yes, proceed to q58)					2. No				
57. If you had been consulted, would it have changed your perception of resettlement?									
1. yes					2. No				
58	What could be the factors influencing your decision to resettle?								
	1. Access to land for farming and dwelling								
	2. Availability of social services								
	3. Continuation of culture								
	4. Presence of same village head								
	5. Friendly attitude of host community								
	6. Presence of same neighbours								
	7. Proximity to my old village								
	8. Presence of work opportunities								
	9. Other(specify)								

59	If availability of land is one of the factors, to what extent do you agree with the following statements?
	1. Landowners are demanding cash for land
	2. There is not enough land for all of us
	3. Landowners demanding land in exchange for land

	4. Land is available but too far away						
	5. Land is not available						
	6. Chiefs in host community are refusing to allocate us land						
	7. The land is not as good for farming compared to what I have here						
	Do not agree at all (1)	Agree a bit (2)	Neither agree nor disagree (3)	Significantly agree (4)	Totally agree (5)		
60	Are you aware of any adaptation/resettlement policies in Malawi? Yes " " No " "						
61	If yes, are these policies effective?						
	Strongly agree (1)	Agree (2)	Neutral (3)	Disagree (4)	Strongly disagree(5)		
62	How likely are you to resettle if you are provided with land to construct your house only and no farming land?						
	Totally unlikely (1)	Very unlikely (2)	A little unlikely (3)	Neither unlikely nor likely (4)	A little likely (5)	Likely (6)	Totally likely (7)

Have you recently resettled as a result of flooding? Yes " " No " " If no, skip to question 77. If yes, please continue.

a. **Note: Questions 63--76 ask only to those that have resettled!!**

63	How did you resettle?				
	(1) On my own " "	(2) With other community members without external support " "	(3) With other community members with external support " "		
64	How far is your resettlement site from your previous village, in terms of villages in between?				
	Same village (1) " "	Two villages away but same TA(2)" "	More than two villages away but same TA(3)" "	More than two villages away but different TA(4)" "	
65	How far is your resettlement site from your previous village, in terms of distance (in KM)?				
66	How would you rate the host community in terms of friendliness?				
	(1) Not friendly at all	(2) A bit friendly	(3) Moderately friendly	(4) Significantly friendly	(5) Totally friendly
67	Which of the following is correct in terms of the size of land you have resettled on as compared to your previous home? The size of land here is than my previous one				

	(1) Smaller	(2) Same size			(3) Bigger		
68	To what extent was your decision to resettle influenced by those that had already resettled before you?						
	Not at all (1)	A tiny bit (2)	A bit (3)	Moderately (4)	Significantly (5)	A lot (6)	Very much (7)
69	Are there any cultural practices that you used to practice but are not being practised in your new place? Yes No <i>" (if no, proceed to q83)</i>						
70	If yes, please state:						
71	Are there any cultural practices that you are practising now but were not being practised in your previous place? Yes No <i>" (if no, proceed to q84)</i>						
72	If yes, please state:						
73	Has resettlement affected the way you feel about yourself i.e. not being you because you have moved (identity)?						
	Not at all (1)	A tiny bit (2)	A bit (3)	Moderately (4)	Significantly (5)	A lot (6)	Very much (7)
74	Has resettlement affected your social bonding with neighbours, family and friends						
	Not at all (1)	A tiny bit (2)	A bit (3)	Moderately (4)	Significantly (5)	A lot (6)	Very much (7)
75	Has resettlement affected your food security?						
	Not at all (1)	A tiny bit (2)	A bit (3)	Moderately (4)	Significantly (5)	A lot (6)	Very much (7)
76	How likely are you to return to your original home?						
	Totally unlikely (1)	Very unlikely (2)	A little unlikely (3)	Neither unlikely nor likely (4)	A little likely (5)	Likely (6)	Totally likely (7)

b. Note: Questions 77—82 ask only to those that have not resettled

77	How likely are you to resettle now if asked to?						
	Totally unlikely (1)	Very unlikely (2)	A little unlikely (3)	Neither unlikely nor likely (4)	A little likely (5)	Likely (6)	Totally likely (7)
78	What is the one major thing that has made you not to resettle? (Please specify)						
	The resettlement programme was not clear to me (1)	I have my livelihood sources here (2)	I have my social network here (3)	I don't want to lose my identity (4)	This is my home not anywhere else (5)	Other (specify) (6)	
79	What would be the one thing that would make you resettle?						
	Nothing (1)	Availability of land in resettlement site (2)	To maintain my forefathers land (3)	Relocating as community to maintain my culture, identity and network (4)	Other (4) (specify)		
80	How likely are you to resettle if you have been given land for farming in the upper land?						
	Totally unlikely (1)	Very unlikely (2)	A little unlikely (3)	Neither unlikely nor likely (4)	A little likely (5)	Likely (6)	Totally likely (7)
81	How likely are you to resettle if you are to move together with your neighbours?						
	Totally unlikely (1)	Very unlikely (2)	A little unlikely (3)	Neither unlikely nor likely (4)	A little likely (5)	Likely (6)	Totally likely (7)
82	How likely are you to resettle if you have been involved in the resettlement planning process?						
	Totally unlikely (1)	Very unlikely (2)	A little unlikely (3)	Neither unlikely nor likely (4)	A little likely (5)	Likely (6)	Totally likely (7)

c. **Note: Questions 83—88 ask only to those that have returned after resettling!!**

83	How likely are you to resettle again if this area is hit by devastating floods again?						
	Totally unlikely (1)	Very unlikely (2)	A little unlikely (3)	Neither unlikely nor likely (4)	A little likely (5)	Likely (6)	Totally likely (7)

84	What is the one major thing that has made you to return after being resettled? (Please specify)							
I did not get what was promised during resettlement (1)	My household became food insecure (2)	my social network was disturbed (3)	I felt that (was losing my identity (4)	The host community was hostile (5)	This is where I consider home anywhere else (6)	There were no social services at the new location (7)	Other (specify) (8)	
85	What would be the one thing that would make you to go back to the new location?							
Nothing (1)	Availability of land for farming (2)	If this area is hit by devastating floods than before (3)	If I can Relocate with the entire community to maintain my culture, identity and network (4)	Provision of housing (5)	Involvement in the resettlement programming (6)	Other (specify) (4)		
86	How likely are you to go back if you have been given land for farming in the upper land?							
	Totally unlikely (1)	Very unlikely (2)	A little unlikely (3)	Neither unlikely nor likely (4)	A little likely (5)	Likely (6)	Totally likely (7)	
87	How likely are you to go back if you are to move together with your neighbours?							
	Totally unlikely (1)	Very unlikely (2)	A little unlikely (3)	Neither unlikely nor likely (4)	A little likely (5)	Likely (6)	Totally likely (7)	
88	How likely are you to go back if you have been involved in the resettlement planning process?							
	Totally unlikely (1)	Very unlikely (2)	A little unlikely (3)	Neither unlikely nor likely (4)	A little likely (5)	Likely (6)	Totally likely (7)	

d. **Note: Questions 89—94 ask only to those that are going back and forth the two places!!**

89	How likely are you to resettle permanently in the upper area?							
	Totally unlikely (1)	Very unlikely (2)	A little unlikely (3)	Neither unlikely nor likely (4)	A little likely (5)	Likely (6)	Totally likely (7)	
90	What is the one major thing that is making you to be moving back and forth? (Please specify)							
	land for farming (1)	I don't feel at home in the new area (2)	Following by social network (3)	To maintain my culture and identity (4)	To access social services (5)	This is where I consider homes not anywhere else (6)	Livelihood sources (business, fishing, work) (7)	Other (specify) (8)
91	What would be the one thing that would make you resettle permanently in the new location?							
	Nothing (1)	Availability of land for farming (2)	If the old area is hit by devastating floods than before (3)	If I can Relocate with the entire community to maintain my culture, identity and network (4)	Provisional of housing (5)	Involvement in the resettlement programming (6)	Other (specify) (4)	
92	How likely are you to resettle permanently if you have been given land for farming in the upper land?							
	Totally unlikely (1)	Very unlikely (2)	A little unlikely (3)	Neither unlikely nor likely (4)	A little likely (5)	Likely (6)	Totally likely (7)	
93	How likely are you to resettle permanently if you are to move together with your neighbours?							
	Totally unlikely (1)	Very unlikely (2)	A little unlikely (3)	Neither unlikely nor likely (4)	A little likely (5)	Likely (6)	Totally likely (7)	
94	How likely are you to resettle permanently if you have been involved in the resettlement planning process?							
	Totally unlikely (1)	Very unlikely (2)	A little unlikely (3)	Neither unlikely nor likely (4)	A little likely (5)	Likely (6)	Totally likely (7)	

e. **Note: Questions 95—98 ask only to those that have resettled permanently!!**

95	How likely are you to go back at the old place?						
	Totally unlikely (1)	Very unlikely (2)	A little unlikely (3)	Neither unlikely nor likely (4)	A little likely (5)	Likely (6)	Totally likely (7)

96	What is the one major reason that would make you return back with time to your old place?(Please specify)					
97	What do you like the most here?					
	Presence of land for farming (1)	Availability of social services (2)	free from the stress during flooding (3)	Good host community (4)	Improved living conditions (5)	Other(specify) (6)
98	What do you miss the most in your old place?					
	My social network (1)	Fertile soils (2)	Fishing (3)	The culture (4)	Other (specify) (5)	

10. Place attachment

99.	Please indicate the extent to which each statement below describes your general feeling about your place (circle the number that best describes how you feel about each statement)				
Statement		Old place		destination	
This place means a lot to me		Yes(1)	No (2)	Yes(1)	No (2)
This place is very special to me		Yes(1)	No (2)	Yes(1)	No (2)
I have an emotional attachment to this place-it has a meaning to me		Yes(1)	No (2)	Yes(1)	No (2)
This is my favourite place		Yes(1)	No (2)	Yes(1)	No (2)
Because of my livelihood needs, this place is important to me		Yes(1)	No (2)	Yes(1)	No (2)
I identify myself with this place		Yes(1)	No (2)	Yes(1)	No (2)
When I am here I am respected		Yes(1)	No (2)	Yes(1)	No (2)
I feel that I am home when I am here only		Yes(1)	No (2)	Yes(1)	No (2)
I enjoy doing what I do here than anywhere else		Yes(1)	No (2)	Yes(1)	No (2)
I feel that I have a wider social network here		Yes(1)	No (2)	Yes(1)	No (2)
I am identified with the lifestyle and values of the people who live here		Yes(1)	No (2)	Yes(1)	No (2)
I sometimes feel like I don't belong to this place		Yes(1)	No (2)	Yes(1)	No (2)
I am willing to invest more time and effort to make this place better than moving to different place		Yes(1)	No (2)	Yes(1)	No (2)
This is where I call home		Yes(1)	No (2)	Yes(1)	No (2)
I have no particular love for this place		Yes(1)	No (2)	Yes(1)	No (2)
I cannot leave this place even if it is hit by disasters		Yes(1)	No (2)	Yes(1)	No (2)
I feel blessed when I am here		Yes(1)	No (2)	Yes(1)	No (2)
I have a lot of memories with this place		Yes(1)	No (2)	Yes(1)	No (2)

End of the questionnaire. Thank you for your participation.

Appendix 3: Checklist for Participatory Photography

Consent Letter

Dear sir/Madam,

I am Babra Ntapara, a PHD student from the University of Reading in England. As part of my study, I am here to conduct research on how people's ideas about home, and their connections with places where their homes are located, change during resettlement projects in response to flooding. The findings of the study will be used solely for writing the report for this research and no names will be associated with it. The aim of this discussion is to learn more about your experiences and knowledge about resettlement that the Malawi government and its partners have been implementing in the Lower Shire River Valley. Therefore, the government being the coordinating agency for DRR activities in the district/Malawi, I would like to learn from you about the resettlement in general in terms of how it is conceptualized, coordinated and implemented. Please note that there is no right or wrong answer. Therefore, you can feel free to express your own thoughts, ideas and opinions regarding flooding and resettlement based on your understanding and experience working in these flood prone districts.

This discussion will last for one hour and, with your consent, this discussion will be recorded. Your participation in this research is voluntary and there are no implications if you decide to withdraw from now until 1st December 2019 as, beyond this period, I will have started data processing. If you choose to opt out before 1st December 2010, any information you might have provided will be destroyed at this stage. You are not obliged to provide reasons why you have opted out of this research.

Please take note that our discussion is confidential and be assured that it will not be shared with any third party apart from my supervisors, Dr. Alex Arnall and Dr. Henny Osbahr of the University of Reading in England. Your views will be kept anonymous meaning that people's views are not being associated with their names. I will provide codes for

each participant and these will be used to replace the names of individuals taking part in this research project. If you have comments or questions about this research please contact me on b.ntapara@pgr.reading.ac.uk and my two supervisors Dr Arnall on a.h.arnall@reading.ac.uk and Dr. Osbahr on h.osbahr@reading.ac.uk or you can call them on +44 (0)118 378 8314.

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PARTICIPATORY PHOTOGRAPHY DATA COLLECTION TOOL

Facilitator..... Assistant..... Date.....
District.....TA.....GVH.....Village:.....

Guidelines and questions

A first meeting will be organised to introduce the research objectives and data collection using participatory photography to the community. During this meeting, the researcher will hand disposable cameras to 5 people in this community to take photos depicting features of significance to them in the absence of the researcher and her team. With the help of the community, the researcher will hand in the camera based on gender, age group and length of residence in the community. The collected pictures will be used as probes in the next meeting with the whole community.

During the second meeting, the participants will be set in small groups of 10-15 people to discuss about the taken photos to understand what features the community values most and

would not want to lose during resettlement. Below are the guiding questions during the discussion.

1. Disasters and flooding in the Lower Shire

1	Can you please explain the features in this pictures that you have taken?
2	What does this picture mean to you and community as a whole?
3	Would you go to a different location where this feature is missing? What would life mean to you?
4	Which features are available in the
	original place
	destination
5	Which features are missing in the destination area?
6	Can you please rank the photos starting with the most significant feature to the least significant one? Why is that so?
7	Which of the things can you forgo if you are to relocate to a different location?

Appendix 4: Checklist for Participatory Mapping

Consent Letter

Dear sir/Madam,

I am Babra Ntapara, a PHD student from the University of Reading in England. As part of my study, I am here to conduct research on how people's ideas about home, and their connections with places where their homes are located, change during resettlement projects in response to flooding. The findings of the study will be used solely for writing the report for this research and no names will be associated with it. The aim of this discussion is to learn more about your experiences and knowledge about resettlement that the Malawi government and its partners have been implementing in the Lower Shire River Valley. In collaboration with the district council, your community has been selected due to your involvement in the resettlement initiatives that the government and its partners has been implementing in this area. Please note that there is no right or wrong answer. Therefore, you can feel free to express your own thoughts, ideas and opinions regarding flooding and resettlement based on your understanding and experience working in these flood prone districts.

This discussion will last for one hour and, with your consent, this discussion will be recorded. Your participation in this research is voluntary and there are no implications if you decide to withdraw from now until 1st December 2019 as, beyond this period, I will have started data processing. If you choose to opt out before 1st December 2010, any information you might have provided will be destroyed at this stage. You are not obliged to provide reasons why you have opted out of this research.

Please take note that our discussion is confidential and be assured that it will not be shared with any third party apart from my supervisors, Dr. Alex Arnall and Dr. Henny Osbahr of the University of Reading in England. Your views will be kept anonymous meaning that people's views are not being associated with their names. I will provide codes for each participant and these will be used to replace the names of individuals taking part in this research project. If you have comments or questions about this research please contact me

on b.ntapara@pgr.reading.ac.uk and my two supervisors Dr Arnall on a.h.arnall@reading.ac.uk and Dr. Osbahr on h.osbahr@reading.ac.uk or you can call them on +44 (0)118 378 8314.

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PARTICIPATORY MAPPING DATA COLLECTION TOOL

Facilitator..... Assistant..... Date.....
District.....TA.....GVH.....Village:.....

Guidelines and questions

The participants will be divided into smaller groups of 10-15 people to develop their community maps with the aim of indicating the most important features that they value. The maps will be used as probes to discuss about the indicated features in relation to resettlement and place attachment. Stationary will be handed to the participants to write their community maps depicting features of great importance in the community. Below are the guiding questions;

2. Significant features in the community

1.	Can you please write down the map of our area indicating all important features that describes our community most

2	On the map, please indicate the most significant features. (please rank them from the most important to the least important)
3	Which features in the community represent our
A	Identity that we can't find them anywhere
B	Social bonding (rootedness, belonging and neighbouring)
C	Place dependency
4	What features can't we do without even if we find ourselves in a compromised situation like flooding?

3. Comparing features at original place and destination

5.	Would you go to a different location where the first 5 features indicated on the map are missing?
6	What would life mean to you in terms of identity, social and place dependency (livelihood means) if you forgo these features?
a	Identity
b	Social bonding
c	Livelihood

7.	In relation to the upland where we are to resettle/we have resettled and the flood plains, Which features are
a	Available both in the original settlement and old settlement
b	Missing in the original place or destination?
c	What other features of importance are available only in one area that we wish they would be in the other to make the place desirable?(either original or destination),
	Original place:
	Destination:
8	How does this influence your response to flooding?

Thank you so much for you time and for sharing your thoughts and opinions with us. Is there anything that you think you missed to say and would like to talk about?

Appendix 5: Checklist for Trend Analysis

Consent Letter

Dear sir/Madam,

I am Babra Ntapara, a PHD student from the University of Reading in England. As part of my study, I am here to conduct research on how people's ideas about home, and their connections with places where their homes are located, change during resettlement projects in response to flooding. The findings of the study will be used solely for writing the report for this research and no names will be associated with it. The aim of this discussion is to learn more about your experiences and knowledge about resettlement that the Malawi government and its partners have been implementing in the Lower Shire River Valley. Therefore, In collaboration with the district council, your community has been selected due to your involvement in the resettlement initiatives that the government and its partners has been implementing in this area. Please note that there is no right or wrong answer. Therefore, you can feel free to express your own thoughts, ideas and opinions regarding flooding and resettlement based on your understanding and experience working in these flood prone districts.

This discussion will last for one hour and, with your consent, this discussion will be recorded. Your participation in this research is voluntary and there are no implications if you decide to withdraw from now until 1st December 2019 as, beyond this period, I will have started data processing. If you choose to opt out before 1st December 2010, any information you might have provided will be destroyed at this stage. You are not obliged to provide reasons why you have opted out of this research.

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research project. If you have comments or questions about this research please contact me on b.ntapara@pgr.reading.ac.uk and my two supervisors Dr Arnall on a.h.arnall@reading.ac.uk and Dr. Osbahr on h.osbahr@reading.ac.uk or you can call them on +44 (0)118 378 8314.

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TREND ANALYSIS DATA COLLECTION TOOL

Facilitator..... Assistant..... date.....

District.....TA.....GVH.....Village:.....

Guidelines and questions

The community will be set in small groups of 10-15 people to discuss the noticeable environmental changes and frequency of flooding in the past ten years. Participants will be provided with stationary to put down the current flooding trend but also the projected one. Thereafter, the following questions will be asked to have a clear understanding of the stated trends.

4. Disasters and flooding in the Lower Shire

1	Can you write down the observed rainfall pattern in the past ten years in our community
2	In what ways does this affect our community?
3	What has been the flooding trends in the past ten years in our community

5. Flood adaptation measures

9.	What has been the coping strategies for most families in this community during flooding?		
10.	What are the mitigation measures put in place by the community, government and NGOs in regarding to flooding?		
	Government		
	NGO		
	Community		

6. Future flooding projections

13	Seeing the flooding trend, can we project future flooding trends? Is it likely to increase or decrease in frequency and why are we thinking that way?
14	We understand that resettlement is one of the adaptation measures (if not mentioned above) Looking at the future projections for flooding, is resettlement relevant? Why?

15	What are the factors we consider resettling due to flooding while considering the threat that flooding causes and the trend?
	1.
	2.
	3.

Appendix 6: Checklist for Community Key Informant Interviews

Consent Letter

Dear sir/Madam,

I am Babra Ntapara, a PHD student from the University of Reading in England. As part of my study, I am here to conduct research on how people's ideas about home, and their connections with places where their homes are located, change during resettlement projects in response to flooding. The findings of the study will be used solely for writing the report for this research and no names will be associated with it. The aim of this discussion is to learn more about your experiences and knowledge about resettlement that the Malawi government and its partners have been implementing in the Lower Shire River Valley. In collaboration with the community, you have been selected as a key informant to share about your knowledge, experience and memories regarding the subject matter. Please note that there is no right or wrong answer. Therefore, you can feel free to express your own thoughts, ideas and opinions regarding flooding and resettlement based on your understanding and experience having stayed in the flood plains and you were targeted for resettlement.

This discussion will last for one hour and, with your consent, this discussion will be recorded. Your participation in this research is voluntary and there are no implications if you decide to withdraw from now until 1st December 2019 as, beyond this period, I will have started data processing. If you choose to opt out before 1st December 2010, any information you might have provided will be destroyed at this stage. You are not obliged to provide reasons why you have opted out of this research.

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research project. If you have comments or questions about this research please contact me on b.ntapara@pgr.reading.ac.uk and my two supervisors Dr Arnall on a.h.arnall@reading.ac.uk and Dr. Osbahr on h.osbahr@reading.ac.uk or you can call them on +44 (0)118 378 8314.

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KEY INFORMANT INTERVIEWS WITH COMMUNITY REPRESENTATIVES

1. Disasters and flooding in the Lower Shire

1	What are the major disasters faced in this community in the past ten years? (<i>Please rank them in the order of their severity</i>)		
	a.	b	c
	d	e	f
2	What are the significant environmentally related changes that have been observed in this area in the past ten years?		
3	What has been the flooding trend in the past ten years in terms of frequency?		

4	Can you recall the most severe floods that affected our community? Who were mostly affected and how?
5	How does floods affect our community?
6.	How does our community cope with flooding?
7.	Where do we get external support in times of flooding and what is the type of help that is provided?
8.	At what level are the mitigation and adaptation measures decisions made? Have you ever been involved?

2. Community participation in flood mitigation measures

9.	What are the flooding mitigation measures put in place by the community?
10.	What are other mitigation measures proposed by the external bodies?

11	How is the community involved in proposing and implementing these mitigation measures?
12	If we are asked to rank the flood response measures, which one is mostly preferred by this community and why?
a	
b	
c	
d	
e	

3. Resettlement

13	What do you think about resettlement as a way of adapting to flooding?
14	Who makes the decision for people to resettle?
15	How has people responded to resettlement initiatives in this community?
16	Do we know people who have resettled permanently? In addition, why do you think they have accepted to be resettled?
17	Are there people who have refused to resettle and why

18	Are there people who are operating from two places in this community and why?
19	Are there people who have returned permanently after being resettled? And why?
20	What do you think are the impacts of resettlement?

4. Place attachment

21	What are the physical things that are considered very important in our community
22	What about the non-physical things that are very important to this community
23	Can we find these in the new resettlement area?
24	How does these affect the resettlement initiatives implemented by the government and its stakeholders?
25	How likely is our community willing to forgo the valued things due to devastating flooding?

Thank you so much for you time and for sharing your thoughts and opinions with us. Is there anything that you think you missed to say and would like to talk about?

Appendix 7: Checklist for Government Key Informant Interviews

Consent Letter

Dear sir/Madam,

I am Babra Ntapara, a PHD student from the University of Reading in England. As part of my study, I am here to conduct research on how people's ideas about home, and their connections with places where their homes are located, change during resettlement projects in response to flooding. The findings of the study will be used solely for writing the report for this research and no names will be associated with it. The aim of this discussion is to learn more about your experiences and knowledge about resettlement that the Malawi government and its partners have been implementing in the Lower Shire River Valley. Therefore, the government being the coordinating agency for DRR activities in the district/Malawi, I would like to learn from you about the resettlement in general in terms of how it is conceptualized, coordinated and implemented. Please note that there is no right or wrong answer. Therefore, you can feel free to express your own thoughts, ideas and opinions regarding flooding and resettlement based on your understanding and experience working in these flood prone districts. This discussion will last for one hour and, with your consent, this discussion will be recorded. Your participation in this research is voluntary and there are no implications if you decide to withdraw from now until 1st December 2019 as, beyond this period, I will have started data processing. If you choose to opt out before 1st December 2010, any information you might have provided will be destroyed at this stage. You are not obliged to provide reasons why you have opted out of this research.

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KEY INFORMANT INTERVIEWS WITH GOVERNMENT REPRESENTATIVES

1. Disasters and flooding in the Lower Shire

1	What is the history of flooding in the lower shire and Malawi in general?		
2.	What are the possible causes of flooding in Nsanje and Chikwawa		
	a.	b	c
	d	e	f
3	What has been the flooding trend and its severity for the past 10 years?		
4	Can you recall the most severe floods that affected the Lower Shire River valley community? Who were mostly affected and how?		

5	How does floods affect the general community?
6.	How does the community cope with flooding?
7.	How does the government and its partners assist the flood affected communities during and after flooding?

2. Community participation in flood mitigation measures

8.	What are the flooding mitigation measures put in place by the community?	
9	What are the mitigation and adaptation measures employed by the government to assist people affected by floods in Malawi?	
10	Who are the key players in conceptualizing, implementing and monitoring the implementation of these strategies?	
11	What role does the community play in conceptualization and implementation of these strategies above?	

3. Resettlement

12	In particular, how has environmentally induced resettlement being implemented in Malawi?
13	Who is driving this resettlement agenda?
14	What has been the level of involvement during the implementation of resettlement in Malawi for
	Communities to be resettled:
	Development organisations:
	Government (national and district):
15	What are the existing policies/strategies governing environmentally induced resettlement in Malawi?
16	How many people is the government planning to resettle in this region?
17	How many people have been resettled so far? And from which locations to where?
18	Are there people who have refused to resettle and why
19	Are there people who are operating from two places in this community and why?

20	Are there people who have returned permanently after being resettled? And why?
21	What do you think are the impacts of resettlement on people and country in general?
22	What are the challenges we face in trying to resettle the flood affected people?
23	What do we see the future of resettlement initiatives in Malawi?

4. Place attachment

21	What are the physical things that are considered very important to the community we are trying to resettle?
22	What about the non-physical things that the community does not want to lose in the course of being resettled?
23	How does these affect the resettlement initiatives implemented by the government and its stakeholders?
24	How is the government trying to address these concerns during resettlement?

25	How likely are the people willing to forgo the valued things due to devastating flooding?
26	What is the future of resettlement in Malawi with these factors in place?

Thanks for your time and this valuable information you have provided for my research.

Appendix 8: Checklist for NGO Key Informants

Consent Letter

Dear sir/Madam,

I am Babra Ntapara, a PHD student from the University of Reading in England. As part of my study, I am here to conduct research on how people's ideas of home, and their connections with places where their homes are located, change during resettlement projects in response to flooding. The findings of the study will be used solely for writing the report for this research and no names will be associated with it. The aim of this discussion is to learn more about your experiences and knowledge about resettlement that the government and its partners have been implementing in the Lower Shire River Valley. In collaboration with the district council, your organisation has been selected as a key informant to share with me your knowledge, experience and role regarding resettlement in Malawi. Please note that there is no right or wrong answer. Therefore, you can feel free to express your own thoughts, ideas and opinions regarding flooding and resettlement based on your understanding and experience working in these flood prone districts.

This discussion will last for one hour and, with your consent, this discussion will be recorded. Your participation in this research is voluntary and there are no implications if you decide to withdraw from now until 1st December 2019 as, beyond this period, I will have started data processing. If you choose to opt out before 1st December 2010, any information you might have provided will be destroyed at this stage. You are not obliged to provide reasons why you have opted out of this research.

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KEY INFORMANT INTERVIEWS WITH NGO REPRESENTATIVES

1. Disasters and flooding in the Lower Shire

1	What is the history of flooding in the lower shire and Malawi in general?		
2.	What are the possible causes of flooding in this area		
	a.	b	c
	d	e	f
3	What are the mitigation and adaptation measures employed by the government, NGOs and other organisations in these areas to assist people during flooding in Malawi?		

4	What has been the flooding trend in the past ten years in terms of frequency and damage to people, property and infrastructure?
5	What programmes is your NGO implementing in relation to flood mitigation and adaptation?
6	What guidelines do you use when implementing such mitigation and adaptation programmes?
7.	<i>(If resettlement has not been mentioned)</i> Have you ever considered resettlement as one of the flood mitigation measures for people living in the flood plains?
8.	<i>(if resettlement is one of their mitigation measures), proceed with the following questions</i> Who are the key players in conceptualizing, implementing and monitoring the implementation of resettlement?
9.	At what level are the decisions to resettle people made?

10	How participatory is the conceptualisation and implementing of the mitigation measures?

2. Community participation in flood mitigation measures

11.	What are the flooding mitigation measures put in place by the community?
	Who are the influential people in the community taking a leading role in the proposed mitigation and adaptation measures?
12.	To what extent are these community led mitigation and adaptation measures supported by the Government and NGOs?

3. Resettlement

13	In particular, how has environmentally induced resettlement being implemented in Malawi?
14	Who is driving this resettlement agenda?
15	How are people responding to the resettlement agenda in the Lower Shire Valley?

16	Are there people who have refused to resettle, if yes, why?
17	Are there people who are operating from two places and if any what are the reasons behind this?
18	Are there people who have returned permanently after being resettled? And why?
19	Are there people who have resettled permanently and what are the motivations of this doing?
20	What are the challenges we face in trying to resettle the flood affected people?
21	What do we see the future of resettlement initiatives in Malawi?

4. Place attachment

22	What are the physical and social things that people consider before resettling that are not part of the resettlement programme that is being implemented in Nsanje and Chikwawa?
23	Are these having an impact on the resettlement initiatives?

24	How is the resettlement programme incorporating people's attachment to their place?
25	How likely are the people willing to forgo the valued things due to devastating flooding?
26	How can these place bonding factors mentioned above be incorporated in the resettlement agenda?

Thank you so much for you time and for sharing your thoughts and opinions with us. Is there anything that you think you missed to say and would like to talk about?