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Involuntary Displacement and Urban Resettlement in the Lesotho Highlands Water Project

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Master of Science in International Environmental Studies

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Declaration

I, Dylan George Marrs, declare that this thesis is a result of my research investigations and findings. Sources of information other than my own have been acknowledged and a reference list has been appended. This work has not been previously submitted to any other university for award of any type of academic degree.

Signature..... Date.....

Abstract

As urbanization is a defining issue of the 21st century. The World Commission on Dams (2000) estimates that the globe´s 45 000 large dams (p. 11) have displaced between 40-80 million people (p. 104). Although it is undeniable that some projects will always have an aspect of resettlement tethered to them, the current economic theories and methods of analysis that govern polices need to be changed.

This project studies rural-urban migration in cases of involuntary displacement in the phase 1B of the Lesotho Highlands Water Project. It seeks to answer methodological question such as; what advances in the SLA debate support its utilization in urban contexts? How can cases of involuntary rural-urban migration in the LHWP inform the debate? As such, the framework used to in this study adapts to local conditions and contexts by acknowledging the effects of rural-urban migration and involuntary resettlement on Basotho livelihoods. Furthermore, by compiling a comparative Sustainable Livelihood Analysis (SLA) between resettlers rural and urban livelihoods, it aims to inform LHWP planners, and add to the debate regarding SLA uptake in urban areas.

Without a better understanding of how vulnerabilities threaten relocated peoples, the inequalities between project gainers and losers will amplify (Cernea, 2003). The contexts in in which households pursue livelihoods determine their vulnerability. For example, rural households face different challenges and opportunities than urban households.

Acknowledgements

I would firstly like to thank my respondents. They took time out of their days to welcome me into their midst and share their stories with me. I would also like all those who helped me develop my broad research ideas into realistic goals. This includes Leif Lillehammer and the natural resources department at Multiconsult. As well as offering me an amazing working space, they also willing gave their time and advice. Leif also connected me with Vuyani, my local correspondent in the field. Without her help, I would never had made contact with the sample village.

Finally, developing this master thesis has been a transformative process for me. As well as academically, my professional and personal capacity has evolved. Many people helped me in throughout this transformation. To name a few; the fellow students I met while studying abroad in Norway-especially my housemates in Slørstad. Moreover, thanks to Joanna for helping me though some of the most stressful moment, including last minute printing fiascos! Finally, to my parents: as always with your support, I can achieve anything.

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List of Abbreviations

- LHWP: The Lesotho Highlands Water Project
- LHDA: The Lesotho Highlands Development Authority
- LHWA: The Lesotho Highlands Water Commission
- NGO: Non-governmental Organization
- TRC: The transformation Resource Centre
- VPN: Virtual Private N
- NESH: The Norwegian National Research Committee
- UN: The United Nations
- FAO: The Food and Agriculture Organization
- AFSUN: The African Food Security Urban Network

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1. Introduction

To meet rising water, energy and food demands; a combination of strategies is required. At the end of 2015, hydropower produced 71 per cent of all the globe´s renewable energy (World Energy Council, 2016, p. 5). Moreover, through irrigation and drought resistance, hydropower dams can contribute towards food and water security; as well as promote economic development. Not surprisingly, between 2007 and 2015, the global hydropower capacity increased by more than 30 per cent (World Energy Council, 2016, p. 6). However, while the macroeconomic benefits of hydropower dams seem straightforward, the consequences for communities they displaced are comparatively uncertain. The World Commission on Dams (2000) estimates that the globe´s 45 000 large dams (p. 11) have displaced between 40-80 million people (p. 104). Furthermore, as resource shortages and climate change intensify, hydropower development will respond appropriately and increase production. As such, more communities risk becoming casualties of involuntary displacement.

Situated in the mountains and foothills of Lesotho lies one of the biggest water transfer and hydropower schemes in the world. The LHWP is a bi-national, multi-billion Rand/Maloti hydropower and water transfer project between the Republic of South Africa and the Kingdom of Lesotho. By harnessing water in large dams, Lesotho has unlocked vast hydroelectric potential. Additionally, the LHWP supplies Gauteng, the economic hub of South Africa with much needed water resources. Through its construction and inundation, the LHWP displaced some 372 households in phase 1A and an additional 390 households in phase 1B (Monyake & Lillehammer, 2011, p. 17). Resultantly, displaced households have to reconstruct their livelihoods in new physical, social and economic environments. Accordingly, an assessment framework should be equally dynamic.

In search of a livelihood-analysis framework that goes beyond conventional production, employment and poverty-line thinking the Sustainable Livelihood Analysis (SLA) should be considered (Chambers & Conway, 1992, p. 2). SLA applies a holistic approach that considers the multiple dimensions of livelihoods, poverty, cultural and social dynamics. Further, SLA draws attention towards assets. Assets are deeply intertwined in complex livelihood strategies that overcome livelihood vulnerabilities and enhance livelihood capabilities (Meikle, Ramasut, & Walker, 2001, p. 8; Chambers & Conway, 1992, p. 4). Moreover, authors such as McDowell (2002), Sapkota and Ferguson (2017) and Alemu (2015) apply SLA to displaced communities, showing that SLA is a useful tool to measure impacts of large dams on resettled communities

such as LHWP. Yet most SLA research is done in a rural context (Meikle et al., 2001, p. 10). This provides food for thought as urbanization is a defining issue of the twenty-first century (Awumbila, 2017, p. 3).

Urbanization is supported by rural-urban migration trends. Whereby, economic migrants move from declining rural environments into urban centres in search of new opportunities (Awumbila, 2017). On a global scale; half the world's population inhabit urban areas (AfDB, 2012). A similar trend is well-underway in Africa. For example, over the past two decades, the continent experienced the world's highest rates of urbanization. Further, forecasts predict that Africa's share of the world's urban population will swell from 11,3 per cent in 2010 to 20,2 per cent in 2050 (Un-Habitat, 2012, p. 23). Whereas, in Lesotho, more than 25 per cent of the population live in urban localities, mainly in the capital, Maseru (Turner et al., 2001, p. 35). Yet, while displaced households in the LHWP ultimately share an adopted urban-lifestyle with Maseru's economic migrants, their impetus for relocating into Maseru is radically different. Rather than choosing to leave the familiarity of their home on their own accord; the decision was imposed upon them by the LHWP. Moreover, economic migrants can return to the support structures of their home villages. Comparatively, displaced households´ villages are inundated. This makes it impossible for them to ever return.

Displacement in LHWP phase 1 has indeed been studied extensively (for example: Devitt & Hitchcock, 2010; Tilt, Braun, & He, 2009; Turner et al., 2001). Yet, most are done in a rural context. Thus, there is an academic void considering households who resettled into Lesotho´s urban localities. This topic attracted me for a number of reasons. I grew up in South Africa where, for a long time in unknowingly relied on the LHWP for my water consumption. Later, after moving to Norway to complete a postgraduate degree in international environmental science, I became keenly interested in transboundary water governance, Fortuitously, I have been able to develop a relationship with a Norwegian firm who; are environmental consultants on for the LHWP. Through their network, I selected the LHWP as a research project.

Thus, this thesis studies involuntary displacement in phase 1B of the Lesotho Highlands Water Project (LHWP). The Maluti resettlers are former residents of the Lesotho Highlands who lost their homes during phase 1B of the Lesotho Highlands Water Project (LHWP). The Maluti resettlers origins are from the Sotho tribe and they are known as the Basotho. Before the LHWP, the Maluti resettlers lived predominately rural and agrarian lifestyles. Yet, rather

that resettling in the mountains, foothills or lowlands, the Maluti resettlers uniquely resettled into the urban bustle of Lesotho's capital, Maseru. Resultantly, their environment has drastically changed, and they face new vulnerabilities typical of urban livelihoods.

In summary, mounting water, energy and food demands will increase in hydropower dam development (and associated involuntary displacement). Urbanization trends indicate more displaced households are likely to resettle in urban localities. As such contextually appropriate analytical tools that encompasses the multiple dimensions of complex, urban livelihood strategies are required. Accordingly, SLA frameworks holistically capture the multiple dimensions of urban livelihoods and their vulnerabilities.

Therefore, this study studies how households who were displaced in the Lesotho Highlands Water Project from rural environment into Maseru's urban cash-based economy have adapted their livelihoods. In doing so, it seeks to answer methodological question such as What advances in the SLA debate support its utilization in urban contexts? How can cases of involuntary rural-urban migration in the LHWP inform the debate? As such, the framework used to in this study adapts to local conditions and contexts by acknowledging the effects of rural-urban migration and involuntary resettlement on Basotho livelihoods.

1.1. Research Questions and Objectives

The aim of this study is to use SLA and displacement frameworks to study how households who are displaced from rural areas adapt when they resettle into urban areas. Specifically, I examine their livelihood strategies, outcomes and vulnerabilities.

1. What existing SLA and involuntary resettlement frameworks are out there? To what extent do they integrate with rural-urban migration and involuntary resettlement?
2. According to livelihood frameworks, how have households who were displaced from rural to urban environments by the LHWP adapted their livelihoods to meet the new demand of an urban environment?
3. How does this case inform the debate on the usage of SLA in urban contexts?

To answer these questions, I seek to explore several thematic areas:

a) I review literature on various livelihood frameworks´ similarities and differences. In particular I focus on how involuntary displacement and urban contexts can be absorbed by SLA.

b) I explore how displaced households perceive the resettlement process. Specifically focusing on shifts in social capital and informal institutions between rural and urban environments.

c) Through semi-structured interviews, I disseminate displaced households´ perceptions of the LHWP and the LHDA. I also reflect how formal institutions shape resettlers´ livelihoods.

d) I aim to study how different assets are mobilized in urban areas. By engaging with households, I gather data on the outcomes of different livelihood strategies.

1.2. Structure of the Thesis

In chapter 2, I outline my research process and reflect on the ethical considerations in the social sciences. In chapter 3 review the relevant analytical frameworks, this chapter is specifically linked to the first research question. I overview contemporary measures of livelihoods and vulnerability. After which, I discuss three interlinking analytical schools of thought. Namely: SLA, forced displacement and rural-urban migration (Figure 5). Chapter 4 discusses Lesotho; focusing on the nature of Basotho livelihoods and the LHWP. In chapter 5, I present my findings. After which, in chapter 6 I answer my research questions and discuss their implications. Finally, in chapter 0, I present my conclusions, a summary of the findings and recommendations for further research.

2. Methodology

In this chapter, I. Firstly discuss why I chose a qualitative case study research design and consider its ethnographic implications. Secondly, I outline how the data were collected, including interviews, participatory observation and a literature review. Specifically, I focused on respondents´ on narratives and perceptions. Thirdly, I consider the ethical considerations of the data collection methodologies. Principally adhering to the Norwegian National Committee for Research Ethics Committees´ (NESH) guidelines. Fourthly, present how I analysed the data and reflect on its reliability, validity and trustworthiness. Finally, I reflect on the study´s challenges and constraints.

2.1. Research design

Qualitative and quantitative data inform SLA in different ways (Meikle et al., 2001, p. 19). Broadly speaking, qualitative research aims to explore relationships and to understand observable qualities, attributes and concepts (Molteberg, 2015). Similarly, as a research strategy, case studies contribute towards our knowledge of individuals, groups, organizations and related phenomena (Yin, 2009, p. 7). In this study, I operationalize a holistic, qualitative case study to compare rural and urban livelihoods. Whereby, each household is perceived as a separate case study; thus, acknowledging the heterogenous qualities of each household. Indeed, rather than vast amounts of quantitative data and statistics, this study focuses on words and meaning. Thus, aiming to illustrate how the Maluti resettlers perceive their local conditions. This is resonates with ethnographic research characteristics which, require adaptability throughout the research process.

2.1.1. Ethnography

Ethnography is the art and science of a human group. For a period of time, researchers immerse themselves in a group. Whereby, they observe behaviours, listen to conversations and ask questions (Bryman, 2012, p. 432). This includes a human group´s institutions, interpersonal behaviours, material productions and beliefs. By exploiting the Maluti resettlers´ close proximity to my base in central Maseru, I was able enjoy many prolonged visits among the Maluti resettlers. As such, I engaged in numerous informal discussions and participatory observation. Discussions typically accompanied picking and snacking from LHDA fruit trees.

Alternatively, when it was raining I was invited into respondents´ living rooms. Interviews were done in respondents´ native language, assisted by a translator or field assistant. By pursuing interviews in familiar, relaxed environments, I aimed to uncover more intimate knowledge of community's social and cultural nuances.

According to Bryman (2012, p. 432), in addition to immersion, ethnographers gather data by collecting documents and though interviews. Reviewing available and recent literature preceded all writing whereby, the literature review was a vehicle for understanding and learning. I asked question such as: *"What is already known?", "What concepts and theories are relevant?", "What methodologies have been used to study similar cases?", "Are there any controversies or inconsistences in the literature?"* and *"Are there any unanswered research questions in this area?"* (Bryman, 2012, pp. 99-100).

The Transformation Resource Centre (TRC) is a local non-governmental organization (NGO) operating in Lesotho. The TRCs overall objective promoting good governance and social justice that is in the best interest of the public (Transofrmation Resource Centre, 2018). Fortuitously, the TRC is also located in central Maseru. Thus, between interviewing periods, I repeatedly accessed their library. In their library, the TRC have a private section of archives exclusively for the LHWP. With the TRCs permission, I gathered and copied original project documents pertaining to topic such as compensation and relocation. In additionally, in used online sources extensively.

To access documents pertinent to my objectives I used a combination of online sources. Mostly, I used Google Scholar to search for key themes related to different theories. Whereby, my university's virtual private network (VPN) allowed me to access articles and journals that are not open access. Similarly, I used Oria. Oria is the Norwegian University of Life Sciences' (NMBU) online search engine that provides access to NMBUs library resources. Examples of key search phrases include: *"urban SLA", "rural-urban migration in dam projects", "LHWP involuntary resettlement", "involuntary resettlement into cities"* and others. I also used technological aids to help me file, sort and categorize applicable findings from my literature review. In particular, Simple Mind was a useful and free mind-mapping tool (Figure 1). Finally, I conform to the scientific integrity and plagiarism ethics, as outlined by NESH. Whereby, plagiarism is defined as: ¨Plagiarism in research ethics is taking something from someone else and presenting it as one's own without correctly citing their source¨ (NESH, 2016). Accordingly, I operationalize APA 6th, as outlined by kildekompasset.no.

SLA demands that vulnerabilities should be identified by men and women themselves, or at least by groups that represent them (Meikle et al., 2001, p. 2). Thus, for more detailed analysis about the specific case, I sample six out of twenty-two resettled households that compromise the village of Maluti (Table 6). Thus, representing 27 percent of the sample population. Mover, I interview two senior members of the host community. In depth, semi structured interview ranged from between 45-90 minutes. Respondents' availability and their willingness to share determined the duration. I created a general interview guide (0) but adapted it to each session. The interviews took place in locations that were comfortable and familiar to the respondents. Typically, inside their homes, in their gardens or on their verandas and front steps. When asking for respondents' perceptions or feelings towards certain project components, I asked follow-up questions, asking them to specifically identify factors that influence their opinions. Interviews were done with the household heads. Yet, in one case, a man his wife equally participated in an interview. Later, I asked the translator if the husband and wife disagreed during the interview. She replied; no. Rather, they were rather presenting both building responses of the same perception.

Five expert interviews were undertaken. Four are based in Lesotho and one in Norway. The expert respondents represented the LHDA, the private sector and NGOs. (

Appendix 5). Through their professional and personal association, the expert interviewees have amassed intimate knowledge of the LHWP. Their availability, familiarity with the project and their level of engagement determined their participation. Interviews typically took place in their offices or in similar comfortable settings. Towards the end of the fieldwork period, I was granted an interview with the chief executive of the LHDA. As the organization which is mandated to implement the LHDA, this was extremely fortuitous. While meeting with the LHDA was insightful, she was extremely guarded and insisted that the LHDAs legal counsel be present. Moreover, they requested that the interview was not recorded.

In summary, e*thnography as a method* is inductive and field-based. Rather than testing a hypothesis, I seek to accumulate descriptive details that identify patterns to explore, describe and explain the effects of involuntary resettlement and subsequent resettlement into urban areas. Placing emphasis on respondents´ own perspectives. Whereby the samples´ extended stories are usually presented in a qualitative report (Angrosino, 2007, pp. 14-15). Resultantly, e*thnography as a product* is generally a detailed report of the sample´s extended story. This resonates with qualitative research.

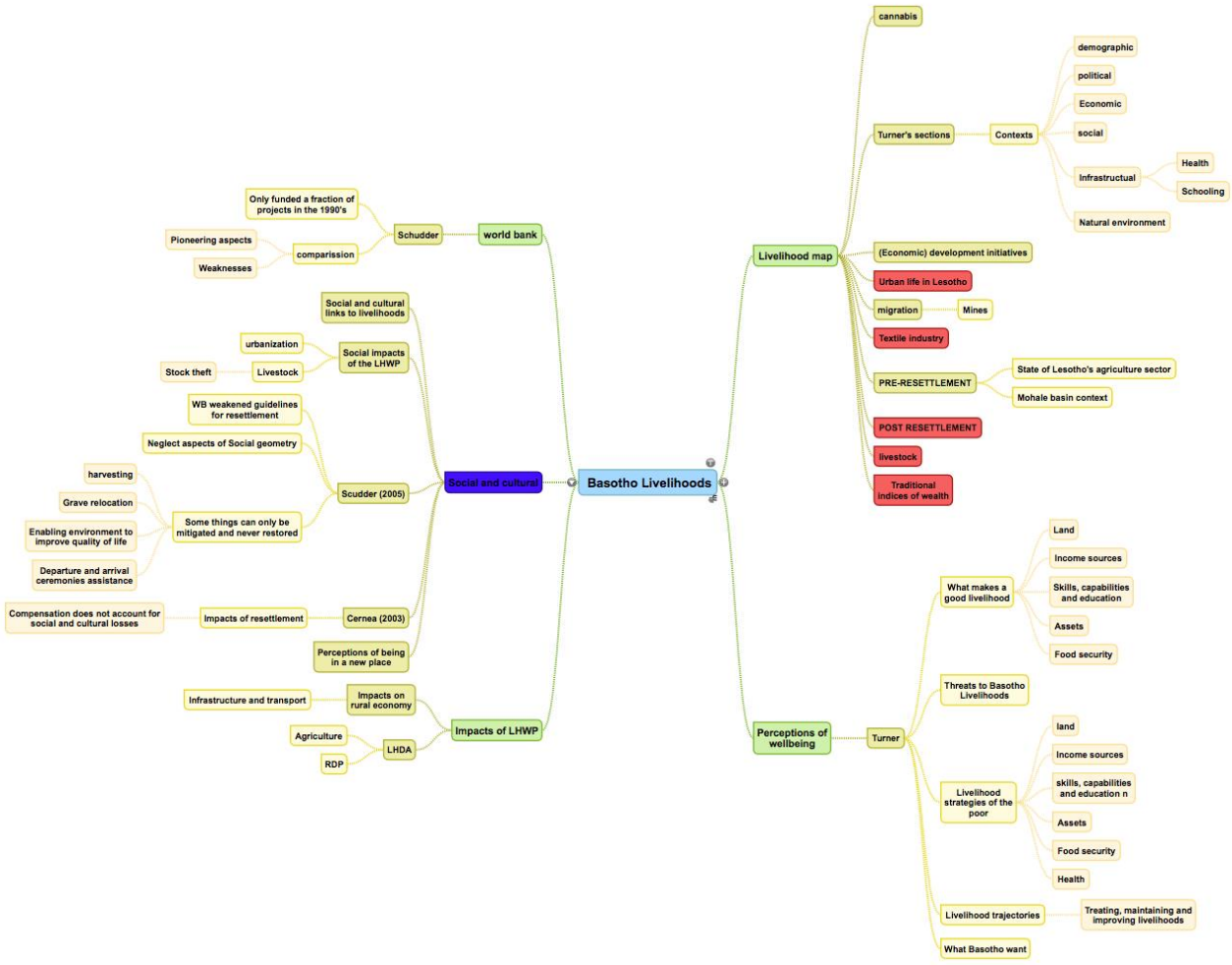


Figure 1: Simple Mind diagram. Used to collate thoughts and themes during the literature review

2.1.2. Choosing an Analytical tool

This study is grounded in *Sustainable Livelihood Analysis (SLA). I chose SLA because the framework incorporates a holistic concept of* vulnerability. Specifically, SLA conceptualizes vulnerability as: threats, resilience and the ability to exploit opportunities (Moser, 1998, p. 3). Moreover, SLA seeks to understand vulnerability from the poor peoples' perspective. To do this, SLA induces the poor´s participation and is sensitive to their environmental needs, struggles and contexts (Meikle et al., 2001, p. 8). Finally, to analyse vulnerabilities in involuntary displacement situations, I exploit the compatibility between SLA and other analytical tools. Specifically, the Impoverishment Risks and Reconstruction (IRR) model (Cernea, 2000).

2.2. Data Collection

Data collection consists of seven semi-structured interviews with local respondents, five semi structured interviews with expert interviews, participatory observation and a literature review. Fieldwork took place in March 2018 in Maseru, Lesotho and the surrounding foothills.

2.2.1. Gaining access to the field

Before sampling respondents, I first engaged the Chief. Whereby, I formally introduced myself and stated by research objectives. In return, told me about his village's population. As the research progressed, the Chief became a key informant and gatekeeper. Gatekeepers are concerned with the research motives, objectives and ultimately determine the degree of a researcher's access to the sample population (Bryman, 2012, p. 151 and 435). In this case, the Chief was concerned with what his community could lose of gain by participating in this study. I always visited the Chief's household when entering the village. Subsequently, I was able to do multiple formal and informal follow up interview with him with the many member in his household. Thus, showing that gaining access to respondents is a political process, requiring clearance from informal institutions. Indeed, before Chief consented, the villagers would hardly engage me.

I first contacted the community on a Sunday. As such, most of the village's men were out…including the Maluti resettlers' chief. The women who remined in the village were unwilling to engage with outsiders such as myself without the chief's consent. Indeed, they seemed guarded and suspicious towards my motives. Resultantly, I located the chief's wife and took her husband's phone number. We later called the Chief and made an appointment to with him the next day. I returned to the village the next afternoon, as agreed upon with the chief. Whereby, I was greeted with a large group of villagers. In fact, the chief had gathered representatives of all resettled households. This was done as an informal group-information meeting alongside a road. At this stage, the resettlers were interested in what they could gain. I fielded questions such as: *"How would my research benefit the village?"; "How would I pay them for their time?" and "What would they get out the process".* In response, I made my position as an independent, self-funded student clear. Further, I explained that financially reimbursing respondents would compromise the data. Indeed, all researchers have a duty towards transparent research funding (NESH, 2016). Once I presented my research and

answered all the villagers' questions, I was asked to return the next day to hear their response on whether they would allow me to engage them. Fortunately, they agreed.

2.2.2. Sampling

Multiple levels of sampling are evident. For instance, the research site was purposively and opportunistically sampled because of the village's accessibility. This significantly decreased the data-collection period. Whereas, households within the village were sampled by convenience. Some Maluti resettlers asked whether I could do focus group interviews? I declined; explaining that I aimed to study each household as individual case studies. Furthermore, I explained that my focus was to sample each household individually to capture their individual achievements, struggles and stories. Once the Maluti realized that I was interested in the heterogenous characteristics of each household, they agreed to participate in individual interviews. Yet, proceeding to interviews, I collected profiling information of each household from the chief.

The Chief wrote down the names of all the Maluti resettlers in order of their housing layout. Furnished with a list of the resettlers' names and locations, I began profiling potential respondents. For example, I collected information such as age, marriage status, first or second generation urban resettlers and number of children. This information was intended to ensure a diverse group of respondents and backgrounds. Yet, in the field randomly selecting houses was impractical. While conducting interviews, it became apparent that if I continued to sample based on predetermined criteria, the non-response rate would be too high. For instance, one household did not want to participate because her husband, the household head was not home. Another non-response was collected because one respondent was very young when they his family moved to Maseru and therefore did not remember much of the highlands. Unfortunately, his father, was away working in South Africa. Resultantly, I abandoned quota sampling and sampled on convenience and availability. Rather, I prioritised a diverse sample of urban livelihood strategies. In hindsight, this was a fortitions development since as the study progresses; livelihoods took to the centre stage of this study.

Some households were unwilling or unable to participate in the process. For example, attempts to interview one household were abandoned as the household head was unavailable. During the fieldwork, we discovered that he was a migrant worker in South Africa. Moreover, two households declined to participate for personal reasons, unknown to the researchers.

Regardless, I was able to compile a comprehensive summary of household livelihoods of six local respondents (Appendix 6).

The Chief also provided access to the host community. Initially, I attempted to visit the host community's chief. However, he and his wife were visiting relatives in the highlands. So rather we engaged with host-village elders. Elderly folk were purposively sampled to ensure comprehensive accounts of the period when the Maluti resettlers arrived. This was the only group interview done. Comprising of the Chief, myself, the translator and an elderly couple. The man remained in bed as he was ill while, his wife sat with us in their kitchen.

2.3. Ethical considerations

Doing ethnographic research requires being aware of particular ethical challenges and dilemmas. Thus, research ethics are codifications of scientific morality. The Norwegian National Committee for Research Ethics Committees (NESH) define research ethics as a variety of norms, values and institutions that regulate scientific activities (NESH, 2016, p. 5). Thus, research ethics can be broken down into components.

2.3.1. Consent

According to Bryman (2012, p. 138), informed consent is a significant component of research ethics which, fiercely debated among social science researchers. When researchers handle personal sensitive information, they are obliged to obtain participants' consent. Whereby, consent should be freely given, informed and in an explicit form (NESH, 2016, p. 15). Consent is freely, informed and explicit when respondents receive adequate information, are not forced to participate and have clearly given consent. Further, researcher have a duty to inform participants (NESH, 2016, p. 13). I broadly informed the Maluti resettles of my research purposes during an initial group-engagement. Yet, when I corresponded with them on a household level, I always prefaced interviews by going through an information sheet. Whereby, I presented information such as: the purpose of my research, research objectives, my funding source, the intended use of the results, who would receive access to the information and the consequences of participating (NESH, 2016, p. 13). The information sheet was compiled beforehand. I did not translate information sheets into their mother-tongue. Based on information from the field assistant who questioned the villagers' literacy rate or indeed, their

willingness to admit to an inability to read. Rather, the translator read information sheet before commencing any interview, relaying respondents' questions back to me. I also obtained respondents' permission to record interviews on my iPhone, thus recording their explicit oral consent at the start of each interview. Indeed, through being transparent, I aimed to avoid surprising respondents in a way that could cause them harm of strain.

2.3.2. Responsibility to Avoid Harm and Strain

Principally, this research aims to ensure the safety of respondents. Indeed, Bryman (2012, p. 135) and NESH (2016, p. 19) identify researchers' responsibility for avoiding harm as cornerstone of research ethics. However, I adopt this ethos more broadly. Rather than narrowly defining harm as physical or mental; I aim to ensure that my research doesn't cause any strain. By broadly using the term strain, I aim to protect respondents from more than just physical or mental harm. Indeed, the Maluti resettlers were displaced over two decades ago and, overtime negative feelings towards the LHWP may have eroded or festered. As such, I was careful not to push or interrogate respondents too hard on topics that seemed sensitive. This was particularly apparent when discussing burial refusal and exhumed remains with the Chief and a host community member. I was particularly concerned with ensuring that my actions did not negatively impact respondents' livelihoods. Indeed, compiling an SLA analysis make one aware of the fickle nature of Maseru livelihoods. Accordingly, I secured permission from the respective chiefs from the host community's as well as the Maluti to deter any negative effects from local hierarchies. Moreover, to protect respondents from wider institutional powers, I took every precaution to maintain respondents' confidentiality.

2.3.3. Confidentiality

Confidentiality reasons that respondents cannot be identified when the information is disseminated and published. I recoded all interview on my iPhone. Upon returning from the field each evening I transferred the filed onto an encrypted hard disk. All respondents indicated that the used to illegally cultivate and sell large quantities of cannabis in the highlands. However, the authorities became aware of this when they compensated the resettlers for loss of income associated with cannabis. Comparatively, one respondent admitted that he was still engaged in illegal cannabis activities. Whereas, interviews and participatory observation revealed that one respondent well over-exceeds the legal quota for livestock on urban

properties. This presents a conflict as researchers are bound to prevent a criminal offence or report it to the police. Whereby, according to NESH (2016, p. 17), suspicion of espionage, acts terrorism, rate, incest or domestic violence takes precedent over confidentiality.

Considering pettiness and small-scale nature of these misgivings, I did not report these crimes. Indeed, reporting them would cause more harm than good. As Turner et al. (2001, pp. 26-28) points out: losing a household's primary breadwinner is a vulnerability which all categories of respondents identified. Thus, If I reported to the police a household in this study is engaged in illegal activities and he was arrested, his family may lose their main breadwinner. Similarly, if local authorities fined #or confiscated part of respondent #2 livestock, his livelihood may be jeopardized. Further questions surround whether citizenship makes a difference in terms of ethical requirements. Thus, in this incident, *the responsibility to do no harm* (NESH, 2016, p. 19) took precedent. Moreover, I anonymize the village name. Rather than using the actual village name, I call the respondents the *Maluti* resettlers. This is an apt pseudonym, as the Maluti are the mountains from which the resettlers originate.

2.3.4. Assumptions made by researcher

a) I assumed that household income was pooled among family members as my focus was on how income was obtained, not on how is was distributed. Admittedly, pooled household resources may not have been the case. Ethnographic research from Africa demonstrates that household income is not equally shared. Moreover, male heads often have obligations to siblings or children of siblings.

b) The prevalence of HIV/AIDS in in Basotho society is widely acknowledged to have acute implications for Lesotho´s development (AFSUN, 2015; Devitt & Hitchcock, 2010; Turner et al., 2001). But, considering the limited of time available to collect data, I determined that it was unfeasible to collect data pertaining to sensitive subjects such as their HIV/AIDS status. Rather, I focused on collecting detailed information of other factors of the SLA frameworks. Such as: social capital, claims and access, cultural norms, and urban vulnerabilities. Indeed, I was generally able to extract data from these categories in the first meeting.

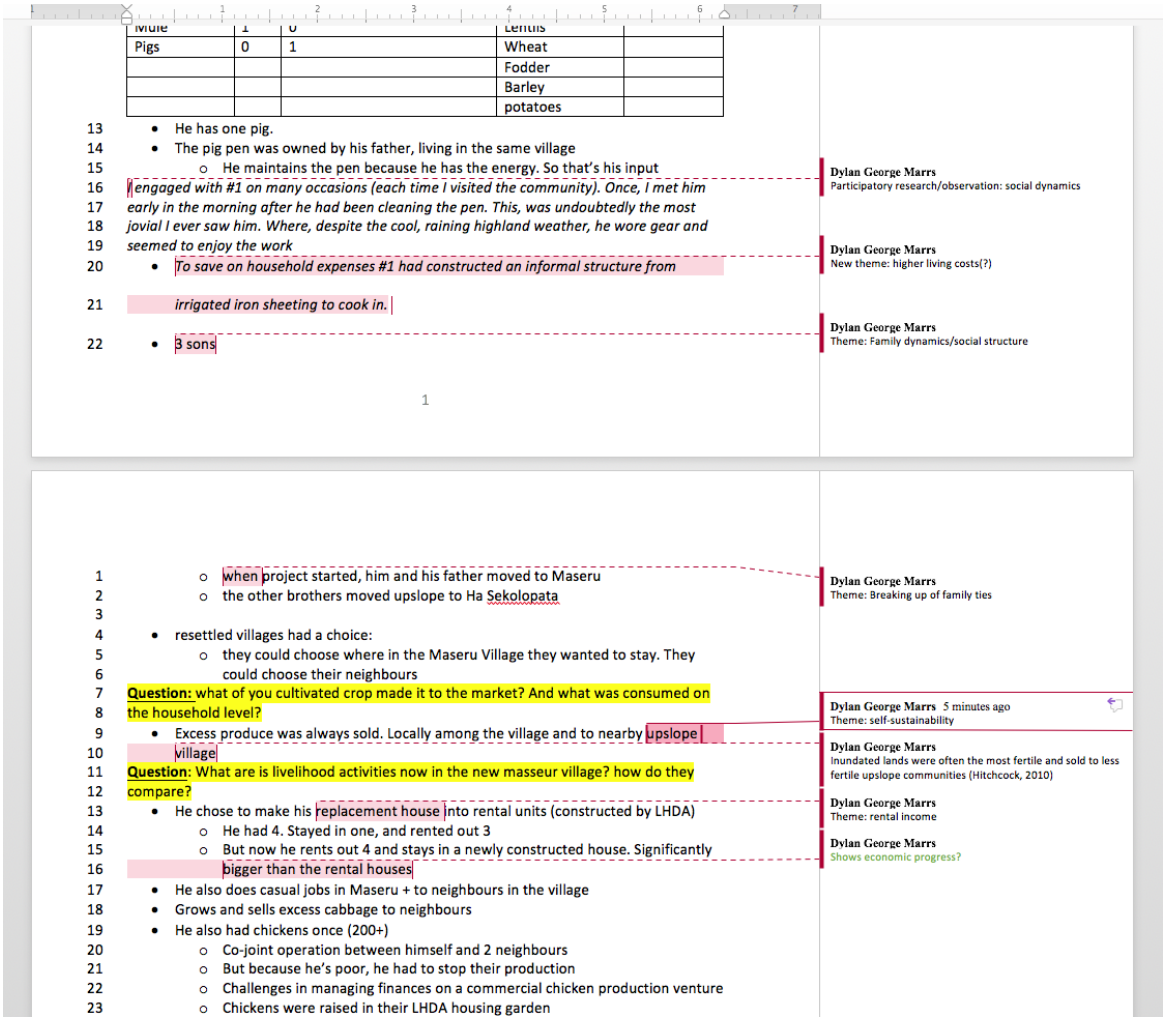
c) Rather than toiling to delineate an ambiguous border between formal and informal institutions, I rather adopt Hodgson (2006) board categorization as legal and non-legal

institutions. Moreover, I acknowledge the interdependencies between each of the categories.

d) To increase compatibility between the IRR model and SLA framework, I broadly merge the terms impoverishment risks (Cernea, 2000), and livelihood vulnerabilities (Scoones, 1998).

2.4. Data analysis

I systematically analysed the Maluti resettlers' interview scripts, as outlined by Berg and Lune (2011) and by Bryman (2012) to study the data. Firstly, I created a physical mechanical filing system. This helped to keep my data ordered. I inserted page numbers as well as line numbers into the transcription notes (Figure 2). Thereby, creating a reference system to categorize and index coded data (Berg & Lune, 2011, p. 154); much like the Dewy system catalogues books in a library. For example, #1-02-09 indicates to a theme at: respondent #1; transcript page 2; line 9. This helped keep the data structured and ordered.



Mule	1	0	Lentils	
Pigs	0	1	Wheat	
			Fodder	
			Barley	
			potatoes	

- He has one pig.
- The pig pen was owned by his father, living in the same village
  - He maintains the pen because he has the energy. So that's his input

I engaged with #1 on many occasions (each time I visited the community). Once, I met him early in the morning after he had been cleaning the pen. This, was undoubtedly the most jovial I ever saw him. Where, despite the cool, raining highland weather, he wore gear and seemed to enjoy the work

- *To save on household expenses #1 had constructed an informal structure from irrigated iron sheeting to cook in.*
- 3 sons

Dylan George Marrs
Participatory research/observation: social dynamics

Dylan George Marrs
New theme: higher living costs(?)

Dylan George Marrs
Theme: Family dynamics/social structure

1

  - when project started, him and his father moved to Maseru
  - the other brothers moved upslope to Ha Sekolopata

Dylan George Marrs
Theme: Breaking up of family ties

- resettled villages had a choice:
  - they could choose where in the Maseru Village they wanted to stay. They could choose their neighbours

Question: what of you cultivated crop made it to the market? And what was consumed on the household level?

- Excess produce was always sold. Locally among the village and to nearby upslope village

Dylan George Marrs 5 minutes ago
Theme: self-sustainability

Dylan George Marrs
Inundated lands were often the most fertile and sold to less fertile upslope communities (Hitchcock, 2010)

Question: What are is livelihood activities now in the new masseur village? how do they compare?

- He chose to make his replacement house into rental units (constructed by LHDA)
  - He had 4. Stayed in one, and rented out 3
  - But now he rents out 4 and stays in a newly constructed house. Significantly bigger than the rental houses
- He also does casual jobs in Maseru + to neighbours in the village
- Grows and sells excess cabbage to neighbours
- He also had chickens once (200+)
  - Co-joint operation between himself and 2 neighbours
  - But because he's poor, he had to stop their production
  - Challenges in managing finances on a commercial chicken production venture
  - Chickens were raised in their LHDA housing garden

Dylan George Marrs
Theme: rental income

Dylan George Marrs
Shows economic progress?

Figure 2: coding transcription notes

Secondly, I systematically ´filed´ the transcript notes by inputting coded topics into one document; an index sheet (Figure 3). Pseudonyms protected respondents´ identities while, the index codes easily referred to specific points in the dialogue. Moreover, by colour coding similar topics, similar themes and sub-themes became identifiable (Berg & Lune, 2011, p. 155)

respondent #1	respondent #2	respondent #3	respondent #4	respondent
:h #1 on many occasions (each the community). Once, I met him ıorning after he had been cleaning , was undoubtedly the most jovial I . Where, despite the cool, raining ıther, he wore gear and seemed to rk (01-16)	#2 had compensation money that he was receiving for land lost that was coming in annually in small amounts. He asked for a lump sum. With the lump sum amount, he was able to build 2 rental properties (01-08)	Why did she chose to move here and not foothills or highlands? Her parents were the ones who chose to move to Maseru because the LHDA had promised: A better life; remunerations; free electricity, water, free housing (01-05)	He has an issue with the fact that he must pay for water here, whereas back home they had unlimited water and that they moved for a water project. And the 50-year compensation started from 1998. But the LHWP is not for only 50 years, it is a lifetime project, so why aren't they getting compensation for only 50 years (01-13)	When he moved to Maser to cultivate for vegetables fruit trees. LDHA promised not deliver. He is now sitti and veg and does not kno "You can only eat so much he has crops year in and y to sell". So basically, his or rental units (01-25)
would slaughter two chickens .i would feed the chicken maize But in Maseru growing chickens is cause i dont have enough land to maize to feed them (02-04)	'in Maseru, you have to work to get food. Whereas, in highlands you can stay at home and still provide though farming. We could also get firewood and energy from natural resources' (01-29)	How long was free utilities promised for? 50years. But they went back to LHDA and said that 50 years wasn't enough because they've taken their fields, houses, water resources, etc. that last for a lifetime (01-10)	he's still into the cannabis business. Specifically says it's a big part of his livelihood. He buys from the highlands and sells in Maseru. He says it is very risky selling in Maseru. Back home, his family was heavily into cannabis production. Cannabis income paid for their school and put food on their plate. He has never had any troubles with the police (01-42)	They used to pursue dress stream, but they faced cha market to sell to. Indeed, elderly, they physically car garments and material int
nake his replacement house into constructed by LHDA). He had 4. , and rented out 3. But now he nd stays in a newly constructed icantly bigger than the rental 3)	The biggest way to increase livelihood from livestock is to grow the herd. If it's too dry, they will still breed but they won't be able to sustain the new additions. 'That's why his livestock isn't increasing'. The fact that his livestock lives far away from his livestock is a concern of his because he is unable to maintain them (02-03)	She has 5 kids. All stay with her in the house. She relocated with 3 kids and had 2 more in Maseru. One child stays with her sister in South Africa. Two are in high school (in Maseru). One is with her brother in the highlands working as a heard boy. Final daughter is at college in Maseru. She studies public admin and human resources (02-11)	When they arrived, it was hostile between themselves and the host community. The host community was promised development things like schools, clinics and better streets. But LHDA never delivered. So, the host community decided that if LHDA isn't going to deliver, they resettlers cannot use the village cemetery. Now they are allowed, but there's still tension, small issues (02-03)	Yes, they were compensat for marijuana but rather f animals. Yes, they had pro while they were growing, People from Kwazulu Nata cannabis themselves with

Figure 3 colour coded index sheet

Collecting themes and sub-themes was done mindful of this thesis' literature and theory review. For example; tangible and intangible assets (Chambers & Conway, 1992) and vulnerabilities in urban context (Meikle et al., 2001). However, I was careful not to let this cloud the analysis. While I was aware of broader thematic concepts, I strived to allow responses from the index sheet to shape themes; rather than trying to mould responses into a rigid analytical framework. By doing this, respondents were able to identify their own sources of vulnerability. Thus, 'categories' and 'sub-themes' guided the data presented in the findings section (section 5). Whereas, themes guided the structure of the discussion section (Figure 4).

B	C	D	E	F
response	**reference**	**category**	**sub-theme**	**SLA/IRR theme**
was promised a free water and electricity in their resettles households	#3-01-05	LHWP compensation	broken promises	institutions
the LHDA promised us a market but, failed to deliver	#5-02-17			
The LHDA promised to make allowences for the superior productivity of my fields. Instead, I got regular sharecropping rates. Despite the fact that I invested a lot of human and financial capital into my fields	#1-02-06	LHWP compensation		
The host community was promised development things like schools, clinics and better streets. But LHDA never delivered. So, the host community decided that if LHDA isn't going to deliver, they resettlers cannot use the village cemetery	#7-01-14	friction with host community		
There wasn't any formal announcement. The host community wasn't officially told that resettlers would come. One day they were attending a funeral and then trucks arrived, dropping off building supplies. That is how the found out about the Likalaneng resettlers	#7-02-06	friction with host community	LHDA communication	
they were told by LHDA after they valued their assets what compensation amount they were to receive (take it or leave it). They didn't have an opportunity to discuss/debate it	#6-02-29	houshoeld valuation during displacment		
he's still into the cannabis business. Specifically says it's a big part of his livelihood	#4-01-42	rural livelihoods	cannabis	

Figure 4: categorized index sheet

2.5. Reliability, Validity and Trustworthiness

2.5.1. Reliability and Validity

Validity is multi-dimensional. External validity concerned with whether the results can be *generalized* beyond the sample population (Bryman, 2012, p. 47). The sample size in this study is too small to represent a larger population of resettlers, or even all households in Maluti. Whereas, reliability is concerned with whether the results of a study are *repeatable* (Bryman, 2012, p. 47). By studying the Maluti resettlers' livelihoods though established SLA methodology, this study promotes it reliability Whereby, this study aligns with contemporary livelihood-thinking. Whereby, livelihoods are acknowledged as a process rather than a fixed state (for example: Chambers & Conway, 1992; McDowell, 2002; Scoones, 1998). For example, this study identifies common SLA components such as different types of assets, institutions, vulnerabilities, short and long-term objectives and contexts. However, this does not ensure significant reliability as there are many other circumstances which could yield different findings and subsequent interpretations.

2.5.2. Trustworthiness

Trustworthiness measures how good a qualitative study is (Lincoln and Guba (1985) as cited in Bryman, 2012, p. 49). Trustworthiness can be deconstructed into multiple components. To pursue adequate trustworthiness in this study, I break down the concept of trustworthiness

into multiple components. Namely: respondent validity, triangulation, credibility, transferability and my own research bias.

I partially pursued respondent validation as a strategy to increase credibility. Whereby, I had the abstract of my thesis translated into Sotho. Thereafter, my local contact in the field; who is a water-resources expert delivered the translated document to the Chief. Thereafter, the chief disseminated the information to the community. Thus, before taken this research any further than a master thesis submission, I will wait for the Chief´s approval. Moreover, sufficient triangulation promotes trustworthiness in research findings.

Triangulation implies gathering *data from multiple sources* and methodologies to increase confidence in the findings (Bryman, 2012, p. 392). It was only possible to triangulate certain details of the research through combinations of participatory observation, interviews with local respondents and experts and literature reviews; including searching project achieves at the TRC library. Such as details pertaining to compensation and reallocation. However, few sources to triangulate the many accounts of reality is typical of qualitative research and auditing is timely. I repeatedly visited the village, attempting to immerse into village life. One day I ran into respondent #2 while he was returning home with his livestock. I noticed that his herd was considerably larger than he told me the proviso day. It was unclear whether the herd I observed was combined with another. Nonetheless, this is an interesting example of how participatory observation can inform interview data (Bryman, 2012, p. 392); thereby, impacting credibility.

Credibility deals with *how believable findings are* (Bryman, 2012, p. 49). As a white, South African male, attempting to enter a facet of Basotho society, there are unique factors that may impact how the local respondents perceive me; and thus, the answer they give. For example, the political history between the Kingdom of Lesotho and the previous apartheid government of South Africa. Thus, to ensure credibility and avoid inflating recounts of circumstances, I stressed that I was not collecting data on behalf of the LHDA. As far as I was able to tell, the respondents believed me. With the field assistant´s invaluable help, I truthfully expressed my purely academic objectives. Moreover, since settling in Maseru over twenty years ago, the Maluti resettlers have gone through multiple interactions with the LHDA; including pre-resettlement engagements, compensation negotiations, post-resettlement assessments such as minimum threshold levels and court cases. This starkly compensates with

the low levels or bureaucracy in rural areas. As such, the respondents may be suffering from a prolonged research fatigue. Furthermore, transferability should be considered.

Transferability is another aspect of trustworthiness. Transferability deals with whether findings *apply in different contexts* (Bryman, 2012, p. 49). However, qualitative research typically comprises small sample sizes and thus cannot be generalized to larger populations. Due to dire time constraints (Section 2.6), this was certainly the case in this study. Instead of aiming to generalize, I decided to develop a thick description (Geertz, 1973a as cited in Bryman, 2012, p. 392). Whereby, I rather focused on contextual uniqueness. Thereafter, I related these two components of SLA frameworks. For example: different types of assets, institutions, vulnerabilities, short and long-term objectives and contexts. Moreover, as Bryman (2012, p. 145) points out, I purposively sampled households which, is a non-probability approach. Therefore, the results cannot be generalized to a wider population. Finally, confirmability addresses researcher's 'own bias.

While observation that is completely bias is impossible (Bryman, 2012, p. 49; 393). I consistently reviewed my own working, searching for blind spots. Growing up in South Africa, I indirectly relied on the LHWP for water, yet I no longer live in South Africa and confirm that this has no bearing of the trustworthiness of this research. Rather, I constructively utilized my familiarity of social and cultural nuances in Southern African society to make respondents more comfortable with my presence. Regardless I acknowledge the unavoidable role that I have in the research environment. As Angrosino (2007, p. ix) notes; researchers themselves are an important part of the process. I am a part of the research process because of my own personal presence as researcher and through my own personal experiences that I bring to the field. Resultantly, my experiences influence my own reflexivity.

2.6. Challenges and constraints

Due to the speculative nature of fieldwork, this study´s focus changed dramatically during the fieldwork period. The original research plan intended to study rural, highland livelihoods and agrarian communities´ capacity to adapt to climate change. Within this plan, the intended sample population were households who would be impacted by Hydropower dams in phase 2 of the LHWP. Yet, finalizing the location of the new dam meant that I could not commence fieldwork until the decision was made. Thus, I travelled to South Africa in

December 2017, expecting a final decision on the dam´s location (and subsequently which communities to sample) in January 2018. But, by the beginning of March 2018 as decision was still not made, thus necessitating a new research scope.

Once it was clear that new research objectives were needed, I selected a new research site. At this point, project delays caused delays in research; thus, limiting the available time to collect data. Indeed, the initial data collection period was schedule for mid-January to mid-February. Furthermore, in March, Lesotho enters its rainy season. Resultantly, entering rural areas in the Highlands required a four-wheel drive and extra time to trek into villages. Resultantly, an urban case study was chosen. Through my background research, I was aware during resettlement in LHWP phase 1B some households decided to relocate from the highlands into urban areas such as Maseru. Therefore, after consulting with the field assistant, we attempted to engage with the Maluti resettlers. Regardless, the sample size is smaller than I initially hoped for. In retrospect, if I was able to collect data again with more generous time resources I would like to sample the majority of the households; including other urban and peri-urban LHDA replacement hamlets. This is desirable as it would widen the research scope and allow for comparison between different LHDA relocation options.

3. Theory

3.1. Introduction

This is a study of livelihoods. By drawing influence from multiple thematic frameworks, this study exudes a dynamic analysis which seeks to capture the many layers of the Maluti resettlers' reality. While this study is grounded in *Sustainable Livelihood Analysis (SLA)* theory, it also considers the displaced contexts of the sample population. Specifically, through frameworks such as *The Impoverishment Risks and Reconstruction (IRR) model* (Cernea, 2000) and *The Four-stage Framework* (Scudder, 2005). This resonates with Chambers and Conway (1992, p. 1) who postulate that accelerating change in all domains of human life is outdating analytical tools and making the future harder to predict. Importantly, this study also considers the *urban context* in which the sample population pursue their livelihoods (Figure 5). Through informal and semi-structured interviews, the findings of this study seek to inform the debate on the use of SLA frameworks in urban context.

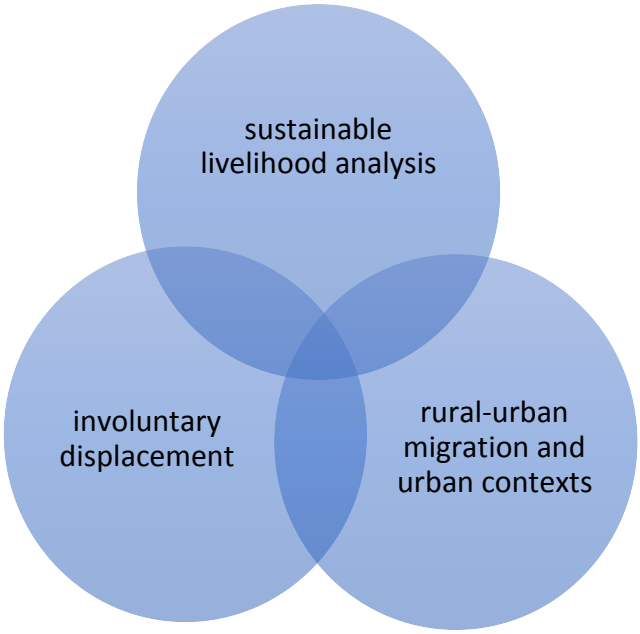


Figure 5: Theoretical scope

3.2. The Nature of Livelihoods and Vulnerability

"A livelihood comprises of the capabilities, assets (including both material and social resources) and activities required to obtain the necessities of life. A livelihood is sustainable when it can bounce back from stresses and shocks, maintain or enhance its capabilities and assets, while not undermining the natural resource base" (Scoones, 1998, p. 5). Livelihood strategies are shaped by households' availability of assets, urban contexts and men and women's' personal choices (Meikle et al., 2001, p. 12). These strategies result in livelihood outcomes. Livelihood outcomes can be aggregated on a continuum between vulnerability and security (Moser, 1998 as cited in Meikle et al., 2001, p. 14).

Moser (1998, p. 3) defines vulnerability as: the sensitivity and insecurity experienced by individuals, households and communities towards their wellbeing in the face of a changing environment. This includes households´ responsiveness and resilience to the risk that they face. Moser (1998) also distinguishes between poverty and vulnerability; although the poor are among the most vulnerable, not all who are vulnerable are poor. There are two aspects of vulnerability: External: shocks and stresses to which they are subject to and internal: the capacity to cope. Thus, an analysis of vulnerability should identify possible threats to household welfare as well as assess the resilience of households to exploit opportunities (Meikle et al., 2001, p. 15).

3.3. Sustainable Livelihood Analysis (SLA)

SLA frameworks seek to overcome the defects of conventional livelihood analysis. These include misperceptions such as production, employment and poverty-line thinking. Each reductionist approach expresses the poor's problems in a single continuum. This is out of touch with reality as the poor usually combine multiple strategies in their quest for secure livelihoods (Chambers & Conway, 1992, p. 4). Crucially, SLA frameworks perceive sustainable livelihoods as a continuous process rather than an end state (*Meikle et al., 2001, p. 18).*

Various authors offer ways to operationalize a sustainable livelihood analyses (SLA); exhibiting both differences and synergies. However, assets (or capital) are common indicators in all methods (Table 3). Assets are mobilized to overcome vulnerabilities. Importantly, asset availability as well as asset accessibility are needed to promote sustainable livelihoods. Chambers and Conway (1992) distinction between tangible and intangible assets help to clarify

this distinction. For example: the existence of schools is irrelevant if people are unable to use them

Comparatively, *capabilities* such as *physical capacity and skills* are the most direct form of human capital as they 'belong' to the individuals or households. But they also depend on *access* to social and economic infrastructure. For example, physical distance, transportation infrastructure, rights of access or ability to exchange assets. In summary, *accessibility* to assets is key which, largely depends on *social infrastructure.* Whereas, many *physical, social or economic assets* such as sewage systems, schools, transport infrastructure and banking services are not owned by those who use them (Meikle et al., 2001, p. 10). Yet, most SLA are done in rural contexts. As such, researchers studying city populations should account for their samples ´urban contexts.

3.4. Urban Livelihood Contexts

Contexts determine which assets and livelihood strategies households can mobilize to overcome risks (AfDB, 2012). Thus, to maintain an analytical framework which, is specifically tailored towards the Maluti resettlers', urban contexts and urban vulnerabilities need to be considered. This is an important advance for SLA methodologies to make. Indeed, cities are engines of economic growth (Meikle et al., 2001, p. 5) and more than half the world´s population inhabit urban areas. This trend is exacerbated in Africa where, high natural growth rates and rural-urban migration fuel urbanization (AfDB, 2012). Resultantly, while, Africa remains the least urbanized region, it also has the highest urbanization rates in the World. Thus, to increase its adaptability, SLA methodologies should account for urban contexts.

At this point, the works of Meikle et al. (2001) and Moser (1998) become insightful. Meikle et al. (2001) both give insight on using SLA on *urban* populations. Whereby, the authors find certain commonalities (contexts) that are present in urban areas. Meikle et al. (2001) finds that these contexts differ; or differ in significance from rural poor. Whereas, based on a study in four urban cities that experienced economic difficulties (Lusaka-Zambia, Guayaquil-Ecuador, Metro Manila-the Philippines and Budapest, Hungary), Moser (1998) proposes a framework to assess urban vulnerabilities. That highlights the complexity of livelihood strategy-sequencing and; how the interrelationships between assets impact sequencing (Moser, 1998, p. 16).

Table 1: comparison of how SLA authors analyse assets

(Chambers & Conway, 1992) (rural)		(Scoones, 1998) (rural)	CARE (Turner et al., 2001) (rural)	(McDowell, 2002) (displacement)	(Moser, 1998) (urban)	Meikle et al. (2001) adapted from (Carney et al., 1999) (urban)
Tangible assets	***Intangible assets***					
Stores of valuables (e.g. food, fabrics, jewellery, cash savings, credit schemes)	**Claims** can be converted into material, moral or other support (e.g. NGOs, community programs)	**Human Capital** (labour, skills, knowledge, good health)	**Human capital** (livelihood capabilities)	**Human Capital** (labour, skills, knowledge, good health)	**Human capital** (e.g. health status, skills, education)	**Human capital** (e.g. skills, good health, knowledge)
		Social capital (relations, affiliations, associations, networks)	**Social Capital** (claims and access)	**Social capital** (relations, affiliations, associations, networks)	**Social capital** (trust-based repositories within communities and between households)	**Social capital** (e.g. access to institutions, networks, memberships)
Resources (e.g. land, water, trees, livestock, tools, farm equipment)	**Access** to resources, stores, services (e.g. transport, education, healthcare, markets, information, technology)	**Economic/financial capital** (e.g. cash., savings, basic infrastructure, production equipment)	**Economic capital** (stores and resources)	**Economic/financial capital** (e.g. cash., savings, basic infrastructure, production equipment)	**Labour** (commonly identified as the most important asset of urban poor)	**Financial capital** (e.g. savings, credit, remittances, pensions)
		Natural capital (e.g. soil, environmental services, resources flows)		**Natural capital** (e.g. soil, environmental services, resources flows)	**Household relations** (e.g. pooling income and sharing consumption)	**Natural capital** (e.g. land, water, wildlife, biodiversity, environmental services)
				Compensation (e.g. land, cash, grants, equipment)	**Productive assets** (for urban dwellers, housing is often the most important)	**Physical capital** (e.g. transport, shelter, water, communications, production equipment)

3.5. Involuntary Displacement

According to Scudder (2005, p. 31), resettlement is a field with a substantial body of evidence based on two theoretical frameworks. Namely; the Impoverishment Risks and Reconstruction (IRR) model (Cernea, 2000) (Appendix 1) and the Four Stage Framework (Scudder, 2005) (Appendix 2). The Four Stage Framework is behavioural and takes two generations to complete (Scudder, 2005, p. 47). Whereby, resettled communities pass through four phases: (1) planning and recruitment, (2) adjustment and coping, (3) community formation and development and (4) community formation (Scudder, 2005, pp. 33-41). Considering that only two respondents are second-generation resettlers, this research primarily uses the IRR model (Cernea, 2000). Furthermore, authors such as McDowell (2002) and Sapkota and Ferguson (2017) conceptualize the IRR with SLA frameworks (Appendix 4). This reinforces the IRR model's compatibility for this study.

3.5.1. The Impoverishment Risks and Reconstruction (IRR) Model

Despite vast differences in project-specific conditions, Cernea (2000, p. 3663) argues that there are clear, identifiable patterns during displacement that may impoverish resettlers and host communities (Cernea, 2000, p. 3667). By focusing on the economic components (Table 2) and social components (Table 3) of resettlement and reconstruction processes, the IRR model seeks to explains how displacement makes people vulnerable impoverishment. Thus, the IRR model places the onset of impoverishment at its centre. Constructed, the model captures the interface between potential risks and actualities. When applied, the IRR model simultaneously focuses on risk reduction and reconstruction (Cernea, 2000, p. 3662). Thus, the three interlinking and fundamental concepts of the IRR model are: *risk, impoverishment and reconstruction* (Cernea, 2000, pp. 3660-3662). Cernea (2000) further splits these into eight variables, each representing another dimension of impoverishment or reconstruction. Namely: land, employment, housing, food security, marginalization, morbidity, access to community resources and social disarticulation (Table 2; Table 3).

However, the work of Scudder (2005) is not completely disregarded. For instance, Scudder (2005, p. 47) reflects that educational risks, loss of broader community services and violation of human rights risk be included to the IRR model. Similarly, as part of a working paper series for the Asian Development Bank, Sapkota and Ferguson (2017) include ´loss of education´ and ´loss of culture and environment´ risks in their Sustainable Developmental

Resettlement Framework for the Yudongxia Reservoir project in China (Appendix 4). Finally, while Cernea (2000, p. 3666) acknowledges that risks to host communities are less threatening than risks to resettlers, they are nonetheless related. For example, resource pressures, on social systems, cultural clashes, health risks, secondary impacts on the environment affect both resettlers and host communities. Indeed, the best way to safeguard host communities is an adequately financed recovery plan for resettlers (Cernea, 2000, p. 3667)

Table 2: economic risks to impoverishment in cases of involuntary displacement and remedial measures (Cernea, 2000)

		Risks of impoverishment		Reconstruction and risk reversal
Economic variables	*From landlessness...*	○ Loss of land impacts agrarian households more that loss of houses. Thus, unless land is reconstructed or replaced with a steady income, resettlers are at risk of succumbing to poverty	*...to land-based resettlement*	○ Replacing land for land is viewed as the best strategy. This should be accompanied with technical assistance and favourable social policies
	from joblessness...	○ Unemployment often remains long after relocation. Self-employed resettlers can lose their businesses of access to customers. Rural and landless households lose access to work opportunities on land owned by others as well as communal land. Urban residents lose jobs in industry ○ Creating new jobs is challenging and requires investment	*...to reemployment*	○ Training should be targeted towards demands in the job market ○ Eminent domain principal. Whereby, projects lease land from resettlers thus, making them project stakeholders and beneficiaries.
	from homelessness...	○ Loss of shelter tends to be temporary for resettlers. Replacement housing is typically supplied by the project. ○ But, on a broader, cultural sense, loss of cultural spaces can catalyse feelings of alienation and a loss of status	*...to home reconstruction*	○ This is one of the easiest aspects to improve in resettlement projects. Some unintended consequences of replacement housing include: longer commutes, affordability, differential housing for formal squatters

Table 3: social risks to impoverishment in cases of involuntary displacement and remedial measures (Cernea, 2000)

		Risks of impoverishment		Reconstruction and Risk Reversal
social variables	*From Food insecurity…*	○ Sudden drops of income and production immediately after resettlement is predictable. It may take years to reach previous production and income levels. Subsequently, malnutrition and food insecurity are symptoms of inadequate resettlement	*…to food security and improved nutrition*	○ In the short-term, immediate disruptions of food and income need to be compensated, even before full economic reconstruction begins. ○ In the long run, levels of food security and nutrition will depend on the degree to which resettlers have recovered.
	From Marginalization…	○ Downsizing of farms or businesses and instances of human capital becoming obsolete leads to economic marginalization. Economic marginalization typically leads to morbidity. ○ In urban contexts, marginalization can be gradual. For example: resettlers may receive temporary jobs instead of land which, turns out to be unsustainable in the long run	*…to social inclusion, rebuilding community networks, restoration of community assets and improved healthcare*	○ Cernea (2000) merges these components of the IRR model to emphasize that; by manipulating variables planners can pursue synergies in reconstruction strategies ○ Community reconstruction refers to formal and informal group structures. Whereas, marginalization primarily refers to the individual or household level. Thus, while distinct, thus components partly overlap. ○ Reconstructing social cohesion and communal assets is a complex matter. ○ Organized, collective help facilitates integration and common cultural values can overcome resettlement challenges ○ Reconstruction of social cohesion is crucial. Yet, planners often fail to socially integrate host and resettlers' communities
	From Social disarticulation…	○ Displacement tears apart the social fabric of communities by dismantling informal networks of mutual assistance and local voluntary services. ○ Thus, poverty becomes more than a loss of income and productive assets. The loss of self-perpetuating social networks directs worsens the outcomes of poverty: powerless, dependency and vulnerability		
	From Access to resources…	○ Most adverse for those without land as communal land is often not compensated ○ Can be compounded by loss of access to public services (e.g. schools, transport)		
	From morbidity and mortality…	○ Psychological stresses associated with relocation can manifest into physical illnesses. Further, moving to marginal land can promote parasitic and vector-borne diseases (e.g. malaria). Unsafe drinking water can augment this		

3.6. Merging Displacement and SLA Theory

This study is guided by two complementary frameworks. Namely, the IRR model (Cernea, 2000) and SLA frameworks. I chose to merge these because they achieve complementary result. Moreover, Cernea (2000) advocates that the IRR model can be moulded to suit researchers' needs: *"This model can be linked with other conceptual frameworks, to achieve complementarity of perspectives and additional knowledge"* (Cernea, 2000, p. 3663). McDowell (2002) takes this notion to heart by combining the IRR model and Scoones (1998) SLA framework. Resultantly; from ongoing resettlement research on the Pasak Jolasith Dam in central Thailand; as well as completed research in drought-prone areas in SW Ethiopia McDowell (2002) has developed an *"Impoverishment Risks-led Framework' (*Appendix 3*).* McDowell (2002, p. 6) finds the sustainable livelihoods approach which, aims to understand development processes and livelihood strategies can be usefully applied to situations of involuntary resettlement. In his framework, McDowell (2002) outlines *impoverishment risks-led livelihood analysis.* He also identifies three main synergies between Cernea (2000)´s IRR SLA frameworks: Namely: *The role of institutions, impoverishment processes* and *livelihood reconstruction strategies*.

IRR model shares and further develops the dynamic nature of livelihoods (McDowell, 2002). This requires an understanding of livelihood reconstruction strategies. The IRR model seeks to understand *cumulative* effects of impoverishment processes. (Moser, 1998, p. 4). Comparatively, SLA is largely concerned with the sustainable outcomes of strategies that overcome poverty Thus, combining these two approaches introduces a time frame and sense of linearity in reconstruction processes (McDowell, 2002, p. 9). For instance: what causes impoverishment (IRR) and what are the outcomes of strategies that attempt overcome impoverishment (SLA). The dualism between the IRR model and SLA frameworks have led to their adoption by multilateral donor agencies.

Multilateral donors have a rich history in developing frameworks for communities who are displaced by dam projects. For example; in a paper which compares and applies Cernea (2000) IRR model, Scudder's four stage model McDowell (2002) forced displacement, sustainable livelihoods and impoverishment risks framework as well as policy frameworks of multi-lateral donors, the Asian Development bank (ADB), put forward set of ten impoverishment risks and a similar number of remedial courses of action (Appendix 4). In addition to the eight risk and reconstruction processes of the IRR model, Sapkota and Ferguson (2017, p. 3) suggest that; loss of education and loss of culture and environment should be

included. Importantly, the ADB conceptual framework reveals that impacts and remedial measures do not apply uniformly across all situations (Sapkota & Ferguson, p. 24). Suggesting that, since impacts and reconstruction measure differ in time and place, so too should frameworks be flexible (Sapkota & Ferguson, 2017, p. 25).

Both IRR and SLA agree that institutions play a central role in livelihoods. According to Cernea (2000, p. 3670), re-establishing displaced communities´ local institutions mitigates livelihood risks associated with involuntary resettlement. SLA frameworks institutional indicators are compatible with Cernea (2000) IRR model. Whereby, SLA methodology seeks to ¨*advance our knowledge of how displacement creates social disorganization and how social structures reform after displacement*¨. Moreover, SLA frameworks´ importantly acknowledge that institutions play both positive and negative roles (McDowell, 2002, pp. 6,8). Therefore, SLA is a useful tool to study displaced communities´ households because it focuses on the institutional process that shape livelihoods. Thus, SL is useful in displacement research because it focuses on institutional processes in resettlers' adaption strategies. It

Households depend on institutions to link them with other households and to their wider community (Turner et al., 2001, p. 28). Institutions are the social cement which provide stakeholders with access to various forms of capital (Davies, 1997, p. 24 as cited in Scoones, 1998, p. 12). Attempts to divide institutions into formal and informal categories have yielded ambiguous and subjective differences (Hodgson, 2006, p. 13). While Scoones (1998, p. 12) highlights important power dynamics between formal and informal institutions, he acknowledges their fluidity: ¨Institutions may thus be both formal and informal, often fluid and ambiguous, and usually subject to multiple interpretations by different actors¨. Thus, a clear division would be inaccurate as formal and informal institutions are constantly changing and influencing each other. Rather, Hodgson (2006, p. 13) suggests using categories such as legal and non-legal. The categorization proposed by Hodgson (2006) is broadly adopted in this study. For instance: Formal institutions are linked to structures of governance and laws. Whereas, informal institutions are typically associated with social and cultural dynamics.

Knowles (2007) tentatively relate informal *(or non-legal)* institutions and social capital, "at the risk of generalising to some extent, most definitions of social capital include the concept of trust, networks and group memberships, and a shared set of co-operative norms". To increase the compatibility between resettlement and SLA frameworks, informal institutions are considered in section (Section 4.2.3) as social capital. Social capital refers to the norms and

trust systems which social organization is based on. They can be local relations or wider social networks (Meikle et al., 2001, p. 5).

Urban residents are tightly linked to formal *(or legal)* institutions and governance structures. As well as depending on the cash economy that cities provide, they also depend on infrastructure delivery and other services supplied by urban institutions. (Beall and Kanji, 1999; Katepa-Kalala, 1997 as cited in Meikle et al., 2001, p. 4). Additionally, macro-level policies play a prominent enabling or disabling role. Indeed, many Basotho perceptions of wellbeing exhibit a high dependency on the state. Yet, according to Turner et al. (2001, p. 33), this starkly contrasts with Lesotho´s macroeconomic policies. For example, the Government of Lesotho committed to a privatization process, shedding assets and responsibilities. Rather than creating jobs and meeting the peoples' expectations. Similarly, many ´development experts´ advocate for states to contract, rather than expand. Believing that the State will create enabling environments for people to create their own livelihoods. Multilateral donors are common formal institutions in large hydropower projects; particularly in developing economies.

4. The Lesotho Context

4.1. Country overview

Lesotho is a small African state that is completely land-locked by South Africa (Figure 6). The people of Lesotho are called Basotho and they speak Sotho. Lesotho's mountainous regions are known as *the Maloti* mountains. According to Thabane (2000, pp. 636-639) *the Maloti* were first inhabited in the ninetieth century. Where, the invading *Boer* settlers (of Dutch origin) were at war with native Basotho tribes. During the war, the *Boers* pursued the Basotho and their allies into the Highlands who; inhabited the Mohale Basin in search of defensive strongholds. Overtime the exiled communities were forgotten and lived relatively isolated lives. Only in 1885 a French priest reported discovering communities in the mountains. According to the priest, in some of the most remote parts of the *Maloti* mountains existed populations much larger than previously thought. In the priest´s testimonies, he the describes Mohale´s residents as folk who enjoyed good pasture and fertile soil in isolated mountain homesteads. Years later, Devitt and Hitchcock (2010, pp. 67,68) similarly highlight that agriculture supported a relatively large population to in the Mohale Basin.

Figure 6: Maps of Lesotho and South Africa, adapted from http://www.maps.google.com/

Contemporary Lesotho is categorized into four agroecological zones, namely*: highlands, foothills, lowlands, and the Senqu river valley* (Figure 6). According to FAO (2005), smallholder production dominates the agricultural sector which, contributes 15,7 per cent of Gross Domestic Product (GDP) and employs 38 per cent of the economically active population. Whereby, most the arable land lies in the lowlands, foothills or deep mountain valleys. Only 11 per cent of Lesotho is arable, comparatively, 80 per cent of Lesotho is used

as rangelands (Lewis, McCosh, Pringle, Bredin, & Nxele, 2011, p. 39). Maize is widely cultivated and accounts for approximately 60 per cent of the cropped area, followed by sorghum (10-20 per cent), wheat (10 per cent) and beans (6 per cent). Comparatively, the highlands are common grazing areas for livestock in summer months (Devitt & Hitchcock, 2010, p. 65).

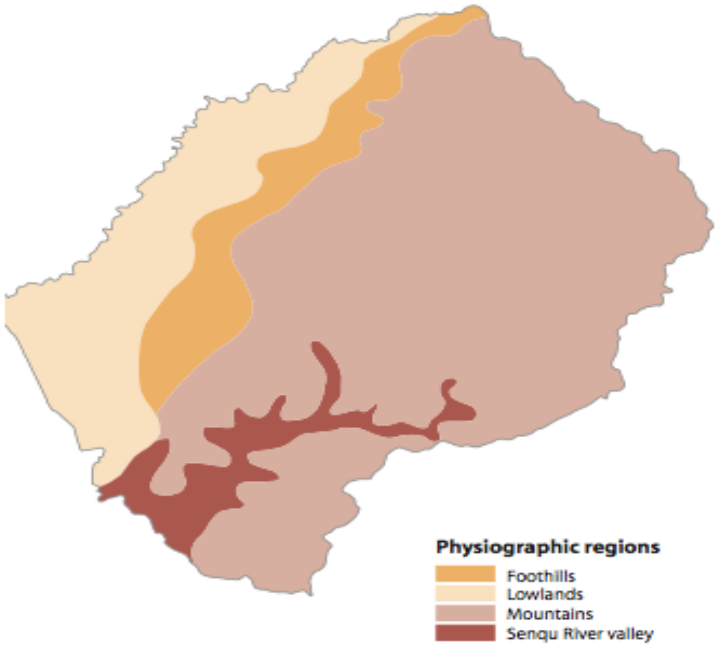


Figure 7: Lesotho´s four agroecological regions. Adapted from Motsamai, Keatimilwe, and Pomela (2006)

Lesotho ranks 159 out of 188 countries in the Human Development Index (HDI) Report (UNDP, 2018). According to the FAO (2015), Lesotho's high rural population (82 per cent) and levels of poverty (49 per cent) contribute towards its low HDI. Lesotho's country's gross domestic product (GDP) is US$ 2,278 billion (World Bank, 2015). In the 1980s, sizeable gains in Gross Domestic Product (GDP) were made through Lesotho's manufacturing sector. However, since then decreasing migrant earnings, import trade shortfalls and political uncertainty sent Lesotho on a downwards economic spiral. For instance, between 1987-1997 the average GDP was only 6.2 per cent. This is down from the mean long-term average; 13 per cent (Turner et al., 2001, p. 37).

According AFSUN (2015, pp. 11-14), four thematical areas explain Lesotho declining productivity. Namely: technological, market-based, health related and environmental. Technological indicators are multidimensional yet broadly linked to competition for rapidly

degrading land in a small mountainous country. In Lesotho, generations of poor rangeland management and traditional land tenure systems exacerbate environmental degradation. However, traditional management cannot assume all blame for failed rangelands; competence of local governance structure is also to blame since most rangelands in Lesotho are communal land and suffer from the tragedy of the commons (Dejene, Midgley, Marake, & Ramasamy, 2011, p. 37).

Market based indicators concern with Lesotho´s economic relations with other states and local producers' inability to compete with cheaper imported food. Whereby, Lesotho land-locking neighbour, South Africa aggressively dominates in Lesotho´s markets. Thirdly, HIV and AIDS threaten rural communities and smallholder producers. Lesotho has one of the highest infection rates in the world. Indeed, almost a quarter of Lesotho's population are infected with HIV/AIDS (UN AIDS, 2017). This impacts households though losses in local labour and through strains associated with caring for ill family members. Finally, the effects of extreme weather and climate change also deter households from an increasingly risky livelihood stream. Yet, despite Lesotho´s urbanization rate, the urban poor are often overlooked.

4.2. Basotho Livelihoods

Basotho livelihoods are difficult to depict or explain in a structured manner. Turner et al. (2001) find that suggest that Basotho are particularly concerned with the material aspects of their livelihoods; referring much less to intangible livelihood aspects such as social and cultural assets. As such, they consider themselves unfulfilled if there is not at least one wage earner per household. While this may be realistic in urban areas such as Maseru, it is much harder to find wage-employment in rural areas such as the Lesotho Highlands. Thus, while Basotho generally have a clear idea of what a good livelihood is, they have a passive view of how to achieve it. Rather, they believe that the state should provide employment. Not surprisingly, many how Basotho define wellbeing starkly contrasts with what development planners promote. For example, many development planners encourage states to contract, not expand. Yet, Lesotho has committed itself to a privatization process; rather seeking to create an enabling environment for people to create their own livelihoods. Resultantly, Basotho households are pressured into a wider range of increasingly risky activities to meet household expenditures (Turner et al., 2001, pp. 32-36).

4.2.1. Natural Resource Base

As small mountainous country, most of Lesotho's arable land is already heavily populated, allocated to farmers and degraded. Resultantly farmers are more likely to make a loss if they invest in inputs such as improved seeds and fertilizer. Suggesting that the only way for cultivators to sustain themselves is to stay poor. Indeed, since Lesotho's independence in 1966, the role of agriculture in Basotho society has dwindled. For a long time, development planners considered agriculture as the Lesotho´s economic backbone´. Yet, recent studies portray that Basotho households typically incorporate a number of livelihood strategies. Strikingly, despite the fact that water is regarded as Lesotho´s main natural resource, farmers are still plagued by drought. Moreover, poor land-use management has led to widespread land degradation and unreliable yields (Ziervogel & Calder, 2003, p. 11). Resultantly, domestic production shortfalls and levels of insecurity are exacerbated. This trend further strengthens Lesotho's dependence on South African markets. Interesting, Lesotho is a producer of much of the cannabis that illegally enters South African markets.

Cannabis is an illegal, but highly valuable cash crop which is a pillar of Lesotho´s rural economy. Rather than criminal opportunism, cannabis is a coping system against declining economic and natural resource conditions. Whereby, cannabis is an opportunity for households to diversify their livelihoods and to maintain a subsistence living (Bloomer, 2009, p. 51; 63). According to Devitt and Hitchcock (2010, p. 76); cannabis grows exceptionally well Lesotho´s sheltered valleys. Prior to inundation, Mohale´s sheltered valleys were well suited to cannabis production. Where, its remoteness generally prevented interference from police. Cultivators sell their produce to South African traders, who transported it along remote mountain paths through the Maluti mountains and into the South African market. This represent established trade networks between growers in Lesotho and buyers in South Africa. Additionally, livestock is common practice in rural Lesotho.

In terms of livelihoods, donkeys and horses are used for transportation, cows provide milk, meat and prestige while sheep and goats provide wool for sale. Moreover, in rural highland areas, cattle ownership crucially provides draught tillage. Something which Basotho-women headed households identify as a livelihood strain International Livestock Research Institute (2008, p. 13). Additionally, livestock are sold when households need cash. Such as, in times of livelihood stresses and strains (Lewis et al., 2011, p. 39). Significantly, livestock ownership is woven into Basotho cultural hierarchies and social status.

According to Ferguson (1985, p. 647), bovine is a unique category of livestock in Lesotho. It is a property of prestige and holds important economic and cultural significance. Rather than gradually eroding in the wake of modern cash economies, livestock traditions have evolved into an institution. Livestock is a livelihood category that simultaneously draws on power relations from traditional and contemporary sources. For example, national livestock management plans incorporate rural land tenure into management range management strategies (Ferguson, 1985, pp. 647,668-669). Yet, established traditions and institutions gave birth to a livestock surplus, cultural as farmers were reluctant to sell unproductive livestock (FAO, 1980 as cited in Ferguson, 1985, p. 647). This has been a repeating obstacle towards economic growth and development. For example, Mbata (2001, p. 18) estimates that 1000 hectares of land is lost each year to degradation caused by poor land management.

4.2.2. Migration

For generations, the Basotho have been mobile people. As such, many forms of migration are evident in Basotho society. Traditionally, young boys become herders. They migrate with livestock into the highlands from the summertime and only returning in autumn when the winter snow threatens. Furthermore, it is common for married women to migrate to their husband´s village. Comparatively, unmarried women often send children to be cared for by other family members. Indeed, intricate webs of intangible assets, social and cultural norms are a significant component of most Basotho livelihoods. Finally, labour migration has been a prominent Basotho livelihood strategy throughout the twentieth century.

Lesotho has a labour-surplus economy. Which, for years, was happily absorbed by the South African mining industry (Turner et al., 2001, pp. 38-39). Yet, despite widespread migrant wages in the twentieth century, local trade and industry did not capitalize from the benefits because South African commerce ruthlessly dominates Lesotho's markets. Turner et al. (2001, p. 49) highlights that, according to Central Bank figures, 116,129 Basotho worked there in 1993; but in the years preceding the Mohale dam development, South African mines began hiring fewer and fewer Basotho men. Subsequently, in 1999 there were only 68,827 Basotho mineworkers (Appendix 8). But, rural Lesotho´s capacity for local, off-farm income generation are weak and there are few employment opportunities in rural areas (Devitt & Hitchcock, 2010, p. 67). Resultantly, decreased employment on South African mines significantly impacted the economic prospects of many Basotho households. Whereby, households lacking prospects for

a member to work in South African mines are poorly equipped to adapt to changing economic circumstances required to create sustainable livelihoods (Turner et al., 2001, p. 38).

Generations of migrant labour in South Africa has shaped large parts of Basotho society. According to Turner et al. (2001, p. 49), this migrant labour model creates generational decay in rural Basotho society. In this model, men move to South Africa to work and save for resource to marry and form households. As time passes, they may invest more into establishing an agriculture homestead as their children grow up. Eventually, the men retire. But, they may have a mature set of farming implements and only family labour to work the fields. Thus, once younger family members leave their homes to work on the mines or start their own household, the prosperity of the original household decreases as the farm is unable to produce autonomously. This is augmented by old age and the ailments.

4.2.3. Social capital

Lesotho's social and cultural dynamics possesses certain strengths which can support livelihoods. Destitution is very rare in amongst the Basotho. In rural areas, networks of kinship and friendship provide support in harsh economic or social times. However, this is diluted in urban areas (Turner et al., 2001, p. 40). While large portions of Highland communities may report earnings below the poverty line, they also enjoy the highest 'traditional' indices of wealth. Indeed, Basotho are proud of their cultural heritage which, is a strength which that commonly rely on. Whereby, networks of kinship and allegiance give support. Thus, destitution is very rare in amongst the Basotho as strong social networks provide support in harsh economic or social times. Indeed, labour exchange or payment in-kind is a major source of food among poor Basotho households. However, this is diluted in urban areas (Turner et al., 2001, p. 40).

4.2.4. Urban Basotho livelihoods

Globally, over half the world's population inhabit urban areas (AfDB, 2012). While Africa is still the least urbanized continent, over the past two decades, it recorded the world's highest rates of urbanization. In cities, the poor face, intolerable challenges which; are augmented by the higher living costs associated with urban areas. Additionally, migrants often lack the skills needed in the urban economy. Thus, they are limited to unskilled labour and the

accompanying social economic profile (Hoover, 2001, p. 20). In Lesotho, food production shortfalls and levels of food insecurity and rising, exacerbated by rapid urban transformation.

Lesotho's population are depopulating remote mountainous areas and resettling in urban areas such as Maseru. Resultantly, through, a combination of natural growth and internal migration (Appendix 9), twenty-five per cent of Lesotho's population now inhabit urban or peri-urban areas. Yet, according to AFSUN (2015, p. 1), the discussion surrounding Lesotho's development agenda generally focus on rural contexts, thus overlooking the unique challenges of poor urban households. For example, Turner et al. (2001, p. 41) finds that many youths migrate to urban or peri-urban areas with feeble hope of securing employment. If economic change excludes them they destructively migrate from rural social norms. Resultantly, alcohol abuse is widespread among urban Basotho youth.

4.2.5. Overview of livelihoods in the Mohale Basin

In a national rural household study, Turner et al. (2001) uses SLA methodology to confirm the heterogenous nature of Basotho livelihoods. Whereby, a declining natural resources base in a small, mountainous country means households' to seldomly rely on agriculture alone. Moreover, historic migrant labour trends reinforce Basotho livelihood heterogeneity. For generations, the Southern African mining industry absorbed large portions of Lesotho's rural workforce. This created a perception that a households' livelihood is incomplete if it lacks wage earnings. While this may be the case when generalizing rural Basotho households on a national scale, upon examining livelihoods on a basin-wide scale, distinct exceptions to Turner et al. (2001) profile become evident.

Authors such as Devitt and Hitchcock (2010), study livelihoods in Mohale on a basin-wide scale. Their suggest that the Mohale Basin´s natural capital sustained its resident's modest subsidence lifestyles. The availability of good farming land attracted a relatively large population to settle in the Mohale basin. For example, Mohale Basin's natural capital provided cropland for cultivating, rangelands for livestock, firewood for fuel and potable water from streams. Resultantly, while there were few signs of opulence in the Mohale Basin, there were equally few signs of poverty. Thus, such, the Mohale Dam inundates 760 hectares of deep and fertile soils; a rare and valuable natural resource in Lesotho. Unfortunately for the basin's residents, the same oxbow river formation that created good farming conditions, attracted hydropower development. (Devitt & Hitchcock, 2010, pp. 66-67). Unfortunately for the

residents of Mohale Basin, the oxbow-river formation that provided good farmlands, also made it an attractive location for hydropower dam development. The resettlers highly regarded the high level of self-sustainability in the Highlands. Yet, they paradoxically resettle into Lesotho's urban capital, Maseru.

4.3. The Lesotho Highlands Water Project (LHWP)

Situated in the mountains and foothills of Lesotho lies one of the biggest water transfer and hydropower schemes in the world. The LHWP is a bi-national, multi-billion Rand/Maloti project between the Republic of South Africa and the Kingdom of Lesotho. The project transports water through a series of tunnels into the Vaal River, supplying Gauteng, South Africa´s economic hub with much needed water resources. Whereas, water sales to South Africa supply Lesotho with much needed fiscal revenue. Additionally, by harnessing water in vast series of dams, Lesotho has unlocked vast hydroelectric potential. Resultingly, decreasing its dependency on energy imports. In fact, preceding the LHWP, Lesotho relied entirely on South Africa for its electricity requirements (Trans-Caledon Tunnel Authority, 2015). Overall, five phases are forecasted in the LHWP. Phase 1A and 1B were completed in 1998 and 2004 respectively. Whereas, phase 2 is ongoing.

Central to phase 1A is the Katse Dam; a 185m high and 710m long double curvature concrete dam. Around 2,32 million cubic metres of concrete was used to construct the dam wall which stores approximately 1950 million cubic meters of water (Trans-Caledon Tunnel Authority, 2015). In phase 1B, the 145-meter-high Mohale dam, a 32 km long transfer tunnel between the Mohale and Katse dam and other supporting infrastructure were built. Other key construction components in phase 1 include: the Muela dam, an intake tower, a 45km long transfer tunnel between the Katse and Muela reservoirs, the Muela hydropower station (324 MW turbines totalling 72MW), 37kms of delivery tunnels from the Muela reservoir to the Vaal River in South Africa and a 32km long transfer tunnel between the Mohale reservoir and Katse dam (Monyake & Lillehammer, 2011, p. 10).

Phase 2 of the project is still in the screening stage and plans are yet to be finalized. However according to the Lesotho Highlands Development Authority (2015), the project will be implemented in two distinct components. Namely, a water transfer system to increase water transfer from South Africa and a hydropower generation component. The Request for Proposal (Lesotho Highlands Development Authority, 2015) details that hydropower generation in

phase 2 shall comprise of a pumped storage scheme in the Kabong River valley. This includes dam infrastructure, a hydropower station, a connecting line between Kabong and Katse reservoirs as well as transmission lines to South Africa. Approval of the Kabong pumped storage scheme is dependent on the outcome of a feasibility study.

4.3.1. LHWP History

In early 1950s, the South African government initiated discussions with the Lesotho government regarding a water supply system from Lesotho into the water-scarce, industrial heart of South Africa, the Gauteng Province. In subsequent decades, several feasibility studies were undertaken. However, while Gauteng's water demand swelled, the two states could not agree on project-costs. Resultantly, the two states only reached a deal in October 1986 (Thabane, 2000, p. 634). The LHWP Treaty (1986) outlines the structures which are required to implement the LHWP. This ranges from project-outputs such as water delivery to South Africa and hydro-electricity generation in Lesotho (Article 9[5]: LHWP Treaty, 1986). Moreover, the basis of the Compensation Policy is expressed in the LHWP Treaty (1986): *"The purpose of this Treaty shall be to provide for the establishment, implementation, operation and maintenance of the Project"* (Article 3[1]: LHWP Treaty, 1986).

Lesotho's relationship with it confining neighbour present unique challenges. Indeed, as being surrounded by South Africa stretched beyond geographical and into political and economic spheres of Lesotho's governance. In the 1980s relations between South Africa and Lesotho were strained. The white-minority, South African government accused Lesotho of accepting political refugees who; were seeking to avoid the Apartheid regime. Resultantly, the South African government exerted its power on its land-locked neighbour to economically strangle its diminutive neighbour. Subsequently, in 1986, Chief Leabua Jonathon was politically overthrown by a pro-South African military dictatorship. Indeed, ten months after the regime change; based on a 1983 feasibility study, the LHWP Treaty (1986) was officially signed by the governments of Lesotho and South Africa. Resultantly, the Basotho associate the LHWP with the overthrowing of a civilian dictatorship (Thabane, 2000, pp. 634-637).

4.3.2. Governance

The LHWP Treaty (1986) is implemented by the Lesotho Highlands Water Commission (LHWC), previously known as: The Joint Permanent Technical Committee

(Devitt & Hitchcock, 2010, p. 69). According to the LHWP Treaty (1986), [the LHWC is composed of two delegations, one from each Party.. Namely South Africa and Lesotho (Article 9[1]: LHWP Treaty, 1986). Thus, the LHWC is represented by two delegations from each country. Namely: the Lesotho Highlands Developmemnt Authoiority (LHDA) on behalf of Lesotho and the Trans-Caledon Tunnel Authority (TCTA) on behalf of South Africa (Figure 8). The roles of the LHDA, TCTA and LHWC are stipulated in Articles seven, eight and nine respectively of the LHWP Treaty (1986).

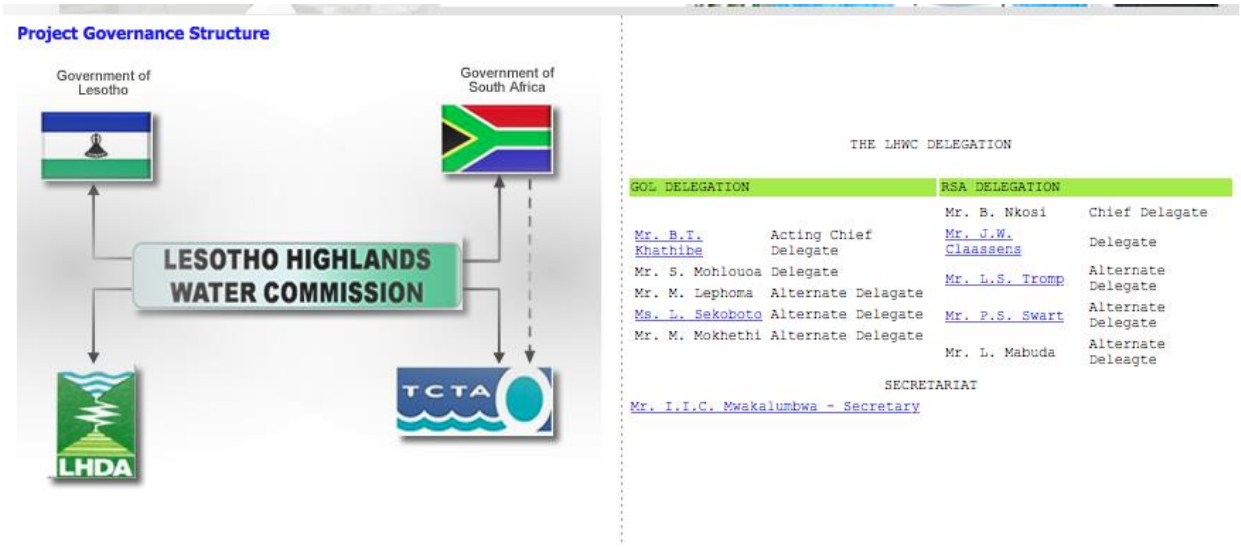


Figure 8: The LHWC structure (Lesotho HIghlands Water Commission, 2016)

4.3.3. LHWP funding

LHWP funders include the Government of Lesotho, the Development Bank of South Africa, the World Bank, the European Investment Bank, the African Development Bank and various commercial banks and institutions (Hitchcock, 2015, p. 526). The World Bank specifically approached to be a stakeholder for strategic reasons. Firstly, the LHDA hoped that having the World Bank´s presence would encourage other investors. Secondly, Lesotho is categorised as a least developed country where, 55.1 per cent of the country live on less than US$2 a day (Hitchcock, 2015, p. 526). As such, Lesotho qualifies for favourable World Bank loan agreements. Thirdly, having the World Bank on board to monitor and evaluate would ensure compliance with the World Bank's resettlement and development guidelines. Thus, the LHDA hoped to please stakeholders such as NGOs, communities and local businesses. Yet, international norms of involuntary displacement and compensation have been criticised.

Cernea (2003, pp. 43,44) take a look through displacement and resettlement policy in some of the World Bank's most authoritative documents during the period of LHWP phase 1A and 1B. In 1980, the World Bank first issues resettlement guidelines. In which, the policy objective regarding livelihoods was defined as, "*Restoring to previous project levels and if possible, improve*". In 1986, this policy objective was strengthened: *"All involuntary resettlement operations should be conceived and executed as resettlement projects".* Whereas, in 1988, The World Bank's explicitly defines 'restoring' as: *"Reaching higher than pre-project levels".* This includes growth that would have happened without the project. Finally, in 1990 the policy goal was again strengthened. Wording changed from: *"restore and if possible improve"* to *"improving or at least restoring".* Two patterns emerge from this summary. Firstly, the policy goal is never defined as simply paying compensation. Secondly, the World Bank's resettlement policy strengthened between the 1980-2000s.

In the 1980's and 1990's World Bank had arguably the most comprehensive guidelines towards social and environmental protection in resettlement and development projects (Devitt & Hitchcock, 2010, pp. 69,527). Accordingly, the LHWC enlisted the World Bank as a strategic stakeholder. Apart from direct funding, the LHWC hoped that having the World Bank onboard would attract other donors. Resultantly, the LHWP phase 1B compensation policy is based off experiences from phase 1A and various adaptions of World Bank Guidelines (Devitt & Hitchcock, 2010, p. 69). Yet, despite the World Bank strengthening resettlement policy from the 1980s-2000s (Cernea, 2003, pp. 43,44), and NGOs such as International Rivers, the Highlands Church Action group and the TRC and members of the Panel of Environmental Experts campaigning for a compensation policy that seeks to *improve* livelihoods (Hitchcock, 2015, p. 527), the LHWP treaty calls for livelihood restoration; rather than improvement.

> *"The Lesotho Highlands Development Authority shall effect all measures to ensure that members of local communities in the Kingdom of Lesotho, who will be affected by flooding, construction works, or other similar Project related causes, will be enabled to maintain a standard of living not inferior to that obtaining at the time of first disturbance: Provided that such Authority shall effect compensation for any loss to such member as a result of such Project related causes, not adequately met by such measures" (Article 7[18]: LHWP Treaty, 1986)*

This has had several outcomes to the LHWP Treaty (1986) and for the communities it impacts. For example, as the project progressed, issues of Free Prior and Informed Consent arose between the LHDA and project-affected people (Hitchcock, 2015, p. 527). The World Bank´s and thus, the LHDAs position is; only Free, Prior informed consultation was necessary. And not, Free Prior and Informed Consent. While the people being affected by the project wanted to be consulted, they also wanted a say in the project design and approval and their levels of compensation. Which, they did not receive (Hitchcock, 2015, p. 527).

4.3.4. Displacement in LHWP phase 1B: Mohale Basin

Since the Maluti resettlers were displaced from the Mohale Basin, attention below is principally focused on resettlement in LHWP phase 1B, the Mohale Dam project (Figure 9).

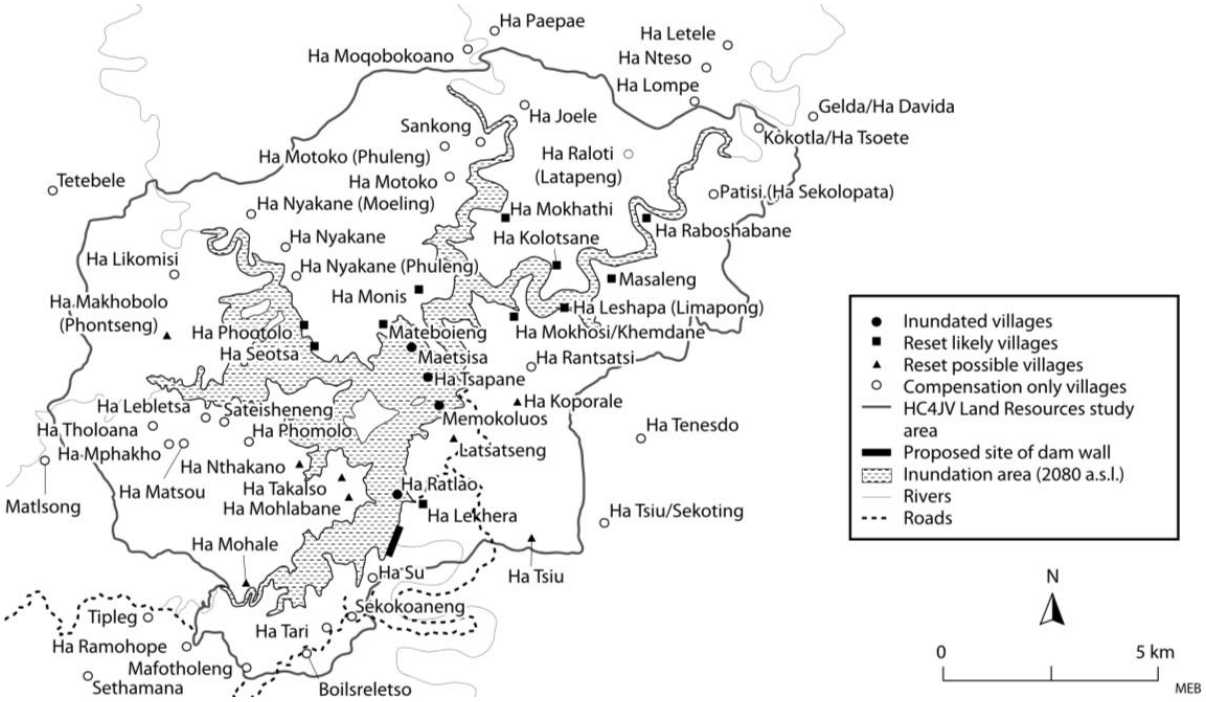


Figure 9; Map of Village affected by LHWP phase 1B (Devitt & Hitchcock, 2010, p. 86)

Resettlement was done between 1996 and 2006 in three phases: pre-construction phase, pre-inundation phase and pre-inundation. According to Devitt and Hitchcock (2010, pp. 85-86), households relocated into three geographical locations: (1) households remained in the Mohale Basin, (2) relocation to the foothills and lowlands and (3) relocation to Maseru (Table 4). The main attraction for remaining in the Mohale basin was good grazing. Thus, most who

chose this option were livestock farmers, not crop farmers. Others moved to the foothills or the lowlands, in villages that they thought would be receptive. Finally, some chose to relocate into suburbs of Lesotho's capital, Maseru.

Table 4: Number of displaced houses in LHWP phase 1B, the Mohale Dam. Obtained from the LHDA in Devitt and Hitchcock (2010)

Stage	destination			
	Mohale Basin	Foothills & Lowlands	Maseru	total
Pre-construction	37	38	24	99
Pre-inundation	27	190	5	222
Post-inundation	103	-	-	103
Total	167	228	29	424

Based on experiences from phase 1A and various adaptions of World Banks guidelines, planning for resettlement began in 1995 (Devitt & Hitchcock, 2010, p. 69). Establishing formal structures within communities was central to facilitate impacted communities' participation (Devitt & Hitchcock, 2010, p. 69). This is an example of the self-perpetuating relationship between formal and informal institutions and organizations in the LHWP. Resultantly, by 1998 a revised compensation policy was released after consultation with local stakeholders (Table 5). Whereby, the LHDA responded to demands by impacted communities for a better complaint system by directing complaint through its field operations offices, one of which, was in Mohale basin (Table 5, #9). Furthermore, calls made by impacted communities to increase the compensation policy were answered. The LHDA increased the compensation from 15 years-as it was phase 1A to fifty years in phase 1B. Resultantly, the 1998 compensation policy was drawn up.

Table 5: salient features of the 1998 LHWP phase 1B compensation policy (Devitt & Hitchcock, 2010)

1. The Scope of Services for each new construction contract shall show in detail how the contractors intend to address environmental and social impacts associated with the contract and how they will reinstate any surface works for the benefit and in accordance with the wishes of the local community.
2. LHDA shall manage land taken for project purposes in a beneficial manner and then return leftover land to its previous users, and land not being used shall be made available for re-allocation.
3. Replacement income, in the form of Minimum Threshold Payments, shall be periodically adjusted to ensure that the standard of living of each affected family is maintained.
4. LHDA shall compile baseline information on households affected by the project.
5. Equitable compensation shall be provided for people who hold 'secondary rights' (i.e. people having sharecropping, rental, or borrowing arrangements with land holders).
6. People who received compensation for loss of assets would also gain access to development assistance, training and credit.
7. The Phase 1B compensation policy added an annuity option (that is, people could choose a lump sum cash payment for their losses, which would be invested to yield an income).
8. LHDA should investigate the scale and severity of losses of trees and natural sources of fuel and recommend a means of compensating people affected by these losses. The communal losses of grazing, trees, shrubs, and other resources would be included in a communal assets compensation program that would be provided to affected communities.
9. A dispute resolution system will be established in which people have the option of appealing compensation decisions through the local level liaison committee, the Land Tribunal, the High Court of Lesotho, and the Appeal Court.

The Rural Development Plan (RDP) is compensation for the loss communal assets such as grazing pastures and other natural resources (Table 5-8). Whereby, the LHDAs role is to supply technical and financial resources (Devitt & Hitchcock, 2010). The LHDA required people to form cooperatives, grazing associations or other legal local entities to qualify for RDP assistance. This helped improve management of natural resources such as grazing lands; helped purchase agricultural inputs and market their products, such as seed, maize and potatoes; provide grain mills where there were no others; other components include tourism, fisheries, health and youth development (Hitchcock, 2015, p. 532). Historically, Cooperatives have a bad track record in Lesotho where little faith in the Ministry of Agriculture discourage members to commit their own funds (Devitt & Hitchcock, 2010). According to (Devitt & Hitchcock, 2010, p. 84) The RDP achieved mixed results. In 1995, the RDP was only able to

spend 3 percent of its annual budget. This shortfall can be attributed to lack of implementation capacity and perhaps lack of commitment from the LHDA

Minimum threshold payments (Table 5-3) play a safety-net role for holders of secondary rights (Table 5-5). These provisions were put in place to counteract the negative the effects the social disarticulation associated with involuntary resettlement. Whereby, impacts are most adverse for the landless, the old and dependent, the sick, the disabled and even the young with no land rights (Hitchcock, 2015, p. 532). Minimum threshold payments were made to affected households whose income fell below a minimum poverty level of 3960 Maluti per month. Intended to ensure that households remain above poverty level. In 2004, the Lesotho Bureau of Statistics found that 31 households dropped below minimum threshold level and required assistance. While, 21 households lifted their income to a level whereby they no longer qualified for minimum threshold payments. minimum threshold payments were seen as a crucial aspect of survival for their recipients (Devitt & Hitchcock, 2010, p. 92). Questions surround the sustainability of such a program, for example: what happens when the minimum threshold payment period is over? And, do threshold payments create dependency or lethargy? However, the same questions apply to all development initiatives.

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5. Findings

5.1. The Maluti resettlers

In this section I present my record of the Maluti resettlers´ narrative. By using live hood frameworks' categorization, I compare the Maluti resettlers´ urban and rural livelihoods. Specifically, through semi-structured interviews, I identify the following livelihood components: Natural capital, economic capital such as housing, the LHDA processes and social capital

Table 6: Profiles of the sample population

Name	Gender	Age	Number of members in household		Was the respondent the household head?	* First of second generation in Maseru	Civil status	Would they choose to go back?
			Mohale	Maseru				
Chief	M	Late 50's	6	8	Yes	First	Married	Yes
Respondent #2	M	Early 60´s	7	9	Yes	First	Widowed and remarried	Yes
Respondent #3	F	Early 40´s	6	8	Yes	Second	Un-married	No
Respondent #4	M	Late 20´s	2	4	Yes	Second	Married	No
Respondent #5	M&F	Late 70´s	3	4	Yes	First	Married	No
Respondent #6	M	mid 50'S	3	4	Yes	First	Married	No
Host community member	F	Late 80´s	n/a	2	n/a	n/a	Married	n/a

This study analyses data from six out of twenty-two resettled households that compromise the village of Maluti (Table 6). Thus, representing 27 percent of the sample population (Table 6). In the highlands, Maluti resettlers were subsistence farmers. They relied almost exclusively on the production and trade of livestock, cereals, and vegetables. Moreover,

* According to Scudder (2005, p. 35), it takes two generations to analyse displaced populations using the Four-Stage Framework

they buoyed their livelihoods by illegally producing and selling cannabis. Comparatively, the respondents exhibit various urban livelihood strategies (Table 7). Crucially, when interpreting this comparison, one must acknowledge the interdependencies between each aspect of the Maluti resettlers' livelihoods (Chambers & Conway, 1992, p. 9). As such, they should not be interpreted as independent variables and rather treated as crosscutting variables of a complex society.

Table 7: Overview of the Maluti resettlers´ urban and rural livelihood strategies

Summary of urban livelihood strategies
Taxi operators
Rental accommodation units
Cannabis
Various fruits and vegetable for consumption and to sell to neighbours
Dressmaking
Joint ownership of Livestock (urban and highlands)
Pig pen
Fruit drying
Tavern
Sending young boys to work as herdsmen
Failed chicken farming venture
Remittances
Dispersing children among wealthier households in the same family.

Summary of Highland livelihood strategies	
Livestock	***Crops***
Sheep	Maize
Donkeys	Beans
Horse	Peas
Mule	Cannabis
Pigs	Lentils
	Wheat
	Fodder
	Barley
	Potatoes
	Corn
	Beans
	Cabbage
	Spinach

5.2. Natural capital

I travelled to Lesotho in late summer, the maize and sorghum growing season (FAO, 2017). Yet, I observed little cereal production in Maluti. This is likely because of cropland shortfalls in Maseru´s urban environment. Comparatively, in the highlands, the Maluti resettlers had space to cultivate fields of cereals that them throughout the year. Moreover, they

had access to grain silos. In which they stored excess grain. In the winter months, they would withdraw grain from the silos and grind it down to feed their families and livestock. Yet, in Maseru, neither space to cultivate expanses of cereals of silos to store excess grain are available to the Maluti resettlers.

The respondents struggled to pursue natural-resource based livelihoods. The Chief revealed that issues, particular to the rural context prohibit him to producing much beyond the subsistence level. For example, in the past, he attempted sharecropping on the outskirts of Maseru as well as a poultry production business in Maluti. Yet, both these strategies failed. Regarding sharecropping, the cost of inputs such a seeds, fertilizer and tractors were too high for the operation to be successful. Comparatively, he never needed these inputs in the Highlands. Moreover, he would slaughter approximately two chickens every week. The maize he grew would sustain his poultry because in winter he stored excess maize in a silo and grinded it when need. However, in Maseru, can only afford to infrequently buy chicken from local retail stores. Notably, all respondents cultivated cannabis in the Highlands.

5.2.1. Cannabis

All respondent highly regarded the resilient growing characteristics of cannabis plants. According to Bloomer (2009, p. 12), cannabis intercrops wells with common crops in Lesotho such as maize and other grains. Growing in the amongst high maize crops also hides the cannabis plants from the authorities. Moreover, cannabis grows on marginal land and in harsh conditions which, other crops are unable to. Cannabis is a highly valuable cash crop which is a pillar of Mohale Basin´s economy This illegal trade consists of established networks between Basotho producers and South African buyers. The remote nature of the Mohale Basin is well suited to cannabis cultivation. Its sheltered valleys generally prevent interference from authorities (Devitt & Hitchcock, 2010, p. 76). According to respondent #3 cannabis played a large part of her households' income and paid for school fees and other household expenditures. Furthermore, when farming failed, they would rely on cannabis sales to maintain their diets. While they had some issues with the police over the years, but they pushed on regardless (Respondent #5, 2018). One respondent, (#4) still engages with cannabis as a livelihood strategy. However, rather than producing, he buys cannabis from the highlands and subsequently distributes it in Maseru. According to (#4), income from cannabis is a big part of his livelihood. While he maintains that it is significantly riskier in Maseru; he has never been

caught. Regardless of its illegality, the Maluti resettlers received compensation for loss of income from cannabis.

Compensation for loss of income from cannabis production required bureaucratic adjustments. Article 7-Paragraph 18 of the LHWP Treaty (1986) binds both the governments of Lesotho and South Africa to provide full compensation for economic losses caused by the project. However, the governments would not be seen openly compensating for an illegal activity. Resultantly, cannabis cultivators received compensation for remarkably high yielding maize crops (Devitt & Hitchcock, 2010, p. 77). All respondents confirmed that they discretely received compensation for losses of income from cannabis. *"Yes, we were compensated for our marijuana business. Not specifically for marijuana, but for other crops such as maize" (Respondent #6, 2018).* The Maluti resettlers reflected fondly on their cannabis cultivating days. Indeed, this illegal activity is something that no treaty or compensation policy can replace.

5.2.2. Livestock

Apart from respondent #2, all households gradually lost social and economic ties with their highland livestock. According to Msedi (2018), losing ties with their livestock is indictive of households who move from rural to urban areas. Despite completely abandoning crop and vegetable production, respondent #2 continues to keep sheep and goats in his yard. During the day, his livestock graze the marginal urban and peri-urban land surrounding Maseru. In the evenings, he moves the livestock into a livestock pen, located next to his home. Furthermore, he jointly owns a livelihood venture with a family member in the Highlands. However, municipal laws prohibit keeping large herds in urban areas. According to respondent #2; he currently exceeds the restrictions and fear getting a fine for keeping a herd large enough to support his household. Moreover, he is constantly concerned about the safety of his distant stock in the Highlands.

Overtime, the chief lost all connection to his livestock in the Highlands (Table 8), Chief cooperates a small pig pen with his father, respondent #4 in the village. The pigs are sustained on the community's food waste and fruit from trees and are sold or slaughtered in local markets. The pig pen is owned by respondent #5 and holds approximately twelve pigs. Yet, respondent #5 is elderly and unable to maintain the pig pen alone. Subsequently, his son, Chief cleans and maintain the pen. In exchange, the Chief keeps one pig in the pen as reimbursement. He

maintains the pen because he has the energy. *I engaged with chief on many occasions, each time I visited the community. One morning, I met Chief after he had been cleaning the pen. This was undoubtedly the most jovial I ever saw him; where, despite the cool and rainy weather exuded enjoyment towards the task.*

Table 8: Approximation of Chief´s livestock before being displaced

Sheep	20
Cattle	8
Donkeys	2
Horse	5
Mule	1
Pigs	4

5.3. Urban Housing

Highlands homesteads typically consist of two, round mudbrick structures. One to cook, eat and socialize in and another for sleeping. Although rudimentary, the rural housing model is practical and cheaply maintained and the fireplace is the focal point for social interaction. Some households showed innovative solutions to the high costs of living in Maseru. For example: to save on household energy consumption, Chief constructed an informal structure from irrigated iron sheeting next to his LHDA house. In their informal structure, the Chief and his wife cook food over a fire place. By preparing food in such a rudimentary way, their household cuts energy costs such as electricity and paraffin. Similarly, Chief recently invested in a rainwater tank to capture and store non-potable water for his household. Yet, despite these cost-saving measure, his transition to an urban economy continues to strain his households' livelihood.

After spending time and becoming with the Lesotho's landscape; identifying LHDA replacement housing becomes relatively easy. Often, similarly designed and arranged, the plain, brick buildings stick out amongst a backdrop of colourfully-improvised buildings commonly found southern Africa. Comparatively, traditional rural Basotho homesteads typically consist of two structures. Whereby, one round mudbrick building is used to cook, eat, and live in. The other, families usually sleep in. in rural houses, the fireplace is a focal point

for social interaction. Whereby, families warm themselves, cook, boil water, and socialize around the heat source. While visiting a peri-urban LHDA displacement settlement, I observed LHWP resettlers who constructed a traditional round ´Highlands´ mudbrick home alongside their LHDA replacement home. Later, I discovered that the resettled family preferred to live in their traditional homes and rented out their LHDA homes. They also benefited from rental income for their LHDA replacement homes.

The LHWP compensation package included: replacement homes and compensation for lost facilities such as kraals, livestock pens and latrines (Table 5). Thus, according to a set of standard designs, the LHDA built new house at sites chosen by displaced households. Households could also choose to take the cash equivalent and build their own homes (Devitt & Hitchcock, 2010, p. 71). Two different designs of LHDA replacement housing were observed in Maluti. Firstly, a multiple-unit replacement house. These consist of four small separate living quarters. This design allowed the owners to rent the remaining units. The second design option was designed as one large unit for a displaced household to live in. Three households chose multi-unit apartment and three households chose a single-unit design. Interestingly, respondent #2 initially chose a large, one-unit house. He later applied for his compensation to be released as a single lump sum. Which he invested in housing capital by building two conjoined rental units.

Rental properties are highly regarded in Maseru's urban property market When asked if he would consider letting two of adult daughters and his granddaughters stay in a rental unit, the Chief replied: *"Even though we are many people living here, I cannot give my daughters a room to live in…the (rental income) money I receive from the units is too important"* (Chief, 2018). Furthermore, rental income as a livelihood strategy prompted some households to move into Maseru. For example, respondent #6 indicated that in the highlands, he owned no land, and was forced to rent fields, thus sharing some of his profits to the land owner. Consequently, the allure of accessing urban property markets and turning his replacement house into a productive asset ultimately led him to resettle in Maseru.

5.4. The Lesotho Highlands Development Authority (LHDA)

5.4.1. Compensation and Resettlement

Respondent #3 outlines the Maluti resettlers´ disturbance allowance which, they received for three years after they relocated from the Mohale basin. On the first year, resettlers

received 6000 Maluti, followed by 3000 Maluti in the second year and 2000 Maluti in the third year. Whereas, (#4) outlines the structures of the 50-year compensation package. According to #4, he receives compensation once a year, around harvest time; thus, mimicking payment structure of that in the highlands. Their compensation is approximately 3500 Maluti. The Maluti resettlers receive compensation from the LHDA once a year; thus, mimicking income from a harvest.

While all respondents confirm that they reliably receive compensation from the LHDA, the resettlers have a poor opinion of the LHDA compensation mechanisms (Table 9). Generally, all respondents expressed dissatisfaction towards the LHDA compensation. Many felt that they should not pay for water and electricity as water and energy were freely available when they lived in the Highlands. Moreover, the finite nature of the compensation period was repeatedly raised. Whereby, the natural resources from which they resettled lasted for generations while, the Maluti resettlers only receive compensation for a period of fifty years. For instance, *¨Why should we pay for water and electricity? […] in Mohale we could collect wood and water for free¨ (Respondent #4, 2018)*

Table 9: Summary of grievances with the LHDA compensation and relocation

Fields are for a lifetime, compensation lasts for fifty years
Promised free water and electricity
Compensation does not cover resettlers' decreased purchasing power in Maseru
Poor communication and broken promises regarding compensation amounts
Failure to formally introduce resettlers and host community

5.4.2. Communication

The Maluti resettlers commonly identified poor communication as one of LHDAs shortcomings. Firstly, the Chief says that he was not informed how much compensation he would receive until after he left the highlands. Subsequently, he feels undercompensated for receiving standard sharecropping rates. Secondly, respondent #6 feels he was poorly engaged as a project stakeholder. After the they valued his assets, the LHDA informed respondent #6 how much compensation he is liable for. respondent #6 expressed did not have an opportunity to discuss or debate it. Rather, he was told to "take it or leave it". Similarly, respondent #6 feel that he felt powerless in the process of deciding to displace his community or not. Finally, to

compensate for his inundated grocery store, the LHDA gave his household a large yard to cultivate. (respondent #4) claims that the LHDAs promises to provide a market for his produce are still unfulfilled. "You can only eat so much cabbage" says respondent #5 while complaining that he has crops year in and year out, but nowhere to sell. However, this could be a communication failure

The Maluti resettlers highlighted many promises with the LHDA made but did not deliver. According to respondent #3 says that LHDA promised to supply his household with free water and electricity. However, when they moved to Maseru they discovered that this was not true. Respondent #3 elaborated that paying for water and energy is the major force. *¨The LHDA made us many promises that they didn´t keep¨ (Respondent #4, 2018).* Similarly, According to Chief, he invested a lot of human and financial capital into his fields. Thus, he obtained comparatively better yields. The LHDA promised to make allowances for his good productivity; but failed to deliver. Yet, since the agreement was not written down, he has no legal grounds to dispute.

5.4.3. LHDA development initiatives for displaced communities

respondent #3 states that to date, the Maluti resettlers received no help from LHDA to establish cooperatives or similar mechanism Rather, as a community they founded a burial society independent from the LHDA. Thus, when someone dies, the Maluti resettlers have funds to bury them appropriately. Comparatively, rural resettlers were liable for development assistance through the RDP. Resulting from the LHDAs failure to compensate for loss of natural resources, the Maluti resettlers took legal action against the LHDA. According to respondent #6, the court case was settled in 2012/2013. The decision was in favour of the Maluti resettlers and they received a lump sum payment. The payment was proportionally divided; based on what they would have received if a cooperative was formed. None of the sample indicated that they could invest their lump sum into a sustainable livelihood strategy.

According to TRC (2018), more time and effort should be put into adequately training communities who are impacted by the LHWP. Specifically, those who relocated into urban areas. *"before the being displaced by the Mohale dam construction activities, communities like the Maluti resettlers have known nothing else but farming"* (H. Hlalele-Transformation Resource Centre, 2018). The respondents expressed varied responses regarding the training

they received from the LHDA (Table 10). According to TRC (2018), while the LHDA provided skills training, the resettlers did not know the urban job markets. Subsequently, they struggled to find employment. (respondent #6) indicated that his wife received training on poultry production. However, she felt that the training was not sufficient. Resultantly, took the initiative to receive additional training. Moreover, LHDA provided training for much shorter periods than regular trade schools. Resultantly, employers did not recognize resettlers' qualifications. Thus, restricting resettlers to unskilled employment.

Table 10:Training from the LHDA

• Respondent #3: Mother received sewing and dress making skills training
• Respondent #4: He does not think his mom received training as she was living in South Africa at the time
• Respondent #6: His wife took an opportunity to get training on animal husbandry • Respondent feels that the training wasn't in depth • wife took the initiative to further her training in chicken raising (no longer raising chickens)

• Respondent #5: They were given training in dress making (wife)
  ○ They used to sew as a livelihood stream in the past, but they faced challenges in finding a market to sell to
  ○ They no longer do it, because they're elderly and have difficulties accessing the market

5.4.4. Friction with host community

By interviewing community members from the resettlers and the host community, this study seeks to shed light on the relationship between the hosts and resettlers. According to respondent #3 states that there was palpable tension between the Maluti resettlers and the host community from the moment they arrived in Maseru. Indeed, during times of peak hostility, the Maluti resettlers could not bury a dead community member in the host community´s cemetery. Resultantly, the Maluti resettlers were forced use a vacant plot of land next to one of the LHDA replacement houses (Chief, 2018). Informally burying the deceased starkly contrasts Basotho cultural and religious norms. According to TRC (2018), in Basotho culture, burial grounds for deceased ancestors are sacred places. Burial sites are sacred and specifically demarcated and children are kept away from them.

The host community specifically blames the initial hostilities on the LHDAs failure to notify the host community of the Maluti resettlers' arrival. Indeed, the host took radical steps

to show that they were angry with the LHDA. Yet, grievances towards the LHDA are not limited to the host community. Two Maluti resettlers; respondent #3 and respondent #4 firmly believe that the LHDA should compensate the host community for welcoming them into their community by developing schools and other social infrastructure.

> *"One day they were attending a community funeral. Trucks started arriving to offload building supplies. That is how we found out […] what we did to them (the Maluti resettlers), we did to show the authorities (LHDA) that what they were doing was wrong"* (Host community Member, 2018)

As time went by, the host community softened. According a host community member, they realized that what they were doing to the Maluti resettlers was not working as the LHDA did not take any notice. Furthermore, they realized that their action contrasted their culture. Resultantly, both the host community and the Maluti resettlers successfully convinced the LHDA to exhume and appropriately rebury the deceased member of the Maluti resettlers into the community cemetery. To date, the LHDA has not provided any form of social infrastructure or compensation to the Host community. In fact, the only action that the LHDA has taken is to relocate the grave.

5.5. Family dynamics

Since relocating to Maseru, four households swelled by two members while, two other households expanded by a single family member. The Chief moved to Maseru with a household of six: himself, his wife and their four daughters. Two of his daughters are in school. His other two daughters working in Maseru.

Two households interviewed in this study are related. In fact, respondent #4 and respondent #6 are members of a much larger family that maintained strong bonds of kinship; despite the resettlement process. Five out of twenty-two of the community´s households are members of this family, three brothers and two sisters. Each received separate LHDA replacement houses. Similarly, respondent #2 states that both his brother and parents relocated from the same village to Maseru. respondent #2 remarried after his first wife passed away after

they relocated to Maseru. Resultantly, in line with Basotho traditions he constructed a second house for his new wife to live in. Overall, respondent #2 moved to Maseru with his first wife and their five children to Maseru and has two more with his new wife. When asked why they chose to move to Maseru, they said that they made the decision to stay together as a family; such as it was in the Highlands.

6. Discussion

6.1. RQ#1: What existing frameworks are out there?

According to Scoones (1998, p. 3) the key questions to ask during an SLA are: (1) under certain contexts what combination of livelihood assets are available to pursue a combination of livelihood strategies? (2) What are the livelihood outcomes of these strategies? (3) What are the informal and formal institutional processes that mediate such strategies?

This study overviews existing theory and methodological frameworks to determine the best approach to study livelihood (Section 3). Specifically, the studies livelihoods were involuntary displaced from rural areas; and subsequently resettled into urban areas. Importantly, this study acknowledges that vulnerability is not a static concept. Rather vulnerability can be viewed as the scale of a household´s insecurity or wellbeing. According to IDS (1989) as cited in Chambers and Conway (1992, p. 10), vulnerability has two dimensions: external-subjected stresses and shocks and internal: the capacity to cope. Therefore, analysing vulnerability requires identifying threats towards household welfare *and* an assessment of household resilience in exploiting opportunities (Meikle et al., 2001, p. 15). Thus, at the onset of this study, I apply a similarly fluid definition of vulnerability.

6.2. RQ 2 How have the Maluti resettlers adapted?

In the following sections, I use SLA framework to profile the urban, post-displacement livelihoods of the Maluti resettlers. In particular, I focus on the different components of livelihoods, as identified by various SLA authors. During the data collection period, I used semi-structured interviews that compelled respondents to compare components of their urban and rural livelihoods. Importantly, respondents identified their own sources of vulnerability.

In the following sections, I present a *comparative* SLA analysis of the Maluti resettlers livelihoods before and after being displaced from the rural Highlands into urban Maseru. Firstly, I focus on livelihood resources such as; natural, economic, human and social capital. Moreover, both SLA and the IRR model have a sharp focus on the role of institutions Therefore, by broadly adopting Hodgson (2006) categorization of formal and informal institutions, I firstly discuss how informal/non-legal institutions shape the urban livelihoods. After which, I finally, I overview the vulnerabilities associated with formal/legal institutions.

6.2.1. Natural Capital

Since moving to Maseru, the Maluti resettlers exhibit varying levels of engagement with agriculture. On the one hand, the LHDA fruit trees that line the roads village roads go largely unappreciated. This may be unthinkable in other urban areas in sub-Saharan Africa. Yet, most respondents are sufficiently secure to not chiefly rely on the apples and peaches which surrounded their homes (and presumably diets) for the past two decades. Moreover, respondent #2 completely abandoned his vegetable garden; saying that unreliable yields prompt him to rely entirely on sales from neighbours and local. On the other hand, two households pursue rely on urban agriculture and natural resources much more.

The chief is respondent #5's son. In the Mohale Basin, respondent #5 was their village's chief. Yet, since moving to Maseru, his son became chief. They maintain strongest bonds with agriculture. In fact, the Chief's household solely harvests and dries fruit from LHDA fruit trees. Moreover, their co-dependency-presumably based on kinship, have turn their urban farming successful. Each respondent has comparatively large cabbage patches. They also cultivate, corn, spinach, pumpkin and other assorted vegetables. Moreover, they also operated the only pig pen in the village. This indicates that maintaining bonds of kinship though a process as destructive as involuntary displacement can be successfully applied to benefit livelihoods. Despite production challenges, households pursing livelihoods based off natural

resources also struggled to enter urban markets and struggled to store his garden´s crops in Maseru.

respondent #5 expressed that he has no storage space for his cabbage. Therefore, I question his crop selection. During an informal conversation during a drive through the scenic Maluti mountains, Vuyani stated that while cabbage is undeniably a staple in many Basotho diets, green leafy vegetables are lowly regarded in Basotho society, despite their nutritional benefits. As such the markets value for cabbage is low. Whereas, vegetables such as peppers which, yield higher profits are not sold in informal markets. Rather, they are sold through South African retail stores that relentlessly monopolize Lesotho's retail sector. Therefore, the effort required to load cabbages to a market understandably seems unrewarding. Moreover, respondent #3 mentioned that they saved seeds from the highland crops to replant in Maseru. It is unclear whether the chief used highland seeds in his sharecropping venture. However, if he did, their variety would better suit the Lesotho Highlands' agroecological environment. This could explain the low yields. The chief also indicated that upon moving to Maseru, his first years´ crops failed. When asked about seed variety and different growing climates, respondents were generally unaware. For example, the term climate change was foreign. Rather respondents associated with periods of extreme weather. Moreover, cannabis is traditionally, grown in Lesotho's Highlands

The illegality of cannabis cultivation ensures that it is a highly valued cash crop. Income from cannabis was a safety net for the Maluti resettlers. For example, when food crops failed, earnings and savings from cannabis cultivation helped households respond to socks and stresses. Indeed, respondents fondly reminiscence about income from cannabis. Losing this safety net significantly impacted the Maluti resettlers´ livelihoods. Indeed. While one respondent still sells cannabis in Maseru, the availability of such a livelihood stream is lost forever to the majority of the village. As it is illegal, this is a livelihood stream that the LHDA can never replace; therefore, impacting the resettlers' perception of there LHWPs success

6.2.2. Basotho culture and natural capital

Basotho culture is strongly linked to rural environments and traditions. Whereby, according to Msedi (2018), rural households from the Highlands are proud to produce all the food they consumed. The Maluti resettlers struggle to uphold this in Maseru. Thus, they don't

see themselves as ‘land owners and perceive that their lives had more value when they lived off the land. The local respondents confirm their cultural attachment to natural capital. According to respondent #2, he did not enjoy receiving money from the LHDA for doing nothing. As idleness is not in his nature, he requested that the LHDA release his compensation as a single lumpsum, rather than over a fifty-year period. With the lumpsum, respondent #2, invested in two rental units as well as in his urban livestock business. Along the peri urban landscapes, respondent #2 grazed a small flock of sheep and goats. Thereby, returning to familiar highland livelihood strategies. Similarly, one day, while walking through the Maluti, I met elderly village member. She revealed that; despite urban energy solutions, she occasionally roams the outskirts of Maseru to nostalgically collect firewood; as she had done for most her life in the highlands. Despite her household not needing the fuel.

6.2.3. Land ownership

Upon moving to Maseru, the Maluti Resettlers´ social and cultural status drastically changed. This was advantageous for some households and disadvantageous for others. For example, respondent #6 expressed that he owned no land the Highlands. This prompted him to relocate to Maseru where, he could access rental income. Indeed, this form of passive-income was unknown to him before moving to Maseru. Comparatively, the Chief expressed that relocating from the Highlands eroded his cultural status. According to Basotho cultural hierarchies, the Chief governed communal land and was respected for it. In the highlands, the extent of his chiefdom and authority was well know and far-reaching. Yet, this is not the case in Maseru. While # chief maintains his hierarchical status in among the Maluti resettlers, his settlement falls within the chiefdom of Host community´s informal jurisdiction. Thus, the Chief’s jurisdiction is essentially a subordinate island within a larger hierarchy. Similarly, loss of livestock impact urban resettlers´ social status.

6.2.4. Livestock ownership

Livestock has great cultural significance in Basotho society. Whereby, Lesotho’s mountainous landscape is ill-suited to crop production yet, make excellent rangelands for livestock (Lewis et al., 2011, p. 37). Resultantly, rural Basotho culture and economies have evolved alongside livestock ownership. Whereby Ferguson (1985, pp. 647,648) notes; owners of large herds are respected not only as someone with economic wealth; but also, someone who

possesses great social status. Moreover, in certain senses, their high social status belongs to their community. respondent #3 summarizes the general trend of the community´s relationship with livestock best: "*Over the years, the animals were sold and slaughtered. And now none remain*" (Respondent #3, 2018). Aligning with Ferguson (1985) thinking, those who own many livestock presumably forfeited the associated social status when they leave rural areas. For example, the Chief owned a large number of livestock in the Highlands (Table 8). Yet, in Maseru, the amount of land or livestock each household owns is unknown to his new neighbours.

6.2.5. Family dynamics

Compared to rural areas, children in urban areas directly rely on their parents' livelihoods for a longer period. According to TRC (2018), while urban and rural schooling systems are the same (twelve years of schooling from age six onwards), there are fundamental differences between rural and urban family dynamics. Particularly, regarding marriage customs in rural areas, children get married earlier-especially girls. TRC (2018) indicates that it is common for girls to marry from age sixteen. Comparatively, in urban areas, children remain with their parents much longer. Urban children attend school until a certain level that provide them employment. Thereafter, they remain in their parents´ home until their employment affords them their own accommodation. This trend is evident in the Chief's household. All the Chief´s daughters are unmarried. Yet, since relocating to Maseru he has become a grandfather as two of his daughters have children. While immersing into Maluti village-life, I observed the visible affection the chief has for his grandchildren. Regardless, the Chief admitted that. ¨*By, now I thought that they (his daughters) would be married already*¨ (Chief, 2018). Indeed, compared to typical rural households in Lesotho, his daughters (and grandchildren) rely on their parents´ livelihood for a much longer period. Yet, UNFPA, UNICEF, WHO, and UN Women (2016) define child marriage as marriage before the age of 18. It applies to both boys and girls, but the practice is far more common among young girls. Furthermore, child marriage is a violation of their rights. Therefore, while parents in urban areas support their children for longer, provided the household is secure, this can be seen as a positive outcome. Moreover, land and livestock ownership transform cultural hierarchies when households migrate from rural-urban areas.

6.2.6. Rural-urban resettlers and formal institutions

Households who relocated into urban areas faced much larger challenges compared to households who relocated into the foothills, lowlands or the Highlands. Whereby, their livelihoods shifted from a trade and natural resource-based economy; towards an employment and cash-based economy (H. Hlalele-Transformation Resource Centre, 2018) Indeed, while there may be many employment opportunities in urban areas, resettlers from rural areas are ill-equipped to sustainably enter the urban job market. The best way to better integrate resettlers into urban areas is to provide suitable opportunities for human development. Indeed, according to Moser (1998, p. 4), labour is the urban poor's most valued asset.

Before relocating to Maseru, the Maluti resettlers were farmers. As such, their skills and knowledge based was rooted in Mohale Basin´s natural capital. Therefore, they lacked skills to enter the urban job market. While authors such as Meikle et al. (2001, p. 8); Moser (1998, p. 3) note that no all those working in the informal sector are poor; and not all those working in the formal sector avoid poverty. Regardless, it is important to note the employment trend among the Maluti resettlers since relocating to Maseru: some became taxi drivers, seamstresses or traders. Yet, none obtained *skilled* work. Forced displacement into the socioeconomic conditions associated with unskilled, minimum wages should attract planners´ attention.

Despite resettling into an urban environment, the Maluti resettlers received training that was better adapted towards rural environments (Table 10). As such, no respondents pursue livelihood streams based off LHDA training. According to Tilt et al. (2009, p. 253), different skills training was determined by gender. Whereby skills such as masonry and welding were designated to men while women received training on skills such as dairy production, sewing and poultry. The programs were designed so the women could stay at home while the men left the house. While this was useful if the women were caring for children, it reinforced existing gender roles, Indeed, gendered LHDA training is reflected in the respondents' responses (Table 10). This highlights an institutional shortfall. Looking forward, the LHDA should better prepared resettlement plans that better integrate rural resettlers into urban economies.

While trend applies to the first generation resettlers, their Maluti resettlers´ seem better adapted for urban life. When asked if they would return to the highlands if they had the opportunity; most respondents expressed that they are accustomed to the development in Maseru and would not return. This opinion resonated most among household heads who had welcomed a second generation into their households during their tenure in Maseru. Whereby,

compared to the Lesotho Highlands, they felt that the availability of better schools, electricity and other urban infrastructure better equipped their children. For instance: *"In summary, resettlement has been a great thing because we have moved closer to development. This like schools, clinics and electricity are thinks which I consider a better life"* (Respondent #4, 2018). This generational stratification brings Scudder (2005) four stage framework to light. Whereby, he claims a project's success can only truly be measured after two generations.

6.3. RQ 3: adding rural livelihoods to the SLA debate

According to Meikle et al. (2001, p. 18), urban SLA indicators are used for system analysis: understanding how and why particular livelihood function or fail; intervention: determining the appropriate intervention by organizations and agencies; evaluation: assessing the effects of policy on livelihoods and comparison: this implies comparison between two different livelihoods systems or; as is the case with this study: comparing the community's livelihood over a period of time. The Likalaneng resettlers' forced rural-urban migration defines their livelihoods. Whereby, this thesis uses SLA methodology to compare the Likalaneng resettlers' livelihoods before and after being displaced from the Mohale Basin in the Lesotho Highlands. Indeed, while the Likalaneng resettlers ultimately share an adopted urban-lifestyle with Maseru's economic migrants, their impetus for relocating to Maseru is radically different. Rather than choosing to leave the familiarity of their home on their own accord; the decision was imposed upon them by the LHWP. Moreover, while economic migrants can return to the support structures of their home villages, the Likalaneng resettlers' original village has been inundated. This makes it impossible for them to ever return. Resultantly, they had to reconstruct their livelihoods to the best of their abilities in new physical, social and economic environments. Yet, since none of the respondents lived in Maseru before the Mohale Dam project. Resultantly, they had little indications of the challenges associated with urban relocation.

Urban livelihoods are largely defined by the opportunities and constraints under which they operate. As such, an analysis of urban livelihoods should be mindful of contexts that specifically apply to urban livelihoods (Meikle et al., 2001, p. 4). Contexts influence the types of assets and the strategies available to households. Ultimately, this determines the levels of household vulnerability and security. However, most SLA frameworks are developed for rural contexts (for example: Chambers & Conway, 1992; McDowell, 2002; Scoones, 1998). Therefore, below I highlight aspects of the Maluti resettlers´ livelihoods adaption from rural to urban livelihoods in the LHWP. By doing so, I aim to inform the debate on the use of SLA methodology in contexts of involuntary rural-urban migration. In doing so, I hope to help planners who use SLA as a planning and forecasting tool. Such as; planners considering rural-urban migration in subsequent phases on the LHWP.

SLA methodology requires that respondents identify their own sources of vulnerability. When applied, the Maluti resettlers exhibit that: in situations of involuntary displacement, households must rebuild their lives in foreign physical, cultural and social contexts. While this

is admittedly not a surprising finding, the extent of change that the Maluti resettlers endured is noteworthy. The Maluti Resettlers show that the intensity of livelihood changes compounds and intensify when displaced households migrate from rural-urban environments.

Urban SLA authors such as Meikle et al. (2001) and Moser (1998) identify contexts that differ or differ in intensity in urban livelihoods. Below, I draw influence and build on these contexts. Namely: *the urban economy context, the urban housing context, urban social capital and informal institutions context, urban governance context and rural-urban linkages*

6.3.1. Urban economy context

Often, urban areas represent opportunities for the rural poor, while paradoxically increasing their living costs. Housing is typically more expensive in urban areas. Furthermore, high living costs, lower real wages and dependence on the cash economy exacerbate urban blight (Meikle et al., 2001, p. 5). Urban labour generates income directly through wage employment or indirectly through the sale of goods and services. The highly-commoditized nature of urban life implies that labour is the most important assets to urban dwellers (Meikle et al., 2001, p. 5).

The urban sales market has largely failed the Maluti resettlers. Indeed, most respondents' primary livelihood activities are based in service and tertiary sectors. For example, taxis and rental properties. Whereas, households who attempt livelihood strategies rooted in highlands thinking-based off natural capital seemed the most vulnerable. For example, while respondent #5 has enough land to cultivate sizeable amounts of cabbage, he complains that he puts a lot of work into his comparatively large (for urban standards) cabbage fields yet receives low profits. Further, he is old and struggles to transport his produce to local markets. While easily cultivatable, cabbages are heavy to transport and have low value in Basotho markets.

Rather than benefitting from better access to urban markets, the Maluti resettlers are suffer and endure its price inflation. The higher cost of food and goods was identified by all respondents as a constant livelihood strain. Rather than producing their own food, the urban residents' food generally passes through numerous 'owners'. In this sense, food is commoditized, as each 'owner' add their mark-up. Thereby, significantly increasing the prices of food when it eventually enters urban food markets. In the Highlands, resettlers never

purchased maize as they could grow enough to last the whole year. Comparatively, the compensation they receive from the LHDA is not enough to buy maize for a year, let alone sustain a diverse diet. Moreover, on good years, Mohale´s residents had excess produce to sell. This shows that when using SLA methods in as a *forecasting tool*, price inflation in urban areas should be considered.

6.3.2. The Urban Housing Paradox

Housing is a rarely identified asset in rural SLA literature (for example: Chambers & Conway, 1992; Scoones, 1998). Indeed, home-seekers in rural areas seldomly rent houses. Rather, they rent land to cultivate and use the freely available natural recourses to build an informal structure close to their fields or grazing areas. Yet, LHDA replacement houses are highly regarded by the Maluti resettlers. Particularly, households who invested in rental units show positive outcomes. By renting out adjoining structures, the resettlers turned their LHDA houses into productive assets. Indeed, the findings suggest that households who sacrificed the comforts of a larger living space at the onset; benefited in the long run. For example, after accumulating money from years on rental income, the Chief, he builds a new house, larger than the original single-unit LHDA replacement house. This scenario has multiple benefits. As well as moving to a larger home, the resettlers can also rent out their original home. Indeed, in his *Impoverishment Risks Framework*, McDowell (2002) highlights that housing in the form of compensation is an important asset. Thus, this study agrees with authors such as Moser (1998), who, acknowledges that housing is often the urban poor's most important, productive asset. Similarly, (Meikle et al., 2001) identify physical capital such as shelter and communications as important determinants of urban livelihoods. Yet, while urban housing is a productive asset, it does have its drawbacks.

The high cost of running and maintain homes in Maseru are much higher. According to Msedi (2018), LHDA replacement homes are less gratifying than planners envisioned. She highlights that rural people were drawn to the idea of living in a ´white persons´ house. While outwardly attractive, the LHDA replacement houses are not user-friendly and less gratifying to rural Highland communities. Originally, LHDA replacement homes lack fireplaces, forcing households to purchase fuel. Moreover, families cannot make fires on the smart tiles and finishes of LHDA replacement homes. This problem intensifies in urban areas. Even with fireplaces, wood for fuel is not freely available; as it once was in the Highlands. Therefore, households rely on expensive inputs such as coal, electricity, goas and paraffin regardless.

6.3.3. Urban Social capital and informal institutions context

To increase combability between the IRR model and SLA frameworks, I grouped social capital and informal institutions in my analysis. By broadly grouping social capital and informal institutions, I was able to capture detailed nuances of the impacts of involuntary displacement from rural-urban areas in a relatively short time. In situations where fieldwork time is limited (such as in this study), I found this to be a useful research strategy. This aligns with both displacement and SLA authors´ standpoints.

Social capital includes local relations, wider social networks and patronage systems between poor and wealthy households (Meikle et al., 2001, p. 5). In rural areas, the obligation to fulfil claims is woven into society. Whereas, Chambers and Conway (1992) similarly identify claims as a form of intangible assets. Adding to the involuntary displaced and urban SLA debate, this study finds that while fragment resettled communities may have strong internal solidarity, they are still subjected to social tension. This is an issue that planners can certainly mitigate. Though community development initiatives that benefit both host and resettlers´ households. Yet, if left unfacilitated, relationships can dismantle. The Maluti resettlers show evidence of this. Refused burial rights to resettlers in Maluti is a shockingly unnecessary manifestation of this. Regardless, as Cernea (2003, pp. 38-40) notes, only physical assets that can be valued are subject to compensation. Social, cultural and psychological effects are not compensated for because they cannot be monetized. This deeply discourages human ability for recovery. The Maluti resettlers exhibit signs of this through their loss of cultural ties with livestock. Similarly, cultural hierarchies are also eroded

6.3.4. Urban Governance context

Not all those working in the informal sector are poor. Likewise, not all those working in the formal sector avoid poverty (Meikle et al., 2001, p. 6). Furthermore, urban economies do not function in isolation and are susceptible to the effects of macro-economic a development policy (Hardy et al., 1990 as cited in Moser, 1998, p. 4). Urban residents are attached to governance systems though their dependency on service delivery, infrastructure and the impacts of policies. Yet, the weak capacity of local governments is frequently unable to meet the needs of poor, urban residents. And in some extreme cases may even discriminate against them (Moser, 1998, p. 4).

The LHDA showed progressive steps in their planning for displacement in LHWP phase 1B. For example, Cernea (2003) says; households should be afforded and accelerated path of development following resettlement. On economic grounds, this accounts for the lag in livelihood activities that resettlers' face. Elements of this are visible in the LHDA's resettlement allowance. Whereby, over the and above the fifty-year compensation package, resettlers also received a disturbance allowance for the initial three years. Yet, despite well thought-out development plans, in some instances poor execution hindered the LHDAs success. For example, the LHDA failed to provide alternatives to the RDP that assisted urban resettlers. The RDP was intended to compensate displaces for loss of communal natural resources (Table 5). Yet the RDP was targeted toward rural populations. For example: technical assistance for improved rangeland management practices and agricultural input subsidies. As the Maluti resettlers moved into an urban environment they did not benefit from the RDP. Resultantly, the Maluti resettlers successfully challenged the LHDA in court for funds which they were liable for through the RDP. Moreover, the LHDA failed to integrate the Maluti resettlers with their host community. Therefore, a detailed resettlement and development plan is needed for urban resettlers in subsequent phases of the LHWP.

6.3.5. Rural-urban livelihood linkages

Social capital connects rural and urban households. Urban livelihoods have distinct characteristics. Yet, it is inaccurate to compartmentalize them as exclusively urban as households often draw on dual livelihoods to survive (Meikle et al., 2001, p. 6). For example, Moser (1998, p. 4) identifies the following livelihood components that rely on rural-urban linkages: remittances from urban to rural areas, sharing caring responsibilities for family members, seasonal labour and short-term migration.

While cities and urban poverty have distinct characteristics, in would be inaccurate apply SLA on an urban community without considering rural-urban linkages (Meikle et al., 2001, pp. 6,7). Even after twenty years after relocating from the Highlands, the Maluti resettlers exhibit rural livelihood links. Based specifically on what Chambers and Conway (1992) term claims and intangible assets. For example, to distribute the costs associated with raising children, respondent #3 shows a resourceful livelihood portfolio. As a single mother of five, her livelihood relies on support from extended family; dually relying on rural and urban network to provide for her children. Her brother sends remittances from South Africa. Moreover, one of her children live with her sister in South Africa. Two other children attend

high school in Maseru. Finally, her son lives with her brother as a herd boy in the highlands. Looking after cattle in the Highlands is a traditional rural livelihood strategy in Basotho culture. TRC (2018) provides clarity on the herd-keeping dynamics in Basotho culture: boys find employment in the highlands by looking after another household´s herd. The boys are taken-in by their employers´ households living and eating with them. This removes all financial burden on the boys´ families. In exchange for a season of employment herd boys receive approximately one cattle or six sheep, depending on the stock they were charged to care for. This shows that rural traditions resonate throughout Basotho society; even in the urban areas.

7. Conclusion

Before displacement, the Maluti resettlers pursued mainly rural, agrarian livelihoods in the Lesotho Highlands. Yet, since the Mohale dam inundated their villages, they relocated in into Lesotho´s capital, Maseru. Whereby, they transitioned from a natural resources-based economy to a cash-based economy. Replacing land-for-land is generally considered the best form of compensation. Yet, in a small mountainous country such as Lesotho, most arable land is already cultivated. As LHWP develops, more rural households will be displaced for hydropower gain. Experiences from LHWP phase IB shows that valuable farmlands in fertile catchment basins are difficult to replace.

This is indeed a unique study, as few-if any, in-depth, household-scale studies have been done on communities who were displaced from rural to urban by LHWP phase 1B. Particularly, follow up studies two decades after displacement. In line with Scudder (2005) thinking, I agree that the measurements of a displacement projects success, become more reliable as time passes. Yet, I caution against the small scale of the sample size limiting the findings´ generalizability. Considering rural-urban migration trends in the region, it is likely that more households will displace into urban centres like Maseru. Therefore, more research should target the impact of rural-urban migration in case of involuntary resettlement. This is important because planners' understanding of vulnerability determines how they will respond to it.

7.1. Summary findings

Overall, most respondents indicate that they prefer urban life. Despite not having access vast natural capital anymore; the Maluti resettlers are accustomed to a certain ´way of life´ in Maseru. Urban convinces such as electricity and access to social and economic infrastructure support their urban inclinations. In particular, households with children vividly expressed there are more opportunities in an urban environment. Yet, the question remains: in accordance with the LHWP Treaty (1986): 'are they no worse off than before?'.

Unlike households who displaced from one rural area to another, the Maluti resettlers migrated to Lesotho´s urban capital, Maseru. as such this study identifies a number of livelihood vulnerabilities and opportunities that are unique to rural-urban migration in cases of involuntary resettlement. Indeed, when using the analogy of vulnerability as a *´continuum between secure and insecure`*, different vulnerabilities can be challenging or fortuitous. For

example; rental property. Rental property is a livelihood strategy that the Maluti resettlers can only access in urban areas yet is hindered by housing designs that lack innovation. Indeed, the LHDA replacement houses transported the Maluti resettlers into modern twenty-first century living standards and may be the envy of many urban poor in sub-Saharan Africa. But, these services came at a cost. Which, the resettlers´ identify as a major livelihood strain. Reduced purchasing power in urban areas compounds this and reduce satisfaction with compensation amounts. Moreover, as resettlers; compensation policies and the institutions that govern them play a major role in resettlers´ livelihoods.

Urban households rely on government services and institutions more than rural households. Therefore, this study focuses on the formal institutions that shape their livelihoods. Formal institutions play a significant role in cases of involuntary resettlement because household rely on formal intuitions for resettlement plans and compensation. LHDA is mandated to oversee resettlement in the Lesotho Highlands Water Project. In phase 1B, the LHDA received mixed results. Notable shortcomings include failing to formally introduce the resettlers and host community. Furthermore, the training provided by the LHDA was irrelevant. Yet, as Hodgson (2006); Scoones (1998) highlight, formal and informal institutions are difficult to distinguish.

In cases of involuntary displacement, informal institutions undergo the most drastic change. Therefore, local communities who represent these informal institutions should participate in the project planning phases. Yet, when households migrate from rural to urban environments, some social and cultural shifts are inevitable. For example, in a county rooted in culture and traditions, this study shows that rural-urban migration erodes resettlers´ connection with bovine and the associated sociocultural status. Indeed, when considering social capital and intangible assets with the Maluti resettlers, a large discrepancy between rural and urban society is immediately evident. Notably, strong bonds of social capital are intimately interwoven into the moral fabric of Highland communities.

In this thesis, I use SLA to study the multiple layers of the Maluti resettlers' livelihoods. Rather than rigidly sticking to one particular framework, I holistic examine and apply many SLA frameworks to study rural-urban migration in cases of involuntary resettlement (Table 3). This has multiple advantages, for example: I did not seek to 'sort and file' components of the Maluti resettlers´ livelihoods into a particular category of livelihood asset or vulnerability. Rather, by being fluid in their categorization, I was able to appreciate their interdependencies.

Furthermore, I exploited SLA frameworks' compatibility with other frameworks that assess risks to resettled populations. For example, I broadly combine my assessment of informal institutions identified by Cernea (2000, 2003) in the IRR model and social capital identified by SLA authors (Table 3). This promoted the uptake of slight nuances the Maluti resettlers' livelihoods in urban contexts. This study finds that; while SLA frameworks have rural origins, adjusting for urban contexts make it a useful tool to study urban livelihoods. I use SLA framework to study what strategies, assets and vulnerabilities shape their displaced, rural-urban livelihoods. Overall, I agree with Meikle et al. (2001, p. 8) who finds that these contexts differ, or differ in significance to rural SLA.

7.2. Recommendations

7.2.1. Urban poverty cannot be overlooked

Stakeholders in Lesotho's development arena often urban population. As AFSUN (2015, p. 1) points out, Lesotho's government and donors exhibit a rural bias. Thereby, leaving Maseru's poor to face unique strains and stresses associated with urban vulnerabilities unassisted. For example, in August 2012, Lesotho's Prime Minister; Motsoahae Thomas Thabane, declared a food security state of emergency in Lesotho. As well as pleas for food aid, he proposed several responses to national food insecurity. Such as; prioritizing agriculture into a National Strategic Development Plan. Whereby he proposed to boost food security by subsidizing inputs, maximum arable land use, promoting drought-resistant crops and conservation farming. All responses were targeted towards rural development and completely failed to address urban poverty.

7.2.2. Communication

A common observation is that the Maluti resettlers were not informed or prepared for the challenges of urban life. Admittedly, they all seemed to eventually settle into a lifestyle that is arguably more secure than many of Maseru's residents. However, the generally low opinion of the LHDA show that the adjustment from rural to urban economies was not smooth. Thus, this poses the question: how the LHDA reduce periods of 'growing pains'? Indeed, the LHWP is a multi-phase project, spanning many decades into the past and the future. As such, more rural-urban displaced households can be expected.

7.2.3. Community housing and innovation

Involuntary displaced communities who resettle into urban areas should not have to sacrifice larger houses to live in order to access rental income. This study shows that rental income is indeed a positive livelihood strategy in Maseru. Therefore, I argue that more renting units should be made available to resettlers. Either individually, or for the community as a whole. According to Moser (1998), housing is the urban poor's most productive asset. Therefore, planners should embrace the migratory nature of Basotho livelihoods by facilitating access to rental livelihood streams. This strategy also aligns with the innate capacity of engineering firms; typically, larger stakeholders in any hydropower dam project. Engineering firms can deliver houses much faster than other livelihood restoration initiatives such as the RDP. Which largely failed urban resettlers. Indeed, according to Hitchcock (2015, p. 65), The physical resettlement program is the easy part, and one which is familiar to engineers- Consisting of construction works, roads, water supply and other services. Yet, for this strategy to be successful, cost saving steps on LHDA replacement houses are required

All respondents indicated that the high cost of housing is a tremendous, ongoing strain to their livelihoods. Therefore, planners can mitigate this by doing more research and development into sustainable, passive housing designs. Cost saving innovations such as renewable energy solutions and rainwater harvesting schemes have multiple benefits. As well as decreasing resettled households' expenditure, this will also make rental properties more profitable. If implemented on a large-enough scale-for example, to both the host and resettlers, it may increase overall property value in the urban neighbourhood. Similarly, more research is needed into increasing the productivity and attractiveness of urban agriculture. Steps such as these could compensate for urban resettlers´ compensation amounts diminished purchasing power. Furthermore, if done on a community-wide scale, it will promote solidarity and avoid conflict between resettlers and host community members

7.3. Further research

7.3.1. The Evolution of livelihood assessment methodologies

In this study, SLA has shown multiple layers of the Maluti resettlers' livelihoods. Including; effects of resettlement, urban contexts, friction with the host community and LHDA institutional shortcomings. SLA seeks to capture the multiple layers of the household livelihoods. Scholars and experts who adopted SLA responded by developing the framework

further. Such as, increasing the number of impact categories and merging it with other frameworks.

Yet paradoxically, as adoptees of SLA continue to evolve SLA frameworks to capture the complex reality of livelihoods and their environments, they also increase the number of categories for assessment. Indeed, if one studies the development of these frameworks and their adoption by multilateral donor agencies; a visible increase in assessment categories becomes apparent. While this is ultimately good to capture the essence of the complex reality of livelihoods and their environments. I worry that; by creating more assessment, and categories may dilute its responsiveness in situations where swift action is required. Thus, I caution that the evolution of SLA to increase SLA comprehensiveness may be at the expense of its ability to supply swiftly in times of haste.

Therefore, based off experiences from this study, I avidly recommend clear, delineated study plans and data requirement. Planners who want to study *´livelihoods´* or the effects of a project on a *´livelihood´* should be more specific. There are numerous nuanced dimensions of livelihoods that cross all fields study. Therefore, to avoid eroding the livelihood part of SLA, I advocate for specific research scopes

7.3.2. Cannabis

Another interesting, theme requiring further research lies with cannabis livelihood strategies in Lesotho. As Devitt and Hitchcock (2010) show, cannabis is the pillar of many community's rural economy. Whereby, its high value as a cash crop is based on its illegality. Yet, recently, this constitutional court of South Africa decriminalized cannabis in South Africa. Presumably, this will diminish many households´ rural livelihoods and could potentially fuel the rural-urban migration trend in Lesotho. A strategy that replaces this vulnerability is required. Preferably, facilitated by Lesotho´s government.

Appendix 1

The IRR model

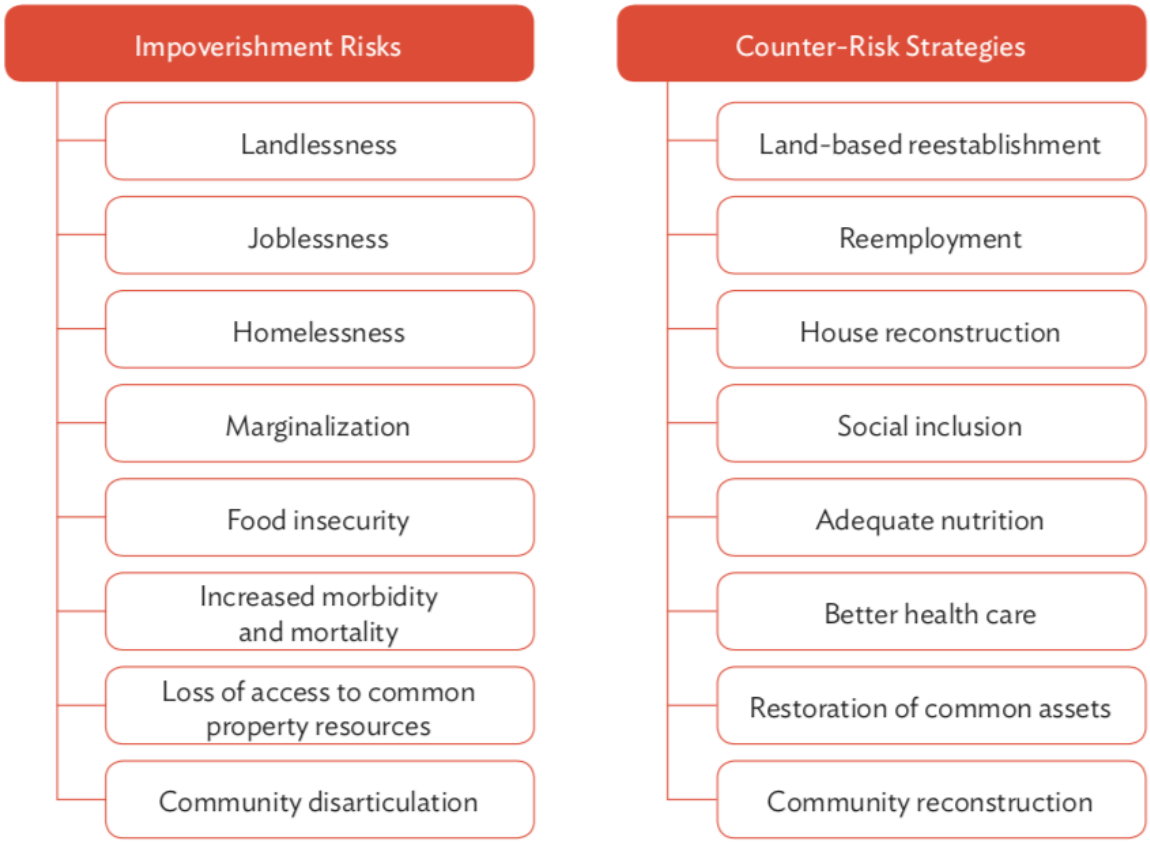

Figure 10: The Impoverishment Risks and Reconstruction (IRR) model (Cernea, 2000)

Appendix 2

The Four Stage Framework (Scudder, 2005)

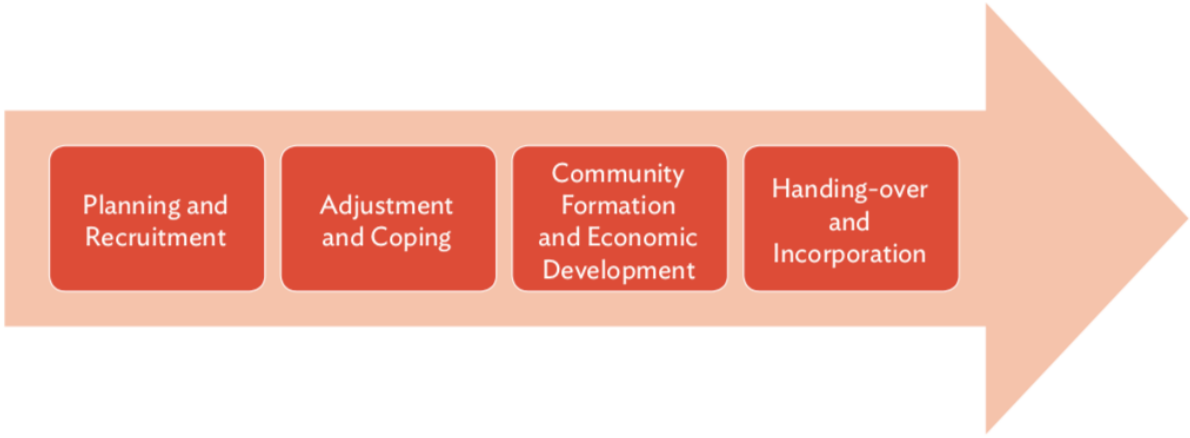

Figure 11: The Four Stage Framework (Scudder, 2005)

Appendix 3

Forced Displacement, Sustainable Livelihoods and Impoverishment Risks framework

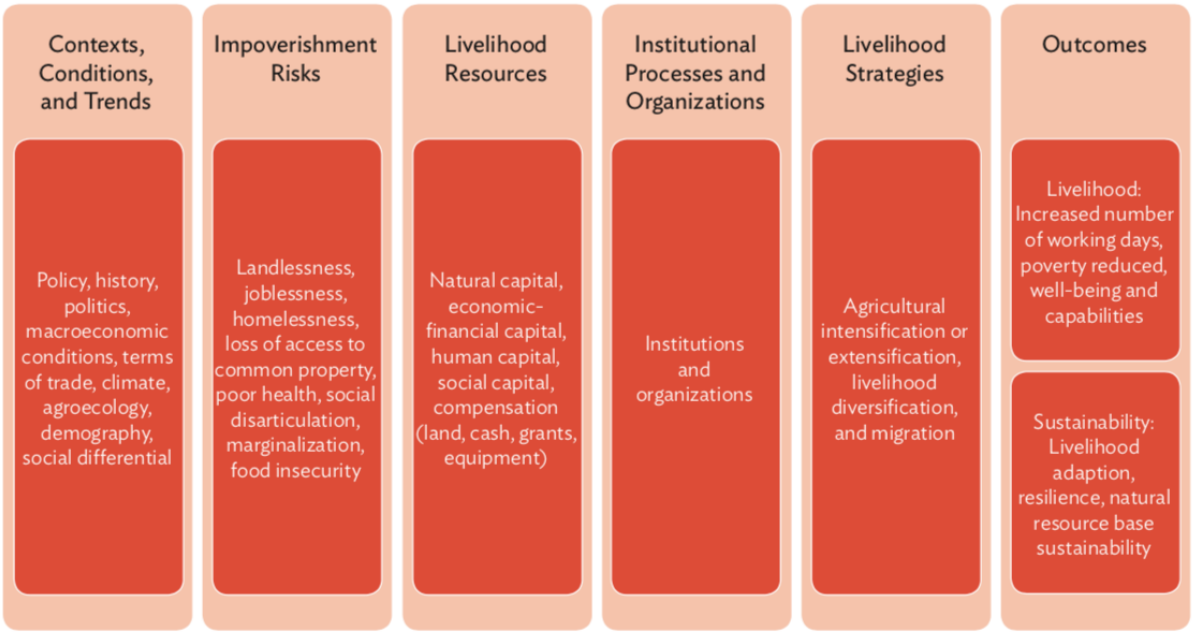

Figure 12:Forced Displacement, Sustainable Livelihoods and Impoverishment Risks (McDowell, 2002)

Appendix 4

Involuntary Resettlement and Sustainable Development Conceptual

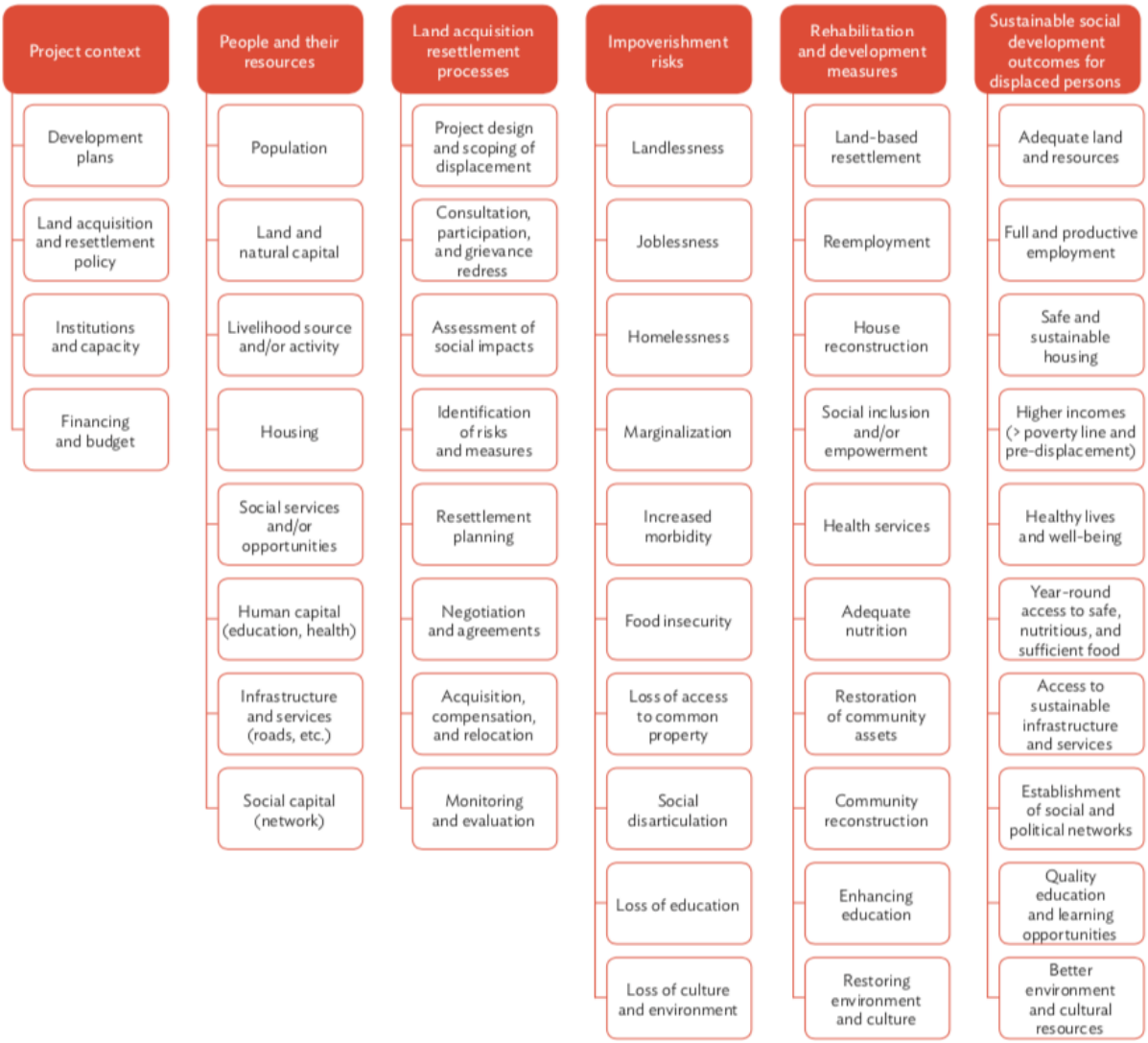

Figure 13: Involuntary Resettlement and Sustainable Development Conceptual Framework (Sapkota & Ferguson, 2017)

Appendix 5

Interview guide

Now…

- Why did you choose to move here?
- At the time of resettlement, who was in your household?
    - And now? Additions?
    - How do they all contribute toward putting food on your table?
    - **(family additions)** How do you perceive that new members are economically situated now? How would things have been different before?
- Describe your land use
    - What other income generating activities do you use the land for?
- Do you still have livestock in the highlands?
- Describe the difficulties that you experience in Maseru which weren't present in the highlands?
    - what are the main items that are costlier in the new villages that weren't in previous?
- Describes the advantages of living in Maseru that were absent in the Highlands
- What amenities were replaced through the project
- Did you invest into any community projects?

Then…

- What did you crop/rear?
- What activities brought $$$ into your household?
- **Clarify whether they have/had primary or secondary land rights, before and after)**
- Did you receive any assistance/advise/training from LHDA (climate smart agriculture)?

Minimum threshold payment

- Did you qualify for minimum threshold payment?
    - *How many years did you receive?*
    - *What are your perceptions of it?*

RDP

- What was your experience with communal projects/cooperatives initiated by the LHDA?

Cooperatives

- Did you join a cooperative?
    - *Elaborate on cooperative's functions/services/products*
    - *What were the results to your livelihood?*
- *How did LHDA assist with the cooperative?*

- *Did the effectiveness of cooperative change after external support from project?*
- *How was the cooperative affected after funding from LHDA ended?*
    - *Did government/NGOs step in?*

Displacement

- Did you have a dispute with the LHDA, how was it handled?
  Do you feel fully compensated for losses?
    - What yes's and no's
- Would you move back to the highlands?

Displacement: IRR

- draw comparison of livelihood variables between Previous Highland and current Host village homesteads:
    - land
    - jobs
    - morbidity& mortality
    - education
    - food (in)security
    - common property
    - social relations

Climate change

- How have extreme weather impacted you now and in highlands??
- What are you doing to adapt to them?
    - Are you aware of any government programs to combat it?
    - Are you aware of any NGO/charity work on it?
    - Where would you get more information on climate change if you wanted?
- Were there any programs/efforts to rehabilitate degraded grazing grounds?
    - And your livelihoods?

Appendix 6

Summary of local respondents

Chief

In term of livelihoods, his household focuses on reducing costs and agriculture. For example, he has a separate, informal structure to cook by firewood. Thus, saving energy costs. Similarly, to save on water cost he has purchased a rainwater harvesting tank to reduce consumption on municipal-supplied water. The tank will supply non-potable water for watering his vegetable garden, maintaining his crops and washing clothes and dishes. At the time of the fieldwork, the tank was not operational as he was saving money for gutters which, will drain rainwater into the tank. Despite the upcoming rainy season. Finally, he is only marginally integrated into the urban, cash economy through way of odd-jobs in Maseru

Summary of urban livelihood strategies
• rental income
• vegetable and fruit garden
• pig pen
• informal cooking structure
• rainwater harvesting tank
• informal jobs in Maseru

Respondent #2

respondent #2 is the only respondent not cultivating his LHDA garden. Rather, relies completely on the market and sales from neighbours for his fresh produce. Contrastingly, he is also the only respondent who has maintained social and economic ties with Basotho bovine traditions by keeping sheep and goats in his yard. respondent #2 is fully integrated into the cash economy by means of a steady job as a taxi marshal.

Summary of urban livelihood strategies
• rental income
• taxi marshal job

• livestock in Maseru and in the Highlands. Namely, goat, cattle and sheep; providing meat, wool, mohair.

Respondent #3

Respondent #3 relies on remittance to family members in South Africa. Additionally, her household relies on her network in the rural highlands; where her oldest son is a herd boy and her brother stay. Indeed, she indicated the strongest reliance on remittances from family members. She did not choose to move to Maseru. Rather, based on promises made by the LHDA, her parents chose to move to the highlands. Overall, she would not choose to return to the highlands; ¨generally, my life is better in Maseru¨. She specifically identified Maseru's access to economic and social infrastructure which benefits her children's human development. For example: her daughter is studying public administration and human resources at a college in Maseru. Furthermore, she appreciates that her children can access lights, laptops and other gadgets which, not possible in the highlands

summary of urban livelihood activities
• Brother and sister send remittances when things get tough
• Odd jobs
• Compensation for fields
• Has a garden   ○ Reduces food costs, sell surplus to cover minor fees such as taxi fares

Respondent #4

Believes resettlement has been good for him and his family. Yet, begrudges paying for water because they never paid for water in the highlands. Furthermore, on a deeper ideological level he resents paying for water because they were displaced by a water-project. #4 is also the only respondent still in the cannabis-business. Rather as producing as they did in the highlands, he is distributing in Maseru. He admits that it forms a big part of his livelihood. Unlike the rest of the sample, his household fortuitously received compensation for a sparsely occupied house. His mother, the household head at the time of displacement worked in South Africa while her children went to school in Maseru. Her two children lived in their Maseru home, cared for by a female helper. Thus, the family only lived in the highlands for a few months of the year during school holidays

• **Summary or urban livelihood activities**
• 4+1 taxi
• he has a business where he transports restaurant employees
• Sale of cannabis

Respondent #5

respondent #4 the status of chief while residing in Ha Tsapane and is the oldest respondent. He moved to Maseru to be closer to development. Overall, he would never go back because he values the developed nature of Maseru too much. Interestingly, he is the only respondent that did not qualify for the 50-year compensation. Rather, he lost his convenience store and thus only received a replacement house and disturbance allowance. His fields were not inundated by the LHWP where his sons run his farm. It is possible that respondent #4 is a victim of poor communication during resettlement. The LHDA supplied his household with a comparatively large garden as compensation for lost income from his store. He claims that the LHDA also promised him a market for this produce. Whereas only market *access* was implied by LHDA

Summary of urban livelihood strategies
• rental income
• large cabbage patch   ○ sells excess to neighbours
• owner of pig pen-approximately 10 hogs

Respondent #6

respondent #6 chose to move to Maseru because he did not own any fields in the Highlands. He envisioned new economic opportunities in Maseru´s urban economy where, the idea of compensation and income from rental properties appealed to him. respondent #6 used compensation money to invest in a taxi which, forms the main part of his livelihood. Generally, he feels that life is better closer to development and cities as running water and electricity that were not available in the highlands. However, respondent #6 stresses the importance of a job in the city: "To prosper in Maseru, you need a job that provides steady income. Otherwise you will struggle". Comparatively, in the highlands his household could rely on natural resources.

Overall, he would not return to the highlands because he has no fields and his children grew up in Maseru and are used to urban lifestyles.

• **Summary of urban livelihood activities**
○ Rental units
○ Owns a 4+1 taxi. This is his mail livelihood stream

Appendix 7

Summary of expert respondents

Hlalele le of the Transformation Resource Centre (TRC)

The TRCs overall objective a local non-governmental organization (NGO) operating in Maseru. The TRCs overall objective promoting good governance and social justice that is in the best interest of the public (Transofrmation Resource Centre, 2018). As such, the TRC is a significant stakeholder from the civil society in both phases of the LHWP. For example, recent work publications by the TRC regarding the LHWP cover topics such as: community participation, range management and socioeconomic justice (Transformation Resource Centre, 2018). I also accessed the TRCs LHWP project document achieves. Whereby, I studied original project documents. Particularly those pertaining to policies towards compensation. Yet, in practice this was a challenging task as the filing system lacked structure

Refiloe Tlali: chief executive of the LHDA

As the agency mandated with implementing the LHWP on behalf of the Kingdom of Lesotho, securing an interview with the LHDA was highly desired. This proved to be a tiresome and bureaucratic task.

Msedi

Msedi was employed by a geotechnical engineering firm during LHWP phase 1A and 1B. She filled the role of a community liaison officer where, she engaged rural communities that were affected by the LHWP. As such, Msedi has dealt with community grievances and their perceptions of the LHWP in depth.

Leif Lillehammer

Leif Lillehammer has published extensively on LHWP phase 1 (for example: Leif Lillehammer, Martin, & Dhillion, 2011; L. Lillehammer, Monyake, & Passchier, 2007; Monyake & Lillehammer, 2011). He has been engaged with the LHWP since its inception in xxx. Moreover, he lived in Lesotho as a consultant during LHWP phase 1.

Vuyani Monyake

Vuyani was contracted as an environmental phase 1A and phase 1B. She is filling a similar role in phase 2. Moreover, her father was a project-anthropologist during LHWP phase 1. Vuyani also facilitated my engagement with the sample population

Appendix 8

Employment on South African mines

Table 11: Basotho men employed in South African Mines: 1904-2000. Adapted from Turner et al. (2001, p. 50)

Table 17. Basotho men in South African mines, 1904 - 2000

Year	*De jure* population	Total males	Males 16-64	Miners	Miners as % of males 16-64
1904	384,000	180,000	93,000	14,000	15.1
1911	444,000	202,000	104,000	23,000	22.1
1921	549,000	246,000	127,000	23,000	18.1
1936	618,000	264,000	136,000	40,000	29.4
1946	620,000	273,000	141,000	36,000	25.5
1956	706,000	299,000	154,000	38,000	24.7
1966	969,000	466,000	240,000	57,000	23.8
1976	1,216,000	587,000	303,000	83,000	27.4
1986	1,597,000	785,000	405,000	100,000	24.7
1988	1,673,000	811,000	418,000	120,000	28.7
1990	1,753,000	850,000	438,000	127,000	29.0
1992	1,837,000	891,000	459,000	120,000	26.1
1994	1,971,000	956,000	493,000	103,000	20.9
1996	2,010,000	975,000	503,000	97,000	19.3
1998	2,054,000	996,000	513,000	69,000	13.5
2000	2,096,000	1,017,000	524,000	64,000	12.2

The earlier population figures are obtained from the Bureau of Statistics census reports for 1966, 1976 and 1986. Subsequent figures are obtained from TAMS (1995) and from the current Health Reform study being conducted by Sechaba Consultants. The census figures prior to 1966 were all listed as *de facto* populations, so we have multiplied them by a standard figure (obtained from the relation between *de facto* and *de jure* populations for 1966) to obtain presumed *de jure* populations. We have also applied that factor to the male populations prior to 1966. The proportion of males within the age group 16-64 was obtained by taking a proportion based on population breakdowns by gender and age for all years.

Appendix 9

Length of residence in Maseru

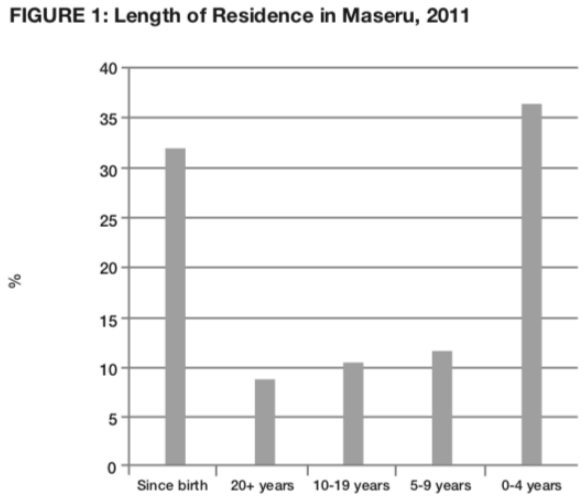

Figure 14: length of Residence in Maseru, 2011

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