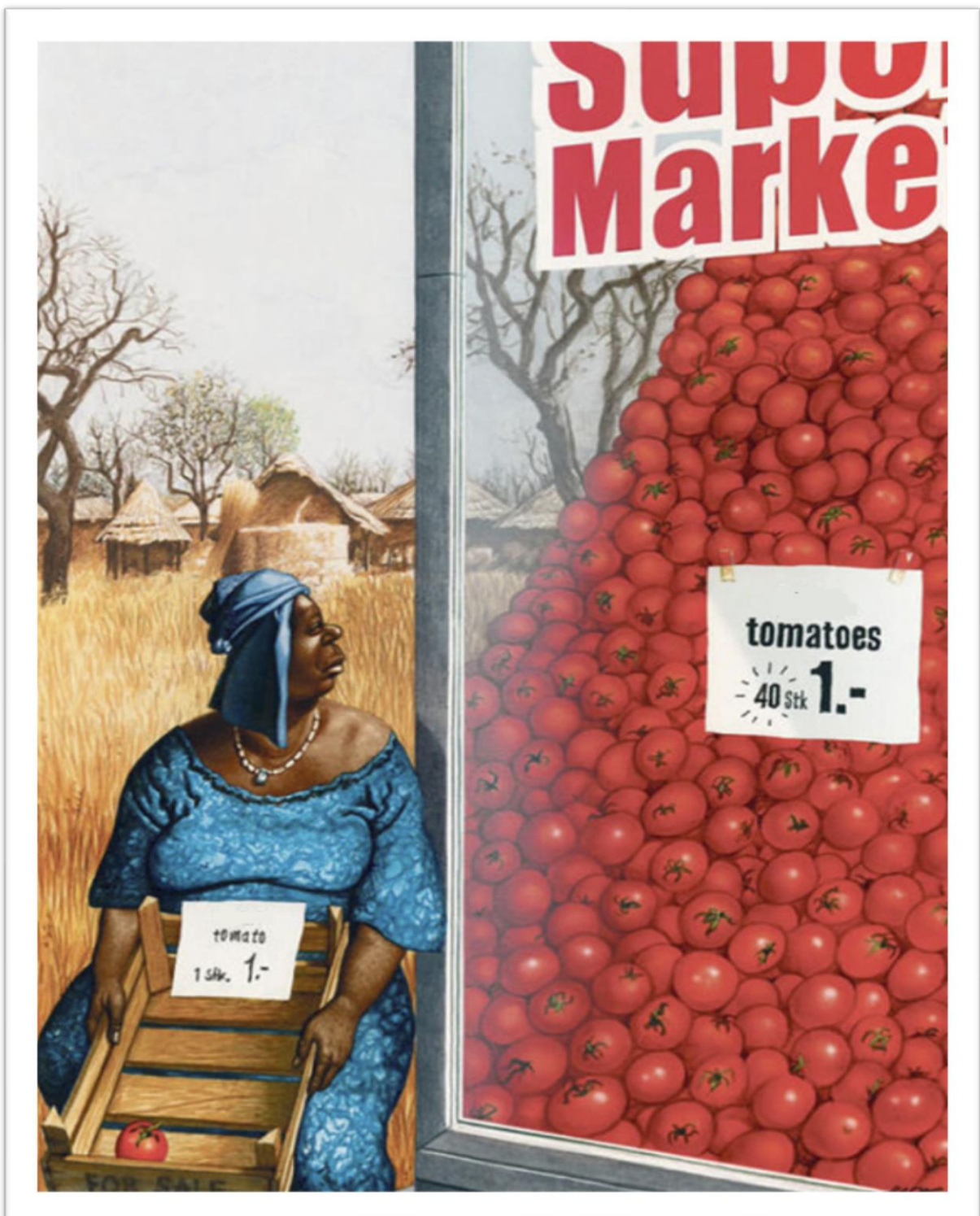


Small-scale female farmers and their capacity for self-sustenance
A Sustainable Livelihoods Approach: Findings from Zambia



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June 2018

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Foreword

This piece of research represents my final assignment for the completion of my two-year learning process, academically, professionally and personally, as part of the PLANET Europe programme. I would like to highlight that I feel very fortunate that I had the opportunity to execute fieldwork in Zambia for my final research project. During my fieldwork I was aware of my privileged background and I have been critical about my own position as a Western researcher in an emerging market. I would like to stress that I treated all people who I have met during my fieldwork with dignity and respect. Before starting the interviews, I explicitly asked for consent from all the individual informants who participated in my research. I explicitly note that the data collected will be used for my individual research and academic purposes. In addition, I made clear that I was not aligned with any NGO or authority, and will not provide any financial support to the informants.

I have internally been debating how to justify my motives of conducting fieldwork abroad. I personally believe that the informants were happy to be heard and were interested in the exchange of knowledge. Therefore, in my opinion, it is important to acknowledge each individual contribution from the informants. Furthermore, I supported the Woman Goat Program of the local Community Training Farm in Mpanshya. The women that are taking part in this programme receive four female goats and borrowed one male. I truly admire the work of the Community Training Farm and I am confident that with their work they positively contribute to enhance and empower sustainable households in the area. I also would like to add that although this research mainly focusses on the lack of assets among the female farmers, and can be seen as a negative view on the situation of the female farmers, the researcher felt that all informants in general are very satisfied and grateful with their living. The informants showed this by being very welcoming and willing to share the minimal resources which they had, including sharing their favourite dish, Nshima, with me.

Shelley Bontje

The Hague, June 2018

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The researcher and translator during fieldwork, April 2018.

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Table of contents

| | |
|--|-----------|
| Foreword | iii |
| Acknowledgements..... | iv |
| Table of contents | v |
| List of tables..... | vii |
| List of figures..... | vii |
| List of abbreviations | vii |
| Abstract | i |
| Chapter 1: Introduction | 1 |
| 1.1 Background | 1 |
| 1.2 Research question and objectives..... | 2 |
| 1.3 Societal and scientific relevance of the research | 3 |
| 1.4 Structure of the research | 4 |
| Chapter 2: Literature review | 5 |
| 2.1 Gender differences & decision-making power..... | 5 |
| 2.2 Gender differences & Sustainable Livelihoods Approach..... | 6 |
| 2.3.1 Human capital..... | 7 |
| 2.3.2 Natural capital | 8 |
| 2.3.3 Financial capital | 8 |
| 2.3.4 Social capital | 8 |
| 2.3.5 Physical capital | 9 |
| 2.5 Gender differences & empowerment | 9 |
| 2.6 Conceptual model | 10 |
| Chapter 3: Methodology | 11 |
| 3.1 Research approach | 11 |
| 3.1.1 Research strategy | 11 |
| 3.1.2 Research design..... | 11 |
| 3.2 Research area and case selection..... | 12 |
| 3.3 Data collection methods..... | 13 |
| 3.4 Ethical considerations..... | 15 |
| 3.5 Limitations..... | 15 |
| 3.6 Conclusion..... | 16 |

| | |
|--|-------|
| Chapter 4: Research context | 17 |
| 4.1 Zambian agriculture sector and policies | 17 |
| 4.2 Research area: Mpanshya | 17 |
| 4.3 Conclusion | 19 |
| Chapter 5: Analysis and findings | 20 |
| 5.1 Gender & human capital | 20 |
| 5.2 Gender & natural capital | 21 |
| 5.3 Gender & financial capital | 22 |
| 5.4 Gender & social capital | 24 |
| 5.5 Gender & physical capital | 26 |
| 5.6 Conclusion | 27 |
| Chapter 6: Conclusion | 29 |
| 6.1 Research question and objectives | 29 |
| 6.2 Limitations and recommendations | 31 |
| References | 32 |
| Annexes | i |
| A) Ethical approval form | i |
| B) Declaration page (CU) | v |
| C) Expert interviews interview guide | vi |
| D) Expert interview transcripts | vii |
| E) In-depth interviews interview guide | xxvii |
| F) In-depth interview transcripts | xxix |

List of tables

| | |
|--|----|
| Table 1: Overview of the small-scale female farmers interviewed. | 13 |
| Table 2: Overview of experts interviewed. | 14 |
| Table 3: Education level of the 13 small-scale female farmers interviewed. Source: Author..... | 20 |

List of figures

| | |
|--|----|
| Figure 1: Sustainable Livelihood Approach.. | 6 |
| Figure 2: The Sustainable Livelihood Assets..... | 10 |
| Figure 3: Map of Zambia, red star indicates location of Mpanshya. | 18 |
| Figure 4: The house of a farmer in Mpanshya..... | 18 |
| Figure 5: Tailor in Mpanshya.. | 19 |
| Figure 6: One of the informants showing her farmland.. | 21 |
| Figure 7: One of the informants at her farm, with some chicken. | 23 |
| Figure 8: Woman walking towards town. | 27 |
| Figure 9: Indication of assets present according to the findings of the study.. | 30 |

List of abbreviations

| | |
|--------------|---|
| 7NDP: | 7 th National Development Plan |
| COMACO: | Community Markets for Conservation |
| CSO: | Central Statistical Office |
| CTF: | Community Training Farm |
| e-voucher: | Electronic Voucher System |
| FISP: | Farmer Input Support Program |
| FRA: | Food Reserve Agency |
| GER: | Great East Road |
| SL Approach: | Sustainable Livelihoods Approach |
| WfC: | Women for Change |

Abstract

The core of the Sustainable Livelihoods Approach indicates five forms of capital: human, natural, financial, social and physical, which positively contribute to the extent someone can sustain his or her own livelihood. In brief, human capital comprises knowledge and skills of individuals. Natural capital consists of natural resources present such as land and water. Financial capital refers to financial resources such as income, savings and livestock. Social capital comprises the reliance and cooperation of individuals with others including networks and organisations. Lastly, physical capital includes basic infrastructure such as transportation. Individuals which possess a low level of assets are strongly reliant on external factors and therefore increasingly vulnerable for external shocks and (natural) hazards.

The main research question is: *To what extent do small-scale female farmers have assets to sustain their livelihoods?* The research is executed among small-scale female farmers in rural Zambia, Mpanshya. Informants are interviewed and asked about the possession of a variety of resources, including schooling, financial resources and ownership of land. The main findings show that, in particular, financial capital is hardly present among the small-scale female farmers. Human, social and physical capital are minimally present, and natural capital is sufficiently present.

Keywords: agriculture, Sustainable Livelihoods Approach, small-scale farmers, gender, human capital, natural capital, financial capital, physical capital, capacity of self-sustenance, rural, Zambia.

Chapter 1: Introduction

1.1 Background

This research is about the position of small-scale female farmers in rural Zambia and the ability to sustain their livelihoods. Worldwide, women have been treated differently from men in many ways and in different contexts (British Council, 2016). In 2000, the Millennium Development Goals already acknowledged the importance of increasing access to education and encouraging political involvement of women. Education indicators showed, that particularly in sub-Saharan Africa, girls face higher barriers to obtaining education than boys (Neema, 2015). This is principally due to several factors including early pregnancies and male-child preferences. Additionally, women only accounted for 13% of the parliamentary seats worldwide.

By the end of 2015, when the Millennium Development Goals officially came to an end, Zambia was still one of the poorest countries in the world (7NDP, 2017), with half of the Zambian population living under the poverty line and 40 percent unable to meet daily basic needs such as food. The situation is worse in rural areas, where an estimated 76 percent of the population is unable to meet daily basic needs. To fight poverty, Zambia joined the rest of the world in committing to the United Nation's Sustainable Developments Goals. In addition, the Zambian government launched the 7th National Development Plan (7NDP) in 2017, with the goal to set policy committed to the socio-economic development of the nation.

In line with the first Sustainable Development Goal, the plan focusses on protecting the poor and vulnerable, including aiming to ensure equal rights to economic resources, access to basic services, ownership and control over land or other forms of poverty, for both men and women (7NDP, 2017). The plan particularly promotes household food and nutrition security, which are pillars to sustain livelihoods, with a special focus on reducing poverty and vulnerability among women, youth, the elderly and people with disabilities. An increase of livelihoods potential among the rural poor is promoted by the provision of finance, agricultural inputs and entrepreneurial skills.

Currently, the agricultural sector in Zambia supports the livelihoods of more than 60 percent of the population (Hemminger, 2014; IFPRI, 2014; IAPRI, 2016; CSPR, 2017). The majority of people that are involved in agriculture in Zambia are located in the rural areas. Women constitute 65 percent of the total rural population (Siame et al., 2017). Therefore, agriculture is the main source of rural livelihood and employment in Zambia for women. The Zambian government acknowledges the presence of unbalanced power relations between women and men in the domestic, community and in public domains (7NDP, 2017). Zambian women have fewer decision-making positions compared to men in the government at all levels, and remain the worst victims of poverty. Women encounter constraints when accessing credit, technology and land, which negatively influence their agricultural productivity.

Several studies show that in Zambia, it is common that women do not enjoy the same economic benefits than that of their husbands (IAPRI, 2016; CSPR, 2017). For example, research published by IAPRI (2016) indicates that female farmers are less likely to adapt new agricultural technologies which could improve their productivity compared to their male counterparts. Furthermore, research of ESARO (2015) states that women have less access to farming inputs. The outcomes of governmental agricultural policies at the local level seem to have achieved limited results, especially among the small-scale female farmers (Djurfeldt et al., 2016).

Currently, Zambian women lag behind in literacy and obtained education level as compared to men (CSO, 2015). Data of the Zambian Central Statistical Office (CSO) shows that 16 percent of Zambian women never attended school, 47 percent obtained some primary schooling, 11 percent completed

primary school, 19 percent had some secondary education, 4 percent completed secondary education and 3 percent continued schooling after secondary education. Men are twice as likely to complete secondary school than women, and on an aggregate basis, more woman did not obtain any schooling as compared to men.

Land is abundant in Zambia with a total of 58 percent of all land area suitable for arable farming and only around 14 percent currently cultivated (IFPRI, 2014; CSPR, 2017). Within a household, farm fields are often under the control of a husband (Mubanga & Ferguson, 2017). Women are allowed to have their “own” fields where they grow crops such as groundnuts, common beans and cowpeas. An increased inequality in land distribution based on gender can be acknowledged (Djurfelt et al., 2018). In general, landholdings of women are only half the size of those held by men according to Djurfelt et al. (2018), and 67 percent of women do not own any land themselves (CSO, 2015).

Formal banking services are hardly present in Zambia (Djurfelt, 2018). The ability to access banking services is limited for rural women mainly due to transportation constraints (Djurfeldt, 2018). Livestock is an important informal way to save “money” when access to formal financial institutions is minimal (Djurfelt et al., 2016), though the appearance of livestock varies from province to province within Zambia (IAPRI, 2016). Besides providing an informal saving opportunity, owning livestock also provides tangible benefits for agricultural productivity such as being a source of manure (Djurfelt et al., 2016).

Djurfeldt et al. (2016) discusses widespread discrimination against female farmers in relation to agricultural assets, mainly due to socially constructed traditional gender roles in Zambia, based on a patriarchal system (IAPRI, 2016, CSPR, 2017). In general, women have little authority on economic and social affairs of most rural set ups (CSPR, 2017). Income earned by different members of the household is often not pooled into single household “family money” (Njuki et al., 2011). In most cases, income belongs to the person who earned it. Woman are most likely to be in control of the income earned themselves (Njuki et al., 2011). However, a lack of marketable surplus is common resulting in woman hardly earning anything (Djurfelt et al., 2018). Only 53 percent of the women participate in making decisions concerning major household purchases and daily household needs (CSO, 2015). Increasing woman’s participation in markets will enhance females control on income (ESARO, 2015; Djurfeldt et al., 2018).

Furthermore, poor road networks are a major characteristic of rural Zambia (7NDP, 2017). Limited access to markets is an acute constraint in rural areas which compels farmers to sell their produce below market prices. It is argued that women gain less access to transport than men (ESARO, 2015). Lower transaction costs for transport will positively influence market participation among women. Additionally, domestic chores of women restrict their mobility (Djurfelt et al., 2018). Strengthening of women’s groups and networks help contribute to women reaching markets and enabling them to sell at a lower cost (ESARO, 2015).

1.2 Research question and objectives

As discussed, small-scale female farmers face a number of constraints for participating in commercial agriculture activities in Zambia. Although the majority of farmers in Zambian rural areas are woman, they have little authority on decision making within the rural set up. The research gap that this study will attempt to address relates to the kind of capacities that small-scale female farmers have, and which capacities they in particular need for sustaining their livelihoods. This study focuses on small-scale female farmers due their underrepresentation and lack of decision-making power in Zambian society, despite being the largest population group who are dependent on agriculture to earn a living.

The research will be guided by the following research question:

To what extent do small-scale female farmers have assets to sustain their livelihoods?

The broad research question is broken-down in research objectives in order to support the research structure and develop an understanding and examination of the posed research question. The following research objectives represent areas of interest that are central to the study:

- (i) To verify the conceptualisation of the Sustainable Livelihoods Approach;
- (ii) To identify the level of assets present among small-scale female farmers;
- (iii) To investigate which asset is crucial for small-scale female farmers to sustain their livelihoods;
- (iv) To provide insights into power relations and social structures within households and measuring the capacity of small-scale female farmers to obtain assets.

The Sustainable Livelihoods Approach is used as the main concept to ground this research. The five forms of capital discussed in the Sustainable Livelihoods Approach are used to measure the level of assets present among the small-scale female farmers. The five forms of capital consist of human capital, natural capital, financial capital, social capital and physical capital. The research is based on a multiple-case study with fieldwork conducted in Mpanshya, a small village located 180km east of the capital of Zambia, Lusaka. In total, thirteen cases of small-scale female farmers are interviewed.

The findings show that the overall measured level of capital among the small-scale female farmers is minimal. This is mainly due to the interrelation of the assets. In particular, social capital is limited, which comprises social networks and organisations which are crucial for enhancing sustainable livelihoods. The presence of these social networks and organisations among small-scale female farmers is minimal, and therefore negatively influences the capacity of obtaining other agricultural related assets.

1.3 Societal and scientific relevance of the research

Firstly, the societal relevance of the study is related to the fact that women play a significant role in agriculture production, however, their voices are rarely heard. It is the hope that by focusing research on small-scale female farmers, and consequently attracting attention to their position within Zambian society, that this research might contribute towards enhancing equal rights for both genders in the country. The social relevance of this research connects to, and underscores, that an unequal gender balance is currently present within Zambian society due to cultural norms and traditions.

From the scientific point of view, this research fills the identified research gap and will principally work towards understanding which assets small-scale female farmers obtain and need in order to sustain their livelihoods. Generating evidence on the needs of small-scale female farmers living in rural poor areas may provide insights for better policy and investment decisions. By reporting detailed information on which assets contribute to sustaining livelihoods in rural Zambia, and a common focus of world governments to alleviate poverty, this research could be of interest to policy makers and government officials.

Secondly, research comprising the Sustainable Livelihoods Approach is often conducted on the household level and focussed on the head of the household, which is generally represented by males. Several studies however, including Njuki et al. (2011), show that households should not be seen as one single unit which reflect preferences of all its members. Therefore, this research can provide insights into power relations and social structures within households and their ability to obtain assets.

1.4 Structure of the research

After the introductory chapter, Chapter 2 presents the conceptual framework for measuring the extent to which small-scale female farmers have access to assets required for sustaining their livelihoods. It primarily focusses on the Sustainable Livelihoods Approach, which provides a framework to investigate capacities present within households to gain a living. Research based on findings from households often focusses on data obtained from male family members. However for this research, there is a particular focus on women. The research breaks down the Sustainable Livelihoods Approach by focusing on five forms of capital, including: human capital, natural capital, financial capital, social capital and physical capital.

Chapter 3 devises a comprehensive methodological framework for the execution of this research. It presents the research approach, the research area and units of analysis, methods used for the collection of data, and limitations of the research.

Chapter 4 provides an overview of the research context. It presents basic characteristics of the Zambian agricultural sector, and introduces the village Mpanshya where the fieldwork for the research is conducted.

Chapter 5 discusses analysis and findings, representing the core of the study and interprets the collected data. Main analysis and findings of the study will be provided, focussing on which forms of capital the small-scale female farmers in Mpanshya obtain.

Chapter 6 presents the overall conclusions of the study and answers the main research question and objectives. The chapter discusses the minimal level of assets which the small-scale female farmers possess, and how this links to the capability to sustain their livelihoods. It provides recommendations for future research activities on the topic of small-scale female farmers and capabilities to sustain themselves.

Chapter 2: Literature review

This chapter discusses the literature reviewed for the research. In this study the concept of gender refers to socially constructed roles of in particular women and men within society (Hemminger, 2014). These roles may differ from one place to another, influenced by culture and may change over time. Social norms, consisting for example of men's role for cash provision and women's role for household provision, result in social expectations of women and men within households and society (Braunstein, 2008). Primarily, women are associated with tasks caring for the family directly within the household, while men often take care, indirectly, by providing an income and act outside the household.

At first, differences in decision-making power within households is discussed in relation to gender roles. Followed up by the introduction of the Sustainable Livelihoods Approach, including discussing the "five forms of capital". Lastly, the conceptual model is discussed.

2.1 Gender differences & decision-making power

Different members of the household obtain different social positioning and power relations (Yuval-Davis, 1997). Primarily, women are associated with tasks caring for the family directly within the household, while men often take care, indirectly, by providing an income and act outside the household. These task divisions within the household affect women's positions within the household and in society.

According to Kabeer (1999) decision-making power at the household level depends on resources control of individual household members. Resources refers to material items such as bicycles, electronic devices and the ownership of land as well as social structures such as participation within networks and organisations. Kabeer (1999) states that decision-making power is gender biased, whereby women have limited decision-making power or even no influence on the decisions made within the household.

According to Cavanzo (2015) it is very common that one of the household members is in charge of most decisions made within unified households. At the same time, it is often assumed that households are one single unit reflecting the preferences of all its members. However, in much of rural Africa, it is not always the case that individuals within households cooperate with each other (Njuki et al., 2011). And research executed among rural household is implicitly based on patriarchal theories. For example, resources and income are rarely pooled among household members. According to Djurfeldt et al. (2018) individuals who control the household income generally themselves influence welfare and benefits among household members unequally. The study of Duflo & Udry (2004) states that resources and income are rarely pooled among households in developing countries. The allocation of generated income depends highly on the gender identity of the household member. Lundberg & Pollack (1997) also support the notion that household members individually control income and therefore distribute it unequally. For example, women are less likely to gain ownership of land among, however, having land rights can have a positive influence on gaining an income by having the opportunity to cultivate the land. Tall et al. (2014) and Twyman et al. (2014) both provide evidence that information received by the head of the household, represented by the men, is rarely passed on and shared to the wife of the same household.

Basu (2006) states that unequal gender roles within households relates to unequal decision-making power. Once again acknowledging that different household members make different decisions regarding resource allocation. Ownership over assets is linked to the fall-back position of each individual within a household to sustain themselves. Depending on the identity of a household member different household decisions are made which effect women, and their ownership and power

of being in control over assets. Djurfeldt et al. (2018) stress that an increased ownership of assets enhances women empowerment.

2.2 Gender differences & Sustainable Livelihoods Approach

The Sustainable Livelihoods Approach (SL Approach), originating from the 1990s, offers an understanding of factors that affect the livelihoods of people living in poverty (Krantz, 2001; Petersen & Pederson, 2010; Levine, 2014). It focusses on people's their capabilities for gaining a living (Chambers & Conway, 1992; DFID, 1999; Sati & Vangcchia, 2017). A living which ensures access to basics needs such as nutrition, drinking water and secure housing. Various factors and processes either constrain or enhance people's ability to maintain an economically, environmentally and socially sustainable livelihoods (Farrington et al., 1999; Krantz, 2001). The Sustainable Livelihoods Approach is in particular known for researching livelihoods in developing countries (Nabikolo et al., 2012).

The SL Approach is widely recognized for understanding the complexity of livelihoods and poverty (Farrington et al., 1999), by building on a comprehensive perspective on the conventional definitions of poverty (DFID, 1999; Krantz, 2001; Brocklesby & Fisher, 2003). Whereas traditional approaches commonly assess poverty based on income, as defined by the poverty line, the Sustainable Livelihoods Approach defines poverty in terms of the absence of basic capabilities to meet physical and social needs (Farrington et al., 1999; Krantz, 2001).

However, households do not have control over all aspects of their livelihood and are vulnerable to external factors such as seasonal variations. Additionally, structures and processes such as the government, private sector and cultural factors influence households' vulnerability. These external factors determine people's ability to access assets (see Figure 1) (Chamber & Conway, 1992; Farrington et al., 1999; Krantz, 2001; Levine, 2014).

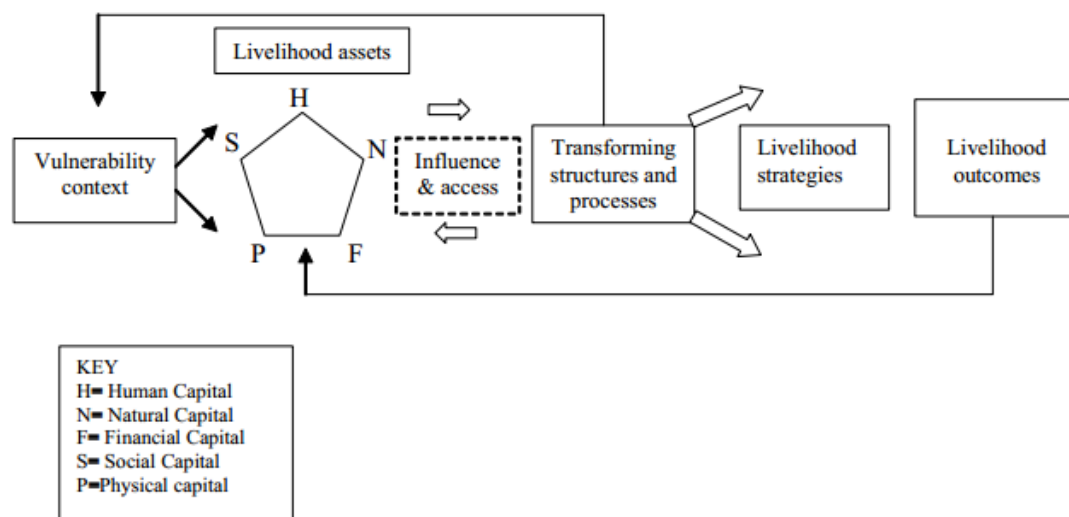


Figure 1: Sustainable Livelihood Approach.
Source: Solesbury, (2003, p. 11).

The core of the Sustainable Livelihood Approach indicates several assets which represent gaining a sustainable living (DFID, 1999; Djurfeldt et al., 2018). These assets are often represented as a pentagon and subdivided into five different types of capital: human, natural, financial, social and physical. For instance, when a household owns a goat (natural capital) this will have impact on their financial capital as well. The capitals are the pillars which households can use in order to improve or sustain their

livelihoods. The generation of sustainable livelihoods therefore depends on the availability and use of these different types of capital. The five forms of capital are indicators enabling the understanding if households will be able to cope with, avoid or resist external stress and shocks over time and enhance households to escape poverty. In the following paragraphs each form of capital will briefly be discussed.

Households' individual preferences and priorities influence livelihoods asset-building (DIFID, 1999; Farrington et al., 1999; Krantz, 2001). Academia and policy makers often link the Sustainable Livelihoods Approach to the household level, assume that households are one single unit. (Chamber & Conway, 1992; Parsad & Vangcchia, 2017). However, since livelihoods are dynamic, and not static, there can be encountered difficulties in collecting data at the household level (Djurfeldt et al., 2016).

In particular, in the context of gender relations, it is important to recognise individual household members within the household, as asset ownership can differ among them (Brocklesby & Fisher, 2003; Sati & Vangcchia, 2017; Djurfeldt et al., 2018). These differences in asset ownership is influenced by a variety of factors including age, gender and cultural norms. This leads to the identification of various levels of access and control to particular capitals among members of the same household.

According to Nabikolo et al. (2012) men and women farmers experience different levels of vulnerability and adaptive capacity within the same household. They state that in general female farmers are under resources and uncaptialized compared to male farmers. For example, in many African countries access and control over land belongs to the men due to patriarchal systems. This links with the notion made earlier that different members of the household do obtain different capabilities to access assets. In particular, gender roles within households influences the extent of assets owned by individual household members. According to several scholar, unequal access to and control over assets within households, based on gender, should be addressed within the SL Approach (Brocklesby & Fisher, 2003; Sati & Vangcchia, 2017; Djurfeldt et al., 2018).

2.3.1 Human capital

Human capital comprises the ability of individuals to use their labour assets to improve their economic activities (DFID, 1999; Rakodi & Lloy-Jones, 2002). In particular enlarging someone's knowledge and skills contributes to increased economic activity, therefore **knowledge and skills** of individuals are the main components representing human capital. More loosely interpreted, human capital corresponds to any knowledge or characteristics someone has that contribute to his or her productivity. Important to note that individuals knowledge and skills can evolve during time (de Haan, 2000). Many scholars acknowledge a lack of education as a core dimension of poverty, with education being necessary for purchasing the other types of assets and, therefore, in particular, important for sustaining livelihoods (Rakodi & Lloy-Jones, 2002).

Several types and means of education distinguishably influence human capital including formalized education such as primary school, as well as trainings or informal education learned at home or from friends. Educational indicators may be easy to access, determined by the years of school obtained, however, it is difficult to measure the quality of education (DFID, 1999). Although education consistently emerges as the main influence on human capital, several other variables are also important to consider, including health and nutrition (Sweetland, 1996).

Additionally, some formal policies or social norms prevent girls from attending schools. Therefore, a close link between obtained and transmitted knowledge and social capital can be acknowledged, where a high level of social capital substantially positively influences human capital. It is appropriate to assume that education increases economic capabilities of people, as well as enlightens citizenry to

participate in democratic and legal process pursuing values such as equality and liberty (Sweetland, 1996).

2.3.2 Natural capital

There is a wide variation of natural resources that make up natural capital (DFID, 1999; England, 2000). In essence natural capital refers to the access of individuals to stocks of **renewable and non-renewable natural resources**: such as water, wild, biodiversity and land. Natural capital is a very important asset for those who derive their livelihoods from natural resource-based activities such as farmers (DFID, 1999). Especially in rural areas, the fertility of land, seasonality and the amount of natural hazards a individuals is exposed to have a major impact on their livelihoods.

According to Guerry et al. (2015) a major limitation of the current framing of natural capital is its perceived isolation from other forms of capital. Natural capital and its influence on livelihoods is often not incorporated within everyday decision making aspects. This displays a close relationship between natural capital and vulnerability of individuals (DFID, 1999). External shocks that influence the livelihoods of the poor are often related to natural hazards, resulting in natural capital losses, destroying yields or influencing the availability of water. Therefore it is highly important to take natural capital into consideration on a daily base (Guerry et al., 2015).

2.3.3 Financial capital

Financial capital refers to the financial resources that individuals use to adopt different livelihood strategies (DFID, 1999; UNDP, 2017). Financial resources can be measured by several variables including, but not limited to, **wages, savings, remittances, income and other financial flows** (Horsley et al., 2015). Savings can be held in several forms: cash, bank deposits, or liquid assets such as livestock and jewellery. Financial capital captures an important asset of livelihoods, namely the availability of cash or an equivalent that enables individuals to sustain their livelihoods (UNDP, 2017).

Out of the five forms of capital financial capital is the most fluid (DFID, 1999). It can be used to convert or improve other forms of capital. Or it can be used to directly sustain a household, for example by buying food. However, financial capital cannot independently solve shortcomings of other forms of capital. For example, certain kinds of wellbeing cannot be bought (UNDP, 2017). Additionally, it is possible that individuals or households are not able to make adequate use of their financial resources. They may lack the skills needed to do so, or external factors, such as undeveloped markets, pose additional limitations. Financial capital is most dominant in market-based economies, tending to be the least available to the most disadvantaged populations (DFID, 1999; Horsley et al., 2015; UNDP, 2017). Due to a lack of financial capital other types of capital often then tend to take precedence among the poorest in a society.

2.3.4 Social capital

The definition of social capital is often debated (DFID, 1999). In the context of the SL Approach, social capital refers to social resources which individuals rely on in order to sustain their livelihoods including social norms, rules and institutions that influence people their lives. An indicator to measure social capital is the extent to which individuals cooperate with other individuals or institutions. The main components of social capital is to what extent individuals are part of **social networks and organisations**. Being a member of a formal or informal group can provide benefits and provide a safety net for households or individuals (Rakodi & Lloy-Jones, 2002). Additionally, Social capital contributes to people's sense of well-being through identity and feelings of belonging.

Social capital directly impacts other forms of capital and can compensates for a lack of capital (DFID, 1999; UNDEP, 2017). For example, social capital can facilitate and encourage the exchange of knowledge (which positively impacts human capital). Social capital can also involve access to political

processes and decision making (Rakdoi & Lloy-Jones, 2002). Making social capital bilaterally-linked with the transformation of structures and processes. Political processes and day-to-day decision making shape social capital. Additionally, social capital can function as a buffer to overcome external shocks such as droughts, which would negatively influence natural capital (DFID, 1999).

It is debated as to whether being part of a social organization will have a positive or negative impact on the state of livelihoods (UNDP, 2017). Negatively, existing networks may be based upon strictly on hierarchical relationships that prevent individuals from developing a sustainable livelihood (DFID, 1999). However, those who are excluded from strong social groups which provide advantages, will not be able to develop social capital in their society. Therefore, it is important to investigate relationships between households in communities as well as inter-related relations within a household. The empowerment of groups may be a primary factor of increasing social capital.

2.3.5 Physical capital

Physical capital comprises the presence of basic infrastructure which supports livelihoods (DFID, 1999; UNDP, 2017). This basic infrastructure relates among others to **transport, water, energy, access to basic services and the possibility to communicate**. The provision of infrastructure helps people to function more productively. Infrastructure such as water, transport and access to information are key for integrating remote areas and sustaining livelihoods. The provision of physical capital is often expensive, and not directly controlled by the individuals who are in need (DFID, 1999)

A lack of particular types of infrastructure leads to spending time and effort on non-productive activities which meet basic needs (such as fetching water) (DFID, 1999; UNDP, 2017). Increased cost resulting from a lack of infrastructure results in a comparative disadvantage in the market. Therefore, infrastructure is a form of permanent asset which should facilitate the provision of needs to the most disadvantaged in order to help them acquiring their most basic needs.

2.5 Gender differences & empowerment

As discussed in the previous paragraphs, individual members of households encounter unequal access to assets and five forms of capital are briefly discussed. This paragraph elaborates on how increased access to assets can enhance empowerment of individuals. Empowerment is a multifaceted concept and several definitions are used interchangeably (Neema, 2015; Sharaunga et al., 2015). Narayan (2002) defines empowerment as expanding assets and capabilities of poor people to participate in, negotiate with, influence and control accountable institutions that affect their lives. Kabeer (2005) attaches on the concept of empowerment as a process where individuals who were not previously able to participate in decision-making, gain decision-making rights. The European Commission (2012) refers to empowerment as a process where formerly excluded individuals or groups increase power to participate and take control over decisions that affect their lives on individual, groups and societal levels. Said-Allsopp & Tallontire (2014) view empowerment as a dynamic process whereby ownership of one type of power accelerates the ability to gain other forms of power, establishing a positive “power spiral”. The United Nations Development Programme (2012) definition, which also complies with all other United Nations agencies, is focused on gaining decision-making power through increased access to and control of resources. In this context, “empowerment” is defined as the expansion of assets and capabilities that enable vulnerable people to participate in, negotiate with, influence, control and hold accountable institutions that affect their lives. According to Neema (2015) the term empowerment can be used in an economic, political and socio-cultural context while having different meanings. All concepts of empowerment refer to gain power to participate.

Some definitions of empowerment relate more to excluded groups or individuals while others refer to explicitly poor or vulnerable people as a group. Most interpretations of empowerment as a concept share the idea that empowerment should start from within the community or from the individual

themselves. Empowering individuals will make them, in particular women, less dependent on others. Therefore, they are more likely to gain access to assets which results in enhancing their voice within households. With an increased access to assets, by empowering them, women can be enhanced to sustain their own livelihoods.

2.6 Conceptual model

As discussed, in the previous paragraphs, most research including a Sustainable Livelihoods Approach are implicitly based on patriarchal theories, assuming that households are one single unit whereby all individual household members obtain equal access to present assets. The assumption that individuals within one household enjoy the same living standards as other households, is often incorrect. According to several scholars, inequalities in access to and control over assets within households should be addressed within the Sustainable Livelihood Approach (Brocklesby & Fisher, 2003; Sati & Vangcchia, 2017; Djurfeldt et al., 2018).

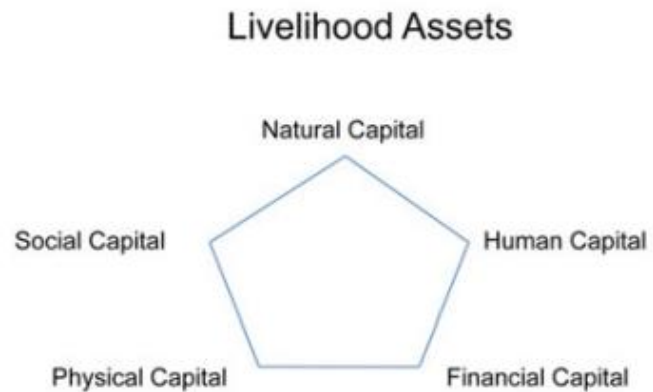


Figure 2: The Sustainable Livelihood Assets
Source: Sati & Vangcchia (2017, p. 94)

This research builds on the core of the SL Approach focussing on the indicated forms of capital: human, natural, financial, social and physical (see Figure 2). In brief, human capital comprises knowledge, skills and health of individuals. Natural capital consists of natural resources present such as land and water. Financial capital refers to financial resources such as income, savings and livestock. Social capital comprises the reliance and cooperation of individuals with others including networks and organisations. Lastly, physical capital includes basic infrastructure such as transportation. Important to note is that each form of capital is interrelate which each other, individuals create and strengthen their livelihood strategies by combining the various assets (Mersha & Laerhoven 2016).

The outlined five forms of capital provide a structure to investigate the cases selected of this study. Small-scale female farmers are selected to examine to what extent they obtain assets to sustain their livelihoods. In particular rural households, which depend mainly on agriculture for their livelihoods (Sharaunga et al., 2015), are likely to feature gender-specific aspects of exclusion to agricultural assets such as inputs and market participation (Njuki et al., 2011). It is common that women face constraints when trying to become involved in commercial agricultural practices. Increasing the ownership of assets enhances women's decision-making power within households (Braunstein, 2008). Therefore, the link between rural households and empowering women to enhance access to assets is important to consider. Therefore, this research will in particular focus on the level of obtain assets of individuals within the household, although the SL Approach commonly is applied on the household level.

Chapter 3: Methodology

This chapter outlines the methodology which was used to conduct this research. Firstly, the research approach will be discussed. Thereafter, the research area, case selection and the research methods are outlined. Lastly, the ethical considerations and limitations of the research are discussed.

3.1 Research approach

3.1.1 Research strategy

Social research requires the use of theories to help understand a phenomenon, but the context of social research influences what is researched, and how findings of the research are interpreted (Montello & Sutton, 2006; Bryman, 2012). In essence, this means that research offers one of multiple possible interpretations of daily situations rather than claiming to reveal any objective truths.

Central to this research is how individuals interpret their own world. The research strategy for this research is based on Social Constructionism considerations (Morris, 2007; Bryman, 2012; Else-Quest & Hyde, 2016). Social Constructionism theorizes that social reality is in a constant state of change, continually being established, renewed and reviewed. This research will only offer insights into lives of small-scale female farmers in a specific time frame (April 2018) and in a specific place (Mpanshya, Zambia). The research will be based on informant interviews, and their own reality which results in multiple “truths”. Their experiences, position in society, background and personal characteristics determine different forms of reality. Collecting the research data, and its interpretation, is influenced by a variety of social constructs, and reflect the researcher’s subjectivity and reality. The analyses, findings and conclusion of the research is constructed as a social reality dependent on social actors located in a specific social context, time, and place.

This research is theory driven and has evolved in a deductive way. The research started with preparations in the Netherlands after which data was gathered in Zambia. This process, however, also included some inductive elements (Bryman, 2012). This phenomenon is called iteration, which implies the repetition of applying data and theory in order to link these theories to the research.

3.1.2 Research design

For the execution of this research, a multiple-case study design is used to study the extent to which small-scale female farmers obtain assets to sustain their livelihoods (Yin, 2009; Bryman, 2012). A multiple-case study can document multiple perspectives, viewpoints and interactions by providing an in-depth analysis in a real-life context. This case study focusses on female farmers which represent “objects of interest” in its own rights and will be studied in-depth. In an effort to investigate this real-life context, the research area Mpanshya, a small rural village in Zambia, is selected. In this research, Mpanshya functions as a research area, and provides a backdrop to the findings rather than being a focus area in its own right (Bryman, 2012). Studying multiple cases offers the advantage of analytical comparison which is relevant for investigating self-sustenance of female farmers (Yin, 2009). It is important to note that each female farmer has their own unique perspective, and thus understanding of a variety of contexts is important.

In particular, an exemplifying case study will be used for the execution of this research (Simons, 2009; Yin, 2009; Bryman, 2012). With an exemplifying case study, the objective is to capture and describe circumstances and conditions of an everyday or commonplace situation. In addition, it allows researcher to examine key social processes. Exemplifying case studies do not represent unusual or extreme cases.

An alternative approach for this research could have been a cross-sectional design (Yin, 2009; Bryman, 2012). For example, a cross-sectional design could have surveyed a (larger) group of female farmers

throughout Zambia on relevant topics. A multiple case study design however is more applicable for this project, due to the specific focus on small-scale female farmers as a population segment, and the in-depth assessment required to determine the extent of assets they need to obtain sustainable livelihoods.

A lack of external validity is commonly used as an argument against the validity of case study research, as compared to a cross-sectional research design (Yin, 2009). Therefore, this research does not aim to generalize for all small-scale female farmers in Zambia. However, it provides an analytical generalisation where the results of the research are related to existing theory and concepts (Bryman, 2012). The inclusion of theoretical analysis is therefore important. It needs to be ensured that the data collected is linked to conceptual ideas (Bryman, 2012). If so, the findings have a wider applicability than the studied cases. Valuable lessons from one context to another can then be made due to analytical generalization.

3.2 Research area and case selection

In this study, the village Mpanshya is used as an example to showcase rural Zambia. The main reason why this research area is chosen is due to the opportunity offered to the researcher to stay at the local Community Training Farm (CTF) situated in Mpanshya. Therefore, the researcher obtained access to small-scale female farmers directly. This enabled the researcher to experience a rural area of Zambia first-hand, and provided the possibility to directly gain insights and experience life in the countryside and in rural farming communities in Zambia. Therefore, the feasibility of collecting the necessary data at the chosen research area is high, due to direct access to information. The village of Mpanshya is small and easy to comprehend. Furthermore, by briefly becoming part of the community, the researcher was provided the opportunity to experience and investigate assets which influence small-scale female farmers and their ability to sustain their livelihoods.

The village Mpanshya is located about 15km from the small town Rufunsa, and Lusaka, the capital of Zambia, can be reached in three-to-four hours by car. Chapter 4 discusses the context of the research area in greater detail.

Within this multiple-case study design, small-scale female farmers located in Mpanshya are the cases selected. In an effort to capture the diversity of small-scale female farmers, thirteen informants are interviewed. Using an exemplifying case study implies that cases are not chosen because of being extreme or unusual but because they provide a suitable context for answering the research question. A form of non-probability sampling was used, namely convenience sampling (Bryman, 2012). With the help of a local villager, functioning as guide and translator at the same time, different areas of the village Mpanshya are explored. During each day of fieldwork, the researcher and guide walked in a different direction when exiting the main town, in order to reach a broad array of farm fields cultivated by small-scale female farmers surrounding the village. When arriving at the households of small-scale farmers, suitable informants were approached, a brief explanation of the research was shared, and they were then asked if they wanted to participate in the research. The informants needed to conform to several selection criteria to qualify as suitable cases, including: (i) being a female, (ii) being the head of the household or being the partner of the head of the household (iii) and being involved in farming activities. These selection criteria resulted in cases which provided relevant information for answering the research question. There were no other specific requirements for selecting the cases. See Table 1 for an overview of all selected cases. In some cases, the informants could speak limited English, however, almost all interviews among the small-scale female farmers were conducted in English by the help of a translator. It is worth mentioning that the translator and guide was a female, selected purposely for her gender, with the aim to create a safe space where all informants could speak freely

without being surrounded by men. To show the appreciation for participation in the research, the researcher learned how to thank the informants in the local language, Nyanja.

Table 1: Overview of the small-scale female farmers interviewed.

| Informant | Marital status | Age | Number of household members | Education | Language spoken by informant | Date of interview |
|--------------------|----------------|-----|-----------------------------|--------------|------------------------------|-------------------|
| Informant A | Married | 38 | 7 | Grade 12 | English | 16-04-2018 |
| Informant B | Married | 33 | 6 | Grade 8 | Nyanja | 16-04-2018 |
| Informant C | Married | 28 | 6 | Grade 6 | Nyanja | 16-04-2018 |
| Informant D | Divorced | 33 | 6 | No education | Nyanja | 17-04-2018 |
| Informant E | Married | 30 | 5 | Grade 7 | Nyanja | 17-04-2018 |
| Informant F | Married | 37 | 7 | Grade 7 | Nyanja | 17-04-2018 |
| Informant G | Married | 50 | 5 | Grade 7 | Nyanja | 17-04-2018 |
| Informant H | Divorced | 26 | 2 | Grade 12 | Nyanja/English | 18-04-2018 |
| Informant I | Married | 41 | 8 | Grade 5 | Nyanja | 18-04-2018 |
| Informant J | Divorced | 50 | 4 | Grade 5 | Nyanja | 18-04-2018 |
| Informant K | Married | 36 | 7 | Grade 6 | Nyanja | 19-04-2018 |
| Informant L | Married | 61 | 8 | Grade 2 | Nyanja | 19-04-2018 |
| Informant M | Widow | 80 | 7 | Grade 4 | Nyanja | 19-04-2018 |

3.3 Data collection methods

A multiple-case study research design favours qualitative methods (Yin, 2009; Bryman, 2012). Qualitative methods are particularly helpful in the generation of an intensive and detailed examination of the case. Using qualitative interviewing methods for data collection puts the informant's point of view first, which fits well with the aim of the research.

The data collection is designed in two phases, and makes use of key qualitative methods including expert-interviews, observations and in-depth interviews. For both the expert-interviews and in-depth interviews, an interview guide was created, and specific questions and themes are selected to frame and standardize the semi-structured interviews as much as possible. The interviews are semi-structured rather than unstructured, to improve the comparability of information gathered from the different informants. Additionally, due to the aim of gathering extensive data, semi-structured interviews are more appropriate than the use of surveys or questionnaires. In total, five experts and thirteen small-scale female farmers are interviewed for this research. The interviews are recorded and transcribed (see appendix D and F), coded manually and analysed afterwards.

Phase one of the data collection process consisted of expert-interviews and participant observations, enabling the researcher to gather supplementary information about the research area and the selected cases (DFID, 1999; Bryman, 2012). With the use of these methods, the context of the research and the analysis are shaped. Expert-interviews in particular provide rich and valuable information. Additionally, it is a flexible way of data collection and provides rich and detailed answers. The expert-interviews have been particularly helpful in checking the applicability of theoretical assumptions concerning the research and the cases selected.

The method of "snowball sampling" was used for conducting the expert-interviews (Bryman, 2012). In this method, participants propose other participants, who have experiences or assets that are relevant to the research. The experts are individuals who were approached for their views on gender roles within rural areas in Zambia. For the expert-interviews, an interview guide was constructed (see

appendix C) (Bryman, 2012). The interview guide is based on the Sustainable Livelihoods Approach, and captured the inclusion of the five forms of capital: human capital, natural capital, financial capital, social capital and physical capital. Each form of capital is split into a subset of items. For example, the informant is asked about land ownership, land rights and land fertility, which relate to natural capital, rather than using the term directly. The topics are set up as a semi-structured interview, leaving room for the informants to answer freely, but also for the interviewer to ask other questions of interest. The expert interviews are recorded and transcripts are attached in the appendix (see appendix D). See Table 2 for an overview of all expert interviewed.

Table 2: Overview of experts interviewed.

| Expertise | Organisation | Language spoken | Date of Interview |
|--|---|-----------------|-------------------|
| Gender specialist | Women for Change (WfC) | English | 03-04-2018 |
| Nutrition and health specialist | Independent | English | 04-04-2018 |
| Gender specialist | Community Markets for Conservation (COMACO) | English | 26-04-2018 |
| Lead farmer | Independent | English | 20-04-2018 |
| Community farmer | Community Training Farmer | English | 22-04-2018 |

Besides the expert-interview also participant observation helped the researcher gain a sense of the research area and the daily lives of the small-scale female farmers in Mpanshya. According to Kawulich (2005) participant observation is a helpful way to collect data about people, processes and cultures in qualitative research. For one week, the researcher observed the research area before starting to conduct interviews with the small-scale female farmers. The observations included brief conversations in town, exploring the area by foot, buying products on the market, and joining activities of the Community Training Farm. On several occasions, farms in the nearby area were visited, and after one week, people in town started to recognize the appearance of the researcher. The participant observation method helped the researcher prepare to conduct in-depth interviews among the small-scale female farmers.

Phase two of the data collection process consists of in-depth interviews conducted among the small-scale female farmers. The interview guide used is based on the Life Story Approach. Using this approach allows the researcher to explore a person's experiences (DFID, 1999; Simons, 2009). It provides insights and understanding of individuals' current attitudes and behaviours. The Life Story Approach is especially interesting to use when researching gender differences (Atkinson, 1998), because research is often based on data obtained from patriarchal structures dominated by men. This is particularly the case when investigating the Sustainable Livelihoods Approach where households are generally the units of analysis, and unity between male and female is assumed.

For conducting the interviews, an interview guide was drawn to utilize the Life Story Approach. This template is structured with an introduction, a core and an end (see appendix E). During the introduction, informants are asked to introduce themselves. The core of the template consists of questions concerning farming activities, including what type of crops the farmers cultivate, how much surplus the informants will have this year, and how often they are able to sell their crops. Sub-sections in the core of this interview template are linked with the five forms of capital. This includes questions

about the distance to the market, whether the informants have any savings or livestock, and how the informants gain knowledge and agricultural skills. The interviews are concluded with an “end” section which mainly poses questions regarding intra-household relations and how the informants envision their own future. Several pilot interviews are conducted among small-scale female farmers to shape the interview guide. The output of each informant interviewed can be found in the appendix F.

3.5 Ethical considerations

This research is designed to ensure integrity and transparency. According to Bryman (2012), ethical principles can be divided into four main areas: (i) harm to participants, (ii) lack of informed consent, (iii) invasion of privacy and (iv) deception. Although it is difficult to identify harm while conducting research, harm in the form of stress, emotional disturbance or loss of self-esteem is minimized as much as possible by avoiding provoking questions. Throughout the research, and on a regular basis, the researcher checked and confirmed with the informants if the person in question was willing to continue to participate in the research. Additionally, harm to participants was minimized by making sure that they were explicitly asked for consent to use the data and photographs (see appendix A for the signed ethical approval form).

The interviewees were provided with as much information as might be needed to make an informed decision when determining their participation (Bryman, 2012). Before conducting interviews, the aim and reason of the research was explained most of the time, in the local language, Nyanja.

During all interviews, the ethical codes were taken in consideration (SRA, 2003). All the interviewees are notified about the possibility to leave questions unanswered, or to cease participation at any given moment. All references made to the interviewees is made anonymously. The recordings of the interviews will be stored confidentially.

Finally, the positionality of the researcher should be noted (Milner, 2007; Bryman, 2012). The researcher strictly aimed to take racial and cultural awareness into consideration as much as possible during the interviews. The researcher acknowledged and reflected on her own background before starting the fieldwork and did not share any personal views or opinions about the research or answers shared by the informants during the interviews. However, expectations might arise related to the fact that the researcher can be considered an “outsider” in the community in which the research was conducted, and some of the respondents may hope or feel that their economic situation can be improved through participation in this research.

3.6 Limitations

During the research, several limitations were encountered. The most important and challenging limitation is that the data collection was partly conducted in a language the researcher does not speak, and required the use of a translator. Prior to the field work, the aim was to conduct the interviews in English. However, after spending several days in the research area (Mpanshya) the researcher realised there was a need for someone who could function as a guide and translate when needed. As a result, most of the interviews were conducted with the help of a translator. When conducting interviews in this way, it becomes more difficult to respond directly to information that informants share, and misunderstandings or errors of interpretation can arise. Moreover, it can be challenging to pick up body language and intonations. For these reasons, the reliability of research executed in non-native languages can be questioned. Potential translation flaws need to be taken into account and it can be assumed that information loss occurred due to the language barriers between the researcher, translator, and the informants.

A second limitation is that people might have felt uncomfortable answering certain questions while being in the presence of others, or because the researcher was not from their native country. Although the researcher felt that having the support of local (female) guide benefitted the research, the answers of the informants could have been influenced by the fact that other people were listening to the conversation. Therefore, it is recommended to evaluate pros and cons of the use of a local translator for any further research.

Thirdly, the researcher comes from a very different background than the informants, which could have resulted in biased answers. For example, some of the farmers asked after the interview if the researcher could give them any financial support. Therefore, it could have been the case that informants exaggerated their answers to gain support. It is recommended to critically reflect on the positioning of the researcher's background involved for subsequent research.

Another limitation is that the research was conducted in a short time frame, leading to a limited number of informants being consulted. The data collection in the field, as well as the theoretical base, would have benefited from a greater availability of time and resources. Furthermore, if more time had been available, a second area could have been researched, serving as an effective means for comparison. Having more time for the execution of the research will most likely have increased the theoretical embeddedness of the research.

3.7 Conclusion

In conclusion, a multiple case study design with Social Constructivism considerations forms the basis of this study. The chosen research area is Mpanshya, a small village east of Lusaka, the capital of Zambia. The cases selected are small-scale female farmers, and exemplifying cases are chosen because they provide information about the extent of assets female farmers obtain to sustain their livelihoods. Qualitative research techniques are used, including expert interviews, participative observation and in-depth interviews. Ethical considerations are taken into account with regards to the execution of the interviews, and certain limitations encountered during the research have been discussed.

Chapter 4: Research context

This chapter provides context concerning the research area where fieldwork is conducted for this research. Firstly, the Zambian agriculture sector and governmental policies will be addressed. Followed up by an introduction of the research area, Mpanshya, Zambia.

4.1 Zambian agriculture sector and policies

Around two thirds of agricultural land in Zambia is held by approximately 1.6 million small-scale farmers (IFPRI, 2014; CSPR, 2017). Throughout Zambia, roughly 800,000 small-scale farmers rely on agriculture as their only source of income (Kumar et al., 2015). Zambia's rural poor are small-scale farmers relying almost entirely on subsistence agriculture (Kumar et al., 2015). However, the yields of the farm lands are often minimal for the small-scale farmers, and rural poverty is a wide spread phenomenon among them. Roughly 80 percent of the rural population in Zambia lives in poverty (Kumar et al., 2015; Mofya-Mukuka & Hichaambwa, 2016). With the implementation of National Development Programs, the Zambian government aims to reduce rural poverty (Mofya-Mukuka & Hichaambwa, 2016). The main focus is to enhance agricultural growth, which in turn will help reduce poverty over time (Mason & Myers, 2013; Adam et al., 2014; IFPRI, 2014). The 7th National Development Plan (7NDP) is the most recent Zambian government initiative focussing on small-scale farmers (7NDP, 2017). It includes an action plan to reduce risks for small-scale farmers, including: creating better market environments, securing land rights, and developing farmer organisations and rural infrastructure.

Agricultural policies mainly consist of large subsidy programs and public procurement (Kumar et al., 2015). The main example of these agricultural policies in Zambia is the Food Reserve Agency (FRA) originating in 1995 (FRA, 2018). The FRA buys maize throughout Zambia from the small-scale farmers, offering a price which exceeds the price offered on markets (Mason & Myers, 2013). It is currently the dominant buyer of maize from small-scale farmers in Zambia, and sometimes purchases up to 80 percent of all marketed maize produced by small-scale farmers. The FRA then sells the maize domestically, guaranteeing the availability and accessibility of maize for everyone within Zambia. The FRA budget comprises approximately 25 percent of the total governmental expenses on agriculture on an annual basis. The agriculture sector of Zambia revolves around a few staple crops which include: maize, cassava, soya beans and groundnuts (Kumar et al., 2015). The most common crop is maize, which 89 percent of all small-scale farmers in Zambia cultivate (Mofya-Mukuka & Hichaambwa, 2016). The crop production season for Zambia is rainfall dependent, and generally lasts from November to April (IFPRI, 2014).

In Zambia, the agricultural sector kept failing to lift rural livelihoods out of poverty. As a result, the Zambian government then started the Farmer Input Support Program (FISP) in 2002 (Siam et al., 2017). This program aims to improve access to agricultural inputs for small-scale farmers, increase maize production, and improve farmer incomes. In order to increase the efficacy of these FISP programs, the Electronic Voucher System (e-voucher) was introduced in the farming season of 2015-2016 (Kuteya, et al., 2016). The e-voucher consists of a card given to small-scale farmers enabling them to purchase agricultural inputs at approved Agro-input supply dealers.

4.2 Research area: Mpanshya

Mpanshya is a small village approximately 180km east of the Zambian capital Lusaka (see Figure 3) (St. Luke's mission hospital, 2012). Mpanshya is located in the low-lands of the African Great Rift Valley (FIS-foundation, 2018). The hilly highlands of the valley in the region of Mpanshya are covered with bush and woodland, where scattered settlements are situated. Mpanshya has its own regional



Figure 3: Map of Zambia, red star indicates location of Mpanshya.

Source: ontheworldmap.com

chiefdom, but is politically seen as part of the Chongwe District, in which 160,000 citizens reside. This district belongs to the Lusaka province.

Mpanshya can be reached via the Great East Road (GER), which is the major road linking eastern Zambia with the capital. Mpanshya is situated 7km south of the Great East Road and can be reached via a paved road which stops at the entrance of the St. Luke's Mission Hospital just before entering town. All other roads in the region are dirt tracks, some even not accessible by 4X4 car. A minivan transportation service connects Mpanshya with Lusaka, and departs several times per day, and can take up to six hours one way. Via private road transportation, the capital can be reached within three hours.

The main way of transport for the villagers is walking, and only some villagers own bicycles. Cars and motorcycles are hardly present. Farmers mainly depend on middle-men from Lusaka who come to Mpanshya and buy their produce. The market in Rufunsa, 15km from Mpanshya, and Chongwe, just 40km before reaching Lusaka, are the other main markets where the farmers can sell their produce. Transaction costs for the farmers in Mpanshya mainly consist of paying for transport to the larger, more lucrative, markets in Lusaka and Chongwe. If travelling by foot, Mpanshya farmers can only sell in town. Additionally, they are dependent on middle-men who



Figure 4: The house of a farmer in Mpanshya.

Source: Author.

come to their farms to buy produce directly. There is a small local market selling a limited amount of products including vegetables and fruits such as tomatoes, onions, local types of spinach, local types of mandarins and bananas, as well as dried fish and eggs.

St. Luke's Mission Hospital was established in 1978, and was until 2010 the only hospital in the Chongwe district (St. Luke's Mission Hospital, 2012). It serves a vast area with a radius of approximately 200km, and patients sometimes need to walk for 1-2 days in order to reach the facility. The hospital has 100 beds offering a variety of services including internal medicine, surgery and deliveries.

In the centre of the village most houses are built with bricks, while, most farmers have fetched housing (see **Fout! Verwijzingsbron niet gevonden.**). There are variety of different churches present, with Christianity as the main religion. Drinking water is available throughout the village via boreholes, and the villagers also use small streams for the provision of water. Farming is the main economic activity present in the region. As in most of Zambia, the region has two main seasons: a rainy season (taking place between December and February) and a dry season. Farmers in the Mpanshya region are bound to these natural circumstances. Besides farming, there are some small-scale businesses such as a hair dresser, tailor, liquor store and clothing shops (see Figure 5). The village is not connected to the electricity grid. The hospital generates electricity themselves and some of the shops have their own solar panels. A minority of the farmers have solar panels which enable them to charge their phones. Another means of income for villagers, although it is formally an illegal activity, is the collection and sale of charcoal.



*Figure 5: Tailor in Mpanshya.
Source: Author.*

4.3 Conclusion

In Zambia there are several governmental policies which support the rural poor. The government acknowledges that female farmers encounter more constraints for accessing agricultural resources than men. The field work of this study is conducted in Mpanshya, a small village in rural Zambia.

Chapter 5: Analysis and findings

As discussed in Chapter 2, the five types of capital (human, natural, financial, social and physical) encompass different components. During the expert and in-depth interviews, informants provided information about the different dimensions of each form of capital. These findings focus on the aspects which are relevant for small-scale female farmers to sustain their livelihoods. In this chapter, the findings of each form of capital will be shown and the linkages between the findings and theory of each type of capital will be briefly discussed.

5.1 Gender & human capital

As discussed in Chapter 2, education, skills and health status are the main components of human capital. The data collected during the fieldwork shows that in particular, the lack of education is an important factor when discussing human capital assets of small-scale female farmers. As the gender specialist of COMACO highlights, one of the reasons why women obtain lesser access to education as compared to men, is due to early pregnancies. Pregnant young girls will often not continue schooling because they feel ashamed or get bullied.

In general, all the small-scale female farmers interviewed did not receive any special education or diploma related to agriculture. Almost all the small-scale female farmers interviewed attended school, however, a majority of them did not continue schooling after the primary level (as noted in Table 3). This means that they stopped going to school at the age of 14 (Grade 7). From the 7th Grade onwards, school fees must be paid. The schooling subject of Agriculture Science only becomes compulsory for students who obtain secondary education (Grades 8 & 9)¹. The small-scale female farmers shared that they learned how to farm by knowledge and skills passed on by their parents, or they gained knowledge by doing it themselves. According to informant M:

“My mother and father learned me, they thought me how to farm” (informant M)

Within the community of Mpanshya, several lead farmers are active. Lead farmers fall under a system of the government and provide agricultural knowledge and skills on a voluntary basis. These information sessions are free and accessible by all local farmers which show interest and commitment to farming. The lead farmer interviewed shared that local farmers are often very interested in learning more about farming methods to increase their output. According to the lead farmer:

“The need is in my opinion... that they [the farmers] need to gain more knowledge, because they ask me a lot of questions” (lead farmer)

Additionally, she points out that having sufficient knowledge can result in a decrease of financial expenses for the farmers: *“You don’t have to pay for fertilizer, you only need to make organic manure”*

| Education level | Number of respondents |
|-----------------|-----------------------|
| No education | 1 |
| Grade 1 | 0 |
| Grade 2 | 1 |
| Grade 3 | 0 |
| Grade 4 | 1 |
| Grade 5 | 2 |
| Grade 6 | 2 |
| Grade 7 | 3 |
| Grade 8 | 1 |
| Grade 9 | 0 |
| Grade 10 | 0 |
| Grade 11 | 0 |
| Grade 12 | 2 |

Table 3: Education level of the 13 small-scale female farmers interviewed.

Source: Author.

¹ Primary education in Zambia runs from grade one to seven. Whereby the official primary school entrance age is seven. Subjects taught at primary school mainly include literacy, languages, mathematics, social and technology studies. Secondary education covers grade eight to grade twelve. Additional subjects taught at secondary school include: history, geography, biology, chemistry, home economics and agricultural science.

(lead farmer). Some of the small-scale female farmers were aware of the workshops provided by the lead farmers in town. However, when asked if they attended such workshops, none of the female farmers had attended. Only one of the informants mentioned that she listens to informative programs concerning agriculture on the radio to gain agricultural knowledge. As previously noted, the small-scale female farmers interviewed do not participate in any agriculture related training, therefore primary education was the only learning opportunity they received throughout their lives.

During the interviews, the female farmers were asked which steps they plan to undertake to increase their farming output. The answer to this was that they did not know how to increase their output and that they did not have a plan. As one of the small-scale farmers shared: *"I don't have a plan [for having more harvest next year]"* (informant F). Some of the small-scale female farmers even failed to answer the question. Another informant said: *"I don't know what to do so I can sell crops next year, perhaps God allows me to do so."* (informant M). Throughout the interviews, the female farmers often cited faith in God as being related to having a better harvest next year. For example, the female farmers were hoping that faith in God will provide them better rains.

The researcher observed that the small-scale female farmers did not give the impression during the interviews that they were passionate about farming, but rather that it is an easily accessible job which does not require any diploma. As previously stated, a majority of the small-scale female farmers interviewed do not have plans related to increasing their farming output. Few of the small-scale female farmers answered that they are interested in starting their own businesses: *"If I have money, I can start my own business and I will be so happy"* (informant B). One of the small-scale female farmers already has her own business, and she shared that she prefers working in her clothing shop instead of doing heavy work on the fields. When asked the question "What do you see for yourself in the future?", none of the small-scale female farmers responded that they wish to continue their farming activities. This might be a reason as to why the small-scale female farmers are not interested in gaining and expanding their agriculture knowledge and skills. Furthermore, the researcher noticed that small-scale female farmers are less likely able to converse in English as compared to the small-scale male farmers spoken to during the fieldwork. This could potentially be explained by the fact that women obtain less schooling than men on average.

According to the community farmer, agricultural inputs are also present in Mpanshya. For example, different types of seeds are shared within the community, however, knowledge about how to use different kinds of seeds is lacking. This results in hardly any diversification of crops among the farmers in Mpanshya.

5.2 Gender & natural capital

The asset natural capital focuses on the ownership and access to natural resources. During this research, it mainly concerns the ownership of livestock, ownership of land, fertility of the land, and access to water.

According to the nutrition and health specialist, ownership of land varies throughout Zambia. Most common is that each rural household oversees a piece of land which is sometimes leased from the head of the village. Farmland of each household is seen as a family field, though, it is in most cases the husband who is in control



Figure 6: One of the informants showing her farmland. Source: Author.

of the decisions regarding what to grow, when to harvest, and what to sell. Nevertheless, generally both the husband and wife are working on the field owned by the household.

All small-scale female farmers shared that they own their farm lands (see Figure 6). All women interviewed perceived their farmland as part of their households, equally belonging to them as to their husband, when present. Despite these responses, as expressed by different experts, the head of the household is generally the owner of the land, and the head of the household is in general the man. This results in women having less access to natural resources than their husbands. The presence of a link between natural capital and social capital can therefore be indicated. This notion is expressed by the gender specialist of WfC in the following way:

“The married women obtain access the farm land through their husband, they [women] won’t control the land, it is not theirs, they [women] don’t decide how to use the land.” (gender specialist WfC)

Some of the small-scale female farmers shared that their land is fertile, though, others acknowledged that their farmland requires a large quantity of fertilizers. Overall, the farmland owned among the small-scale farmers in Mpanshya seems to be fertile. The community farmers expressed concern relating to the current unsustainable manner of cultivation used by the small-scale farmers. Some community farmers believe that due to a lack of knowledge, the small-scale farmers are not able to cultivate their lands in a profitable way without using fertilizers, and the input of fertilizers is not very sustainable.

More than half of the small-scale female farmers interviewed do not own any livestock. Roughly half of the 13 small-scale female farmers interviewed own some chickens, and as one of the small-scale female farmers shared: *“We do have some chicken, but we don’t have goats or a cow, we don’t have”* (informant A). Only one of the small-scale female farmers interviewed owns five pigs in addition to owning some chicken. Pigs in the Mpanshya community are valuable (one fully-grown adult pig is worth 540 kwacha²) which is the equivalent of roughly one-third of school fees for one year. According to the community farmer, it is very difficult for the farmers to start with livestock individually without any financial support or knowledge.

Observations by the researcher indicate that the natural resource water is sufficiently available in Mpanshya due to boreholes nearby the farms and small streams. The level of water in the streams depends on the season, and is influenced by the rains. Some of the farmers shared their wish to have abundant water all year round. In this way, they will be able to irrigate their farmlands and grow different crops such as tomatoes.

5.3 Gender & financial capital

Financial capital refers to the presence and accessibility of financial resources for individuals. As discussed in Chapter 2, it encompasses a variety of components including income from wages, savings, remittances, livestock, the possibility to receive a loan and the ability to hire paid labour.

The community farmer shared that most small-scale farmers are not able to earn a substantial income from their farmlands. This notion is underpinned by the small-scale female farmers as informant C shared: *“We have no income. Farming is just for ourselves to eat”*. During the interviews with the small-scale farmers, the informants were asked if they are able to sell some of their harvest this year. Only one out of the 13 small-scale female farmers answered this question with a “yes”. Interestingly, the

² Based on the conversion rate during the fieldwork: 1 kwacha is equal to 0.10 US dollar, which make 540 kwacha equal to 53 US dollar.

one farmer who is able to sell her produce, is part of a farming cooperative. All other small-scale female farmers are not part of any farming cooperative or network.

There are several reasons why the small-scale female farmers are not able to sell their produce. Firstly, the self-sufficiency of the farmers, having enough food for themselves, is their primary goal. Only in the case when the harvest is big enough, will the farmers be able to sell crops to market. Additionally, during the raining season of the current year, a major drought occurred, influencing farm yields negatively. Some of the small-scale female farmers said that they were able to sell some of their produce last year. Although, others were also unable to sell in previous years as informant L shared:

“For the past years I am not able to have enough [harvest], I am not able to sell [my crops] at the market since the last year’s” (informant L)

One of the small-scale farmers believes it is the intense competition amongst farmers in Mpanshya, that results in not being able to gain a good price for their produce. All farmers cultivate the same types of crops, and therefore fiercely compete for the limited market opportunities in town. Most of the small-scale female farmers share that they do not have any other frequent source of income. Most of them rely on one-off work, which the small-scale female farmers call “piece work”, informant F shared the following:

“I fail to gain an income and take care of myself. Sometimes I do some peace work, sometimes they call me to help in household chores, however, the money I earn is just a few, it is not enough to take care of myself” (informant F)

Furthermore, the female farmers rely on the income generated by their husbands. Unfortunately, according to the female farmers, their husbands often also rely solely on their farm fields or one-off work such as chopping charcoal. Only one of the small-scale female farmers shared that her husband has a permanent job at the hospital.

None of the small-scale female farmers interviewed has a loan. Some of the small-scale female farmers shared that they are in favour of getting a loan, while others said it is difficult to receive a loan. One of the informants said the following: *“I am scared to get a loan, if I fail to pay, I can lost my fields.”* (informant H). Furthermore, all informants replied that they have no savings. Only one of the informants is able to hire labourers when needed in the peak season. Although, livestock can function as informal savings (see Figure 7), only one of the informants owns livestock that would qualify as “savings”. Due to the lack of financial resources among the households of the female farmers interviewed, they complain about not being able to buy the inputs for agriculture which they need for the cultivation of their crops such as fertilizers and seeds.



Figure 7: One of the informants at her farm, with some chicken.
Source: Author.

As the lead farmer stated, generally financial resources among small-scale farmers in Mpanshya are lacking. The small-scale farmers are willing to earn more income, though, it is difficult to receive this without any support: *“They [farmers] would like to have income out of farming, they are interested to gain more income but, they need to know how”* (lead farmer). This can be linked with the notion that

most of the small-scale female farmers in Mpanshya do not have a business plan, or the knowledge and skills, for running their farms, despite the fact that farming is their main economic activity, and most of the time their only possible source of income.

Lastly, the experts shared that in Zambian rural areas formal banks are rarely found. The lack of formal financial institutions nearby is one of the main reasons why women have limited access to financial resources such as credit and loans. As the gender specialist of COMACO shared, women are less likely to travel outside their community by themselves compared to men, due to the fact that women have to match expected gender norms within society.

5.4 Gender & social capital

As discussed in Chapter 2, social capital encompasses a variety of components including: intrahousehold relations and belonging to social networks. During the interviews, the main focus has been on linkages between gender roles within households and society.

According to the gender specialist of Women for Change, women lack the time to participate at the community level or join networks due to their workload. Their workload mainly consists of taking care of the home chores including working on the farm fields and caring for the children. With limited additional time to spare, it is difficult for the women to join cooperatives or influence political decisions, resulting in missed opportunities for women to sustain themselves. For example, farmers can only receive the support from the e-voucher³ system if they participate in a farmer organization, however women are often not included in such cooperatives, as she shares:

“You will recon that women have no voice when it comes to leadership, leadership goes to the men, they [men] are the one that talk, women are marginal, they [women] are not there, they are there but their voices are not heard, their issues are not heard” (gender specialist WfC).

Additionally, farmers need to contribute with 400 kwacha themselves to qualify, and then the government contributes 1600 kwacha. As this example illustrates, some start-up capital is required in order for farmers benefit from government support. Therefore, most of the women are excluded from this program. Only one of the small-scale female farmers spoken to, out of the thirteen interviewed, is part of a farming cooperative. However, she did not remember the name of the cooperative. As a result, most of the female farmers in Mpanshya are not able to participate in the e-voucher system, and support received from the government is therefore limited. Additionally, the farmers receive little support for their farming activities from their community. The female farmers mainly rely on their own labour combined with their husband, as well as labour from their children.

All the experts reflect on the phenomenon that traditional gender roles in Zambian society are still very present. The gender specialist of COMACO shared:

“It is our [Zambian] culture, we have different gender roles, men should do that and women should do other things. Women have multiple roles, they produce food, look after the children, look after the sick. Where the men have the time to relax, to do politics, attend workshops and receive information” (gender specialist COMACO).

As noted earlier, traditionally men are responsible for earning an income while women stay at home and take care of the family. However, within many rural settings, opportunities for gaining an income are limited, which makes it difficult for men to fulfil their traditional roles. According to the lead farmer, it is accepted in Mpanshya that men go into town and have alcoholic drinks while the woman stay home: *“Especially the men who don’t have knowledge, they just go out and drink beer, come home and*

³ Brief explanation of the e-voucher system can be found in the context chapter, chapter 4.

eat, go to sleep and come to produce the babies” (lead farmer). She recognizes that not all men do this and some do support their wives with the household chores. However, several small-scale female farmers confirm the habits of men described by the lead farmer: *“My ex-husband, if he had money he just used it for drinking alcohol”* (informant D).

Besides the traditional roles concerning household tasks, men are often perceived as the head of the household. The gender specialist of Women for Change and the nutrition and health specialist both emphasized that women have little influence within the household concerning decision-making, particularly when decisions are made concerning financial issues. As shared by the nutrition and health specialist, men are often in charge of earning an income, while women have to take care of the household chores. This results in the situation that men control their own income, and the equivalent of the income belonging to the household. However, when women do earn some income themselves, they are mostly in charge of what they earn. Informant F shared:

“Yes my husband decides on the money which comes from the fields and I decide about money earned from my own business [clothing shop in town] ” (informant F).

The data obtained from the interviews with the small-scale female farmers shows that most of the households, according to the informants interviewed, are led by the man. A few of the informant’s households are led by the women, however this was because these women were either divorced or widowed. More than half of the respondents said that decisions within the household are made in consultation with each other. According to informant A: *“Decisions on financial issues, we plan them together”*. Only two of the informants said that decisions made within the household are solely decided on by their husband. Additionally, five of the informants (38 percent) said that decisions on financial matters are only made by their husbands. A few of the informants confirmed that they believe in gaining their own income benefits and decision power within the household.

The researcher observed that the small-scale female farmers interviewed who run a household without the support of a husband seem to be satisfied with their household situation. For example, one of the female farmers said that she was able to build a house herself while her husband was not able to do so. In Zambian society, divorce is not socially accepted by a majority of the population, and it is not very easy to process. The assumption can be made that some women are able to flourish and sustain their households more without the restrictions from their previous husband. Informant H expressed her opinion on this topic as follows:

“Sometimes people ask me why I am not married. But for now I am not interested to get married, cause my ex-husband, his behaviour was bad, he did not give support for our child or for me, no support, [...] by myself I manage to buy everything. So it will be different to get married now, I am happy without” (informant H).

Rationale supporting women succeeding without their husbands or spouse, is that men sometimes want to have more children than they can financially support, the burden for which is then carried by the woman, and sometimes men can restrict their wives from joining any economic activities. When women led the households by themselves, they are in complete control concerning which activities they participate in, although, they generally still need to fit within the social norms of society.

Furthermore, according to the COMACO’s gender specialist, women have less opportunity to access financial resources due to social constructs in the society. It is rather difficult for women to travel to banks, as they are generally not able to cover the transportation costs, and social expectations from the community deem that they stay at home. Women need to justify their behaviour when willing to travel out of town: *“If you are a married woman, older members of the family will not allow it, if woman*

travel out of town to much [for example] going to a bank. They [the community] will get suspicious what she will be doing out of town” (gender specialist COMACO).

5.5 Gender & physical capital

Physical capital comprises the availability of basic infrastructure to support households. In this research there is focus on infrastructure enabling the farmers accessing a market. In general, market opportunities vary for different crops in Zambia according to the lead farmer. However, the market for maize is guaranteed by the Food Reserve Agency⁴ of the state. According to the community farmer, farmers participating in this program sometimes receive delayed payments, and despite being able to sell their maize, the market for other crops is limited.

Unfortunately, the harvest of small-scale farmers is often minimal and is often not worth storing it somewhere. As the gender specialist of COMACO acknowledges, storage possibilities in general are lacking, resulting in losses of output. Storage possibilities in Mpanshya are minimal, and most of the small-scale female farmers shared that they do not have any storage possibilities. Therefore, they are forced to sell their crops right after harvesting.

When asking what the small-scale female farmers will do if they are able to sell their produce and which infrastructural sources they make use of, they said that they just walk into town with their harvest. Being able to sell their produce in town eliminates transportation costs for the farmers, however, opportunities to sell their produce in Mpanshya are very limited. Informant A shared: *“I just go the market in the village, but sometimes the marketeer come here and buy products from us here [at the farm]”*.

The small-scale female farmers in Mpanshya share that they are mainly depending on traders from outside towns, since they are unable to afford the necessary transportation costs to travel to more lucrative markets which are further away. The lucrative markets in Chongwe and Lusaka can only be reached with the use of motorized transport. Transporting a small amount of goods to the lucrative markets results in higher costs since farmers must then rely on others for motorized transportation. The lead farmer shared: *“The market is a problem, if you have a lot of maize, you need to shift the maize from here [Mpanshya] to Rufunsa, so the transport is really expensive”*.

Small-scale female farmers need to rely on others. They are mainly dependent on selling their goods at the local market, or to traders from outside of town who directly buy from farmers in the community. Although, for example this year due to a drought, most of the small-scale female farmers will not be able to sell any of their produce, and thus the harvest of small-scale farmers is often not enough to be bought by a middle-man in the supply chain to sell their crops. As the community farmer shared:

“Buyers are there in Lusaka, they will come [to Mpanshya], as long as they have a full load, they can’t come for five or ten bags” (community farmer).

Informant D elaborated that: *“If I have enough [harvest], like maize, when I have ten bags, I can’t even sell it at the market, it is not enough to sell”*. Paying transportation costs themselves and bringing their goods to the market, is often not affordable for the small-scale female farmers. Organization among the small-scale female farmers to work together on arranging transport for their produce is lacking.

⁴ Brief explanation of the Food Reserve Agency can be found in the context chapter, chapter 4.

Besides the unaffordable transportation costs, there are other barriers preventing women from accessing the market. These barriers appear to be socially constructed norms within the society, rather than resulting from a lack of infrastructure or distance. According to COMACO's gender specialist men are more likely to access different means of transportation, and encounter less difficulties when leaving the children at home as compared to women. She shared that: *"Men will use animals, bicycles, the man will bulk so they can transport to the market. Men organise themselves woman are not included"*. The nutrition and health specialist also mentioned barriers for women when accessing the market: *"For women to access the market it is really difficult, because they are often not so free to move or whatsoever"*. However, none of the small-scale female farmers themselves expressed limitations of accessing the market due to social constructs, and that they mainly walk to the market in town (see Figure 8).



Figure 8: Woman walking towards town.
Source: Author.

In brief, there are limited possibilities for the small-scale female farmers to access the market. The main constraint is that there are no nearby lucrative markets, and the lucrative markets need to be reached with motorized transport which none of the small-scale female farmers can afford. This results in high transportation costs for the small-scale female farmers, which combined with their minimal yields, makes traveling to a larger, more lucrative market further away from Mpanshya unaffordable. The local market in town is easy to reach, however, the farmers hardly gain any profit when selling there due to high competition, and limited purchasing power of the villagers. The small-scale female farmers are mainly relying on traders from outside of town to buy their produce.

5.6 Conclusion

When analysing the results of the data obtained from the interviews among the female farmers in Mpanshya, the presence of human capital among the farmers in general is lacking. Education and knowledge development concerning agriculture is limited, resulting in many of the farmers lacking basic agricultural education and having no future plan to increase the output of their farms. Despite farmers willingness and interest to learn about farming methods, available opportunities for gaining agricultural knowledge seem to be quite unknown amongst the farmers. Most of the agricultural skills which the farmers obtained during their life is taught to them by their parents. As the theory of human capital indicates, knowledge and skills are assets to improve economic activities and productivity. The results show that the farmers in Mpanshya cannot rely on this form of capital to increase their crop yields.

As previously noted, natural capital consists of a variety of natural resources. Although natural resources include more than just land when households rely on agriculture as their main income source, the natural resource of farmland is highly important. All informants spoken to in Mpanshya shared that they own their farm lands. Additionally, access to fertile land also does not appear to be a limitation for the farmers. The natural resource water seems to be sufficiently available for human consumption, however, some of the farmers would like to irrigate their farm lands further. The natural resource of livestock is hardly present in Mpanshya. Currently, the natural sources available to the farmers in Mpanshya appear to benefit the households surveyed.

Financial capital refers to the financial resources to which people have access when sustaining their livelihoods such as: loans, livestock and income. The data shows that such financial resources are barely present among the female farmers. This farm season (2017-2018), almost none of the informants will gain an income from their fields. The farmers are mainly self-sufficient and unbanked,

however they are highly interested in having access to formal financial services. They are aware of the benefits of having such access and perceive themselves as being financially poor.

Social capital relates to social resources which individuals rely on in order to sustain themselves, including norms and institutions. As the theory states, being part of an organization or network can positively or negatively influence livelihoods. Social constructs in society lead to women having limited decision-making power within households. Traditional gender roles are present, and women take care of the children and household chores, while men are principally in charge for providing an income. A majority of the female farmers interviewed said that decisions on financial matters are only made by the man within the household, and households are generally led by men. Female farmers in Zambia rarely participate in farming cooperatives. The data collected during fieldwork suggests that barriers exist for female farmers looking to join organizations due to social norms presents in local society. Although widowed and divorced female farmers do not fit to the traditional hierarchical household norms, which are mainly man-led, they seem to be more likely to sustain their households themselves, rather than join an organization.

Physical capital, or lack thereof, relates to a lack of infrastructure which leads people to spend time and effort on non-productive activities. This is particularly acute in the Mpanshya area. Infrastructure to provide market access for the female farmers is extremely minimal. Markets options within the community are free of transportation costs, excluding time costs, for the female farmers in Mpanshya, however are highly competitive and do not generally enhance the female farmers' ability to sell crops at a profit. Transportation costs for reaching major markets are very high, and harvesting small yields and the reliance on others for transportation make selling at a major market unfeasible for many. The female farmers are dependent on middle-man outside the Mpanshya area, who are often only interested in maize, and perhaps not interested in the less valuable crop types which woman generally produce.

Chapter 6: Conclusion

6.1 Research question and objectives

Agriculture plays an important role in Zambia, especially in view of existing challenges regarding widespread poverty, and the fact that the economy is predominantly agriculture-based. Growth in Zambia's agricultural economy is perceived as an effective strategy to reduce poverty by as stipulated in the 7th National Development Plan (IAPRI, 2016; CSPP, 2017). In line with the first Sustainable Development Goal, the plan focusses on protecting the poor and vulnerable including aiming to ensure equal rights to economic resources, access to basic services, ownership and control over land or other forms of poverty, for both men and women (7NDP, 2017). However, according to Djurfeldt et al. (2016) agricultural policies hardly contribute to the livelihoods of women. Women are less likely to obtain access to the provided government support, and socially constructed traditional gender roles make accessing other services more difficult.

This research used a multiple-case study approach for investigating the varying levels of capital that are present among small-scale female farmers in rural Zambia. The following research question has been answered with the use of expert and in-depth interviews:

To what extent do small-scale female farmers have assets to sustain their livelihoods?

The research is guided by the following research objectives: (i) verifying the conceptualisation of the Sustainable Livelihoods Approach, (ii) identifying the level of assets present among small-scale female farmers, (iii) investigating which asset is crucial for small-scale female farmers to sustain their livelihoods, and (iv) providing insights into power relations and social structure within households in order to measure the capacity of small-scale female farmers to obtain assets.

A variety of assets, as included in the Sustainable Livelihood Approach, are acknowledged throughout this study. (DIFID, 1999; Djurfeldt et al., 2018). The core of the Sustainable Livelihood Approach indicates several different types of assets represented as five forms of capital: human, natural, financial, social and physical. In brief, human capital comprises knowledge, skills and health of individuals. Natural capital consists of natural resources present such as land and water. Financial capital refers to financial resources such as income, savings and livestock. Social capital comprises the reliance and cooperation of individuals with others including networks and organisations. Lastly, physical capital includes basic infrastructure such as transportation. Each form of capital is interrelated. Individuals which possess a low level of assets are strongly reliant on external factors and therefore increasingly vulnerable for external shocks and (natural) hazards. The possession of a high level of assets contributes positively to the extent someone can sustain his or her livelihood (objective i).

In order to develop an understanding regarding the extent to which female farmers have assets to sustain their livelihoods, it is important to look beyond individual forms of capital. Each form of capital is interrelated with another form of capital, and the relationships between the capitals will be examined. Firstly, the level of **financial capital** among the small-scale female farmers is **very low**. Financial resources are hardly present among the female farmers, and this year, the women are not able to gain any profit from their farm yields. Furthermore, the female farmers in general face constraints for accessing financial support, which is closely related to the availability of social capital.

Access to financial resources is related to the social constructs within the society. In this regard, female farmers are limited in accessing financial institutions because they cannot travel in-and-out of town frequently without being negatively judged on their outgoing behaviour. As this study has demonstrated, traditional norms and gender roles are present within the community of female farmers. As a result, few female farmers have the ability to make financial decisions within their

households, and only one of the female farmers is part of a broader farming organization. Thus, it can be concluded that the social desire to be part of networks is very low. Despite this fact, the farmer who is part of a farming organisation will be able to sell some of her produce, which positively benefits her livelihood economically. Therefore, being part of a social network (in this case a farmer organisation), can contribute to someone gaining additional income. In brief, the level of **social capital** among the female farmers is **limited**, as they need to conform to the existing societal

standards which limit their ability to engage in the broader community and act independently. In the cases where women run a household without the presence of a man (spouse), despite not fitting into the social norm, these women seem to be satisfied with their way of living.

The level of social capital also influences the level of physical capital. Even though infrastructure is poor, the women additionally face social constraints to selling their surplus produce in major markets that are out of town. For example, as it relates to transportation costs, men can cooperate with others to lower these costs, however, women are often excluded in these efforts and have limited support. **Physical capital** is therefore especially **low** due to a lack of social resources.

The experts interviewed indicated a negative linkage between limited social capital and natural capital. While farmland is often owned by the entire family, the experts interviewed shared that despite this fact, the head of the household is generally in charge of the farmland, who is often a man. Therefore, it is assumed that women are consequently more dependent on men for obtaining natural resources. However, according to the data obtained from the small-scale female farmers, their access to natural resources is adequate. In this research the level of **natural capital** scores **sufficient**.

Finally, the level of **human capital** among the small-scale female farmers is **minimal**. Human capital is perceived as the basis to purchase other forms of capital, and is therefore important towards sustaining a livelihood. Minimal education can influence someone's livelihood negatively while good schooling can have positive effects. Knowledge gained during schooling is limited to primary education among the female farmers. Skills which the female farmers learned related to agriculture are mainly passed on by their parents. Informal social norms negatively influence the ability of female farmers to gain skills and knowledge. According to the research data, it can be assumed that the limited social capital of the female farmers influences their capacity to develop their education and skills representing human capital. Therefore, a close linkage between human capital and social capital is present.

However, there are potentially available opportunities to enhance farmers agricultural knowledge and skills. For example, the availability of human capital related to agricultural activities can minimize the need for extensive financial resources. In the context of Mpanshya, the lead farmer and the community farmer in Mpanshya both provide opportunities, without any costs, for nearby farmers to learn about organic agricultural methods. The cost of farming inputs such as fertilizers can be minimized by having knowledge about how to make organic manure. In general, education and skills contribute to reducing financial expenses, which can in turn help female farmers to adequately use their limited resources.

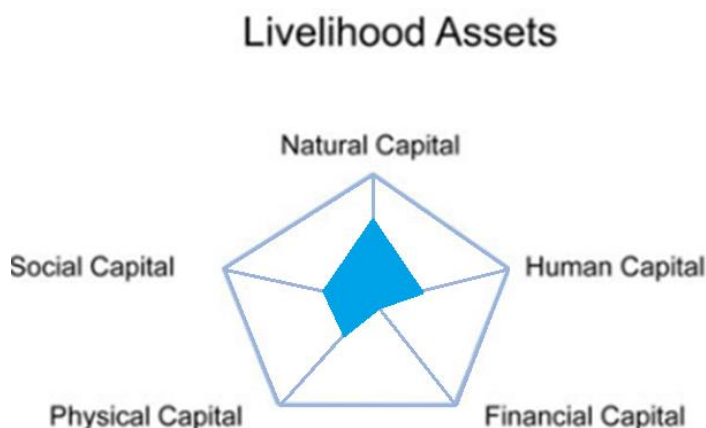


Figure 9: Indication of assets present according to the findings of the study.

Source: Author.

In conclusion, this research identified that the **overall level of assets** obtained by the small-scale female farmers in Mpanshya is **low** (see Figure 9). Social and human capital are both present at very low levels among the small-scale female farmers. These forms of capital are crucial to sustaining a livelihood, particularly due to their linkages to levels of financial capital and physical capital, and to a lesser extent natural capital. Based on this research as presented, the small-scale female farmers interviewed do not obtain high enough levels of assets in order to effectively sustain their livelihoods (objective ii).

The most important asset to enhance is social capital, for securing a sustainable livelihood, due to its positive influence on the four other forms of capital: human, financial, physical and natural. It is important to note that the lack of social capital showcases that small-scale female farmers capacity to obtain assets is limited. Increasing the level of human and social capital can help to overcome external shocks and increase the sustainability of the livelihoods of the small-scale female farmers. (objective iii).

The lack of social capital is mainly due to the presence of traditional power relations and social structures which come to the surface within the data conducted throughout the research. These findings are related with the theory that different members of the household obtain different social positioning and power relations (e.g. Yuval-Davis, 1997). Interestingly, women without the presence of their husband or spouse are more free to make their own decisions, and seem to have a greater access to assets. Djurfeldt et al. (2018) stress that an increased ownership of assets enhances women empowerment. The outcome of this research assumes that small-scale female farmers who run their households by themselves have great capacity to sustain their livelihoods. (objective iv).

6.2 Limitations and recommendations

Besides the limitations discussed in Chapter 3, several content related limitations were encountered during the research. While the research focuses on the five forms of capital of the SL Approach, the researcher acknowledges that other elements of the SL Approach, for example the vulnerability context of a household, could have been investigated. This research addresses only limited aspects of the SL Approach. For further research, it could be of interest to widen its scope, however, it could also be recommended to focus on one of the five forms of capital.

Additionally, despite the importance of the poverty alleviation debate and the food and nutrition security debate for the overall context, the research focuses only on the production side of food and excludes the consumption side. The decision was made to only focus on researching women's roles within the household, but does not focus in particular on health care and nutrition. However, these topics are closely linked to women's roles within households (i.e. CSPR, 2017) and could be of interest when researching the assets women obtain within households.

It is recommended that further research on this topic includes the participation of men. For example, men could be asked about their role within the household, and which difficulties and constraints they encounter due to traditional gender roles. It would also be interesting to ask informants what kind of support they expect from their counterparts, and on which household chores they work together.

Lastly, some unforeseen circumstances were encountered during the fieldwork. Originally, the researcher had aimed to investigate female farmers' access to the market. However, after arriving in Mpanshya, it became apparent that most of the farmers will not be able to sell any of their crops this season, due to a drought. Therefore, the main purposes of the research had to be adapted. Additionally, the researcher aimed to use the Life Story Theory, however, this turned out to be rather difficult in practice, partly due to working with a translator.

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Annexes

A) Ethical approval form

GUIDANCE NOTE: SUBMISSION OF ETHICAL APPROVAL FORMS (TAUGHT STUDENT)

A/ For the majority of cases for Taught Student projects the SREC expects that **supervisors/module leaders will have discussed with students the ethical implications of their particular research project well in advance of the project being undertaken**

B/ Where the module leader / dissertation supervisor is satisfied there are no potential issues that need to be brought to the SREC's attention for further discussion/clarification, **the only action required is for the form to be fully discussed agreed and signed WELL IN ADVANCE OF ANY FIELDWORK/INTERVIEWS ETC TAKING PLACE**

C/ The signed form should then be kept by the student to be appended to their final dissertation and submitted with it in the usual way

D/ **ONLY** those taught student forms for ethical approval **WHICH WARRANT FURTHER COMMITTEE DISCUSSION** should be submitted to the secretary of the School Ethics Committee (SREC) in both of the following 2 ways 2 weeks before the SREC is due to meet (a Schedule of meetings is available on the shared drive):

- a HARD COPY version sent to the SREC Secretary (Ruth Leo) BEARING RELEVANT STAFF AND/OR STUDENT SIGNATURES
- a version sent to the SREC Secretary BY EMAIL AS A WORD ATTACHMENT (to LeoR@cf.ac.uk)

PLEASE NOTE THAT **HANDWRITTEN FORMS ARE NOT ACCEPTABLE** BY THE COMMITTEE AND WILL BE

RETURNED TO YOU FOR ELECTRONIC COMPLETION

Finally please note also that your Supervisor/module leader (and potentially the Ethics Committee) must be notified immediately when the nature of the project proposed changes significantly from that originally approved

CARDIFF SCHOOL OF PLANNING AND GEOGRAPHY

Ethical Approval Form

Student Projects (Undergraduate & Taught Masters)

*This form must be completed and submitted to Evelyn Osborne email: **OsborneE1@cardiff.ac.uk** / Tel Ext: 76131 / Room 2.54 Glamorgan Building).*

*In the case of dissertations it is the responsibility of the student to submit the form, duly signed by their supervisor, and secure ethical approval **prior to any fieldwork commencing**.*

A copy of the signed form should be included by all students with their final dissertation.

Title of Project:

The perceived accessibility of small scale female farmers to the market. The case of Zambia.

Name of Student(s):

Shelley Bontje

Name of Supervisor/Module Leader:

Oleg Golubchikov

Degree Programme and Level:

MSc European Spatial Planning and Environmental policy

Date:

7-3-2018

| Recruitment Procedures: | | Yes | No | N/A |
|--------------------------------|--|------------|-----------|------------|
| 1 | Does your project include children under 16 years of age? | | X | |
| 2 | Have you read the Child Protection Procedures below? | | | X |
| 3 | Does your project include people with learning or communication difficulties? | | x | |
| 4 | Does your project include people in custody? | | X | |
| 5 | Is your project likely to include people involved in illegal activities? | | X | |
| 6 | Does your project involve people belonging to a vulnerable group, other than those listed above? | | X | |
| 7 | Does your project include people who are, or are likely to become your clients or clients of the department in which you work? | | X | |
| 8 | Does your project include people for whom English / Welsh is not their first language? | X | | |

*** Cardiff University's Child Protection Procedures:**

<http://www.cardiff.ac.uk/govrn/cocom/resources/2010%20November%20Safeguarding%20Children%20&%20VA's.doc>

If you have answered 'yes' to any of the above questions your supervisor will need to explain how you will deal with these ethical issues.

| Data Protection: | | Yes | No | N/A |
|-------------------------|---|------------|-----------|------------|
| 9 | Will you tell participants that their participation is voluntary? | X | | |
| 10 | Will you obtain written consent for participation? If "No" please explain how you will be getting informed consent. | | X | |
| 11 | If the research is observational, will you ask participants for their consent to being observed? | X | | |
| 12 | Will you tell participants that they may withdraw from the research at any time and for any reasons? | X | | |
| 13 | Will you give potential participants a significant period of time to consider participation? | X | | |

If you have answered 'no' to any of the above questions your supervisor will need to explain how you will deal with these ethical issues.

| Possible Harm to Participants: | | Yes | No | N/A |
|---------------------------------------|---|------------|-----------|------------|
| 14 | Is there any realistic risk of any participants experiencing either physical or psychological distress or discomfort? | | X | |
| 15 | Is there any realistic risk of any participants experiencing a detriment to their interests as a result of participation? | | X | |

If you have answered 'yes' to any of the above questions your supervisor will need to explain how you will deal with these ethical issues.

| Data Protection: | | Yes | No | N/A |
|-------------------------|--|------------|-----------|------------|
| 16 | Will any non-anonymised and/or personalised data be generated and/or stored? | | X | |
| 17 | Will you have access to documents containing sensitive ⁵ data about living individuals? | | X | |
| | If "Yes" will you gain the consent of the individuals concerned? | | | |

If there are any other potential ethical issues that you think the Committee should consider please explain them to your supervisor. It is your obligation to bring to the attention of the Committee any ethical issues not covered on this form.

⁵ Sensitive data are *inter alia* data that relates to racial or ethnic origin, political opinions, religious beliefs, trade union membership, physical or mental health, sexual life, actual and alleged offences.

| | |
|---|----------|
| Health and Safety: | |
| Does the research meet the requirements of the University's Health & Safety policies? | Yes |
| http://www.cf.ac.uk/osheu/index.html | <u>X</u> |

| Prevent Duty: | | Yes | No | N/A |
|----------------------|--|-----|----|-----|
| 20 | Has due regard been given to the "Prevent Duty" in particular to prevent anyone being drawn into terrorism https://www.gov.uk/government/uploads/system/uploads/attachment_data/file/445916/Prevent_Duty_Guidance_For_Higher_Education_England_Wales_.pdf http://www.cardiff.ac.uk/public-information/policies-and-procedures/freedom-of-speech | X | | |

Any changes to the nature of the project that result in the project being significantly different to that originally approved by the committee must be communicated to the Ethics Committee immediately.

Supervisor's declaration

1/ As the supervisor/module leaders, I confirm that any ethical issues arising from this student project were discussed in advance with participating students (please indicate how here)

2/ As the supervisor/module leader (*please delete as necessary*) for this student project, I confirm that I believe that all research ethical issues have been dealt with in accordance with University policy and the research ethics guidelines of the relevant professional organisation.

Date 12/3/2018 Name Oleg Golubchikov Signature

Oleg Golubchikov

If any of the shaded boxes have been ticked the supervisor/module leader must explain below how the potential ethical issue will be handled:

8) The research will be taken place in Zambia. Although English is the national language of Zambia the possibility exists that I will get in contact with some people who speak the local language.

10) Taken in consideration that perhaps not all the interviewees speak English or can read a written consent is not an added value. In case if people don't speak English I will work with a translator. Additionally, taking in consideration that perhaps some can't read I will make sure there is an oral consent made.

B) Declaration page (CU)

| | |
|-----------------------------------|---------------------------------------|
| CANDIDATE'S ID NUMBER | 1673996 |
| CANDIDATE'S SURNAME | Please circle appropriate value Ms |
| CANDIDATE'S FULL FORENAMES | Shelley |

DECLARATION

This work has not previously been accepted in substance for any degree and is not concurrently submitted in candidature for any degree.

Signed 

Date 15 June 2018

STATEMENT 1

This dissertation is being submitted in partial fulfillment of the requirements for the degree of MSc European Spatial Planning and Environmental Policy.

Signed 

Date 15 June 2018

STATEMENT 2

This dissertation is the result of my own independent work/investigation, except where otherwise stated. Other sources are acknowledged by footnotes giving explicit references. A Bibliography is appended.

Signed 

Date 15 June 2018

STATEMENT 3 – TO BE COMPLETED WHERE THE SECOND COPY OF THE DISSERTATION IS SUBMITTED IN AN APPROVED ELECTRONIC FORMAT

I confirm that the electronic copy is identical to the bound copy of the dissertation

Signed 

Date 15 June 2018

STATEMENT 4

I hereby give consent for my dissertation, if accepted, to be available for photocopying and for inter-library loan, and for the title and summary to be made available to outside organisations.

Signed 

Date 15 June 2018

STATEMENT 5 - BAR ON ACCESS APPROVED

I hereby give consent for my dissertation, if accepted, to be available for photocopying and for inter-library loans **after expiry of a bar on access approved by the Graduate Development Committee.**

Signed 

Date 15 June 2018

C) Expert interviews interview guide

Interview items based on Sustainable Livelihood Approach

| Asset | Item |
|--------------------------|---|
| Human capital | <ul style="list-style-type: none"> - Skills - Knowledge - Education - Illiteracy - Health - Domestic chores - Division of time - Provision of market information |
| Natural capital | <ul style="list-style-type: none"> - Natural resources - Land ownership - Land rights - Land fertility - Cash crops vs food crops |
| Financial capital | <ul style="list-style-type: none"> - Savings - Credit - Loans - Payed labour - Non-farm income - Coping strategies for financial risks |
| Social capital | <ul style="list-style-type: none"> - Networks - Social relations (within households) - Normative roles - Duties - Responsibilities - Part of association/cooperative - Gender equality |
| Physical capital | <ul style="list-style-type: none"> - Infrastructure - Equipment - Distance to market - Physical access - Transportation costs - Storage facilities |

D) Expert interview transcripts

Gender specialist WfC

Gender specialist
Organisation: Women for Change
Address: Plot 1801 Nchenja Road, Northmead
P.O. Box 33102
Lusaka – Zambia
Office: +260 953 529951
web: www.wfc.org.zm
Date of interview: 3th of April 2018

Brief introduction of interviewer incl. aligned universities, dissertation research, internship Hivos.

Interviewee: "I studied in The Hague at the ISS institute."

Interviewer: "I actually live not further away from it than two minutes."

Both of the women need to laugh about the coincidence.

Interviewer: "Did you enjoy studying there? How long ago was it?"

Interviewee: "Almost like 10 years ago."

Interviewer: "So I try to combine my interests in agriculture and gender in once."

Interviewee: "That is my combination as well, agriculture/gender."

Interviewer: "So I still have a lot to learn and that is way I connected you."

Interviewee: "So I am XXX, I have been working as the executive director here since 2015. But before that I also used to work here, for 12 years, than I went and then I came back. WFC is a gender focused organisation so we try to do so many things. But our many mission is to build to capacities of rural communities especially for women and girls to achieve sustainable development. So that they are able stand on their own they are able to do their own advocacy they are able to claim their own rights. And the women in rural areas depend on agriculture, most of them actually are farmers. They are engaged in different types of agriculture mainly farming, different crops, maize, groundnuts, so at one time as WFC we used to train them a lot, so that they are able to increase their productivity and also to address gender issues in agriculture, we are trying to look at the value chain where are the woman what challenges are they facing when it comes to accessing inputs, production level, processing, marketing etc. train them in advocacy because as WFC we do not speak on behave of the women, but we train them so that they are able to have a voice. So when you have a voice how can they, that voice together so as WFC we mobilize them, mobilize them into groups which are more like cooperatives, some of them have transformed themselves in cooperatives, for collective action, because you know as individual you can't do much but as groups there is better cohesion, better understanding of the issues that affect them and a bigger voice for them to make their claim for the duty barriers." "So since the past years, so WFC has been in existence since 1992, that is when we came registered, so since 1992, we have built the capacity over 1000 groups, and this 1000 group there are smaller group of membership of 30-35 people including men, we encourage women and men to work together, so WFC is gender based organisation. We encourage them to come together and then this groups, they also organise themselves to a higher level, who is there representative from each group, 10-20 groups become an area organisation so WFC starts now also to work together with these area associations to training them on various issues so that they are able to go back and train there groups in various issues. So we use participatory education methodology which entails that you have to start where the people are to organise them allow them to identify there issues and challenges and it is the people themselves that come up with solution and WFC just facilitates the process so that is our approach. Our thematic areas is gender analysis, we do a lot of gender analysis, addressing a lot of barriers that women face, both women and men."

Interviewer: "And what are in particular difficulties which women face? What are the main differences..."

Interviewee: "Between women and men? When it comes to participation, women in families have no voice, most of them actually belong to traditional cooperatives, in agriculture, but you find that women have no voice when it comes to leadership, leadership goes to the men, they are the one that talk, women are marginal, they are not there, they are there but their voices are not heard, their issues are not heard. So as woman for change we do a lot of gender analysis, analysis why is it why woman are not there what are the challenges which they are facing? Even in this groups at first, women in most cases lack the confidence, because of our culture we are socialized, growing up like girls are told you are not supposed to do this and that, but sit in the background and watch the men do things for you, so even when organising you find that the women are not there, they are there, but their voices are not heard so we analyse such things, and yes, all these groups, it is the policy of WFC to ensure that they are women led."

Interviewer: "So although men are included within the group..."

Interviewee: "So they have to be woman led and at first there was a lot of resistance, men where the first ones to resists. Woman cannot lead, they are not educated, they won't be able to organise, but this our policy we cannot work with a group where a men is the leader, we work where a women is the leader, although she is not educated, she never been to school it doesn't mean that she cannot make a good leader they have the knowledge they have the skills the skills can be in patterned on them, they can be grown so that they become good leaders so we do a lot of leadership training, so that the women can

do these groups. So leadership, women participation is one of the issues, and the other issue is that stops women for participating is that women workload. We find that women just do not have the time to participate in most of these community programs it can be at community level or at governmental level because there, there is a heavy burden when it comes to the care economy, where women are the once to be expected to look out the family, cooking, what kind of, food, eating, it is the women that help to decide, so we find that in the end they don't have time to really participate, so we bring together women and men and then we analyse why is it that women don't have time and then they say it is because of the workload, they have to cook for the children, they have to take care of the sick, they have to be involved in agriculture, so there is usually a lot of discussion around this, and in the end it takes time but we find that women, bit by bit they start participating and the men take up some of the responsibilities, and then the same women's workload also has implications on their productivity, because they have to work at home, they have to work in the field, they have to work on the community, so even when they have a field of maize, it won't do as well as a field that belongs to a man because a man will have all his time to maintain, for those crops, but the women if she has her own field she won't have the time maybe she doesn't have money to employ other people so that field will go to waste, however, she will be working there every day but nothing much will come off, because there is not so much going in. Because they are moving everywhere and the time factor doesn't work on their side because of being involved in the care, economy, productive, community, they are the once that are looking of the sick's in hospitals, so we find that issues of productivity and where they are supposed to participate."

"issues to access to land is another issues, in the rural areas woman may have access to land, especially those who are not married. They usually given land, but it is not theirs, they cannot control it, even the married women they access land through their husband, but they won't control it, it is not theirs, to decide how to use that land."

Interviewer: "They can use it..."

Interviewee: "They can use it but they won't decide. The following year they want to plant there I want to use it this land, because she planted groundnuts and the groundnuts have regenerated the land, re-oxygen the land, the men now once to plant another crop, probably maize, so she needs to move to another, so she is given another fatigue land, or land that is not really good for anything, but she will work hard that she grows something there, but the next year, no no no no, she needs to move to another so they are just used to clear the lands."

Interviewer: "And that is also connected than, to leadership or having the power to say..."

Interviewee: "Yes because they will not have the power to say, to control the land is not theirs."

Interviewer: "And how does it work when, within a household, when you do have a man and a woman, do they work together on their land? Or is that not the case?"

Interviewee: "Yes they work together, on family land. Like, the man is the head of the family, so everybody on that household works on one field, which is controlled by the man, But the woman, they won't get any benefits of most cases, when it comes to the cash the man decides I will give you this."

Interviewer: "So they work on the family land and the earnings that come from the land..."

Interviewee: "Are not enough for the woman, that is way the opt to have a small field for themselves which doesn't do well because they spend most of their time on the family land/farm. Where they not get anything. So as WFC in our analysis for encouraging couples to work together so there are more benefits for working together as a household as a couple. Ensuring that woman, man and children everyone benefits from whatever comes out of that. And such families tend to be more successful than where the husband is controlling everything and the wife is not getting anything."

Interviewer: "Yes it is a big change indeed comparing the historical way of running a household, I am wonder if you could perhaps elaborate something on that, the income earned on the family land, who brings this to the market? Are that the farmers self or is there a middle man in between, how do they eventually earn money with their crops?"

Interviewee: "In the rural areas, because most of them is for subsistence, they just grow and have enough to eat, although they sell some, what is sold is not enough to involve a middle person. Other farmers around, especially those close to the urban centres, that is where you find the middle person, the agents to sell for them, and bring their products to Lusaka, they don't sell their products directly, but there are some, there are different kind of farmers, other people sell on their behalf, others just sell in their community there are people who come to buy."

Interviewer: "So it is a matter if households can grow enough crops, if they even can make an economic benefits out of it. And then I was wondering if, when income earned, most of the time the man hold control of the woman so he is in charge of.. oke."

Interviewee: "Actually, they, it works in this way, the man will actually go and sell and gives the money to the wife to keep. But she won't have control to use it the way she wants it. She is more of a bank, because they know that women are disciplined to keep the money, but the man will ask everyday may I have something? Every day it will be him asking the woman she can't say know."

Interviewer: "So actually they are semi in control, but they don't decide"

Interviewee: "Yes they don't decide, the man decide."

Interviewer: "And then increasing their voice, increasing their leadership do you think that it will also..."

Interviewee: "So that is why we train in leadership, we bring the couples together, we train them, to how to work together. Our motto is how to encourage woman and man to work together as equal partners, as a female to advance, you need to work together, you need to plan together, planning should not be by one person, because women have a lot of knowledge,

but you find, certain men they won't listen to their wives, they are just doing it, but if a women say it might could be this way, and a men acknowledges this, than they are able to work together, in most cases such families are successful."

Interviewer: "You also have data on that? That it is more successful to work together?"

Interviewee: "YES I can share some, reports, some baseline, especially around nutrition, there is a project which we implemented in Mumba, Mumba district, where there was heavy involvement of men in nutrition, normally when it comes to nutrition issues we find that women are left alone, to take care of babies and so on, so this project tried to ensure that men become involved in nutrition, in agriculture, nutrition, for the benefit of the family to work together, so they were talking to the men to get involved. So, yea we can share some reports."

Interviewer: "Additionally, I am interested in, I feel like it is a very big change where you are advocating for to change the traditional set up of rural communities..."

Interviewee: "Yes, it takes a bit of time, because we have been working with this communities, some for a long periods, 5 or 6 years, yea. There are changes, because of our methodology, where we don't go there to say you are the problem, we let them identify what problem they are seeing, what is the issue, without pointing to men that they are not helping, on their own they realize what happens, you know men are not involved when we start working together, if we are not working together there will be more poverty, suffering, so they will be able to see it from the positive sight. So the methodology that we use the participatory methodology, and also the gender analysis which focusses on the issue other than the people as a problem, so the issue is about the culture is about the socialization is about the norms, what kind of beliefs do we have around women and men, so in that way people are more willing to change. Other than to say, men are the problem, they will resist more."

Interviewer: "And also it makes me think about if you change something which is traditional the way how it is you also can get conflicts within, or between men and women kind of, because it get kind of..."

Interviewee: "Yes then you get, they become more prone to gender based violence, what are you trying to show off, instead of solving a problem you introduce a new problem, because women are trained, become more confident, you know, then they become more, they start resisting even to listen to their husbands, so that is not gender, what we want is women and men to sit together and plan together, having a dialogue as equal partners, as a women you still have the responsibility to respect your partner, he is the head of the household you know. So, we don't cause more conflict, yea, because now women are empowered, so I can make decisions, but decisions have to be made together, you still have to allow someone to lead, and you can also lead from behind, you know, you can advise, you can push a lot of things, you can make decisions together, and not women who say I can do this..."

Interviewer: "Yes because then you have an encounter effect kind of..."

Interviewee: "So that is why we take the approach of having a dialogue, looking at the power, what kind of power do we have, who has power over, power within, what kind of power is helpful for the family, but you know, the power we have is needed to do something together, than power over something/somebody. They actually go to different types of leadership/training, just to understand who is the leader, you don't have to be the head to be a leader, everyone can lead, without being the head. It is about the ideas, you know, solving the problems together that is all about leadership, because leadership is not about a leader is about a process."

Interviewer: "Thanks a lot for sharing so much of your insights, let me think for a moment if there is something else to ask you, or perhaps you have something else to share, but for me this already clarifies a lot... I might had a question about, I saw on your webpage that you indeed strive for sustainable human development, and I was a bit curious, what you actually consider as being sustainable?"

Interviewee: "For as what we consider as sustainable is people take development in there hand, and they are able to find local solutions, also focussing on the assets that they have. Because..."

Interviewer: "The assets that they have?"

Interviewee: "Yes the assets, yes what kind of assets do they have that is the other approach that we use. Starting from what people are and what do they have. That enables them to going through life, other than the focus on the problems, but they have to solutions for the problems, so we focus on what do they have. What do they have, as an community to sustain themselves, we have people to do the work, we have the skills, we can wave baskets we can fish, you know, we have a lot of land, we can do these kind of things. So we are focussing on what people have. And also issues of having group solidarity, you work but they are not organised, you don't even know who is there, once you are done with your project, or whatever it is, it gets disembarked. But for use the groups are there, even when WFC leads, among these 1000 groups, we are no longer with most of them, we mainly work still with 100 out of 1000. But most of those groups, let's say 800 groups, ⅔, they are still there, they still exist, some of these have even registered themselves as community based organisations and link themselves to other organisations so that they can access some kind of support."

Interviewer: "And they still know that you are here right?"

Interviewee: "Yes they still acknowledge like, there are area organisations which are linked to the non-governmental council organisation, an NGO is a membership organisation, have you been there?"

Interviewer: "No"

Interviewee: "It is an organisation addressing gender..."

Interviewer: "How is it called again, than I will write it down to make sure."

Interviewee: "Non-governmental organisations council is an umbrella organisational body for women, even WFC is a member..."

Interviewer: "So it is actually an organisation that brings, combines, everyone together as well."

Interviewee: "So it has about 100 members, so out of these 100 members, we can say that 30 of these came from the WFC groups."

Interviewer: "So that is something to be proud of right?"

Interviewee: "Yea for sure, they evolved from WFC, they are a community based organisation. They are able to access our kind of training there, you know, they also sit on the board, we had members of WFC area organisations that sit at the national level on these boards."

Interviewer: "That is good to hear, and if you talk about what kind of assets do people have in a rural community, do you, what are the main differences of assets between men and women?"

Interviewee: "Of course men have, own a lot of productive assets."

Interviewer: "So more the commercial ones?"

Interviewee: "Yes the commercial things that they want to use like they own cattle, you know animals for ploughing, you know, they own the plough, they own the irrigation equipment, you know, such kind of assets, but for the women, they own the chickens, the goats, nowadays even the goats are owned by the men, but in most cases, women own the chickens blablabla, small animals, and, so we do train them. Like what kind of assets should you be looking at. Because women like to buy all these pots women like to put them on display, a lot of plates, you know, but what are they going to do for you? It is better you save and buy something that will help you to increase your productivity. Than you can buy those plates later, because you don't need 100 plates, you are only a family of 10 so you don't need all those plates. Why do you need all those plates, pots, for them that is competition, you see what I mean..."

Interviewer: "So that is also a social thing, between the woman then..."

Interviewee: "Yeah, yea to have a lot of pots, when there is something in the community, that women have a lot of plates.. but they have the money, but it is how they invest their money, they want to invest in care, in the jobs that they do. So, we try to, you know, analyse that, so this money you could actually buy a watering can, which can help you with watering your garden, or you can even, buy a pump, you know, pumps are not very expensive, it is around 500 kwacha (+/- 50 euro, conversion rate 3/4/18) some of these plates and pots are even more expensive."

Interviewer: "But then it is perhaps also the difference between the traditional way of uh, yea, investing in the social and caring side and the more economical sense of gaining more income and so on."

Interviewee: "So the men, they save for their seeds, so next time they can plant a bigger field, so men are more business-like, but women are more into the social kind, they want to invest in social things, so we are trying to change that. So we have women that have done really well, as a result of these trainings, if you have time you could have the chance to see those women, that are trained in seed multiplication. And now they are reselling in the community, now they even want to sell like a real company. So now being like a group they have even become, they have reached, that they are a cooperative, but they want to transform in a company, in the international, because their seed is good, and they are able to show case. And they have the support of the government, you know, they are working with the government, they are doing research with them, so they have seeds, soya beans, groundnuts, maize and they are growing bigger fields and making money, they are investing, they are transforming their lives, you know, better houses for themselves, they are sending their children to school, so those are very good examples, when you train a woman, they can change things, even their husbands are happier now, they almost wanted to leave and now their husbands are stuck with them, because they love money. Because the woman is making more money."

Interviewer: "I think this is it from my side, because you shared a lot of interesting facts. As well it is interesting to hear a lot about what WFC is doing. Because it is a Zambian organisation right from origin?"

Interviewee: "Yes we are born out of a Canadian NGO, CUSO so they had women empowerment programs around the country, but around 1992, because of the change of wind politically, we were transitioning from one party state to a multi-party state they decided to leave Zambia and close all the projects in Zambia. So the few people that decided to stay, the few Zambian women they come together, and this program it is good, it is empowering, and that time they were mainly focussing on income generating activities, basket weaving, growing ground nuts, so that is how WFC was formed. And one of the results is that woman were not benefiting much of the income generating activities."

Interviewer: "They were not benefiting a lot?"

Interviewee: "They were not, every woman focussed organisation where just focussing on the women. So we said it is better, yes ok women can be used as entry point but let's bring in the men. And also start working with the men to change the structure causes of inequality, we need to focus on both women and men and that is how WFC originated."

Interviewer: "That is interesting that you have learned from what you are doing right, it is important to reflect on the process which you are doing. I had some preparation for the interview but it is for so far already covered."

Nutrition and health specialist

Nutrition and health specialist (+10 years experience)

Organisation: Independent consultant

Address: Lusaka-Zambia

Date of interview: 4th of April 2018

Brief introduction of interviewer incl. aligned universities, dissertation research, internship Hivos.

Interviewee: "For me I have been living and working here since the last 10 years, I first came here for my internship as well, for the national food and nutrition commission, because I studied in Wageningen. So, then I went to Mali for three years, ICRISAT. I used to work for Concern Worldwide but they are closing, so I used this opportunity to start for myself. So far so good. I have been mainly focussing on nutrition, but also on agriculture and of course gender is part of it and, yea. That is a bit of my background."

Interviewer: "I think it is pretty exciting going here for an internship ending up staying. So, are you also in particular working with households in the rural areas? Do you have any view or opinion the differences within households concerning agriculture? Concerning gender..."

Interviewee: "You mean between the men and the women? So I think in general men are normally the once that are, not in all areas but normally this is the case, but you surely need to check in the specific area you are going to do research in, but normally you have a family field which is owned by the husband and then you have the wife helping on that field but often it is in control of the husband. So the husband has the largest say on what to grow on it, what to do with the harvest, how much to sell and also what to do with the income. So it is indeed a family field but it is really the husband normally who is in control."

Interviewer: "And that is on average, depending in Zambia where you go to, the case."

Interviewee: "Yes indeed, and then it is often that the wife is given a small piece of land, but you find often it is not even the best piece of land, they first have the family field where they need to work first, but if they have time in addition you can go to your own field and there she can do what she wants to do, and she has all the ownership and control over this piece of land. But normally, in general it is the husband who is leading the family field but they work together. It is a bit difficult, I can't say that the husbands do less or more but often the husbands are there to do the hard work but the women also do a lot of work within the fields often even more than the husband, so it is really that."

"And then when we are talking from a nutritional perspective, that is my main interest, the husband is more focussed on maize, of course because you can eat it but it is also one of the, it is seen as a cash crop as well, and there is always a market for it because they sell it to the Food Reserve Agency, the FRA, there are often issues with price and payments, but whatever, you always know that you can sell your maize."

Interviewer: "Because that is the only crop that you can sell via this system?"

Interviewee: "And then often cotton is also a good cash crop, in some areas Tabaco, but I am not sure if that is also in the Rufunsa area, mainly in the west and in the east, but you can find them even Agricultural Extensions Officers work more with these crops, the men with the bigger crops, so what we really try to do is let the Agricultural Extensions Officers work more with the women. Because the women are a little bit excluded because already they work with different crops As an example groundnuts something what women grow, not necessarily grown by men, like cow peas, there a crops which are really female, from a traditional perspective kind of, you find that woman grow different things and decide differently. For sure if you have a women and a husband and ask them what shall we do with this family field they would give you different ideas. And our essential work is that we try to train them, to work also more on other crops like the traditional vegetables, the cow peas, different types of beans, because those are the vegetables which do not get much attention, so that are the things which provide nutrition, because maize doesn't really provide you with any nutrition and even the money that comes from it will often be controlled by the husband, and although there is a lot of literature that if the money is controlled by the wife it is more likely to go to health and nutrition so because there is a link between if a household has more income it has less malnutrition but only if the income is controlled the women and not via the husband."

Interviewer: "So if the income increases but the ownership of the income is at the husband it will not necessarily increase nutrition. And do you have any ideas why do women does not have control over income?"

Interviewee: "My child of 5 years recently came home with a test, and one of the first questions of this test was the question 'who is the head of the household?' he could choose between father, mothers our children, and the correct answer was father. So already at the age of 5, at schools they get told that that the head of the household is the father. So I was asking my older son, who is 8 years old, I was just asking him the question, because I remember he also got it at school, he straight answered 'father', so already from that perspective, I said and 'what about me?' – laughing – so it is really, if already at primary school they teach that the father is the head of the household. I mean what does that mean for me? And then yesterday I was on FB, it was a message from the minister of health, he wrote something about the importance of traditional vegetables it started with since 'you cannot start early enough' with the basic education, basic training for girls, with the work in the kitchen' something like that and I was even showing to my husband, asking if he agrees with this, and he said there is nothing from with it. It is only you who comes from a different perspective how finds it is offensive, you know why is it girls need to be working in the kitchen and that they are whatever, but there is nothing wrong with it and even I was just browsing through the comments like maybe people would say something about it, but it were all comments like 'very well said' so

maybe it was because it is the minister and they will never say something about it that it is wrong but when I was reading it, the minister of health, so I mean it is really those gender roles are really strong, fathers are the head of the household, girls work in the kitchen, but even I thought once there was a question what are girls supposed to do, asked at school, at home the answer was sweeping, I think that is also one of the test questions I have seen, sometime ago, so from an early age, this is how it is, so even when I talked to my son who is 8 he wasn't questioning it, it is the father who is the head of the house, so already it is really difficult to change that."

Interviewee: "But then also in your work, because with your work you also focus on woman with nutrition, what kind of programs do you do..."

Interviewee: "So with the concern we used to do gender training, so then we talked about the different sex roles, this are the roles that the husband to, these are the roles that women do, and then you start discussing, you know whether there is any overlap our that the husband can take over one of the jobs of the women, such things you are trying to address, to open up the discussion, and you see that it really helps, you find men that start helping women with their vegetables garden for an example, our are helping with a goat house where you can keep within the home nearby, so that you have the goat etc. and stuff like that. It helps I think but it is not something that is easy and changing a cultural or society, or whatever something, you can't do it in one day, it really has a lot of, it takes long, and it needs a lot of deliberate training. But even, at schools as an example, they can still try to teach, that the father is the head of the household so that means that you almost need to work on all levels, do you see what I mean?"

Interviewer: "So, yes it is hard to change. And I am wondering would you say that the head of the household also means, 1:1, that person controls the income of the household?"

Interviewee: "Yes, by no doubt."

Interviewer: "And as an example when women do earn income/money from their own plot..."

Interviewee: "Yes then they can do whatever they want with it, because it is their own..."

Interviewer: "So if they earn something from that plot, and they are able to sell it then it is their income."

Interviewee: "I can share with you some baselines studies which we did in Momba, and the end line studies, where we asked some questions about control over assets and control over decision making. And of course it is not a national survey but at least it will give you some idea."

Interviewer: "Yes and then in particular, the asset of having more income, increases this also results in better nutrition? Or more money..."

Interviewee: "Although that, you can't make this connection."

Interviewer: "And another question which I am interested in, when you start empowering women maybe by giving them a bigger voice towards there men, to you see any conflicts within the household rising? Because indeed it is a very traditional way of working together, and if you want to change that, although it is throughout all layers of society, how does that go?"

Interviewee: "I don't know about that, but I guess it depends on how the husband has been involved, but not everyone likes to see their wife being empowered, some people do apicate it when the women is empowered and that it actually has a positive impact on myself as well, a positive impact, but I don't know if everyone sees that, maybe they see when the wife is empowered they my leave me or she becomes bossy. But I don't know about that."

Interviewer: "So you did not encounter that in your work or..."

Interviewee: "No.. but I do think it happens. But I am just not aware of it."

Interviewer: "As you already mentioned different crops are cultivated by men or women, there is a division on that, between cash crops and food crops, do you see any other differences? Land, or others? Knowledge? Tools?"

Interviewee: "Yes I think for the tools as an example when you have a ripper or a plough, the husbands will use them first for the main land and if there is still time remaining they can use it for the wife's plot, but normally it is the family field that will be prioritized. And, the same for time, first working on the main field and when there is time remaining than they work on the other field, and also even the quality sometimes, the wife's plot will not be the most fertile piece, so even as you recon there is a number of conservation agriculture, to my knowledge the Grassroot Trust works in particular on that, it means that if you do that you have to use the same plot every year, because it only makes sense if you have done it for a few years because you increases the fertility of your soil, so if you don't have a piece of land that will be kept for you, you don't really have an incentive to implement the conservation approach. And then what is interesting with the conservation method, they always promote intercropping, so maize with ground nuts or with beans, and that of course will also really help because than you will have the husband also to grow also these more nutrients crops."

Interviewer: "So you are a big fan of promoting that as well?"

Interviewee: "Yes for sure."

Interviewer: "And then the family plots they will stay the same for years? And the women plots might change during time? Because you said that if you implement conservative agriculture it only makes sense if that land will stay your land in the nearby future as well?"

Interviewee: "Yes for a longer time, because it might take between 2 or 3 years before you are able see the effects. Although, I am not sure if the plots over years, it is more deciding what is going to be cultivated which year."

Interviewer: "And do you know anything about the differences between men/women accessing the market?"

Interviewee: "I think for markets, Rufunsa is a little bit close to Lusaka, so maybe it is a bit different there I am not really sure,

but in many areas where we have been working the town is far. It can even with a vehicle take you more than two hours if you have to take public transport, maybe it is only once a week, and then it is expensive, for women to really access the market is really difficult, because they are often also not so free to move or whatsoever plus you also need to have a good harvest otherwise it is not worth it to sell, you are kind of depending on whatever you can sell within your community or what you can preserve, that is also where we train the women in, there are ways to make it a bit more effective as an example the drying process. And at least during the dry season they will have access to vegetables, which makes more sense try to sell it because it is difficult and also if you dry the vegetables, whenever they are having access [to the market] it is easier to sell because you don't have to sell in two days, because otherwise it is going bad, if you dry them you can hold it for a longer time."

Interviewer: "So that is actually investing in the products which you have, also for the family itself for having enough food in the future, but also the opportunities to sell it on the market increases."

Interviewee: "So what we did in Mumba, we are trying to find ways to allocate the surplus and making linkages with the market. So I think they have made linkages with, with the Soweto market, the big market here in town, and also with the, a private company which is just collecting groundnuts, for peanut butter, so if you have at least have all these small little bits and help them to allocate their surplus, then it was large enough for transport, our making the company come, now at least I can go with a truck."

Interviewer: "As an additional question, do you feel like in these small villages do they cooperate together?"

Interviewee: "I think they are very willing to cooperate together, to do so, but sometimes it may need a bit of coordination, and for it you are in need of kind of a leader, someone who says I am going to this and I am going to organize everyone, so I am not sure, how often it really works on their own or how often you need to create these linkages externally."

Interviewer: "Because it might make sense that if it is a two hours' drive to sell some of your products, so maybe if you combine it with others..."

Interviewee: "And then the other thing is because you are talking a lot about the output market but you also need to think about the input market, what they usually do is they save some of the seeds, but after some years the quality reduces because you need to have fresh seeds and proper seeds in order to have a better harvest, as an example for beans, they will just buy some beans on the market, which you normally cook and that is what they plant, and to really get bean seeds is not even very easy in Zambia. So it is access to the inputs which is not very easy."

Interviewer: "And do you think there is a difference between men and women? Or depending perhaps on crops? Because you give beans as an example."

Interviewee: "Oké men, it would be interesting, I am sure you will be able to get some data on that from IAPRI, you have the Farmer Input Support Program the FISP, which was used to get maize seeds and fertilizer, but now they have changed it to the e-voucher system, so you can get an e-voucher and you can select the inputs which you want, but you always have to pay so it is not really like a social protection program, it is really for those farmers which already have a little bit of up there, because I think you need to pay around 400 kwacha (+/- 40 euro (conversion rate 4/4/18)) and then they receive more input, so they top up kind of, so you need to pay 400 and then the government give 1600, so it becomes around 2000 kwacha or something like that, as a start amount, but you need to be part of an cooperative, so there are already a few barriers for woman, to access the e-voucher system, have you been talking to IAPRI already? It would be nice to talk to them, and ask if there are any barriers for woman to enter the program by the fact that they need to provide income, for the contribution and the fact that they need to be part of an cooperative. But they have also published a lot of papers so I think if you go to their website, you will find a lot of interesting things."

Interviewer: "Yes thanks for the advice, I have indeed seen a couple of things of them, all very recent data which is very useful."

Interviewee: "Yes they truly focus on research."

Interviewer: "I am also wondering do you feel like women are interested in becoming more commercially?"

Interviewee: "Yes I think so, we had our first RAIN project, Realigning Agriculture to Improve Nutrition, and then the results were quite disappointing I think, because there was a big impact evaluation done by IFPRI and it was really a flagship program but in the control area we saw similar changes. So after that we did the RAIN+ so it was a similar project, a similar set up, but we did added a marketing component, because we realized that one of the disincentives of not producing nutritious foods is not being able to sell them on markets. So we really felt like farmers need to have an incentive to produce it and some for consumption and some for selling, when it is only for feeding the family that is not enough of an incentive, if we say grow this because there is a good market for it, because you will sell, then they will grow it, and then at least, you still have to check of course but they will at least have some for home consumption and some they can sell so we really felt like that access to market is really important and the, I talked to, I felt like people are really into it when you include the market component. So I think access to market is really important for woman as well they are more likely to grow things if they at least get a bit of money for it as well."

Interviewer: "But this access to the market is most of the time missing?"

Interviewee: "Yes although for maize, they know they can sell it, and groundnuts are so much into the culture because you don't need to use cooking oil if you add groundnuts to the vegetables, so it has a lot of other advantages to have that, and it is also a crop that you can keep for long times, as well there is a lot of focus on adding groundnut power to baby porridge,

for as an example, so groundnut are quite popular.”

Interviewer: “I am just wondering why woman or incentives, to participate more in markets, also compared to their husband.”

Interviewee: “Yea I think especially from a nutrition perspective they have to be open for different crops not only for maize, and if you can find markets for that they are more likely to grow those and that is what we really want them to do, to grow these different crops, and reduce some maize production and increase the production of other crops.”

Interviewer: “And do you also look into what the normal Zambian diet is? In the sense for there is a market for products which are eaten.”

Interviewee: “Yes true it works on two sides, with the concern we did not really focus on this, we did have some links with private companies. We also created linkages with Silver catering, which buys dried vegetables as well. So the women can sell their leaves to them. But I guess it is a much bigger general thing in Zambia, that people need to consume a much healthier diet. However, with the concern this was out of our scope, it was too much, it is more for Sustainable Diets for All [program of Hivos] to focus on that.”

Interviewer: “Yes I think I, you gave me already a lot of information which is very helpful, so let me just check my list with my items. I hope it is not too much repeating about what we have already been discussing. Concerning the distance to the market do you have any idea if there is a difference between men and female to access the market?”

Interviewee: “For a men it might be easier, because they can have an bicycle as an example, and for a men it is easier to leave the children, at home, then for a women or a female headed household, but I think also, women tend to sell more often, as an example on small markets within the community, for maize, I don’t know if they really sell within, but almost everyone sells maize, so I think in that sense, due to the types of crops, within the community, it is more difficult for them to access the market.”

Interviewer: “So you think when there is a bicycle within the household, a man will use it but not the woman to go to another place?”

Interviewee: “I am not sure if woman are not allowed to use it, they may be able to use it, but I don’t know how far they really can go, if I was a husband I would also not really like to send my wife on a long journey, where she has to sleep somewhere and stay a night before returning home, perhaps as a husband I would say I will do it myself... but then I don’t know how willing men are to that for the wife, so if the wife says I have one sack of maize can you sell it for me, will she get all the money or will the man keep it, that I don’t know, but that could perhaps be of interest to find out.”

Interviewer: “If the woman earns income she has the power to do with it right? So if it again goes via the husband...”

Interviewee: “Than you don’t know what you really get from it.”

Interviewer: “I was also wondering, and I am not sure how often it happens, but as an example if a women needs more help on her plot, is she then also able to hire labour?”

Interviewee: “I don’t know about that, because often the plots are not that big, but I also think that the husband will not pay for that, so then unless she has some money herself, but then you also really need to find balance, because it doesn’t make sense to hire labour, you know. I guess she will work on it by herself.”

Interviewer: “And do you feel like there are a lot of educational differences between women and men?”

Interviewee: “Nowadays there is a major focus on girls joining schools, but if you are talking about the most female farmers nowadays they will be around my age, and then I think there can still be a difference acknowledged but I am not sure how big that difference is. You can also check the Demographic Health Survey, I am not sure if you have checked that already? But it is mainly focussed on health, but it is also a demographic survey, but at least it talks about women education, the Zambia Demographic Health Survey, you have it for almost all countries, the lasted is for 2014.”

The interviewer shares that this where the questions for now, and says thank you to interviewee for sharing her knowledge and time. Interviewee ends with the advice that besides interviews focus groups could also be very helpful. Plus she recommends to talk with the Agricultural Extension Officers. And at the district level you have got the District Agricultural Officer.

Gender specialist

Gender Coordinator
Organisation: Community Markets for Conservation (COMACO)
Address: Chipata – Zambia
web: www.itswild.org
Date of interview: 26th of April 2018

Via the headquarters of Community Markets for Conservation COMACO, which are seated in Lusaka, the researcher was able to get contact with their gender coordinator. Unfortunately, due to the gender coordinator not being seated in Lusaka but in the Eastern part of Zambia the interview is conducted by phone on the 26th of April 2018. However, due to technical circumstances it was not possible to record the phone call as well the connection got lost in the middle of the conversation. Verification of data as well as a big thank you has been communicated via e-mail.

The phone call started with a brief introduction, explanation of the purpose of the research and asking for consent of the interviewee.

Interviewer: "Why do you in particular focus on woman?"

Interviewee: "High percentage of woman [in agriculture]. They produce crops, groundnuts, soya beans, rice etc. They have problems, especially now, the quantities [of man] are bigger, the problem is to have the transportation from the farm to the market. In our culture they [woman] are not helped with transport from the field to the market. Although their output is little but they can't carry. Man will use the animals, bicycles, the man will bulk so they can transport to the market. Man organise themselves woman are not included."

Interviewer: "Why is it important that woman have access to the market as well?"

Interviewee: "When man sell their products, they don't bring all the money home. But they [woman] don't benefit from all the money. They [woman] still wait back home. It is our [Zambian] culture, different gender roles, man should do that, woman should do other things. Woman have multiple roles. They produce food, look after the children, look after the sick. Where the man have the time to relax, to do politics, attend workshops where they receive more information."

Interviewee: "With COMACO, we try to encourage woman, to be in small groups, we encourage them to work together, little money, they save something as a group, than from that money they borrow, they invest in small businesses, and they bring that money back to themselves, they do that for eight months for one or two years and then they spread this technique to others."

Interviewee: "We encourage them [the woman] to do gardening, there is still place around the villages, as COMACO, we give them seeds, so they produce the vegetables and COMACO guarantees to buy them. As an example they produce mango's, we encourage woman to sell these products. This is the opposite of family crops, which they are growing at the family, soya beans, rice, maize banana's, these are the crops which we grow during the raining season. The man take them to the market. And usually do not bring money back."

Interviewee: "The tradition is that man take the decisions, he is the head of the household, you [woman] have very little to say. I am not saying that all the man are bad. Usually in our training, we include the whole family, because a happy family will grow more [crops]. It is important that everyone works together."

Interviewer: "What do people need to increase their output?"

Interviewee: "there is a lack of information, information to encourage them. To look around what is happening around them, make sure that they get information from all the training, that they are using their equipment, than they can cultivate."

Interviewer: "And what about storage facilities?"

Interviewee: "They don't store in the village, they don't store in one point in the village, they have to directly sell, lots of losses. However, there is no difference between woman and man their storage possibilities, the storage possibilities are just lacking. Most of them sell directly to the market. However, COMACO makes sure that they are able to sell."

Interviewer: "And what about access to finance for woman?"

Interviewee: "Woman have less opportunities to credits/loans, because the banks are not there in the rural areas. So for woman to travel there is really difficult. It is difficult for them to access credit. They need to pull money together, than they can have some money to do some business. Man have as an example bicycles, motorbikes, they can transport themselves more easily than woman. If you are a married woman, there family will not allow it, if you go out of town to much, or you go to banks. They get suspicious what you are doing in town."

Interviewer: "What are the main differences of opportunities between man and woman?"

Interviewee: "It is education, general information, skills, technology, especially now, we have to fight, girls get pregnant to early, they can't continue their school, they are bullied on school, they are shamed although they could leave their children at their grandma. It [education] is very important. Even to earn income you at least, you needed to have gone to school till level 7 or 9. But most of the woman don't have these opportunities, are not able to make an income for themselves, it is early pregnancy that they are facing."

[Lost phone connection]

Lead farmer

Lead Farmer

Address: Mpanshya – Zambia

Date of interview: 20th of April 2018

A 'lead farmer' which means that on a volunteering base she provides demonstrates and gives advice concerning farming in a sustainable manner. Sometimes she does receive some benefits due to volunteering as an example a bicycle. During the interview several farmers passed by to listen to her while she was sharing knowledge. Plenty of questions by the farmers where asked. She gained her knowledge due to a NGO called Kasisi. (Kasisi Agriculture Training Centre). Whereby she also received the opportunity to visit and exchange knowledge with farmers of Zimbabwe. She obtained education and finished grade 9. She has three children. Unfortunately, her husband passed away due to illness.

Introduced ourselves and the purpose of the research when we met each other a couple days earlier on the markets. Explained what kind of questions will be asked. Furthermore, there was asked for consent to participate in the research as well if it is alright to record.

Interviewer: You know right how to sustainable farm?

Interviewee: Yes.

Interviewer: Can you perhaps briefly introduce yourself, how you learned to farm and who you are.

Interviewee: Yes that day, I did the farmers register. Read this paper.

Interviewer: So people register and then they are part of a farmers organisation?

Interviewee: The number of my farmers is this, so the number of us lead farmers is six, not throughout the district but throughout Mpanshya camp. Six, so that day that we meet there, we had farmers from me and farmers from my friend. So me I register my farmers, only there will be two farmers, I take like this, so, my other friend takes like this. So now today, I want to introduce to my farmers what is sustainable, the problem is, which is in like, this year, there is a problem of climate, so I have to explain to my farmers, what are we going to do if we don't have a lot of food are we going to wait for another season or what.

Interviewer: And what if people sign up talking with you, where do they sign up for, can everyone just sign?

Interviewee: The farmers are around, they need to do like this, they can sign like this, another day they can sign, so there is a report, after three months there is some report.

Interviewer: And who makes the report?

Interviewee: The agricultural officer now.

Interviewer: So you are on of the lead farmers who falls under the agricultural officer.

Interviewee: Yes under the agricultural officer, they come the agricultural officer, they see our reports, they see this and this, so the farmer was around, so sometimes, so you see which people are active, sometimes they bring seed, or fertilizer.

Interviewer: The agricultural officer? And is this for free?

Interviewee: Yes, the agricultural officer and it is for free, they have to show that they are active, they have to give the people who are active.

Interviewer: So if you sign up, you show that you are interested to learn, you show that you are active. And everyone can sign up, do you need to show commitment than?

Interviewee: Yes you just need to show commitment. Some people just only want to receive, they just want to receive. So us we don't want people to only receive but to learn, how to decide, how to do, so, this is what we do. Because sometimes he, even bicycle, me I have received that bicycle, from the agricultural officer, through my activeness, they follow the register, this day she was around, that day she was around, they know that I am active, so they gave me the bicycle so I can go and teach my friend, even us we do like this we want people that are active.

Interviewer: So if people do sign up, and they show that they are willing/committed to learn. So than if you organise something they should come. Do you also go to their farms to see how that is going?

Interviewee: Yes, yes to demonstrate especially.

Interviewer: And what as an example do you learn them?

Interviewee: Yes I will go to their farm, and for example I am going to see this one, I will go to her farm, and she what see is doing and share the ideas, if she is not doing well, I can see you can do this or do that so she needs to follow what I am saying.

Interviewer: And what if she wouldn't do it? Than it is a sign that she is not committed to what you are sharing? And how did you learn this, did you learn this yourself? What is sustainable to do or not.

Interviewee: For me, cause, I have to do the demo, it is a poster there, the sign yes, I put a demo plot, so I put the trees, I make the necessary, put them in a pot, so for my follower farmers they come here sometimes for field days, they came and see what I am doing, they ask me, lot of questions, even the, like this time there is no big harvest, some don't have harvest, some they have, I teach her, how she can find food, you have to continue the business. Even to grow the chickens, like me I have a small shed over there and there are 100 chicken inside. So I have to teach people so they can find some money so that they can increase their food.

Interviewer: So you teach them how they can increase their farming outputs, so that they can sustain their own food but also to make some money out of it or not? And are a lot of farmers interested in it?

Interviewee: Yes they are very interested. See these farmers.

Interviewer: And do you know how big there farms are?

Interviewee: 1 ha, some more, some 1,5 ha, some have 2 lima (0,5 ha) some have more, depending on how much people can manage.

Interviewer: And what is for you sustainable farming?

Interviewee: For me? I am doing sustainable, very much, uhm, you are saying what does it mean. The means of doing sustainable, is to reduce hunger, I have to reduce hunger in my farm, and even to my friends, I have to teach them to reduce hunger, we need to sustain.

Interviewer: So that every year there is enough food.

Interviewee: Yes.

Interviewer: And how is that going?

Interviewee: It is going well, very well, when I started to sustain, I started with a small field, thereafter, I start to sustain so I could grow bigger.

Interviewer: And how did you cope with the draught of last year?

Interviewee: The draught, we can't grow everything in the field, we do, we do the crops in the gardens, there is some place where there is water, we go there and start digging for water, if we want to grow maize we will go there.

Interviewer: Where the water is still available. And these farmers are they mostly man or woman?

Interviewee: Some, most of them are woman, one two, three, four five, six, seven, there are seven man out of 19.

Interviewer: Why do you think there are so many woman into farming?

Interviewee: Here I think, man often go and start drinking beer, yea, the man, they always go and drinking beer, they don't care even not for the children, so, to woman we care, we care for the children, we see the problems, they see the problem that there is need for food. And they are more committed woman and not the man.

Interviewer: And how does that work than as far as I understood most of the time within a family the man is responsible for gaining an income, so how does that works within a family?

Interviewee: We can't work well if he, but like us now we are used, we are used to find money, the woman, the woman are used to find their own money, we can't wait for our husband that he is going to bring, no we can't wait.

Interviewer: So you think woman should take steps themselves. Because it is not good to wait for a man.

Interviewee: Yes, I have an experience for me, for me I stay alone here without man, I take my children to the school I eat, I do everything [without a man], so some people will learn from me.

Interviewer: Do you think that all the man allow it that woman gain their own income?

Interviewee: Yes.

Interviewer: Yes you do think that most of the man are fine with it that woman earn their own income?

Interviewee: Yes, because if he is seeing the woman what she is doing you can't say no that is not good, because sometimes he can even eat, so he shouldn't complain, so he will find his Nshima prepared, so he can't say no what is this.

Interviewer: But that is perhaps farming for their own food. But what if they farm and they can make some money out of it? And what if they can sell their crops?

[interruption of other people passing by]

Interviewer: What do you think farmers here in the region really need to improve their harvest?

[interruption of other people passing by]

Interviewer: If you want to stop the interview just let me know.

Interviewee: She is going to do so some work home and then she will come back, it is fine.

[interruption of other people passing by]

Interviewer: But they are also coming for the meeting right? I can also talk to her afterwards.

Translator: No you should just take her time she has a lot of knowledge.

[interruption of other people passing by]

Interviewer: Just let me know if you want to continue the interview and other time.

Interviewee: Yes the questions we are asking we can share with the farmers. Let me just explain.

[explanation to the farmer about my research]

Interviewee: He is busy, so I am going to say that he was here. So I know the lima's [measurement within agriculture] like this I know, the lima's and the hectares. He showed his commitment.

Interviewer: So I was wondering what is in your opinion the need of the farmers to improve their output?

Interviewee: The need is, in my opinion, I have interest in teaching the farmers.

Interviewer: So you think it that there need is that they have more knowledge?

Interviewee: Yes, I want to, that they have more knowledge, because the people ask me a lot of questions, so also me I need to know more how to sustain, so some people they don't even have income which they can put in fertilizer, in seeds, in chemicals, they don't have, so we usually teach them how to make field in an organic way.

Interviewer: Because you don't need to pay for fertilizer right?

Interviewee: Yes you only need to have manure, we teach them how to make manure, we start with how to make manure, we do a demonstration for manure, after making manure, we start making holes, we make the holes, after making holes, we go to step three, after making to holes we put manure into the holes, so in October we start putting seeds in the holes, in the holes we put seeds, after putting seeds, we stop. After stopping the rain comes, after rains comes we start weeding, after weeding, we first again put manure, we put decompound, after putting decompound, the maize start growing, when we research a certain, state, we put top compound, we teach how to make top compound, so we start putting, to make things, which is, we don't put chemical, we learn how to make organic manure.

Interviewer: And do you also use manure of animals?

Interviewee: Yes.

Interviewer: And do other farmers do that as well?

Interviewee: Yes other farmers do that as well. Other farmers come here and see, and they ask they also want to have manure. They want to have the manure of the chicken.

Interviewer: And is there something else needed for them besides gaining more knowledge?

Interviewee: Yes they need more, they need to have more knowledge.

Interviewer: Ok they need to have more knowledge, but do they also need to have something else?

Interviewee: Yes especially, some different seeds, the crops, yea, the maize if the maize is not doing well this year, they should have another crop, as an example pigeon peas, if the rain is small they grow.

Interviewer: Although there is not so much rain the pigeon peas will grow. Is there any other support from the government? As an example the e-voucher system do people use that here?

Interviewee: Yes they do.

Interviewer: But then you can buy different seeds right?

Interviewee: Yes they can buy different seeds so this time, we are teaching the organics, because the e-voucher are going to stop this year. The government said we are going to give the e-voucher only for three years. We have to learn how to grow things without fertilizer. So that is why this year is the last year of e-voucher, next year there will not be any e-voucher. So if people have the money they can buy.

Interviewer: Do you think that people should have access to loans or other sources of money so that they can invest in their farms?

Interviewee: Yes.

Interviewer: And at the moment people don't have access, or enough money?

Interviewee: Yes.

Interviewer: And do you think there are differences between female farmers and man? Or do you think that the needs are the same?

Interviewee: No it is different, the female farmers, female farmers, they are different than man, for as an example, for me I can say, I need to have the business to take my children to school, the man he can say like that, in times of businesses, he can take that money and go and start drinking beer, to find the other man friends, the girlfriends, they can say and take the money to girlfriends, as a woman you can't take that money, and can't take that money and give it to your boyfriend.

Interviewer: No they spend it on their children right? And do you think woman have less time to spend on the farm due taking care of their children? Is that something which is a burden for them?

Interviewee: Yes, due to taking care and making food.

Interviewer: And what about the farm land is it owned, buy people themselves?

Interviewee: Yes the farm land is owned by the people.

Interviewer: Do they decide about the land together? What they do with it?

Interviewee: If people are together they decide together, but if you are alone you decide yourself.

Interviewer: And do you think woman and man grow different crops?

Interviewee: Yes, sometimes he, they can share the ideas with your husband, no me I am going to grow this and you are going to grow this, so you can have different crops at home.

Interviewer: And what about the market to sell your crops to? Are there any difficulties with that, if you have surplus where are people going to sell it.

Interviewee: The market is a problem, if you have a lot of maize, you need to shift the maize from here to Rufunsa, so the transport is really expensive, if we would a market here, that would be better, a nearby market.

Interviewer: But sometimes I did understand that people come here to the farms and buy the maize here, what do you think about that?

Interviewee: It is too expensive. They take the busses from here to Lusaka. And then can only bring what they want.

Interviewer: And what if people from Lusaka come here to buy the maize on the farm itself?

Interviewee: No, only maize. Other crops they don't, especially groundnuts we can only sell here, only maize, especially the dealers, from Lusaka and come and they buy maize. Only maize not the other crops.

Interviewer: What do you think can be done to diversify farms in Zambia beyond maize, so as you said only maize will be bought, so perhaps that is an incentive for people to grow maize, what do you think can be done to start growing other crops. Or do you actually agree with that a lot of people grow maize?

Interviewee: Yes, most of the people grow maize, a long time ago, they even grow cassava, people from Lusaka would come and buy, even the cassava, but now the cassava can't grow well because of the land, the insects, insects who eat the leaves of cassava due to this insect.

Interviewer: So what do you think can be done that people diversify the crops that they grow?

Interviewee: Hm, the, maybe to change the crops, another crops, especially if there is water, they can start growing things like tomatoes, vegetables, they can take things and go to Lusaka. People come here to take these products.

Interviewer: Ok, how many different crops do you grow?

Interviewee: Seven different groups.

Interviewer: And do you think farmers in your area would like to grow different crops? And what are the main reasons do you think that they don't grow other crops?

Interviewee: Some, the problem is, they don't have seed, some, they don't have the place, the land, they don't have some, they only have a little and they grow maize and groundnuts and then they stop.

Interviewer: And what do you think can be done to improve people their diets in Zambia?

Interviewee: We have to improve, we have to improve the diets in Zambia through, to grow different crops, yes, when you grow different crops you can change the diet, you can change.

Interviewer: But most people grow the crops for themselves right? So they only eat what they grow. So they first need to seeds so that they can grow different crops and they need the knowledge..

Interviewee: Especially the knowledge, because if you have seeds, but you don't know well how to grow, you can't grow.

Interviewer: But I really thought with the e-voucher system you can grow different seeds as well right? But you said that the e-voucher system will stop?

Interviewee: Yes, it is going to stop. This year will be the last.

Interviewer: will the government have another plan what to do?

Interviewee: The government will say that you have to learn know how to make things without fertilizer and to learn to buy fertilizer by ourselves. To find money ourselves. We put little [money] 25%, than the government put 75%.

Interviewer: Yes, and what about the fertilizer you can do that in an organic way and you don't have to buy that, but what if you need to have different seeds how are you going to do that?

Interviewee: How do you get these different seeds, now you have to go and buy, on your own so that you have the seeds.

Interviewer: So you think it is really important, that what people grow needs to be diversified so that people their diets change as well?

Interviewee: [nod yes].

Interviewer: Maybe I have asked you something similar like this before already, but what are the biggest obstacles farmers in your area face? What are they main difficulties which they face when farming?

Interviewee: Yes the difficulties, the challenges, the challenges when we are farming we are busy with weeding or doing something and then the rain stops. Sometimes, you can plan, in this month I will put this, in this month I will put this, but the rain stops, the challenge is, the rain, and the insects, when sometimes, maize, you plant maize, when you see the maize, you start looking for the insects which destroy your fields.

Interviewer: Do you also share you knowledge on intercropping?

Interviewee: Yes that is good intercropping. This year you put this and next year you put this. Our cover crops, that you put cover crops into your field. If you put covers, sometimes you can put maize, maize and pumpkin, maize grows like this and pumpkins covers, if the rain will stop my soil cannot be dry because of cover.

Interviewer: Do you think a lot of farmers do this?

Interviewee: This time some do, and some don't.

Interviewer: Do you think that most of the farmers in this area raise animals as well besides their crops?

Interviewee: No, hm.. In this area especially this side they don't. Maybe they need to be thought about this as well. They are not used [to animals] some they don't have place, for me as an example, if you have a goat they can go in someone else their field and destroy it. The problem is that people are too nearby each other.

Interviewer: Okay I think this where my questions for now, is there something else which you would like to share or do you have questions for me?

Interviewee: If you have some questions you can ask!

[some questions about what kind of crops we grow in Europe]

[45:00 brief conversation about not eating Nshima in Europe: "Without Nshima I will die"]

Interviewee: If you reach a home like here, you need to find maize like this, if there is no maize there is a problem. So I keep maize, I keep 20 bags of maize, I keep for food security. I keep nice for Nshima etc.

Interviewer: And are you this year still able to sell your maize?

Interviewee: Some they come and ask me if I can sell them some maize. Maybe sometimes he, they don't even have money, but then I provide them with work, they work in the field, help to remove the maize or weeding and then there after I provide them with maize.

Interviewer: I am still very interested that, I think it is really cool that you have such a big farm, all by yourself.

Interviewee: Yes without any husband! Yes is good.

Interviewer: Why is it that some of the husbands don't really support, why?

Interviewee: I don't know, some they support, some support, but some they just drink beer, especially that one that don't have knowledge, they just go and drinking beer, come and eat, go to sleep and come to produce the babies.

Interviewer: And then the woman need to take care of them, and woman don't drink?

Interviewee: Some of them drink but not like the man. Sometimes it is our traditions. Man have to go and chat, woman stay at home, they are keeping the children, the man go there they are chatting and they are drinking beer. That is our tradition. But some see that this tradition isn't good, the man have to work, help the children, help the woman, take the children to the schools, some they are changing, some they are not.

Interviewer: there is nothing wrong with chatting right? I also like to chat but we also need to work.

[laughing]

Interviewee: You have to work, work, work, and then chat, come to home and work again.

[54:00 a farmer which I have interviewed comes along]

Interviewer: So how often do people need to show that they are committed?

Interviewee: Every month. So this is in the beginning of the month.

Interviewee: I want to open a saving account myself, I want to start saving.

Interviewer: And this program is from the government right? But it is sponsored by USAID?

Interviewee: Yes it is sponsored by USAID [and the books she uses are from the FAO].

[all of us start eating pumpkin]

Interviewer: So what are any other differences in tradition between man and woman?

Interviewee: Woman take care of the children, but there are a lot of traditions here, you can choose which, in our tradition man have to sit at the chair, woman do sit on the ground, have to sit down.

Interviewer: And is there a decision who decides about money/finance.

Interviewee: Man, within a household it is always a man.

Interviewer: And if you are by yourself it is yourself. And what if woman earn their own money with their own farm or business can they decide about it themselves?

Interviewee: [Nod] If you want to get married you have to wait till a man approaches you and wants to marry you. But you can say no.

Interviewer: But if you don't know the person you don't know what is going to happen right?

Interviewee: He needs to do his best for you.

[eating pumpkin again]

Interviewer: If a woman is not happy with the behaviour of a man what can she do about it?

Interviewee: If a woman is not happy with the behaviour of a man, woman, they beat woman, man they beat woman. According to our law, now it is not well to beat woman.

Interviewer: So what does a woman do then?

Interviewee: They sit together and they talk.

Interviewer: And what if they want to divorce?

Interviewee: If they want to divorce, they talk. They say what they like or not. Sometimes they suit, they go to court, they provide you with the divorce ticket and then it is alright.

[...]

Interviewer: You have these chicken also for eating?

Interviewee: Yes I have indeed.

Interviewer: What other livestock does you have?

Interviewee: I have pigs, some more chicken, pigs, some goats at my other place not here [and some pigeons].

[woman talking Nyanja]

Interviewer: For how long have you been doing this [being a lead farmer]?

Interviewee: Since four years.

[woman talking Nyanja]

Interviewee: I try to explain about carbon dioxide. There are some trees here, and we are saying that they shouldn't cut them. Don't cut the trees, we have to keep the trees. The people are taking the carbon dioxide from there. After taking the carbon dioxide, from there, we are benefiting through the farmers.

[woman talking Nyanja]

Interviewee: She just shared that next year she want to have a variety of crops and not only maize.

Interviewer: And how is she going to do that?

Interviewee: Through learning. She said I want to learn, and I want to grow different crops.

[woman talking Nyanja]

Interviewee: They [two female farmers] want to have pigs.

Interviewer: Why do they want to have pigs?

Interviewee: One pig is worth one semester of school fees [one term is 540 kw, three terms a year, 540kw/54US].

[woman talking Nyanja, after the talks one of the woman registers herself by the lead farmer]

Interviewer: Can I ask you some last questions?

Interviewee: No problem.

Interviewer: Do you feel like people see farming as something important?

Interviewee: They want to get income out of farming, they are interested to make income but they need to know how.

Interviewer: Because sometimes I hear people want to make a business, do you think people prefer making a business above having a farm?

Interviewee: They prefer having a business. The business is different, there are some businesses, like what I am doing there sitting and selling, what they need, the mean, is farming. Doing farming and then you sell. You can this what you grow in the field and then bring it to the market. After you come back from the market you can work on another production to the market. That is why, they are questioning me, it is better to start keeping a pig, the more you have, how more the pig will grow. Instead of wasting, sometimes we have Nshima left overs, you can give to the pig.

Interviewer: And you have been to Zimbabwe? As well right?

Interviewee: I have gone to visit Zimbabwe, that was an exchange visit, the Zimbabwe people also came here. And see what we are doing and we have seen what they are doing.

Interviewer: What kind of education did you have?

Interviewee: My education, it is just farming, I have been to school a bit, I have learnt by myself. Not from my parents, from my parents a bit. But most of myself. I went to school till grade 9.

Interviewer: And your income is due to your farm and do you get paid for this [being a lead farmer] as well?

Interviewee: No, I don't get paid. It is just voluntary. My income comes from my farm.

Interviewer: So you call yourself a lead farmer? And how is this program called?

Interviewee: Yes, this program, sustainable agriculture.

Interviewer: And are people here members of a farmer organisation?

Interviewee: Yes, sometimes, they are, the people work together. To learn. To learn what we are doing. To learn more what we are doing.

[we decided to make Nshima together, I had to learn, after eating we started talking about gender roles again]

Interviewer: So what do you teach the [women who are going to be married] than?

Interviewee: I teach them to show respect, what you can do, how you can give respect to your husband, to your mother in law, your sister in law. I teach. So if someone gets married, so they come here, and then I give advice. To tell them to do this and this.

[translator talks Nyanja]

Interviewer: What are you saying Hellen?

Interviewee: She is saying that some woman when their husband passed away, they start drinking, beer, dancing, the woman.

Interviewer: If they are without a man.

Interviewee: Yes my husband passed away in 2003. Left me with that boy, he was very young, he was like not even 1 year old. I was even without the house. I did this myself. My first born was in grade four, he was only 9 years, my second born was 5 years old, than that one was 1 year 4 months.

Interviewer: And what happened with you husband?

Interviewee: He was sick. He died. So I stay here with my children, taking my children to school, do everything in the farm. And till now my children are good. Very much, I send them till grade 12, he got to the college, he finished three years of college, he took the degree and now he is working.

Interviewer: And he is still helping you as well?

Interviewee: Yes very much.

Interviewer: When your husband passed away how did you decide? What was your plan to make your children go to school?

Interviewee: I was doing my business, already, but not there at the market. I was doing that here, when we had something to sell we did, but thereafter I started going to the market, and I joined in going to workshops, to learn more.

Interviewer: Who organised these workshops?

Interviewee: There is Kasisi agriculture, who give workshops, even to go to Zimbabwe, they organised it. It is an organisation. A NGO. They gave a training here.

Interviewer: How did you get in contact with them?

Interviewee: They phone me.

[...]

Interviewer: What kind of crops do you grow?

Interviewee: Maize, groundnuts, maize I grow in three varieties, velvet beans, cow peas, pigeon peas, traditional beans. The groundnuts I grow in three varieties. And popcorns. And cover crops, pumpkin and the pumpkin leaves.

Interviewer: And you have chicken.

Interviewee: Pidgeon's, guinea paw, village chicken, hybrid chicken.

[...]

Interviewer: And who decides who to marry?

Interviewee: The man decides and pick the woman, sometimes they follow the families, how good the family is. Because the family is good.

Interviewer: And then they discuss it with the farther of the woman?

Interviewee: They talk and the parents of each other will meet, they talk. The man haves to pay the money to the parent to the parents of the woman. First payment can be any money, second payment they charge you. The money goes to the parents of the woman. When the payment is finished they will start with the preparations of the marriage. The woman, the parents of the girl, they have to prepare the girl well, because she is going now to stay with other people. Some they will come here, they come here with that girl, they say this girl will get married now, so you have to sit with her, and teach well. So me I will stay here, I will always call my friends, we are with four woman, we teach her, practical, teaching, we call the parents of that girl. The parents of that girl they come and two members of the parent of that boy to witness. We don't teach outside, we close, we just open the window, teaching well, we teach, the parents from that boy, need to know that we teach her well.

Interviewer: And how much money to they pay?

Interviewee: To the parents, it is according to the money they have, if he comes in a right way, they don't charge more, if he comes, sometimes, he doesn't come in a right way, he does first the relationship, sometimes after relationship he pregnant her. Than he can come as well, than the money will be more. Because he didn't respect her parents he did what he wanted with that girl. He caught damage.

Translator: And what about in the Netherlands?

[explanation on the Dutch situation]

Interviewer: So how much is the first payment?

Translator: Any money.

Interviewer: Like 100..

Translator: 50, 20, somewhere there.

[...]

Interviewee: Me I grew up with my grandma.

Interviewer: Your mum wasn't around?

Interviewee: She left me when I was two, she died during the deliver, and the child didn't survive. I am the first born. So I leaved alone with my grandma. The grandma from my mum.

Interviewer: And your father?

Interviewee: I don't know even my farther. He stayed in a tribe. I just heard. I even don't know. So, long time ago in our family, me I am from the chief. So long time ago if you pregnant a girl from the chief the rules come very rude. Very rude. When pregnant people from a royal family.

Interviewer: So you don't know you further, but your mum was from the chief.

Interviewee: But long time ago the chief was very rude. So they wanted to punish my father, because my mum died during the pregnancy, what did he do? So my father went off. From that time till now. So for me I lived at my grandma. And she took care. She even stayed here for a bit but she passed away and she was very old. She was 108 years. So I know everything from my grandma, I learned from my grandma.

[...]

Interviewer: And what about family planning?

Interviewee: They use.

Interviewer: And what does the man think about that?

Interviewee: The man they don't want. They want to produce [laughing] so it is up to you, are you able to manage or not, so you have to plan. Man they don't want to plan they just want to produce [laughing].

[...]

Interviewer: What do you want in the future for yourself?

Interviewee: For myself, in my future, I wish, to take my children to school, to finish their schools, all of them, they sit well. And they just come by and see me. My future, to bring my children well to school. I don't want my children to suffer like me. As I suffered, I am scared, my children to suffer. Because the things will be expensive, they can suffer.

Interviewer: You need to know how to work hard.

[time for Nshima]

Community farmer

Executive Director

Organisation: Community Training Farm

Address: Mpanshya – Zambia

web: www.furrerfoundation.com

Date of interview: 22th of April 2018

To promote animal husbandry in a community, where traditionally hardly any livestock was being kept, the Community Training Farm (CTF) Mpanshya was established. Before, people widely relied on wildlife and fish for animal protein in the area. But with the human population growing and with it the demand for bush meat unsustainable hunting practices took over and sustainable wildlife numbers disappeared from the surrounding.

The CTF was founded as a vehicle to spearhead the introduction of livestock in the area. Cultural resistance to new animal-crop systems had to be carefully tackled and advantages of livestock had also to be shown. Livestock should not only cover the shortage of animal protein in the area, but also allow a diversification of agricultural produce, increase crop production through draft animal use, lower the input costs for crop production through availability of manure and offer readily available capital reserves in livestock for local households.

CTF is registered in the legal form of a society with local farmers as members. Its mission is to offer training, livestock availability and animal produce to the community, as well as offering an alternative to the often fatal poaching in the neighbouring National Parks and Game Management Areas. With established livestock farmers now in the area, CTF is also going into product processing (meat, cheese, yoghurt) to add value and enable the local producers to reach a wider market.

The Community Farm consists of 56 members and has an elected management board of 12.

Before starting the interview the kind of questions were explained, asked for consent to participate in the research as well if it is alright to record the conversation. Although mainly one of the interviewee's was participating, both of the interviewee's agreed with what has been said during the interview.

Interviewer: Do you think there are any farmer cooperation's here?

Interviewee: Yes they are, there is one big called Chimapona. And, but it is, it is more they have to find cooperatives to get these farming inputs, these e-vouchers.

Interviewer: But a lot of people had no clue..

Interviewee: Yea no clue about it yes perhaps that as well. But there is a big cooperative actually. We are a society, we have 56 members, our workers are all automatically members of the society. We elect the board. Which are twelve members, and then, they direct the management of the farm.

[...]

Interviewer: Perhaps you can briefly introduce what you are doing here and how you started?

Interviewee: Yes the whole idea was, why we came here, was because of the bad malnutrition in the hospital, especially children, which had a stunting rate of almost 100%, not the sick children, but the children that come to the hospital under five regularly which get checked. Get their vaccinations, they are checked, and that is where they recorded that 50% percent of them is stunting, malnutrition, what we saw there is actually no livestock around, there is hardly any, perhaps some village chickens, just a few, two farmers had, and one farmer had some cattle and one had some goats. In the whole area, up to Rufunsa. We thought introducing livestock would help, and curse it, get them malnutrition.

Interviewer: When did you started with it?

Interviewee: We started with it in 2011, uhm, yea we wanted to introduce livestock but we did not really know how to do this, their where no agricultural services from the state at all, there was no fed, agricultural officer, there was one but he was quite useless, we thought we could find a farm, which should be community owned, introduce the livestock, and animal products, meat and milk, and from there we do trainings on the farm, and then we try to introduce more livestock in the community. We did goat courses with the woman, we have some dairy cattle introduced, many people bought animals from us, loads of people bought oxygen, that is one of the reasons here why the fields are so small, because they don't have cattle, no one has draft animals, no ploughing, it is all by the hand, and that limits the size which you can do during a year. Yea, that should change of course, we are teaching how they should use the manure as well from the animals, and at the moment it has gone so far that we are actually trying to process the products, the milk, but also the butchery, which is almost completed, and that should actually be as a cooperative, where people can come and process their own products. With their own goats, we slaughter them, and send it further, especially the milk of course we have a collection centre we take in the milk of the farmers, and yea with the communal heard, we are actually now in some areas, we almost have over grassing in the areas which we have the herd and the goats, we have two villages, where there is lots of livestock now, so we started to think one step further and we started a communal herd, we took out the cattle out of the town, to one herd which we manage, and then, do a holistically management.

Interviewer: So that was actually one step further?

Interviewee: Yes actually, we did not know that at the start, it all kind of build-up, also the processing actually, we just saw at one point, especially with the milk, we had to much milk for the local market, and our problem is we sell raw milk, so we can't really sell to the shops, it is just hygiene, it is difficult to give that to others, and if something will go wrong, it will come back to use and that is difficult to control. So we never sell to shops, we only sell directly from the farm and we sell two days

a week directly to the local market as to day as an example, they went and on Thursday they take it to all the local markets, but he, we decided we should pasteurise the milk, and then we can take milk in from the other farmers as well, especially if we take in raw milk we don't want to be responsible for the other farmers, but when we do pasteurize it we can take it in from the other farmers as well, you can start collecting the milk.

Interviewer: Yes thank you, I know we have been talking about this all a bit already, but as far as I understood you would also like to, with the herd that the land becomes more fertile.

Interviewee: Yes exactly, that is the holistic management, one of the big problems here is that every year actually after the raining season in the dry season, and actually the whole bush and also the crops fields are burned down, it is a culture of building, the whole of Zambia is in flames, and it is very detrimental actually the soil gets poor because there is no organic matter is kept on the ground, it is not going into the soil it is all burned down. There are different factors, it is even health wise, we have a beautiful blue sky at the moment, but in September / October it is grey, because their fires are all over, it is just covered all the time, so it is also health actually, but even climate change in the end, what a hectare of bush burned I just read about it, I don't know the exact figures any more but it is almost like 18 cars..

Interviewer: And it is unnecessary?

Interviewee: Yes it is unnecessary, so what we trying to do with the big heard of beef, cattle, we are trying to imitate nature again, because what have changed with before that there are no big herds anymore. The numbers have been hunting down, but there where big hers with zebra's, buffalos, antelope, living around in these areas, and they actually trembled down all the grass, let manure drop and which is a fire proof in the land, keeping cover also, it will keep more water also because you actually cover the soil with grass with organic mature, you manure it actually, so the humidity will stay in the soil, you can even make rivers flow again or streams actually, and that is what we would like to make, we have been talking and ask them about the rivers, they actually all remembers that these rivers where still flowing, like Rufunsa river, they were flowing throughout actually.. we saw it actually just here, just here they cut down all the trees in the area there was a big pool just next to the farm and it is not filled this year, the reason, it shows how fast it actually can go.

Interviewer: I know you have a lot of future plans, so what do you see in your future?

Interviewee: For the community farm, uhm, if we can be hub of knowledge, you saw the different parts of the farms, the organic gardening, the pig tractors, we are trying to use livestock as a tool actually to regenerate and offer animal protein as well of course, so if we can be a hub and a training place for even other communities, we are getting more and more, visitors from neighbouring districts, and also our communal herd program, I would really like, it we have an advancement here, our communal herd farmers, already trust me, it was quite easy to convince them to put the animals together to one herd, but in other areas the animals are already spread, they are already being doing it, it will need a little bit more to put them together, it is working what they are doing they have their livestock and then someone comes and says you need them to put together, it is better if you do this.

Interviewer: Trust is really important.

Interviewee: Yes for sure, but if we can have an example here and show that it is working, than it will be easier to convince other communities to do the same, and then you can really restore the whole catchment.

Interviewer: I am looking forward, if I am back in a couple of years [laughing] thank you so much, and then what is your opinion to diversify farms in Zambia? Mainly because most of the people are really into maize so do you have any view or opinion how that can be changed?

Interviewee: I am not sure if that really needs to be changed, one problem with growing maize that it is actually not a very drought resistant plant and it needs a lot manure actually compared to others place like sorghum or millet, which would grow here much more drought resistance and can grow with less fertilizer, with less fertilizer, so, but it is possible to grow maize, we have shown it, I am not sure if I have shown you the picture of maize, which were grown in the area of our common herd, with the manure, nearby the fish ponds, and we had a drought this year he, from the three months of raining season, we had six weeks of drought, very, very little few rains actually in these six weeks, 2.5 mm or so.

Interviewer: So you think that growing maize is not a bad thing but people should do it in a different manner.

Interviewee: Exactly, and intercrop it with different crops, but uhm, I don't think the climate is still ok, it is not like Zimbabwe where they receive much less rain, they really need to think about other crops because maize is not really drought resistance, it is not happening there, the raining pattern [here] is not as bad, as long they use sustainable manners.

Interviewer: And do you think farmers in your area are interested to grow different types of crops?

Interviewee: Uh, it will need some convincing, but I think they all see that it is not that easy, to grow maize, so if we can put up some examples, we have done the pigeon peas program, we have introduced some pigeon peas, one hundred and twenty farmers. We did the training that was together with Rolf [Shentton, Grassrootstrust] actually, Rolf did the training not me, he brought the seeds as well, the agreement was that he brought 2cage, and they had to bring back the double of that. So that was no seeds 2 to 4 cages, and if they harvest they needed to provide back.

Interviewer: Because that is always included in your program, or often included that you provide them with something which is for free but they need to return something..

Interviewee: Exactly, as an example with the goat program, we give 4 goats and they need to give back the first five kids. So four go the next woman and one is for the fuel expedients, the time, and the course etc.

Interviewer: And do you think the availability of not having different types of seeds limits to farmers to grow different types of crops?

Interviewee: Most seeds are around already, there are a few farmers, that have already diversified actually, so seeds are not the problems, there is Kasisi community here as well, and they offer seeds as well, I think seeds would be but then the knowledge about it and the advantages, knowing the advantages, and they just believe that maize is everything, and I mean

in one maize field you could easily cultivate five crops which would be much better, you can have the pumpkins, they already do some intercropping with the pumpkins, they often have pumpkins within the maize, you could have lines of pigeon peas inside, and you could even do some lines with soya beans, a few lines between the maize and then you rotate, and then you grow the groundnuts where the maize was etc.

Interviewer: And do you think the crops that people grow is connected to what people would like to eat as well?

Interviewee: Yes of course, that is why they plant the maize, because that is what they eat, but I mean for protein that could still be the groundnuts, they do plant groundnuts, but they could do more, beans and other protein sources.

Interviewer: What do you think, can be done to change people their diets?

Interviewee: I think changing the diets is not really an option. The moment that it gets diversified, you see, the people in town, Irish potatoes also, rice of course, uh, and, and pasta already. It depends, they have to be able to buy it and that will come automatically. With time yea, I don't think there is, the basis the maize, cassava was here very big but no longer because they had a big virus, the leaves, they still have it, I am sure you have seen, it was huge here, as well as in Lusaka, it was actually known as a very good cassava area.

Interviewer: Maybe not really changing but improving the diets? Maybe I can connect it with what you started with, that the stunting level is really high, and you thought about if we introduce animal protein, or at least some extra protein, it will improve diets.

Interviewee: Yes, and what else good be done? It just needs to be shown, that it is possible to cultivate other crops. I don't know, they haven't, mainly, they don't see to, I think as soon we harvest it farmers will see it.

Interviewer: Because rice is also not originally from here?

Interviewee: The rice, yea even the maize is not from here he in the end, maize is from America, so, yea. And rice, of course is difficult, you can't do it everywhere because you need a lot of water.

Interviewer: What do you think are the biggest obstacles which farmers in your area face [when doing agriculture]?

Interviewee: Uh, infertility, in their fields, within the fields, the way that crops are farmed here is just unsustainable, and it used to work for a long time, because people would clear an area in the forest, for three to five years and then they will clear a new area of forest, and the bush would regrow so fast her in this area, her in this climate, it is really hard actually to keep it down, we try it actually with our goats, it is really hard, but it is almost impossible, it is not like Lusaka where they complain about goats destroying young trees. Coming up here, you can't bit it back. It wasn't a problem [the way of farming] till the population grew, and now you have to shift. Make decisions about how to farm the same piece of land sustainable so that they can have their harvest from the same piece. In the future years as well, so that need to be a big change, because they haven't being doing, and then they burn down the whole all the residues on the field, they heap them and light them, all the organic matter, so at the end every year you grow crops and you burn all the organic matter, and you give nothing back to the soil nothing at all, and then their dependency on fertilizer grows, which is getting more and more expensive, as well.

Interviewer: This approach is supported by the government, right?

Interviewee: The fertilizers approach, I mean, it is good to subsidize and try to help the farmers, that is not bad, but yea, anywhere the whole system is not working at all, fertilizers don't come etc.

Interviewer: Do you think at the moment farmers do have some livestock?

Interviewee: It is still very low we have a lot of villages which have no livestock, it is only in the villages which we started, it is very difficult for someone to start alone, that is why we say we start with one village a time, it is not easy to start with livestock. In the dry season you have nothing especially when it is burned, you need to walk quite far, you don't want to have your animals on the land, and what do you do if everything is burned, than your animal will starve actually, it is difficult to start with livestock, we have our challenges, and that was the advantages of our farmers, we really need to push, even rules, we went to the palace [house of the chief] several times, and pushed for rules, for example we pushed for a law, that, we have a free grazing period every year where animals can be realised without having to herd them, that is after the harvest, from June to November, so it is six months, where the livestock owner needs to herd its animals every day because than everyone will have their crop fields, but than in the dry season, when it is that for animal to find their feed they are free to roam, into people their farms, it is traditional land anywhere, there are no titles, actually all belong to the traditional leaders, that give land to their subjects, and, so we have that period which are free to roam, and those who have gardens along the stream are supposed to fence their gardens, so if you have animals in that period, in the dry period, moving in someone's its garden actually, it their own problems, it is the gardens, problem, it is the responsibility of the garden owners, we went a lot to the chief, and of course it is not, often you still need to debate something, big discussions, we actually bring all our livestock farmers with us, when we go to the palace, so we show that we are already a community with livestock, and those interest should also be respected.

Interviewer: One of the last questions, do you think that markets are a problem in this area, so if people grow something are they want to make money out of it are there markets?

Interviewee: Well, markets are a problem. Especially when you want to diversify, it is difficult for someone to sell, people have small fields, so if you have 8 bags of soya, it is difficult to sell that, how are you going to sell that? They don't organise themselves, although the Agricultural District Officer and the FED technician, as well as the Agricultural Extension Officer here in Mpanshya, they don't help in that, that is also what we are trying to go a bit, trying to have storage facilities, offer storage for the local farmers, if we can gather the soya beans, we could have, because buyers are there in Lusaka. They would come, as long as they have a full load, they can't come for five bags or ten bags, they need to have ten ton or more, and they will come and get it. Trying to organise the farmers as well, what they don't do, they don't trust someone also, to bring soya to someone's place for collection.

Interviewer: And is this than the job of the agricultural officer actually?

Interviewee: I think it should be actually, but it is not yet happening. Yes I think that would change a lot, that is what we are trying to do a bit as well with the finance institute, where we give out loans, to organise the farmers, they just did a programme on groundnuts, so he did like ten or fifteen farmers, just to start off, to make them bigger in the future, but we have 50 farmers growing soya beans, and we have contact with one of the bigger buyers who exports actually so not for the local market to Asia and other places, to Europe. And the contacts are their already, signed the contracts, the market opportunities are there, but for simple farmers here, he can't go and contact someone. But actually two years ago their where people from Lusaka coming and asked people to plant Sorghum, brought Sorghum seed with them and said they will come to collect and pay but people got just cheated. The payed a small amount and they said they would pay the remining but they did not come, and that is what people do, the simplest farmers here, they are so uneducated, they can't react, what can people do? So, yea.

Interviewer: I am not sure if there is something else which you would like to share or if you have any questions? I know we have been talking a lot already, but perhaps also something from the health perspective?

Interviewee: No it is fine.

Interviewee: Do you see any results in the stunting already?

Interviewee: Of course we are only concentrated in a few villages, the catchment of the hospital is huge, so we haven't followed that up. We should have done that we will be doing that from now one with families which join the goat program, so in five years we will do it again, and see if we have, and if there is change and see if it could be related to our program. Because there will always be change, but that would be really interesting. But for myself I have already seen people helping themselves, with the goats, it helped them a lot, paying school fees or even college fees, selling of 20 animals so they could pay the school fees, because their herd grew up to 50 animals in a few years. Like I said, it is like a saving, as long as you keep them ok, the animals will be doing fine, the moment you need something, your capital grows.

E) In-depth interviews interview guide

A) INTRODUCTION

A1. General details

A2. Can you briefly introduce yourself, who you are, about your family, your household. What is the beginning of your life (story) till today?

B) CORE

B1. May I ask what you do on a daily base?

B2. Can you perhaps describe your day, when do you wake up, what do you eat, what tasks do you do?

B3. What are the difficulties which you encounter on a daily base?

B4. What would you like to have or what do you need to solve these difficulties?

B5. What kind of sources of incomes do you have?

B6. What are the main stresses of gaining an income?

B7. How many people are depending on your income?

B8. What would an increase of income do to your livelihood?

C) FARMING

C1. What is the main aim for cultivating crops?

C2. Do you considering taking care of your crops as your main task/job?

C3. Do you consider yourself as a farmer?

C4. If you have surplus, do you sell your surplus (at a market)?

C5. How often would you have surplus?

C6. What would you need to increase your surplus?

C7. PHYSICAL

- What about distance to the market?

- What about a stall at the market?

- What about transportation costs to the market?

- What about possibilities to storage your harvest?

C8. FINANCIAL

- What about savings?*

- What about livestock?*

- What about loans?*

- What about financial risks which investing in increasing your output will bring?

For investments to increase your market output

C9. HUMAN

- What about your knowledge for improving your harvest output?

- What about your health: for working in the field?

- What about domestic chores which give barriers for working on the field?

- What about other tasks you need to do (before you can spend time on the field?)

- What about information you have about how to improve your output of the field?

C10. SOCIAL

- What about family members which help you on your land?

- What about community member which can help you?

- What about (becoming part of) a farmers cooperation?

C11. NATURAL

- Do you own your land?

- Is your land fertile?

- What kind of crops do you cultivate?
- Do you cultivate cash crops or food crops?

D) HOUSEHOLD INTRA-RELATIONS

- D1. Is the work on the field done by you (female) or by the men?
- D2. Who is the head of the household?
- D3. Who decides on decision made in the household?
- D4. Who decides on financial issues?
- D5. Would you like to increase the income of your land?
- D6. Do you think this will increase your decision power?
- D7. What would you do with an increased income?
- D8. What do you think your husband will do with an increased income?

E) END

- E1. What do you see for yourself in the future?
- E2. Is there anything that you would still like to share?
- E3. What are your feelings about this interview?

F) In-depth interview transcripts

Informant A

| | |
|--|---|
| Date | 16 th of April 2018 |
| Gender | Female |
| Age | 38 |
| Origin | Chongue |
| Marital status | Married |
| Religion | Apostol Church |
| Family-size | Her & her husband, 5 children and 1 grand child |
| Education level | Grade 12 |
| Daily income | Agriculture Her husband works at the mission hospital in Mpanshya. |
| Units of land | Does not know |
| Crops cultivated | Maize |
| Member of farmer group/organisation | X |
| Men-headed/female-headed household | Man |

Translator introduces ourselves and the purpose of the research. Explains what kind of questions will be asked. Asks for consent to participate in the research as well if it is alright to record.

Interviewer: Would you perhaps like to introduce yourself? Can you please translate after every question when she is ready?

Translator: Yes she is ready. She came here in 2007. Then she does farming and she also works in her garden.

Interviewee: And there are five children I'm out of a family of five children. There were two boys three girls.

Translator: And she has one granddaughter.

Interviewee: Did you understand? In my family we were with nine. However, for her here in her house there are five children living. Three girls two boys and one grandchild. She has a husband.

Interviewer: What does she do on a daily basis?

Interviewee: On a daily base I grow vegetables.

Interviewer: Which vegetables do you grow?

Interviewee: We grow okra, green beans, cabbage, rape that's all. Oh and yes cucumber.

Interviewer: And how does the day look like for you? When do you wake up? Do you take care of your children?

Interviewee: Yes, before they go to school I prepare them. We have breakfast before they go to school. And then I work on the fields.

Interviewer: Did you work on the fields today?

Interviewee: Yes. The children help me on the field as well.

Interviewer: And what are the difficulties which you encounter on a daily basis?

Interviewee: The difficulties which I encounter, I would say just for gardening we don't have enough inputs, inputs, I tried to say the chemicals which to use for the gardening are very difficult to receive those and we don't have enough of them so, that is the main difficulty for growing our crops. Yes that are the main challenges which we are facing because at this moment we want to plant tomatoes, with tomatoes, when you are growing tomatoes you need to fertilize, sprayer, everything you have to put in place before you can start before you start, so those are the challenges.

Interviewer: What would you like to have to solve these difficulties?

Interviewee: Yes if someone can help me with fertilizers I can plant tomatoes so I can sustain my living.

Interviewer: Do you get support from the government, with the e-voucher system?

Interviewee: Yes the previous years we were getting but let me say, but since last year till this season we did not receive anything they said that those who are working at the government that they didn't receive the inputs.

Interviewer: Do you think you will still receive them?

Interviewee: No I don't think so because, because those in the government they are managing to buy those, but looking at our standard our living, children that are going to school one of them goes to college, then we have these two girls they are going to grade 9 and learn to write now, the other one is in grade 7 and the other one is in grade 3.

Interviewer: That sounds good, what kind of sources of income do you have?

Interviewee: As I said earlier, we do gardening, my husband is working at the hospital, maybe you have been to the hospital? He works at the registry office, that is where he works so that is the income that we receive and from the gardening.

Interviewer: So your own income is from the garden? What are the main stresses for you for gaining an income? Which difficulties do you have for getting an income out of the garden, are you able to sell your products?

Interviewee: Yes we are selling, however there are many people that are doing gardening in this area but market options is only on a low pace so you don't receive a lot of money for it.

Interviewer: And what kind of crops do you sell?

Interviewee: Like today, we sell, we have green beans, okra.

Interviewer: You sell them?

Interviewee: Yes we sell.

Interviewer: And how many people are depending on your income?

Interviewee: The people that are depending on my income as I said are the children, and with the money which we receive from the garden we use the money here at home buying those things which are needed, like grinding [the maize], other cosmetics, things which are needed here to use for the children at school.

Interviewer: And what would an increase of your income for your family, what would you do if you have more money? Where would you spend it on?

Interviewee: If we would have more money, the money is needed to send the children to school. So that at least they can finish, they can maybe just doing something for themselves. The other thing is to buy goods for farming.

Interviewer: Why are you actually in farming? What is the main reason?

Interviewee: The main reason is for consumption.

Interviewer: Do you see farming as your job?

Interviewee: Yes.

Interviewer: And if you have surplus, will you sell it on the market?

Interviewee: Yes, maybe every after three or four days we are able to sell on the market.

Interviewer: Maybe I have already asked it but what would you need to be able, to increase your harvest?

Interviewee: We would need to add more crops, so we can sell, we need to have more crops as I said earlier the main crop that can gives us more money is tomatoes, but as I said earlier the maintenance used for the tomatoes, pesticides, we need those chemicals to control the pesticides.

Interviewer: And is it easy for you to go to the market?

Interviewee: I just go to the market in the village, but sometimes the marketeers come here and buy products from us here.

Interviewer: And do you need to pay and transportation costs if they are coming here?

Interviewee: They just buy it from here, they can get what they want and then go.

Interviewer: Do you have any possibilities to store your crops?

Interviewee: Possibilities to store my crops, the possibilities are not enough when you grow onions you want to sell unions at the higher price you need to, you need to keep them in a dry place. So it should be dry and not start rotting. You need to put them in a place where there is enough air. But we don't have such a place last year we kept them in this room but it was not enough, it did not receive enough air so it got rotten.

Interviewer: That is a pity! Do you have any savings to improve your harvest?

Interviewee: No we don't have.

Interviewer: And do you have any animals?

Interviewee: We do have some chicken, but we don't have goats or a cow, we don't have.

Interviewer: And are you able to, or do you have a loan?

Interviewee: No.

Interviewer: And if you invest in your garden are there any financial risks?

Interviewee: If you invest in your garden, there is, there are, like when you want to spray you need to wear the clothes that protect you, because otherwise the chemicals can harm you somewhere so there is a risk to your own health.

Interviewer: and what about your own knowledge, how did you learn to farm?

Interviewee: Yes I received a training, even now we are still training. The training that we get, those are the trainings of the agricultural extension officer sometimes they trainers call us how to farm the garden, including the farming of maize, and these extensions trainings are provided by the government. The previous training which we had was in February and it was both for woman and man.

Interviewer: Do you feel healthy enough to work on the fields?

Interviewee: Yes.

Interviewer: And do you feel like you need to watch the children more or do you have enough time to work on the fields?

Interviewee: If the children are here, they assist me on the garden, and as an example my grandchild they just take care of themselves.

Interviewer: Are there any other things which you need to do and that's why you can't spend time on the field?

Interviewee: Yes, if there can be any help with someone can give me, yes I can do can be doing something else then gardening there is maybe something which can make me busy.

Interviewer: Does your husband help you on the fields?

Interviewee: Yes he helps me, yes, yes, besides his work.

Interviewer: How would you find information about harvesting?

Interviewee: The information may be received from these trainings and we have trainings.

Interviewer: Have you any other family members which will be helping you on the fields?

Interviewee: Most of the time the children are the only ones to help us. There are no community members that help.

Interviewer: Are you part of a farming cooperation?

Interviewee: The previous years we had that, looking at this year it's not active [she was not aware of the name of the farming cooperation].

Interviewer: Is this your own land or from your husbands?

Interviewee: No it is our own, together with my husband.

Interviewer: Is your land fertile? Do you need a lot of extra fertilizer?

Interviewee: Yes I do need a lot of extra fertiliser.

Interviewer: And you already shared some with me but what about your crops, what kind of crops do you have on your fields?

Interviewee: Like this year's looking at the raining pattern wasn't good, we grew like groundnuts, green beans, but this year due to the raining pattern we only grew maize. Because the weather wasn't good, yes.

Interviewer: And is the maize for selling or for eating?

Interviewee: Just for consumption, actually we sell, we sell, if the surplus is more if the harvest is more, if we have enough we do sell it is just a few then we only use for our own consumption ourselves, this year we don't have enough to sell.

Interviewer: Than the last questions, if that is all right? Is the work on the field mainly done by you or by your husband?

Interviewee: By myself.

Interviewer: And who is the head of the house?

Interviewee: My husband.

Interviewer: And who decides on decisions made?

Interviewee: We do that together.

Interviewer: And who decides on financial issues?

Interviewee: Decisions on financial things, financial things we do together we plan together.

Interviewer: Would you like to increase the money you earn from the land? And do you think that will increase your decision power?

Interviewee: Yes, yes.

Interviewer: And what would you do with an increased income?

Interviewee: There are many things which we can do, just to sustain our living. I would like to sustain my household.

Interviewer: What do you think your husband will do with an increased income?

Interviewee: My husband, if the income increases because we do plan together, yes because the plans which we have the children, which we have that's the main challenge. To have the money to send them to school, so, if we have more money it can help us to send our children school because looking at the time we don't have, we don't have enough money, so we borrowed money just to send the children, so that the children can go to school, yes.

Interviewer: And what do you see yourself do in the future?

Interviewee: In the future, in the future there are many things as you have seen here it's a new place, actually we haven't even completed this house so we need to, there are many things that are still needed, I want to improve my house in the future.

Interviewer: Is there anything you would still like to share with me or do you have any questions?

Interviewee: I don't have any questions but looking at looking at the last year for the garden the main challenges that we face there is not enough water, if there can be a borehole it will make things move faster.

Informant B

| | |
|--|--------------------------------|
| Date | 16 th of April 2018 |
| Gender | Female |
| Age | 33 |
| Origin | Dauzeni |
| Marital status | Married |
| Religion | Apostol Church |
| Family-size | Her & her husband, 4 children |
| Education level | Grade 8 |
| Daily income | Agriculture |
| Units of land | 3-4 ha |
| Crops cultivated | Maize, sweat potatoes |
| Member of farmer group/organisation | X |
| Men-headed/female-headed household | Man |

Translator introduces ourselves and the purpose of the research. Explains what kind of questions will be asked. Asks for consent to participate in the research as well if it is alright to record.

Her husband was around when conducting the interview. She couldn't show her around on her farm due to her farm not being located nearby her house.

Interviewer: Can you perhaps introduce yourself to me?

Translator: She is Betina Muchimba

Interviewer: And what about your family?

Translator: They are living here, she has a husband and four children, two girls and two boys. She grew up in Chenque.

Interviewer: May I ask what you do on a daily base?

Interviewer: Sorry can you translate?

Translator: On a daily base, it is just farming she's doing her garden when she comes back from the garden she goes to friends to chat with people.

Interviewer: And can you perhaps describe your day when do you wake up what do you eat?

Translator: She wakes up around 06:00 she makes breakfast she eats and then after breakfast you work on the lands or you take care of the children. When she wakes up in the morning she makes, she prepares her children makes breakfast.

Interviewer: How old are the children?

Translator: The third one is three years and the other one is one year, two of them live at her grandma [mother's place] and they are already nine years and six years.

Interviewer: What are the difficulties which you encounter on a daily basis?

Translator: It's difficult to carry those baskets to water the plants, and those chemicals you are supposed to have enough but this time she doesn't have enough chemicals.

Interviewer: What would you like to have so that these difficulties are so.

Translator: The difficulties, she needs to buy machine hand pump, she wants to have a borehole here, there's nowhere near by here, so they just take the water out of the stream.

Interviewer: What kind of sources of income do you have?

Translator: She just has the garden she gets and brings them to the market she has some money with the money she buys things for the house.

Interviewer: So the income is from the farm and the garden and what about her husband?

Translator: And her husband is working at Benjamin his farm.

Interviewer: And what are the main stresses of gaining an income for her?

Translator: But this time she don't know what she can do, when she finds a lot of money, sorry can you ask me again?

Interviewer: But she told you a whole story right? Can you please translate what she just said? The question was what are the main stresses of gaining an income for her?

Interviewer: Can you please translate it for me.

Translator: about gardening she's supposed to buy fertilizer let's your she bought for backs of thighs for the lighter for this year she's supposed to buy 6 or 8.

Interviewer: How many people are depending on her income?

Translator: Lots of people 7, people also her grandparents.

Interviewer: What would an increase of your income do for your household?

Translator: She would like to have her own chicken.

Interviewer: What are the main crops she grows?

Translator: She says the crops she has is rape, chihowa, that is how we call the leaf of pumpkin then okra onions and that's it.

Interviewer: No maize? Can you check? Can you ask her if she grows maize?

Translator: She also grows maize.

Interviewer: Do you consider taking care of your farm as your main task?

Translator: So she said for those crops she farms, just gardening, first when you can put maize, so you have to remove the grass and thereafter you can put the fertiliser. Sometimes she books the cap and she takes it to the market, to get those foods, like maize, she takes it to the market.

Interviewer: Does she consider herself as a farmer?

Translator: She cannot manage to take care alone so the farm is done by the whole family so her husband is also farmer and she helps.

Interviewer: So she doesn't consider herself as a farmer? Once again does she consider herself as a farmer and what is the answer?

Translator: She and her husband they are the farmer's.

Interviewer: And if they have extra crops they sell it to the markets?

Translator: Sometimes she did gardening for tomatoes so these tomatoes she sold on the market.

Interviewer: And what about maize?

Translator: The maize is just for the family only.

Interviewer: How often can she sell crops at the market?

Translator: Those crops she has those people come and get themselves.

Interviewer: And how often is that?

Translator: They come after 3 months or 6 months once a year. You need to spray the tomatoes every two weeks.

Interviewer: Does she now have tomatoes?

Translator: Right now she doesn't have tomatoes.

Interviewer: What crops does she have right now?

Translator: Right now she only has sweet potatoes?

Interviewer: And are these sweet potatoes going to be sold on the market?

Translator: No this sweet potatoes or only for herself she's not going to sell them on the market.

Interviewer: But would she needs to have so she can sell it on the market?

Translator: She's supposed to make a lot of sweet potatoes but right now she doesn't have.

Interviewer: So what do she needs to have more sweet potatoes?

Translator: Right now she doesn't have any business or any money these sweet potatoes are just to eat herself.

Interviewer: So this year she is not going to sell any crops. Does she have any savings?

Translator: So she said, we have peace work here [temporary work].

Interviewer: And does she have any live stock?

Translator: She doesn't have.

Interviewer: And does she have a loan?

Translator: She don't have.

Interviewer: And is she educated to be a farmer

Translator: No She just learnt by herself.

Interviewer: And does she feel healthy to farm?

Translator: She doesn't know.

Interviewer: And does she have to take care of the children instead of farming?

Translator: The first thing she takes care of the children and then she goes to farm and her children stay at their house.

Interviewer: Are there any family members which help her on the farm?

Translator: No she doesn't have.

Interviewer: And her husband does he helps on the farm?

Translator: No.

Interviewer: And is she parts of a farming corporation?

Translator: No.

Interviewer: And does she owns the land?

Translator: No.

Interviewer: Is her land fertile

Translator: Yes.

Interviewer: And which crops does she currently cultivate?

Translator: Maize, for the maize she needs fertilizer, only maize and sweet potatoes.

Interviewer: And does she grow the sell or only for themselves?

Translator: Only for themselves.

Interviewer: Leicester restaurants is the work on the field don't buy her and not pay her husband

Translator: Also the husband's works on the fields.

Interviewer: And who is the head of the household?

Translator: Her husband.

Interviewer: And who decides on decisions made in the household?

Translator: Both.

Interviewer: And who decides on financial issues?

Translator: Both also.

Interviewer: And would she like to only sell group food for herself also sell food to sell on the market [in the future].

Translator: She would like to grow cassava to sell.

Interviewer: Do you think she will have more decision power when she earns more money?

Translator: Yes.

Interviewer: what would you do with an increased income where would you spend it on.

Translator: She said if she has money she will get that money she will start a business so then she can have money to build her house.

Interviewer: I what do you think her husband will do if they have more money?

Translator: they think together about this.

Interviewer: What does she see herself to do in the future?

Translator: If she will find money, she can start her own business and she will be so happy.

Interviewer: Is there something else she would like to share with me or does she have any questions?

Translator: No.

Informant C

| | |
|-------------------------------------|--|
| Date | 16 th of April 2018 |
| Gender | Female |
| Age | 28 |
| Origin | Dauzeni |
| Marital status | Married |
| Religion | Baptist |
| Family-size | Her & her husband, 4 children |
| Education level | Grade 6 |
| Daily income | Agriculture |
| Units of land | 2 ha |
| Crops cultivated | Maize, sweat potatoes, cassava, groundnuts |
| Member of farmer group/organisation | X |
| Men-headed/female-headed household | Man |

Translator introduces ourselves and the purpose of the research. Explains what kind of questions will be asked. Asks for consent to participate in the research as well if it is alright to record.

She couldn't show us around on the farm because it was not located nearby her house. Children where happy to pose for an picture.

Interviewer: Let me find the questions. Can she perhaps introduce herself?

Translator: She is Mope. And these are her children. She does have a husband. Those children she has three, she has four children.

Interviewer: And her husband is not here.

Translator: Her husband is around.

Interviewer: Where does he work.

Translator: No he's just around.

Interviewer: Can you perhaps ask what she does on a daily basis.

Translator: She's just farming.

Interviewer: Or perhaps ask how her day looks like.

Translator: She wakes up at 8 in the morning then she prepared her breakfast. who of the children go to school.

Interviewer: Does she encounter any difficulties during the day?

Translator: She doesn't encounter any difficulties.

Interviewer: What kind of sources of income does she have?

Translator: There is no income.

Interviewer: What would you do if she does happening come?

Translator: If she finds the money she can start the business like selling tomatoes, rape.

Interviewer: What is the main reason why they are farming?

Translator: It is just for themselves to eat.

Interviewer: Is that the main job which he does during the day?

Translator: Yes only farming.

Interviewer: And if they have more crap do they sell it at the market?

Translator: Yes they sell.

Interviewer: What do they need to have more crops?

Translator: They need to have fertilisers.

Interviewer: What about the distance to the market do they sell it here in the village?

Translator: Yes they sell each year in the village.

Interviewer: And do they have any possibilities to store their crops?

Translator: No.

Interviewer: And does she have any saving?

Translator: The savings, if she haves money she buys things for the house.

Interviewer: Does she have live stock?

Translator: Just some chicken.

Interviewer: Does she have a loan?

Translator: No.

Interviewer: Does she perceive any financial risks when farming?

Translator: Sometime she wants to do chemicals into the garden, but these chemicals can affect your health.

Interviewer: How does she know to farm?

Translator: She just knows herself she didn't have any education or training.

Interviewer: What about her health, how does she feel?

Translator: Good.

Interviewer: What about taking care of the children that's it take too much time?

Translator: After the farm she takes care of the children.

Interviewer: Would you like to have more information about farming.

Translator: Failed to answer.

Interviewer: Do family members help her on the farm?

Translator: Just her husband.

Interviewer: No community members?

Translator: No one.

Interviewer: Is she part of a farming organisation?

Translator: No.

Interviewer: Which crops does she cultivate now?

Translator: She cultivates maize, sweet potatoes, cassava and groundnuts.

Interviewer: And they are all for consumption?

Translator: Yes.

Interviewer: Who is the head of the household?

Translator: Her husband.

Interviewer: Who decides on decisions made in the household?

Translator: Both of them.

Interviewer: And who decides on financial issues?

Translator: Both of them also.

Interviewer: Would you like to make money with the crops to grow?

Translator: If she has a lot the maize she can sell but now she cannot.

Interviewer: What would you do if she has more money?

Translator: She will use the money for farming. This year she had three bags of fertilizer but next year she will need to have six.

Interviewer: What does she think her husband will do and with more money?

Translator: for now she's just thinking about building a house.

Interviewer: and what does she see for herself in the future

Translator: She doesn't answer.

Interviewer: Is there something else she would like to share with me or does she have any questions?

Translator: No.

Informant D

| | |
|--|--|
| Date | 17 th of April 2018 |
| Gender | Female |
| Age | 33 |
| Origin | Chapita |
| Marital status | Divorced |
| Religion | Waness |
| Family-size | Herself, 5 children (4 boys one girl) |
| Education level | No |
| Daily income | Agriculture, peace work / temporarily work |
| Units of land | 1 ha |
| Crops cultivated | Maize, groundnuts, sweat potatoes |
| Member of farmer group / organisation | X |
| Men-headed/female-headed household | Woman |

Sometimes she earns some money by washing clothes from others. She is divorced from her husband. She is living here now for one year. This is her own place/farm, and different from the one she was living with her husband. Made some pictures of her and her children, sitting, millet on the background

Translator introduces ourselves and the purpose of the research. Explains what kind of questions will be asked. Asks for consent to participate in the research as well if it is alright to record.

Interviewer: Can you perhaps ask what she does on a daily base?

Translator: she's just getting the water and she's just farming.

Interviewer: Does she encounter any difficulties during the day?

Translator: She failed to answer, she doesn't have any difficulties.

Interviewer: And what about when farming?

Translator: Those difficulties are, to remove the grass in the farm, to get fertilizer.

Interviewer: What are the main stressors for gaining an income?

Translator: She said by those time she divorced from her husband, so she doesn't earn money.

Interviewer: So in the best her husband earns money?

Translator: In those times she was married she was depending on her husband but now she does this work.

Interviewer: And how did her ex-husband earn money?

Translator: Her ex-husband, if you found money he just used it for drinking alcohol.

Interviewer: He didn't have a job or something like that?

Translator: No only like Peterborough if he found some money.

Interviewer: What will the increase of income do for households?

Translator: For now she says, the income, she just wants to take care of the children and herself.

Interviewer: So the farmland is hers or is it from her husband?

Translator: No it is hers.

Interviewer: What kind of crops, we already asked, will she sell crops on the market or will she use it for food?

Translator: Just for eating.

Interviewer: Would you like to sell some of her crops?

Translator: Just if she has enough, like maize if she has more than 10 bags she can't even sell at the markets, she has not enough to sell.

Interviewer: But she would like to sell?

Translator: Yes if she would have had enough, she would like to sell.

Interviewer: So this year so will she will not still right? does she consider herself as a farmer?

Translator: Yes.

Interviewer: And what would she needs to sell crops next year?

Translator: If she found a lot of foods like maize and cassava, like next year, And for now she's just planning for next year to have a big farm if she can manage if God allows her, she can manage to have a big farm so she can have next year she can sell her crops by next year.

Interviewer: And what they should need to have this big farm?

Translator: The seeds of those crops she would like to have and fertilizer.

Interviewer: Does she have access to the seeds and fertilizer?

Translator: Yes she can have, if she manages to find the money.

Interviewer: And how will she get that money does she have any savings?

Translator: No.

Interviewer: And is she able to get a loan?

Translator: No.

Interviewer: And does she have any livestock?

Translator: No she doesn't have.

Interviewer: How did she learn to farm? Did she do any training?
Translator: She just knows from her mum.
Interviewer: And what about her health how does she feel?
Translator: She feels fine.
Interviewer: And how many meals a day does she eat?
Translator: That is normally two, If she finds a breakfast then lunch then supper so that will be three times but it's only if she able to.
Interviewer: And can she have two meals a day the whole year?
Translator: Yes she can manage.
Interviewer: Are there any family members which help her on the farm?
Translator: She doesn't have.
Interviewer: And from the community?
Translator: No.
Interviewer: Is the land her own?
Translator: Yes.
Interviewer: Is the land fertile?
Translator: Her land is not very fertile.
Interviewer: And if she can bring Cross to the markets how does she do that?
Translator: Just walking.
Interviewer: And does she has any possibilities to store her harvest?
Translator: The crops which she can sell, she just takes it from here to the market.
Interviewer: When she was still together with her ex-husband who decided about decisions made in the household?
Translator: Herself.
Interviewer: Yes now she does but when she was still together with him who decided about decisions made?
Translator: her husband made the decisions.
Interviewer: Did he also make the decisions on financial issues?
Translator: Both of them.
Interviewer: What will she do if she has more money?
Translator: If she has a little money, she will just buy things which she can use in her house.
Interviewer: And if she has more money?
Translator: If she can have a lot of money she can build a house and she can sponsor to let her children go to school.
Interviewer: And what does she think her ex-husband's would have done if he had more money?
Translator: Nothing he was just drinking alcohol.
Interviewer: And what does she see for herself in the future?
Translator: She is fine now.
Interviewer: Is there something else she would likes to share with me or does she have any questions?
Translator: No.

Informant E

| | |
|--|---|
| Date | 17 th of April 2018 |
| Gender | Female |
| Age | 30 |
| Origin | Lupiepa |
| Marital status | Married |
| Religion | Roman Catholic |
| Family-size | Wife, husband, 3 children (1 boy 2 girls) |
| Education level | Grade 7 |
| Daily income | Selling Fritta's (fried dough) |
| Units of land | 1 ha |
| Crops cultivated | Maize, cassava, sweat potatoes, pumpkin (at family farm) Maize (at her farm) |
| Member of farmer group / organisation | X |
| Men-headed/female-headed household | Man |

Plenty of kids around when we were doing the interview. The woman where washing clothes before we arrived. She has a mobile phone.

Translator introduces ourselves and the purpose of the research. Explains what kind of questions will be asked. Asks for consent to participate in the research as well if it is alright to record.

Interviewer: Does she mainly work on the family farm or also on her farm?

Translator: She first works at this farm and then she goes to her own farm.

Interviewer: Can you perhaps ask what she does on a daily base?

Translator: One daily base she cleans her house and takes care.

Interviewer: Does she encounter any difficulties on a daily base?

Translator: No.

Interviewer: And does she encounter any difficulties with farming?

Translator: It's too difficult to farm when moving the grass on the fields or you put a spray a weed killer.

Interviewer: So what is difficult for the farming?

Translator: She don't know exactly.

Interviewer: so how does she earn her money, she sells fritta's [fried dough balls]?

Translator: Her own fritta's sometimes someone calls her for doing peace work.

Interviewer: Does her husband earn money?

Translator: her husband, he knows to build the house of people, and earned money with that.

Interviewer: Does she encounter any difficulties with earning money?

Translator: Sometimes if she doesn't have the money she can't even find the money for food.

Interviewer: So sometimes she doesn't have enough money to feed herself. how many people are depending on her income?

Translator: 4 people, her children and her husband.

Interviewer: what would she do if she has more money?

Translator: To feed her children, to care for herself, to buy the clothes.

Interviewer: Does she sometimes sell her crops to the markets?

Translator: If she has a lot yes she sells at the market.

Interviewer: But this year did she sell?

Translator: No.

Interviewer: Can you perhaps ask if all the children can be a bit more quiet. Thank you. which crops does she sell to the market if she has enough?

Translator: Cassava and sweet potatoes.

Interviewer: Would she just walk to the market?

Translator: She just walked to the market.

Interviewer: Does she have any possibilities to store her crops?

Translator: She just brings her crops to the markets she doesn't store her crops.

Interviewer: Does she consider herself as a farmer?

Translator: Yes.

Interviewer: What will she do so that her her harvest of next year is bigger so she can sell it to the market?

Translator: She's planning to have a big field next year so she can sell at a market.

Interviewer: And how is she planning to make that big field?

Translator: She is thinking of buying another piece of land. She will also buy a lot of fertilizer so she can grow the maize.

Interviewer: Does she have savings or how is she going to pay for that.

Translator: She doesn't know that.

Interviewer: So she doesn't have savings or a loan?

Translator: She doesn't have.

Interviewer: And does she have any animals?
Translator: Only some chicken.
Interviewer: And how did she learn to farm?
Translator: She learnt it from her mother.
Interviewer: Does she have enough energy to work on the farm.
Translator: Yes.
Interviewer: How many meals does she eat a day?
Translator: Three meals a day, for the whole year.
Interviewer: Who takes care of the children when she's working on the fields?
Translator: She just brings the children to the fields.
Interviewer: Does any family members help her on the fields?
Translator: No that's her husband's were helped as well as the children.
Interviewer: Is the land fertile?
Translator: The land is fertile.
Interviewer: Who works the most under Fields her husband or herself?
Translator: Her husband's works the most on the fields.
Interviewer: And who makes the decisions in the household?
Translator: Both of them
Interviewer: And to make decisions about money?
Translator: Her husband's.
Interviewer: Does she think if she can earn more money she has a higher decision power?
Translator: No.
Interviewer: What would she do if she has more money?
Translator: She wants to have a business she thinks about if she has more money she can start a big business.
Interviewer: And what does she think about if your husband has more money but does she think he will do?
Translator: He will buy food [unclear if he will buy food for him or the family]. She failed to answer, she doesn't know.
Interviewer: Does she think he will spend money on alcohol?
Translator: Maybe, you can think sometimes.
Interviewer: What does she see herself to do in the future?
Translator: She doesn't know.
Interviewer: Is there something else she would likes to share with me or does she have any questions?
Translator: No.

Informant F

| | |
|--|--|
| Date | 17 th of April 2018 |
| Gender | Female |
| Age | 37 |
| Origin | Chipenti |
| Marital status | Married |
| Religion | 7 th day church |
| Family-size | Wife, husband, 5 children (4 boys 1 girl) |
| Education level | Grade 7 |
| Daily income | Peace work once a while, is not able to earn money with agriculture. |
| Units of land | 1 ha |
| Crops cultivated | Sweet potatoes, ground nuts |
| Member of farmer group / organisation | X |
| Men-headed/female-headed household | Man |

She wanted to be interviewed after we did an interview at her neighbour.

Translator introduces ourselves and the purpose of the research. Explains what kind of questions will be asked. Asks for consent to participate in the research as well if it is alright to record.

Interviewer: Can you perhaps ask what she does on a daily base?

Translator: She washes her clothes, takes care of the children and her husband.

Interviewer: Does she encounter any difficulties during a day?

Translator: For now she doesn't have any difficulties.

Interviewer: And does she encounter any difficulties when farming?

Translator: Difficulty for farming, after you are done for maize, you have to plan, you are supposed to clean the field for groundnuts or sweet potatoes. Those are difficulties.

Interviewer: What are [more specific] the difficulties?

Translator: She don't know that..

Interviewer: And what is difficult for her to earn money?

Translator: The difficulties encountered, if she finds money, she is supposed to buy books for the children, pay the school fees.

Interviewer: Is it difficult for her to earn money?

Translator: She fails to find a lot money to take care for herself. Although she does peace work sometime, if someone calls her to do peace work in house, but those money is just little, not enough to care.

Interviewer: And her husband, does he earn some money?

Translator: For now her husband is just sitting, no working, Not doing anything.

Interviewer: It is a temporary farm right? Does she have her own farm as well?

Translator: Yes she has her farm in Chapeti, where she comes from.

Interviewer: Does she go there often?

Translator: No.

Interviewer: If she would have more money where would she spend it on?

Translator: For now, if she finds money, she just depending, for food to it because this year she doesn't have maize, just a little one, causing to rain.

Interviewer: If she has money she will spend it on food. What crops is she growing?

Translator: For now? Now she just only have sweet potatoes and groundnuts.

Interviewer: She doesn't have maize, what happened?

Translator: Due to the sun and the rain.

Interviewer: So she wanted to have maize but the market isn't good. Does she sees herself as a farmer?

Translator: Yes.

Interviewer: This year she does not have enough to sell at the market, right? If she would have enough would she than sell it on the market.

Translator: For now she doesn't have, but maybe for next year she things maybe she can have some to eat some to sell.

Interviewer: Does she have a plan how to have more harvest next year?

Translator: She doesn't have a plan.

Interviewer: But she hopes to have more [next year]?

Translator: Yes.

Interviewer: What does she thinks she needs to have to have more [harvest next year]?

Translator: For next year, if she has money, she can have a lot of food, farming a lot, she thinks about buying her own place. Where she can stay with her husband and she plans to have a lot of food.

Interviewer: So if she has more money, she will buy her own place. Does she have any savings?

Translator: No.

Interviewer: Is she able to get a loan?

Translator: She can't have.

Interviewer: Does she have any animals?

Translator: She doesn't have.

Interviewer: How does she know to farm?

Translator: She hears on the radio sometimes, the big farm like Chipata, us on the farm, we put traditional beans for those leaves, they came down, you make a manure. So she heard on the radio.

Interviewer: And now she makes it herself as well?

Translator: Yes.

Interviewer: That is good, how many meals a day does she eat?

Translator: Three times a day.

Interviewer: For the whole year?

Translator: Yes everyday, three meals a day.

Interviewer: Does her husband help her on the farm as well?

Translator: Yes.

Interviewer: And any other people from the community?

Translator: No.

Interviewer: And who works the most on the farm?

Translator: Her husband.

Interviewer: And who decides on decisions made within the household?

Translator: Both of them.

Interviewer: And who decides on how to spend money?

Translator: Only her husband.

Interviewer: And does she think if she earns money herself that she has more right to decide on it?

Translator: She thinks that if she will find more money, she can build a house.

Interviewer: And what does she think what her husband will do if he has more money?

Translator: She doesn't know, because there is no money. Nothing.

Interviewer: Would he spend it on drinking?

Translator: Yes.

Interviewer: What does she see for herself in the future?

Translator: She failed to answer.

Interviewer: Is there something else she would like to share with me or does she have any questions?

Translator: No.

Informant G

| | |
|---------------------------------------|---|
| Date | 17 th of April 2018 |
| Gender | Female |
| Age | 50 |
| Origin | Lungne |
| Marital status | Married |
| Religion | Baptist church |
| Family-size | Wife, husband 3 children and 4 grand children |
| Education level | Grade 7 |
| Daily income | Chock hole (husband) Agriculture |
| Units of land | 1 ha |
| Crops cultivated | Maize sweet potatoes cassava |
| Member of farmer group / organisation | X |
| Men-headed/female-headed household | Man |

She was laughing out loud all the time, very happy woman. However, she did asked for money in English although she wasn't talking English besides that.

Translator introduces ourselves and the purpose of the research. Explains what kind of questions will be asked. Asks for consent to participate in the research as well if it is alright to record.

Interviewer: Can you perhaps ask what she does on a daily base?

Translator: It's just farming during the day. farming from the morning up to 10 when she gets there she comes here.

Interviewer: And that she encounter any difficulties during the day?

Translator: The difficulties are fertilisers that she doesn't have fertilizers. for now the difficulties she doesn't have for now she needs to have more money so she can manage to buy fertilizer. she says it's difficult to find the money, money..

Interviewer: How does she normally get her money?

Translator: For now, for this year it's difficult to find some money.

Interviewer: And the past years?

Translator: This year the land is not to good, for the past years she could sell some of her maize. Her husband's makes chock hole, but he is 64 years so it is hard, but it is because they need to earn money.

Interviewer: And how many people are depending on your income?

Translator: No one is the depending on her income. Only her husband has an income.

Interviewer: What would she do if she has more money?

Translator: She wants to build a house to sleep in. And she want to buy clothes.

Interviewer: And the farm owned by her or by her husband?

Translator: This farm is from her and from her husband.

Interviewer: Does she have her own farm as well?

Translator: For now she don't have.

Interviewer: And which crops does she grow?

Translator: She grows maize, sweet potato, groundnuts, pumpkin and leaves of pumpkin.

Interviewer: Does she see herself as a farmer?

Translator: Yes.

Interviewer: And if she has enough crops does she sell them on the market? **Translator:** If she has enough she has a part to eat and has a part to sell.

Interviewer: And does she have enough to sell?

Translator: This year she does not have enough.

Interviewer: And how is she going to make sure for next year she has more crops herself.

Translator: If the rain comes good next year. then she can have some more miss to sell. so she's in needs of the rain.

Interviewer: So she will not sell others crops?

Translator: For now she is not going to sell. Perhaps for next year.

Interviewer: And if she is going to sell, she just walks to the market.

Translator: Yes she manages with walking.

Interviewer: And does she have any savings?

Translator: No.

Interviewer: Money I don't have money.

Interviewer: Do you have any animals?

Translator: She just owns some chicken.

Interviewer: Does she think she wants to have a loan?

Translator: She can't manage to have a loan.

Interviewer: How did she learn to farm?

Translator: Her mother teaches her.

Interviewer: And what about taking care of the children does that mean she have less time to farm?

Translator: The girl that she has here, she only has one child to take care of.

Interviewer: Does other people help her on the farm?

Translator: Just her husband.

Interviewer: And is this her own land?

Translator: Yes.

Interviewer: And who works the most on the fields her husband or she's herself?

Translator: They work together.

Interviewer: Who makes decisions in the household?

Translator: She can manage to make her plans alone. is she doesn't have money she does some peace work so she can buy some food and she can decide about it herself.

Interviewer: So if she has her own money she can decide herself ? And other ways husband decides?

Translator: She can buy what she wants to use also from the money of her husband. she wants to have a house, a mattress.

Interviewer: What will she do if she has more money?

Translator: She will buy food.

Interviewer: And what will her husband do if they have more money?

Translator: He will by food.

Interviewer: Will he by drinks as well?

Translator: No her husband doesn't drink.

Interviewer: Is there something else she would likes to share with me or does she have any questions?

Translator: No.

Informant H

| | |
|--|---|
| Date | 18 th of April 2018 |
| Gender | Female |
| Age | 26 |
| Origin | Mphanshya |
| Marital status | Divorced |
| Religion | White church |
| Family-size | Herself and one boy (which mostly lives at her parents place) |
| Education level | Grade 12 |
| Daily income | Selling vegetables on the market. |
| Units of land | 3 ha |
| Crops cultivated | Maize and hot beans . |
| Member of farmer group / organisation | X |
| Men-headed/female-headed household | Woman |

Older sister of Hellen my translator. She sells vegetables on the market in town. Offered us Nshima.

Translator introduces ourselves and the purpose of the research. Explains what kind of questions will be asked. Asks for consent to participate in the research as well if it is alright to record.

Translator: She is doing business.

Interviewer: What kind of business?

Interviewee: Selling tomatoes and vegetables.

Interviewer: And how do you get these tomatoes?

Interviewee: To order, buy them myself and sell them at the market.

Interviewer: So from how do you buy them?

Interviewee: Chequena area.

Interviewer: You can buy them and sell them at the market. Are these tomatoes also sent to Lusaka?

Translator: Yes.

[...]

Interviewer: Can you tell me what you do on a daily base?

Interviewee: Business.

Interviewer: Shall we first do the questions, or are we first going to cook?

Translator: Yes after the questions we can cook.

Interviewer: So what does she do on a daily base?

Interviewee: In the raining season we are busy with cultivation of the field. But this time, in the dry season I am busy with the business. The tomatoes, onions, hot beans.

Interviewer: So the beans of yourself you also sell?

Interviewee: Yes.

Interviewer: So how does your day look like?

Interviewee: Like today? I prepare my breakfast, Nshima, green my yard, sweep my house, there after I will go to the market. To sell tomatoes. But today I am not going because I don't have tomatoes, they are too difficult to order. They are expensive, a box is 200kw (20 US).

Interviewer: And if you sell them how much do you earn?

Interviewee: Maybe sometimes, 350 (35US) – 450 (45US), or so. But today I am not going, I am here because I don't have tomatoes there.

Interviewer: So what are the difficulties which you then have during the day?

Interviewee: Like today?

Translator: She don't have today.

Interviewer: And what are your difficulties for earning some money?

Interviewee: The types of business, like here, the environment of Mphanshya, it is a difficulty, maybe we are with 20 marketers in the market, but all of us are perhaps only selling on type of the business, like onions or tomatoes, and they all, so it is too difficult to find the biggest money, so we are not able to have a different business. So like now the tomatoes are too expensive to order. So they are too expensive, so like today I don't have tomatoes, so you sit. But my plan, if the days are coming right, I want to change the business.

Interviewer: So you would like to sell something else? How are you going to do that?

Interviewee: My mind is telling me that when I, I join the community, that will grow business.

Interviewer: What would you like to grow?

Interviewee: I would like to join the Kompanygroup.

Interviewer: Which group?

Interviewee: Kompany.

Interviewer: How do I write that? And what kind of group is that?

Interviewee: They are teaching, to grow vegetables, to cultivate the gardens, the maize, during the raining season, and cassava, soya beans and sun flower.

Interviewer: That is an organisation in the village that can teach you? Who leads it?

Translator: Yes that is Brenda [the woman we have seen this morning].

Interviewer: And what are your main difficulties to gain your money?

Translator: Ask again.

Interviewer: And what are your main difficulties to gain your money?

Translator: Shelley, she said she already talked about her business.

Interviewer: And how many people are depending on her income?

Translator: Her family.

Interviewer: So herself and her boy? And what would she do if she has more money?

Translator: If she can have a lot of money. She can have, a can go to Naconde [biggest town her in the area], and order a lot of clothes, and other things, she can order, she want to open a big boutique. Selling clothes.

Interviewer: And this is all your own land?

Interviewee: Yes.

Interviewer: And you grow maize and hot beans?

Interviewee: Yes.

Interviewer: And how many hours a day do you spend on the field?

Interviewee: Three hours. During the raining season, I can only prepare a halve lima.

Translator: She can only cultivate a halve lima because, because she can't prepare more.

Interviewee: But now I am planning to cultivate three hours a day.

Translator: Last year, she could only cultivate for one lima, last year, she did one hectare, so now for next year, she things about she can do two or three lima, yes.

Interviewer: And what would she need to have to increase her cultivation area?

Translator: If she has two lima for maize, after that, she will have many maize, another one she can get for herself to eat and another one for sell. So she can have more money.

Interviewer: So what do she need to have, like, what does she need to have to make two lima? This year she only did one lima right, next year she want to do two lima, what does she needs for that?

Translator: Fertilizer, if she can manage to have two lima for next year, if she can manage to find the seed for maize and for fertilizer.

Interviewer: And how is she going to find the seeds?

Interviewee: If she haves money, she will go and buy at the market.

Interviewer: And for the fertilizer?

Interviewee: Yes the same.

Interviewer: And is there any support from the government for her?

Interviewee: No.

Interviewer: And what about the e-voucher system?

Interviewee: No.

Interviewer: Do you see yourself more as a farmer or as a business woman?

Translator: When it is time she works at the field, after that, she prepares herself and she goes at the market, so she is both.

Interviewer: This year she will not have enough maize to sell?

Translator: For now she don't have.

Interviewer: But she has enough hot beans to sell?

Translator: Yes she have a little but those beans, she is going to sell at the market.

Interviewer: So she just walks to the market right?

Translator: Yes she just walks.

Interviewer: And you don't need to pay to sell your food at the market?

Translator: Yes she pays, 5kw (0.50 US) a month.

Interviewer: Does she have any savings?

Translator: She don't have.

Interviewer: And do you have any animals?

Translator: She don't have.

Interviewer: And would you like to get a loan?

Translator: She want to get a loan but she is scared.

Interviewer: So what is she scared for?

Translator: If she can get a loan she is scared. She is willing to have a loan, but is scared, because for now if maybe I can get a loan, but maybe I fail to pay, so otherwise if you fail to pay, there is something.

Interviewer: And for what would she like to get a loan?

Translator: If she can get a loan she will order clothes.

Interviewer: So she doesn't want to have a loan for the farm?

Translator: She is scared for that. She said, I am scared to get a loan. If I fail to pay, I can lost my fields.

Interviewer: So, she doesn't want to have a loan for the field because if she losses it, she will lose her food source for herself. How did she learn to farm?

Translator: No, she did not learn to farm.

Interviewer: So how does she now to cultivate crops?

Translator: Her mum and her father taught her.

Interviewer: That is how she know, and what about the training group she was talking about?

Interviewee: I am willing to join.

Interviewer: How can you join?

Translator: It is time to join, if you want to join, you can go there and write your name.

Interviewer: You don't have to pay for it?

Translator: No you don't need to pay.

Interviewer: So why you don't join?

Translator: She is thinking about joining.

Interviewer: But you only need to sign.

Translator: Yes.

Interviewer: Uhm, how many meals does she eat a day?

Translator: Three times a day for the whole year.

Interviewer: Is it difficult with having a child to work on the field?

Translator: It is difficult to have a baby on the field, and after that you come here to prepare food for her baby.

Interviewer: So it is difficult to manage working on the field, doing her business and having a child.

Translator: Yes.

Interviewer: So how do you manage?

Translator: She takes him to her mum.

Interviewer: And now she is able to do what she wants to do.

Translator: Yes, even to day she did manage to take him away [to her parents].

Interviewer: Are there any other people helping her on the field?

Translator: No one.

Interviewer: Is it her own land? Did she buy it?

Translator: It is her own land.

Interviewer: And what happened with the father of her child?

Interviewee: He did not gave any support.

Translator: No support.

Interviewer: And what does she see for herself in the future?

Translator: For now, she is just fine.

Interviewer: Is there something she would like to ask me or something else she would like to share?

Translator: Yes, she said, now you are here, you are question these questions, what is the purpose.

Interviewer: For my research right, you told her?

Translator: Yes, she is doing research, when the time comes, will she help us.

Interviewer: How could I help her?

Translator: With a loan.

Interviewer: I can't do that.

Translator: And another question: you come back again in Zambia?

Interviewer: I don't know yet, I hope so but I don't know yet.
[starting making food together]

Interviewer: And how is it for you to be without a husband?

Translator: She said that without a man, she just says that sometimes people ask why she is not married. But for now she is not interested to get married, cause, her ex-husband, he was to bad, no support for children, for her, no support, even for her to buy things for food for her, her children, no he failed to buy, so for now I don't have a interested, for her self she manages to buy everything. So it is different, to get married now, she is happy without.

Interviewer: So does she think she can decide more without him?

Translator: Yes.

Interviewer: But she was married with that man?

Translator: Yes, they were married. No support, for this house, no support. They were living together, they still see each other. He is not married to someone else.

Interviewer: So he spend his money on other things than she wanted to do?

Translator: Yes.

Interviewer: And on what kind of things he was spending his money?

Translator: For now, her money, what she finds, she is buying clothes, for her and her children, buying food.

Interviewer: Yes that is what she is doing with her money right?

Translator: Yes.

Interviewer: And what did he do with money he had?

Translator: For now she don't know, there is no communication, maybe he is just drinking alcohol, but she don't know

Interviewer: And when they were together did he spend his money on other things than she wanted to do? So when they were together, on what kind of things he was spending his money on?

Translator: He was not giving the wife money, he did not give.

Interviewer: Does she know what he was doing with his money?

Interviewee: No.

Interviewer: Is it difficult to divorce?

Translator: Yes it is difficult to divorce.

Interviewer: Because, I think her man wasn't happy with that.

Translator: Yes.

Interviewer: So how does that go than?

Translator: By time she went, he said, "I will go, get another man".

Interviewer: He said that to her.

Translator: Yes. She said she wanted to divorce because she wasn't seeing anything. Like a marriage, I am staying I am like single [because he wasn't around].

Interviewer: How long were they together?

Translator: For one year.

Interviewer: How do you decide to marry someone?

Translator: She don't have interested to get married.

Interviewer: But how did they got together/who decided to marry with each other?

Translator: The man.

Interviewer: He asked her to get married. Did she know him before they got married?

Translator: She did not know him.

[asks how it goes in the Netherlands]

Translator: Here he proposed me.

Interviewer: But you did not know him?

Translator: After three months getting to know each other, we could marry.

Interviewee: Are you married?

Interviewer: I am not married.

Interviewee: Don't get married fast.

[laughing]

Interviewer: And if people get divorce, do they often get married with someone else?

Interviewee: Different people, some after divorce get married, and some not.

Interviewer: And here who decides to get married, can the woman decide?

Translator: Here the man decides.

Interviewer: And at what age do you get married?

Translator: At what age? Here in Zambia? The normal is 30, 30 till 35. But for now, everything is not oke, just for now it is 18 or 20 years.

Interviewer: Why it is for now different? Than normal?

Translator: I don't know, the people, I don't know. I, I am turning 24, but my husband is 28.

Interviewer: So there is a different age between woman and man.

Translator: Yes there is supposed to be a big difference between, not the same age, no, you can't manage to marry someone the same age. Us like my family, my grandma, she divorced from her husband, by time she divorced, she did not wanted to have any husband, she was young, I still remember, I was young, 2002. That my grandma she died. Than my grandpa, died..

Interviewer: You were still in contact with your grandpa, although they divorced?

Translator: My grandpa, he divorced, but maybe in 199.. somewhere there. But he died last year. In November. Heart problem and kidney problem and he died. The last one, out of us four past away.

[learning cooking Nshima and talking about my family]

Interviewer: Is it ok if I ask some more questions about her and her ex-husband?

Translator: Yes.

Interviewer: So when they where together who made the decisions within the household?

Translator: She was making her own decisions.

Interviewer: And what did her husband thought about it that she was making her own decisions?

Translator: Her husband did not follow, her decisions for the house. Her she did, but her husband no, he was not doing anything, he was not listening.

Interviewer: And who decided where to spend the money on? What about his money?

Translator: He did not gave her money. Not seen.

Interviewer: But he was earning money.

Translator: Yes.

[asking about when I wanted to get married]

Interviewer: And what about having sex, before getting married?

Translator: For now she don't think about it because she doesn't have a man.

Interviewer: But can you have sex before you get married?

Translator: Here in Zambia, you can have sex when you get married, the day you are married you will have sex.

[laughing]

Translator: At that day.. The traditional ceremony, we get the lady, put her inside a house, and then we teach how, to dance. So now, when you get that lady, we start to teach her to how to dance for her husband.

[laughing]

Translator: So here in Zambia, Shelley, here we have Brenda who teach us. She teach us. How to dance when you are having a man, what to do when having sex, how to take care of him, how you dance when you are having sex.

Interviewer: And do you talk about this with your husband as well?

Translator: No, we talk, if it is was well or not. Or if it was well.

Interviewer: And does he also ask if you liked it?

Translator: Yes.

Interviewee: So if you want to you can come?

Interviewer: So I should come? I should learn as well.

And what happen to girls if they have sex before they are married?

Translator: We are just scared about the pregnant, or a man can change his mind, so I stop, he can find an other woman. So we are supposed to take care.

Interviewer: And do you think it is easier for man to earn money than for woman?

Translator: For man? Man he is supposed to find money, and to bring money for me.

Interviewer: And how is that when you are by yourself?

Translator: For now, if you are by yourself, when you are alone, you are supposed to find a way, maybe selling the tomatoes.

Interviewer: And can you also do this when you are together?

Translator: Yes.

Interviewer: And does your man than need to allow it?

Translator: An other one will allow it, an other won't. He not allow.

Interviewer: So if your husband doesn't allow you to do it you can't?

Translator: Just sitting at home but he haves to bring you everything.

Interviewer: And what if he doesn't allow and he doesn't bring?

Translator: Than you need to start using knowledge. I need to find things so I can help my children, because he doesn't manage. He doesn't manage to bring everything.

Interviewer: Is she happier now without her husband?

Interviewee: Now I am wishing to get a boyfriend.

Translator: A nice one.

Interviewer: But she is happier now than when she was together with her (ex) husband?

Translator: For her ex-husband, not for now she don't think about him. She wants to have a boyfriend, not her ex, another one.

[continue cooking Nshima]

Translator: My husband, in 2011, he had a girlfriend.

Interviewer: But was he married?

Translator: Before he married me, he left her being pregnant in 2016. He married me.

Interviewer: He did not wanted to marry her?

Translator: Yes. He left her pregnant, I heard that she aborted the baby, but I just heard that she was laying and she does have the baby.

Interviewer: Does your husband see his child?

Translator: No.

Interviewer: Is your husband not willing to see them? Or are they not willing to see him?

Translator: Both of them.

Interviewer: When they where together they lived here right? So does the woman receive the land?

Translator: It depends sometimes the man leaves some times the woman. It depends. It depends if you take someone to the court. The judge decides. He was supposed to leave the house to the woman and the children.

Interviewer: So if you want to divorce, you go to the court? And they decide what is going to happen?

Translator: Yes.

Interviewer: And if they don't allow you to divorce?

Translator: If they don't allow, you have to stay together, and if you can manage the advice they gave, you stay, not divorce. So it depends.

[talking about the Netherlands]

Interviewer: And who takes care of the children the man or the woman?

Translator: No the woman.

Interviewer: And with a divorce who takes care of the children?

Translator: Me, the woman. We don't allow the man to take care of the children. Because they don't care.

Interviewer: I hope you don't mind that I am asking so many questions. You can also ask me questions.

Translator: She don't mind the questions, she is so happy and she is learning more.

[eating]

Interviewer: So if your husband allows you to work you can but if he doesn't you cant.

Translator: Yes, if he allows you can works if not you cant.

[eating]

Interviewer: You think the woman we have been talking to the last days, they are all happy with their husband?

Translator: Yes they are all happy with their husband.

Interviewer: Does she think everyone is happy with their husband?

Translator: Yes.

Interviewer: But when woman are divorcing they are not happy?

Translator: Those woman that divorce feel bad, about divorcing.

Interviewer: Because it is not what should happen.

Translator: You need to have a lot of problem, than you divorce.

Interviewer: What kind of problems do you need?

Translator: Not making sure to bring children to school, not feeding them, not able to buy food for children, and they still they want to have more children. But there is no support.

Interviewer: And do you think when woman have their own money, so they work, do you think that they have a bigger voice against their man.

Translator: I don't know.

Informant I

| | |
|--|--|
| Date | 18 th of April 2018 |
| Gender | Female |
| Age | 41 |
| Origin | Njimba |
| Marital status | Married |
| Religion | New Postal |
| Family-size | Wife, husband, 6 children (2 boys, 4 girls) |
| Education level | Grade 5 |
| Daily income | Agriculture and her husband sells clothes at the market |
| Units of land | 4 ha / lima |
| Crops cultivated | Maize, groundnuts, sweet potatoes, cassava |
| Member of farmer group / organisation | X |
| Men-headed/female-headed household | Man |

We met with the aunt of Hellen and got some Nshima offered. She had some chicken and also some baby once. Made a picture of her children.

Translator introduces ourselves and the purpose of the research. Explains what kind of questions will be asked. Asks for consent to participate in the research as well if it is alright to record.

Interviewer: Can you perhaps ask what she does on a daily base?

Translator: Farming.

Interviewer: So how does that work?

Translator: First she prefers breakfast for the children and then she goes to the fields.

Interviewer: How many hours does she work on the field?

Translator: 4 hours.

Interviewer: Does he she face any difficulties when farming?

Translator: No she doesn't face any difficulties.

Interviewer: And what does her husband do for gaining an income?

Translator: he has his own business he is selling clothes he is now at the market.

Interviewer: What would she do when she has more money?

Translator: If she find small money, she will buy soap, bathing soap, and making more money for making mill mill, salt, buying food.

Interviewer: And is this farm from her and her husband together?

Translator: Both of them.

Interviewer: Does she also have her own farm?

Translator: Yes at her place at Njimba, but that is far away.

Interviewer: Does her husband also works at the farm?

Translator: Yes, they are working together with her husband.

Interviewer: And which crops do they grow?

Translator: Maize, cassava, sweet potatoes and groundnuts.

Interviewer: And do they grow their crops for eating and selling..?

Translator: Only for eating.

Interviewer: And if they have enough crops do they also sell them.

Translator: If she haves enough she can sell, but for this year she don't do it.

Interviewer: So for this year she will only sell the maize? And not the other crops?

Translator: Yes not the other crops.

Interviewer: Will she sell it here on the market?

Translator: Yes at the market.

Interviewer: Does she have any animals around?

Translator: She doesn't have any animals.

Interviewer: Does she have any savings?

Translator: No.

Interviewer: And her husband?

Translator: No.

Interviewer: How did she learn to farm?

Translator: Her mother thought her.

Interviewer: How many meals does she eat a day?

Translator: Three times a day, breakfast lunch and supper, the whole year.

Interviewer: Are there any other people helping her to farm?

Translator: Both of them, and those children which are staying here.

Interviewer: Is the land bought, is the farm really theirs.

Translator: They bought the farm themselves.

Interviewer: And who decides on decisions made within the household?

Translator: Both of them.

Interviewer: And who decides where the money is spend on?

Translator: Her husband.

Interviewer: Does she think if she earns her own money that she will have more decision power.

Translator: It is to difficult to gain her own money.

Interviewer: But if she would have her own money do you think she can decide about it herself?

Translator: Maybe she can start a business when she finds some money.

Interviewer: So if she has some money, she will start a business?

Translator: Yes an own business to increase her money.

Interviewer: And what does her husband do with the income he earns?

Translator: She failed to answer this question.

Interviewer: Is there something else she would like to share with me or does she have any questions?

Translator: She asking you if you are going to bring a loan?

Informant J

| | |
|--|--|
| Date | 18 th of April 2018 |
| Gender | Female |
| Age | 50 |
| Origin | Malisall |
| Marital status | Divorced |
| Religion | Roman Catholic |
| Family-size | Herself, plus 2 children (boys) |
| Education level | Grade 5 |
| Daily income | Agriculture (she has also sold some land and made money out of it) |
| Units of land | 5 ha |
| Crops cultivated | Maize, groundnuts, sweet potatoes |
| Member of farmer group / organisation | X |
| Men-headed/female-headed household | Woman |

She was making nshima when we arrived, so we waited for a bit. Of course we got offered some as well, however, we had already been eating it twice that day so we could say no to the offer. As she said she was really happy with 'being free' and did not feel free with her husband.

Translator introduces ourselves and the purpose of the research. Explains what kind of questions will be asked. Asks for consent to participate in the research as well if it is alright to record.

Interviewer: She is not married? You don't have a husband? What happened with him?

Interviewer: Does she have a farm?

Translator: Yes she has a farm.

Interviewer: What does she do on a daily base?

Translator: She works in the fields there after, In the morning she goes into the fields, there after she comes back and starts cleaning her house.

Interviewer: And does she face any difficulties?

Translator: She find it difficult to have a man.

Interviewer: But that is her son?

Translator: First he was in Lusaka but now he is her, he is not working.

Interviewer: Ok but she doesn't have a husband. But she has a son?

Translator: Yes, but she is divorced.

Interviewer: How long is she divorced?

Translator: 25 years.

Interviewer: And was she living with her husband here?

Translator: Yes she was living with her husband to you, but he went away.

Interviewer: And how does she earn her money?

Translator: She said with her money she just build her house. She sold some of her land to someone else so she managed to build a house.

Interviewer: Is it easy for her to gain money?

Translator: Yes for now she would like to have a business.

Interviewer: What kind of business would you like to have?

Translator: A business into a dried fish.

Interviewer: How many hours do you spend on your phone?

Translator: She works from 6 in the morning till 10.

Interviewer: And do you grow crops to sell or only for eating?

Translator: Last year she could sell but this year she can't.

Interviewer: And which crops do you sell?

Translator: Maize.

Interviewer: And why do you only sell maize? And not the other crops?

Translator: She sells maize and sweet potato.

Interviewer: So the reason that she's farming is to make money out of it? what will she do so that next year she can sell again?

Translator: She plans to help fertilisers a lot fertilisers to put in the maize and let it grow.

Interviewer: And how will you get to fertilizer.

Translator: She goes to a place, round January and then she buys it.

Interviewer: Does she have to pay for the fertilizer?

Translator: She pays for the four bags of fertilizer to use for bags she received one back of seeds.

Interviewer: Is this the e-voucher system?

Translator: No she does this herself. After that she sells mango and maize.

Interviewer: And where does she sell it if she can sell it?

Translator: Here at the market.

Interviewer: And she just walks there?

Translator: Other people come and get from here. Who needs to maize, they come here. To get those maize they need, a part of it they buy it from here and a part on the market. If someone needs the maize they come here. Sometimes here sometimes at the market.

Interviewer: Does she have any savings?

Translator: No.

Interviewer: How can she buy the fertilizer than?

Translator: If she find a little money she just keeps it herself.

Interviewer: Ok. and then she can buy the fertilizer. Does she have some animals?

Translator: Only chicken.

Interviewer: Would she like to have a loan?

Translator: Yes, she needs to get a loan, she is willing.

Interviewer: Will it be difficult for her to get a loan?

Translator: For now she can manage to farm without a loan.

Interviewer: How did she learn to farm?

Translator: Her mother teaches her.

Interviewer: And she does not have any trainings?

Translator: No she learned herself, and uses her own knowledge [however I saw her at the 'lead farmer' meeting].

Interviewer: And can she have 3 meals a day the whole year?

Translator: Breakfast, she eats in the field. After working at the field she comes here. Three times a day.

Interviewer: She does have some children right?

Translator: She does have 2 boys. But they are grown up.

Interviewer: Do they still live here?

Translator: Yes

Interviewer: Do they have work?

Translator: Driving in a bus. But he was sick. So for now he is here.

Interviewer: So he used to be driving around.

Translator: Yes but not now.

Interviewer: Do they also help on the farm?

Translator: No.

Interviewer: And it is all her own land?

Translator: Yes.

Interviewer: And maize she grows to sell and to eat.

Translator: Now only for eating. This year maize not for sell.

Interviewer: And the sweat potatoes?

Translator: Only some of the sweat potatoes she is going to sell.

Interviewer: You have enough for yourself as well?

Translator: Yes.

Interviewer: And the groundnuts? And what happened with her husband why did they breakup?

Translator: He gave a lot of big problems. He had problems. She faced a lot of problems to her husband so what comes next is just divorcing.

Interviewer: And what kind of problems? Was it about financial issues?

Translator: Fighting [gestures of beating]. Drinking bear, fighting, drinking bear. Drunk and then fighting.

Interviewer: And what did he do with his money?

Translator: He did nothing. He even failed to build a house. But for herself she managed to build a house.

Interviewer: Who was the head of the household when they were together?

Translator: The husband.

Interviewer: And did they make decisions together?

Translator: By that time they made decisions together.

Interviewer: And about money did they also make decisions together?

Translator: Yes, same both.

Interviewer: What does she see herself to do in the future?

Translator: She is very happy now.

Interviewee: I am very free.

Interviewer: Thank you. Does you have any questions for me?

Translator: No.

Informant K

| | |
|--|---|
| Date | 19 th of April 2018 |
| Gender | Female |
| Age | 36 |
| Origin | Mpanshya |
| Marital status | Married |
| Religion | Baptist Church |
| Family-size | Wife, husband, 5 children (1 boy 4 girls) |
| Education level | Grade 6 |
| Daily income | Husband: Farming Herself: Farming + business of selling chitenge, wigs + slippers etc. |
| Units of land | 1 ha |
| Crops cultivated | Maize, groundnuts, sweat potatoes, sun flower |
| Member of farmer group / organisation | Yes, but she doesn't know the name |
| Men-headed/female-headed household | Man |

It seems they are living with welfare. She has her own business and income. The land of the sunflowers is owned by the Community Farm. She has intercropped traditional beans with groundnuts for the manure of the traditional beans. Translator introduces ourselves and the purpose of the research. Explains what kind of questions will be asked. Asks for consent to participate in the research as well if it is alright to record.

Interviewer: What does she do on a daily base?

Translator: Farming.

Interviewer: Does she work on the farm with her husband?

Translator: Yes.

Interviewer: And she doesn't go to her business on a daily base?

Translator: Yes goes after she have been to the farm.

Interviewer: And taking care of your children is it also something which he does on a daily basis?

Translator: After you finish at the field she comes to here prepare food for children and she goes to the business.

Interviewer: And then her children to stay here?

Translator: Yes.

Interviewer: Are any difficulties which he encounters on a daily basis?

Translator: The farming, it is hard work.

Interviewer: Farming is hard work so she prefers working at the business?

Translator: Yes.

Interviewer: And are there any difficulties for gaining an income?

Translator: She has sunflower at her farm besides all the other crops for this time she said she has sunflower, sun flowers she has on the farm maize this year wasn't good.

Interviewer: But the sunflower was good?

Translator: Yes the sunflower is good.

Interviewer: Are they going to sell the sunflower for money?

Translator: Yes.

Interviewer: What will she do if she has some more money?

Translator: If she has more money she can buy a car to work on the fields, help for her working on the field.

Interviewer: And how many hours does she spent on the farm?

Translator: One hour.

Interviewer: And how much time does her husband spend on the farm?

Translator: Also one hour.

Interviewer: Do they normally grow maize to sell?

Translator: The maize they have is just for eating this year.

Interviewer: Yes this year but in the past did they sell their maize?

Translator: Yes past year she did sell the maize.

Interviewer: What is she going to do this for this year next year so she can sell the maize?

Translator: If the rain comes good for this year maybe for next year she can have maize to sell, sun flower also and also the groundnuts are to sell.

Interviewer: And does she see herself more as a farmer or more as a business women?

Translator: Both of them.

Interviewer: Whether she like more?

Translator: She needs the children to go to school so she need the income.

Interviewer: Does she earn more money with the business or with the farm?

Translator: When she has small money she can take her money in the field to help people, which help her at the farm so she pays people to help her at a farm.

Interviewer: Does she do that or just her husband did it?

Translator: Both of them.

Interviewer: And where do they sell their products if they can sell them?

Translator: For now they can't sell.

Interviewer: Yes I understand that last year where did they send their maize?

Translator: At the markets.

Interviewer: What market?

Translator: Here at the [local] market.

Interviewer: And how do they go there?

Translator: They just walk to the village.

Interviewer: And are they able to store their crops?

Translator: No they directly sell it.

Interviewer: Do they have any animals around as well?

Translator: Some pigs, five, some chicken, six chicken.

Interviewer: And did they have a loan?

Translator: She has a loan for groundnuts.

Interviewer: So she can sell them?

Translator: Yes.

Interviewer: This year is she able to sell them?

Translator: She got the loan for groundnuts, a part to give back for the loan and another part is to sell, so to pay the loan she needs to give the groundnuts back and so she can sell.

Interviewer: Can you manage to do that?

Translator: Yes she can manage.

Interviewer: And how did she receive the seeds for the groundnuts?

Translator: She got one bag of seeds.

Interviewer: How? From who?

Translator: She doesn't know the name of that man, she did explain, it's the men who is teaching the farmers [the agricultural extension officer].

Interviewer: So she received seeds and money?

Translator: No she only received seeds no money. Yes she received the seeds, the seeds, not money.

Interviewer: So with the seeds she could grow groundnuts, from these groundnuts she needs to give a bit back and the rest of it is hers. She can decide to eat or to sell. And for next year she will have the seeds again or does she need to go back to that man again?

Translator: The seeds for now she just keeps some herself.

Interviewer: Ok for next year she don't have to bring groundnuts back. How did she learn to farm?

Translator: Her mother did teach her to farm.

Interviewer: Did she got any training?

Translator: No.

Interviewer: And does she have enough energy to work on a farm?

Translator: Yes.

Interviewer: Did she manage to have three meals a day?

Translator: Sometimes she can manage, sometimes she can't.

Interviewer: And when she can't manage to have three meals a day, is it in a dry season?

Translator: Yes.

Interviewer: And does her husband also take care of the children?

Translator: Both of them.

Interviewer: And if they work on the field together who takes care of them?

Translator: She will take care of the children.

Interviewer: Do other people help her on the field?

Translator: Sometimes she has help with that she pays for it.

Interviewer: Are there some crops which they only grow to sell or are all the crops to support themselves?

Translator: For all the crops she have a part of them is to sell a part of them is to eat yes.

Interviewer: And what about the sunflower?

Translator: She uses the sunflower for cooking oil.

Interviewer: Does she think her husband works more on the farm?

Translator: They are working together with the husband they work the same hours.

Interviewer: But she said that if they work together she takes care of the children right?

Translator: Yes but then she goes back and take care of the children.

Interviewer: And who decides on money is spent within the household?

Translator: Her husband.

Interviewer: And who decides on money spent within the household?

Translator: Both of them.

Interviewer: So the money she earns of her business she can decide on what to spend it herself?

Translator: Yeah.

Interviewer: And the money that they received from the fields, does her husband decides on it?

Translator: Yes her husband decides on the money coming from the fields and she decides on the money from the business.

Interviewer: And on what does her husband spend the money which returns from the fields?

Translator: If her husband finds money, he buys the things which he wants for the house. And they save some of their money for next year.

Interviewer: Does he also spends on alcohol?

Translator: He doesn't drink alcohol.

Interviewer: And where does she spend her money on?

Translator: Sometimes she pays the school fees.

Interviewer: What would you do if she has more money?

Translator: She needs to build the house.

Interviewer: Is there something else she still wants to ask or share with me?

Translator: She doesn't have.

Informant L

| | |
|--|---|
| Date | 19 th of April 2018 |
| Gender | Female |
| Age | 61 (from 1957) |
| Origin | Kamutoo |
| Marital status | Married |
| Religion | 7 th day Church |
| Family-size | Husband, wife, 6 children (3 boys 3 girls) |
| Education level | Grade 2 |
| Daily income | Husband doesn't do anything, also not farming, he was only eating did not work. She does the farm (sometimes she did peace work) |
| Units of land | 1 ha |
| Crops cultivated | Maize groundnuts sweet potatoes |
| Member of farmer group / organisation | No |
| Men-headed/female-headed household | Woman |

She just came back from her field with a bag of maize. Husband was sitting nearby when having the conversation. However, as she said, her husband only eats and he doesn't work.

Translator introduces ourselves and the purpose of the research. Explains what kind of questions will be asked. Asks for consent to participate in the research as well if it is alright to record.

Interviewer: Can you perhaps ask what she does on a daily base?

Translator: She eats in the morning then she goes to the farm that is what she does.

Interviewer: And does she have any difficulties when farming.

Translator: She faced difficulties for farming, don't have help, she don't have money to buy fertilizers. she don't have support from the government.

Interviewer: So how did she receive her seeds?

Translator: So she just has maize, and she just use this seeds.

Interviewer: And she doesn't use any fertilizer?

Translator: Yes she doesn't use any fertilizer.

Interviewer: And what would you do if she has more money.

Translator: If she has money, maybe she finds a lot of money she can buy a house clothes for husbands and for herself. maybe she can buy fertilizer.

Interviewer: And is this her own land?

Translator: Yes.

Interviewer: Is she able to sell some of her crops on the market?

Translator: Yes if she has a lot she managed to sell at the market?

Interviewer: And for this year?

Translator: For this year she doesn't have.

Interviewer: And which crops does she sell at the market?

Translator: The groundnuts and sweet potatoes.

Interviewer: The maize she doesn't sell.

Translator: The maize she doesn't sell, groundnuts and sweet potato she does.

Interviewer: The past years was she able to sell her maize?

Translator: For past years, she can't manage to have enough, to sell at the market since the last year's.

Interviewer: What would she needs to have enough for next year?

Translator: She failed to answer so she don't know.

Interviewer: And if she manage to sell some of her products, where does she sell it?

Translator: At the market you're in town.

Interviewer: And how would she go there?

Translator: She will walk to the market.

Interviewer: And does she have any storage for crops?

Translator: No she doesn't have.

Interviewer: Does she have some animals or just some chicken?

Translator: Some chicken.

Interviewer: Does she ever had a loan or would she like to have a loan?

Translator: She said, he can't even get a loan, no one is there to help.

Interviewer: How did she learn to farm?

Translator: She knows herself, she started from Young.

Interviewer: Did you receive any training?

Translator: She didn't have.

Interviewer: Did you manage to get enough foods for the whole year?

Translator: She don't have enough maize or oil.

Interviewer: Is she able to have 2 meals a day or 3 meals.

Translator: She managed only to have two meals a day.

Interviewer: Does her children help her on the farm?

Translator: No one to help her.

Interviewer: Is her land fertile?

Translator: Yes.

Interviewer: And her husband never works on the farm?

Translator: Yes. He is not working at the field because he has a problem at the leg.

Interviewer: Who makes the decisions in a household?

Translator: Herself.

Interviewer: And what will she do if she has more money?

Translator: She can build her house.

Interviewer: I what does she think her husband will do with more money?

Translator: To buy..

Interviewer: Is there something else she still wants to ask or share with me?

Translator: No.

Informant M

| | |
|---------------------------------------|---|
| Date | 19 th of April 2018 |
| Gender | Female |
| Age | 80 |
| Origin | Nyalug |
| Marital status | Widow, 6 grandchildren (all girls) |
| Religion | Baptist |
| Family-size | Herself, 6 grandchildren (all girls) |
| Education level | Grade 4 |
| Daily income | Farming (her husband in the past as well) |
| Units of land | 1 ha |
| Crops cultivated | Maize groundnuts |
| Member of farmer group / organisation | No |
| Men-headed/female-headed household | Woman |

She was laughing all the time! However, when laughing you could only see on teeth. She did not know how old she was, so she went and searched for her identity card. After a while she had it, born in 1938..! Unfortunately, her husband died with a car accident, he got hit by the car when walking on the road.

Translator introduces ourselves and the purpose of the research. Explains what kind of questions will be asked. Asks for consent to participate in the research as well if it is alright to record.

Interviewer: Is she married? is her husband still alive?

Translator: She's staying alone her husband passed away.

Interviewer: How many children does she have living here or there she lives by herself?

Translator: 6 children. Grandchildren. Only girls.

Interviewer: Can you perhaps ask what she does on a daily base?

Translator: Daily base that she have is prepare the children, bring them to school, make breakfast.

Interviewer: And does she work at the farm?

Translator: After she prepares the food, she goes into the field.

Interviewer: And does she encounter any difficulties when farming?

Translator: Yes she have, difficulties she face on the field causing to fertilizer.

Interviewer: She needs to have fertilizer for her crops?

Translator: Yes.

Interviewer: And she doesn't have?

Translator: No she doesn't have.

Interviewer: She doesn't have support from the government?

Translator: She don't have support from the government.

Interviewer: Have she done any peace work in the past or how did she earned some money?

Translator: She is not doing any peace work.

Interviewer: And are other family members taking care of her?

Translator: No one is taking care of her.

Interviewer: And her children?

Translator: If Bettina, if she has chitenge [Zambian skirt], she gives to her mum. Yes Bettina is the one who bought chitenge.

Interviewer: What would she do if she has more money?

Translator: She will buy clothes, radish, mill mill, she will buy some food and some clothes.

Interviewer: How many hours a day does she work at the farm?

Translator: Hour, half an hour a day.

Interviewer: Does she have enough crops to sell at the market?

Translator: She doesn't have.

Interviewer: This year she doesn't have. And past years?

Translator: Last year she also did not have.

Interviewer: What will she do so she can sell coming next year?

Translator: She doesn't know, perhaps God allows her.

Interviewer: But there is some maize right?

Translator: What you see, is only that. That is it.

Interviewer: Does she have any animals?

Translator: She don't have any animals.

Interviewer: And how did she learn to farm?

Translator: Her mother and father learned her. They thought her to farm.

Interviewer: And did you receive any training?

Translator: No.

Interviewer: Is she able to have enough food for the whole year?

Translator: No she don't have.

Interviewer: How many meals does she have?

Translator: She takes one meal a day, the lunch she misses and she eats in de evening.

Interviewer: And are other people helping her on the farm?

Translator: No.

Interviewer: And is this her own farm?

Translator: Yes.

Interviewer: And when she was still together with her husband who decided on decisions made in the household?

Translator: Her husband's.

Interviewer: And who decided on where the money was spend on?

Translator: Himself, he made the decisions for money. He was making chairs. A bed.

Interviewer: I think this where the questions, perhaps she can show us her farm?