

The sustainability of livelihoods of female-headed households: A case study of Zamdela, Sasolburg

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DECLARATION

I, Ockert Jacobus Oliver, solemnly declare herewith that this dissertation, presented for the degree of Master of Science in Geography and Environmental Management and submitted to the North-West University, is solely my own work and has not been submitted to any other university.

17 February 2023

DEDICATION

I dedicate this dissertation to my wife and two sons.

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Coming to the end of a journey and looking back on it there are many thoughts that come to mind.

There are so many people who have crossed my way and influenced my thoughts. Some are still prominent in my life, while others I may not even remember anymore. For example, the thousands of students and learners I taught over the past quarter of a century, people who picked me up from the roadside, helped me with directions in a foreign place or queued with me in the supermarket. So many of these people helped to shape my thoughts on people and developed my interest in people's existence, which made me choose this topic.

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ABSTRACT

For many years, poverty relief theories and efforts had a single-dimensional focus aimed at the rural majority of the population. With urbanisation, a need arose for more urban-orientated poverty approaches. The shift from rural to urban brought about a change in lifestyle, needs and livelihoods requiring a shift from a “one solution fits all” approach to a multi-dimensional approach to poverty where individuals’ unique experiences of poverty are acknowledged. Searching for unique solutions to individual poverty experiences researchers adopted participatory research methods like the Sustainable Livelihoods Approach (SLA).

The Oxfam Sustainable Livelihoods Approach toolkit was selected to investigate the sustainability of the livelihoods of female-headed households in Zamdela, Sasolburg. Semi-structured interviews were conducted with sixteen participants and the interviews were followed by a single group session. Various other participatory tools were also used to gain a better understanding of the livelihoods of females who experience poverty.

The study found that a lack of diversity in income portfolios and a dependency on social grants weakened the sustainability of household livelihoods. Support in entrepreneurial activities is suggested as a strategy to diversify and strengthen livelihoods portfolios. Relying on credit and social networks, especially networks from church were identified as the strongest coping strategies during emergencies. From the five SLA assets or capitals social and human assets emerged as the strongest among the participants.

This study was an investigation into individual experiences of people living in poverty. Understanding the individual experience with its strengths and weaknesses allows for specific solutions for each experience. Common strengths such as the value of vegetable gardens emerged from the study, and therefore it is a possible livelihood strategy that can be promoted for the urban poor in general.

Religious assets and burial societies were identified as the two most popular social institutions relied upon. Further studies into the role of these institutions in the livelihoods of particularly females are recommended. Further studies are also recommended on the diversification of low-income female-headed households’ livelihoods portfolios.

Key words

Sustainable livelihoods, female-headed households, poverty, participatory approaches, Zamdela, assets, income

OPSOMMING

Vir baie jare was verligtingsteorieë en pogings om armoede te verlig eendimensioneel en die fokus was meestal op die landelike meerderheid van die bevolking. Saam met verstedeliking het 'n behoefte ontstaan vir 'n meer stedelik-georiënteerde benadering. Met die skuif van 'n landelike na 'n stedelike benadering, het 'n gepaardgaande verskuiwing in leefstyl, behoeftes en lewensmiddele gekom vanaf 'n "een oplossing vir almal" na 'n multi-dimensionele benadering waar individue se unieke armoede-ervaring erken word. In 'n soeke na unieke oplossings vir individuele armoede-ervarings, het navorsers deelnemende navorsingsmetodes soos die "Sustainable Livelihoods Approach" aanvaar.

Die "Oxfam Sustainable Livelihoods toolkit" is gekies om die volhoubaarheid van matriargale huishoudings in Zamdela, Sasolburg se lewensmiddele te ondersoek. Semi-gestruktueerde onderhoude is met sestien deelnemers gevoer wat deur 'n enkele groepsessie opgevolg is. Verskeie ander deelnemende gereedskap ("tools") is gebruik om 'n beter verstaan te kry van vroue wat armoede ervaar.

Die studie het gevind dat 'n gebrek aan diversiteit binne inkomste portefeuljes en die afhanklikheid van maatskaplike toelae, die volhoubaarheid van huishoudelike lewensmiddele verlaag. Ondersteuning in entrepreneurskap-aktiwiteite word voorgestel as 'n strategie om lewensmiddele portefeuljes te diversifiseer en te ondersteun. Die steun op krediet- en sosiale netwerke, spesifiek in die kerk se netwerke, is geïdentifiseer as die sterkste hanteringstrategie tydens noodgevalle. Van die vyf "Sustainable Livelihood" hulpbronne of kapitale het sosiale en menslike hulpbronne as die sterkste bronne na vore gekom onder die studie se deelnemers.

Hierdie studie was 'n ondersoek na individuele ervaringe van mense wat in armoede leef. Deur die inviduele ervaring met sy sterk en swak punte te verstaan is dit moontlik om spesifieke oplossings vir elke ervaring te vind. Gemeenskaplike sterkpunte soos die waarde van groentetuine het na vore gekom wat dit 'n moontlike lewensmiddel maak om oor die algemeen onder stedelike armes te bevorder.

Religieuse hulpbronne en begrafnisverenigings ("burial societies") is geïdentifiseer as die gewildste sosiale verenigings waarop gesteun is. Verdere studies oor die rol van hierdie twee instellings in die lewensmiddele van spesifiek vroue, word aanbeveel. Verdere studies word ook aanbeveel oor die diversifikasie van lae inkomste matriargale huishoudings se lewensmiddele portefeuljes.

Sleutelsterme

Volhoubare lewensmiddele, matriargale huishoudings, armoede, deelnemende benaderings,
Zamdela, hulpbronne, inkomste

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LIST OF ACRONYMS

ASGISA - Accelerated and Shared Growth Initiative for South Africa

BME- Black and Minority Ethnic

CARE - Cooperative for Assistance and Relief Everywhere

COVID-19 - Coronavirus Disease

DFID - Department for International Development

GEAR - Growth, Employment and Redistribution

HLSA - Household Livelihoods Security Assessments

ILO - International Labour Organisation

MDG - Millennium Development Goals

NATREF - National Petroleum Refiners of South Africa

NDP - National Development Plan

NGP - New Growth Path

NPC - National Planning Commission

NPO - Non-Profit Organisation

NSFAS - National Student Financial Aid Scheme

PPP - Purchasing Power Parity

PR - Participatory Research

PWV - Pretoria-Witwatersrand-Vereeniging

RDP - Reconstruction and Development Programme

SASOL - South African Coal, Oil and Gas Corporation

SDG - Sustainable Development Goals

SHD - Sustainable Human Development

SLA - Sustainable Livelihoods Approach

UNDP - United Nations Development Programme

CHAPTER 1 INTRODUCTION

1.1 Introduction

Poverty reduction has been prioritised internationally and locally for several years, with large scale international poverty remaining a major challenge (Sekhampu, 2013). Globally, the Millennium Development Goals (MDG) and the Sustainable Development Goals (SDG) were launched in September 2015 with the goal to combat poverty and improve the quality of life of the impoverished (United Nations, 2003).

Since South Africa's first democratic election in 1994, the fight against poverty and correcting the injustices of the past has been on the forefront. By 1994, poverty in general and urban poverty were social and economic issues (The World Bank, 2018; Viljoen & Sekhampu, 2013). The influence of the discriminatory legacy of apartheid in the lives of the black population had to be addressed (Viljoen & Sekhampu, 2013). Since 1994 a number of development policies have been implemented aiming at eradicating poverty and inequality in South Africa (The World Bank, 2018). These policies were the Reconstruction and Development Programme (RDP), the Growth, Employment and Redistribution (GEAR) strategy, the Accelerated and Shared Growth Initiative for South Africa (ASGISA), the New Growth Path (NGP) and the National Development Plan (NDP) (Mosala, 2022). In the face of all the mentioned initiatives, in 2011 the National Planning Commission (NPC) listed poverty, inequality and unemployment as major challenges in South Africa (National Planning Commission, 2011), with poverty remaining as a major challenge until today.

1.2 Problem statement

In spite of all the development policies and programmes that have been implemented in South Africa during the past two to three decades, 30.4 million South Africans were still living in poverty in 2015 (The World Bank, 2018). Though poverty levels are generally lower today than what they were in 1994 (Statistics South Africa, 2017), 55.5% of the total population of the country was living in poverty in 2015 (Statistics South Africa, 2017).

Scholars in South Africa are in disagreement on whether the gender poverty gap is on the increase or decrease. However, they are in agreement that females are financially the poorer gender (Fransman & Yu, 2019; The World Bank, 2018). In the labour market, females earn on average less than males do. In 2018 South African females' earned on average 76% of what males earned (Statistics South Africa, 2020). While in 2019, 22% of female-headed households in South Africa did not have an employed household member, in the Free State Province where

the Zamdela township is situated, the number increased to 28% (Statistics South Africa, 2020). In the same year, 11% of South African females reported suffering from hunger compared to 9% of males. In the Free State the number increased to 14% for males and 16% for females (Statistics South Africa, 2020). In other words, females are more vulnerable to poverty in South Africa, than their male counterparts, which leads to an increase in the poverty gender gap (Mutyenyoika et al., 2017; Posel & Rogan, 2012).

As is the case in a number of developing countries, the highest poverty concentration in South Africa is in rural areas (World Bank, 2018) and thus anti-poverty initiatives by government have been focussed mainly on rural development and livelihoods. Traditionally, researchers have also given more attention to rural poverty studies than is the case for urban poverty (Mahmood, 2012). As a result of this, urban livelihoods are not as fully understood as that of livelihoods in rural areas (Beall, 2005). Furthermore, there has been a tendency for urban poverty to be underestimated (Parnell, 2005; Satterthwaite, 1995) and according to OECD (2010), poverty in South Africa's urban areas has in fact increased. The worst forms of poverty are also concentrated in these areas, where the poor often lack adequate shelter, education and employment, even though South African cities are the centre of the country's wealth (Parnell, 2005).

As the world's population becomes more and more urbanised, the problems of the urban poor will gain increasing prominence on the development agendas of donors and national governments (Lloyd-Jones, 2002). Furthermore, the expansion of cities and the high levels of urbanisation do not go hand in hand with the necessary economic growth, which results in an increasing problem of urban poverty (Lloyd-Jones, 2002). However, Lloyd-Jones (2002) asserts that in order to understand relative poverty or economic well-being, it should be done from the perspective of the poor themselves. He further argues that poverty, from this point of view, has a number of different dimensions and that it changes over time for most people and their households. Lloyd-Jones, however, cautions that poverty cannot be represented adequately solely by income-related poverty lines or simple measures of consumption (Lloyd-Jones, 2002). A holistic assessment of the various livelihood activities and strategies that people use are required (Lloyd-Jones, 2002; Rakodi, 2002).

In this regard, the Sustainable Livelihoods Approach (SLA) will be applied in the proposed study in order to gain a better understanding of poverty in South African urban areas. In contrast to traditional approaches to development, the SLA is a holistic approach which recognises the assets and abilities that people have in order to improve and manage their lives more sustainably, such as their health, knowledge, skills, family and friends (Oxfam, 2013; Rakodi, 2002). In this approach, the focus is on people and their households instead of on their problems (Rakodi, 2002), while focusing on their 'wealth' instead of their poverty is also highlighted (Lloyd-Jones,

2002). Oxfam (2013) also emphasises the need to understand the experiences of the urban poor in this approach, so that local contexts and circumstances can be better understood and in so doing, solutions to the problems of the poor can be found.

In order to address this need for understanding the experiences of people living in poverty in urban contexts, the proposed study will examine the strategies that are used by the poor in order to sustain their livelihoods. It will also address the question of what range of livelihood activities the poor uses and what assets are available to them in implementing their livelihood strategies. This will be done through a case study of Zamdela Township in Sasolburg in the Free State, with a particular focus on female-headed households. According to Øyen (2008), the extreme poor are often omitted from poverty relief efforts and studies. By focussing attention on this particularly vulnerable group in South African society, it is hoped that appropriate interventions and strategies will be developed that will help to meet the needs of the poor.

1.3 Aim and objectives

The aim of this study was to investigate the sustainability of the livelihoods of female-headed households in Zamdela, Sasolburg. The following specific objectives helped to reach the main aim of the study:

- to assess the sustainability of the livelihood strategies used by female-headed households;
- to determine the assets-base of these households and how people use available assets;
- to establish how people, use local services and community organisations to create a livelihood;
- to determine the effectiveness of current livelihoods and the barriers that people face in improving their situation; and
- to identify possible solutions to the problems that people face in trying to sustain a livelihood.

The specific objectives gave clarity and insight into the sustainable livelihoods of female headed households in Zamdela. By investigating the objectives, the household heads participating in the study will get a better understanding of their own unique poverty experience and it also helped the researcher to understand the uniqueness and diversity of poverty experiences in Zamdela better (Oxfam, 2013). By understanding each household's unique circumstances more effective, livelihood solutions can be sought (Oxfam, 2013).

1.4 Methodological approach

A participatory approach was used to conduct this study. This approach was selected due to its ability to actively involve the participants in the research, focus on their issues and struggles, and to study their livelihoods portfolios from their point of view (De Vos et al., 2011; Oxfam, 2013; van Vlaenderen & Nkwinti, 1993). Having a participant-centred approach creates a better understanding of the unique poverty conditions of the individual or household.

The Oxfam SLA toolkit for Wales was used to collect the data for this study. The toolkit was selected because it is a versatile tool catering for diversity and allowing for unique experiences to be recorded (Arad research, 2016; Carney et al., 2000; Oxfam, 2013). Using a tool which accommodates diverse experiences nurtures a better understanding of poverty leading to more personalised and effective solutions for the poor (Arad research, 2016; Quinn, 2018; Oxfam, 2013). The toolkit make use of both semi-structured interviews and group sessions to collect data. On request of certain participants paired depth interviews were used where two or more participants sit in the same interview session, but each gives their own answers (Wilson et al., 2016).

The group sessions created an environment within which the participants felt safe to share experiences they would have hesitated to share in individual interviews (Greeff, 2011; Liamputtong, 2013; Wellings et al., 2000). In addition, groups accommodate the diversity amongst participants aiding them not just to nurture a self-understanding, but to allow for the sharing of valuable knowledge and experiences (Greeff, 2011; Liamputtong, 2013; Maguire, 1987).

The COVID-19 pandemic set a number of challenges to the research. In addition to meeting all necessary COVID-19 protocols, an attempt was made to limit contact between the researcher and the participants.

1.5 Study area

The Zamdela township is located in the Metsimaholo Municipality in the northern Free State Province of South Africa. The major town in the municipality is Sasolburg of which Zamdela forms part of. Sasolburg is an industrial town located on the southern border of the PWV (Pretoria-Witwatersrand-Vereeniging) industrial region which includes Pretoria and Johannesburg. Figure 1-1 indicates the location of Metsimaholo Municipality and the Zamdela township. A number of important industries are located in Sasolburg, such as SASOL (South African Coal, Oil and Gas Corporation), NATREF (the National Petroleum Refiners of South Africa) and Omnia Fertiliser.

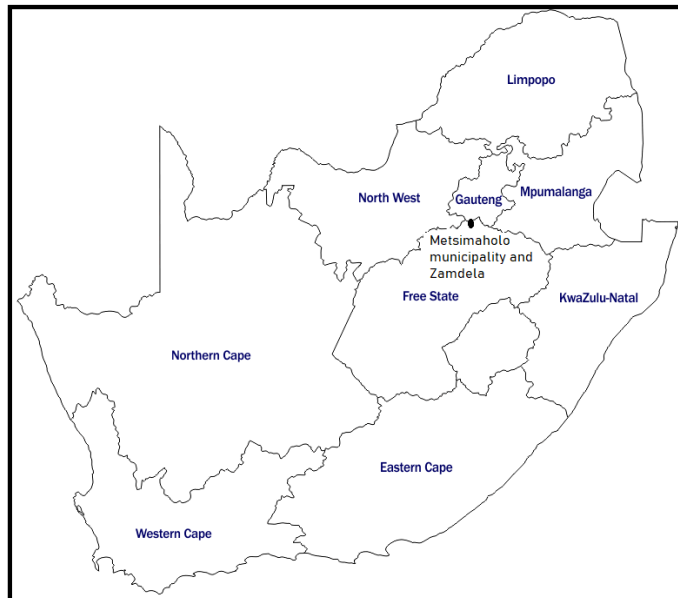


Figure 1-1: Location of Metsimaholo Municipality and Zamdela township.

(Adapted from d-maps, 2022).

According to Statistics South Africa (2016), the 2011 population for Zamdela was 82 339 people living in 25 067 households, of which 39% were female-headed households. Sixty-two percent (62%) of the population had piped water inside their dwellings, 82% had electricity and 62% had flushing toilets that was connected to the sewage system (Statistics South Africa, 2016).

When the South African upper-bound poverty line was used as a measurement, 49% of Metsimaholo's residents lived below this poverty line (Fezile Dabi District Municipality, 2020), compared to 48% of the Free State's population who lived below the upper-bound poverty line (Statistics South Africa, 2020). At a district wide level, 20.6% of the population had secondary education, whilst persons with tertiary education made up only 1.3% of the district population (Fezile Dabi District Municipality, 2020). Concerns had been expressed over the vulnerability of the Zamdela population due to the high population density of the area (Fezile Dabi District Municipality, 2020). Figure 1-2 shows Zamdela located in the greater Sasolburg region.

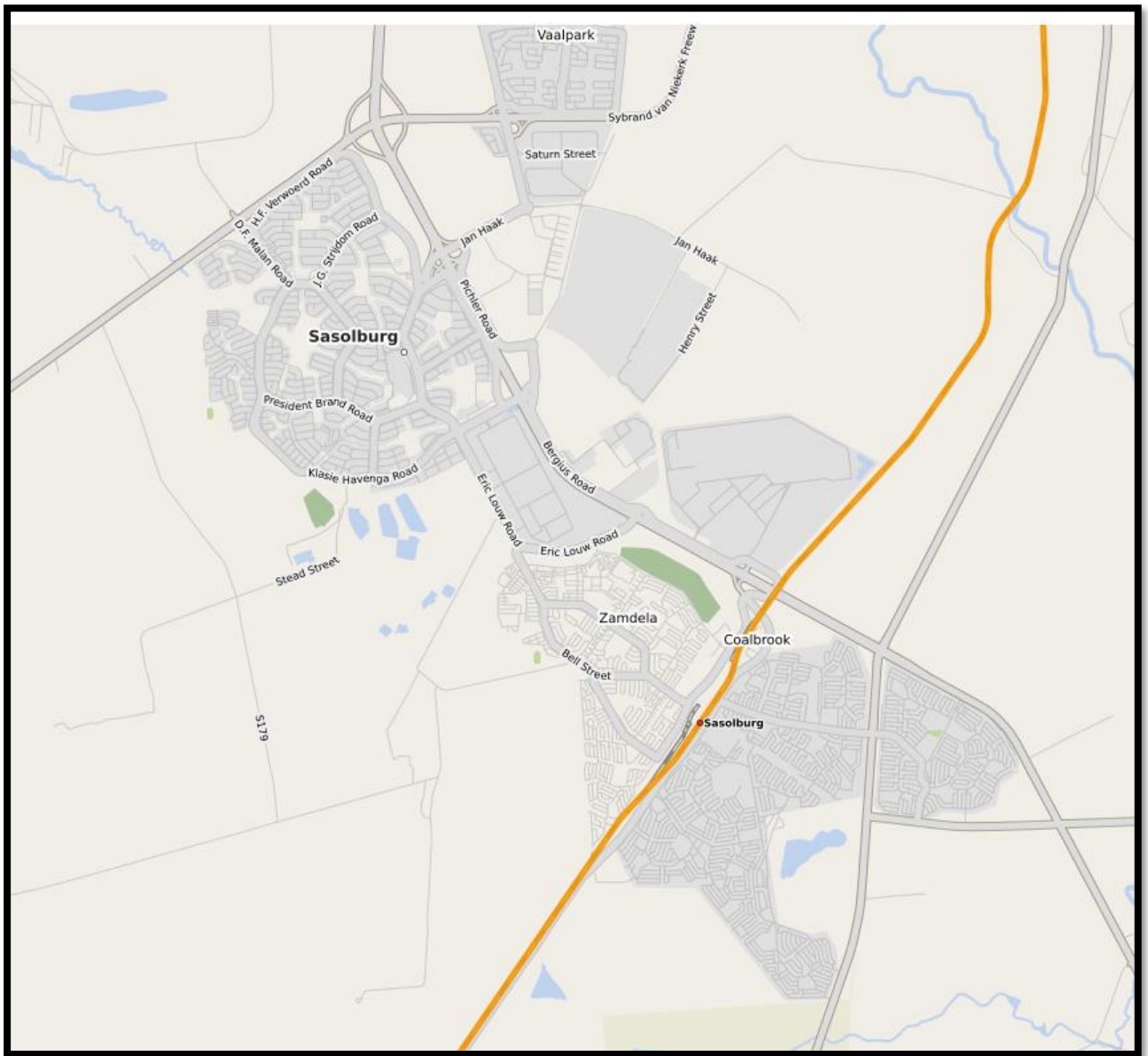


Figure 1-2 : The location of Zamdela in the greater Sasolburg.

(Openstreetmap.org, 2023).

1.6 Structure of the study

Chapter 1 (the current chapter) gives an introduction and sets the context of the study. The chapter gives an outline of the research objectives and the study area. A brief description of the methodological methods used and how the data was collected is given. The chapter also introduces the coming chapters.

Chapter 2 covers the literature review. The chapter reviews current South African and international opinions and trends on this research topic. This chapter also provides a review of the theoretical literature on sustainable livelihoods, which offer an explanation of how disadvantaged households manage to survive by relying on a combination of resources.

Chapter 3 discusses the methodology of participatory research and the data collecting methods that were used to conduct the study. The chapter also discusses the data analysis methods of the study and the ethical considerations.

In Chapter 4, the research findings of the study are presented.

In the final chapter, Chapter 5, the findings are synthesised and related back to the aim and objectives of the study. The main findings of the research are discussed in this chapter and compared to relevant studies elsewhere. The chapter also discusses the limitations of the study and point out future research possibilities linked to this research. Finally, the chapter ends with a few concluding remarks.

CHAPTER 2 LITERATURE REVIEW

2.1 Introduction

In this chapter, the current literature on urban livelihoods and poverty will be reviewed. Firstly, the chapter will focus on the Sustainable Livelihoods Approach (SLA) and the adoption of the approach by different relief agencies. The discussion of the different agencies' adoption of the SLA, will also serve as motivation for selecting Oxfam's implementation of the SLA for the study rather than another agency's approach. Secondly, approaches to poverty alleviation is looked into to create a background on the development of poverty studies that lead to the SLA and its implementation. Third, an investigation of the link between female-headed households, urbanisation and poverty follows. Finally, the framework of the Sustainable Livelihoods Approach will be discussed.

2.2 Sustainable livelihoods approaches: a comparison of different agencies

Since the 1990s, different relief agencies adopted the Sustainable Livelihoods Approach (SLA) as a blueprint in their poverty-relief efforts (Farrington et al., 1999). This section will discuss and compare the livelihood approaches of CARE (Cooperative for Assistance and Relief Everywhere), the UNDP (United Nations Development Programme), DFID (Department for International Development) and Oxfam.

2.2.1 CARE's approach to sustainable livelihoods

In 1994, CARE adopted sustainable livelihoods as the blueprint for their relief work using the 1992 definition of Chambers and Conway to do so (Brocklesby & Fisher, 2003; Cannon et al., 2003; Morse & McNamara, 2013). The organisation's initial focus fell on food security and community issues before shifting later towards a more integrated approach emphasising household livelihood securities within a local context (Brocklesby & Fisher, 2003; Carney et al., 1999; Frankenberger et al., 2002; Solesbury, 2003). The local focus is in contrast to the broader societal focus of DFID's and UNDP's frameworks (Carney et al., 1999).

he main focus of the CARE approach is to “understand livelihood strategies of different categories of households, their level of security, and the principal constraints and opportunities to address through programming” (Frankenberger et al., 2002:13). From the quotation it is clear that CARE aims at accommodating the diversity found within households. This approach also includes different categories of households which indicates the support it aims to provide, in the broader sense, to the poor and most vulnerable. The approach addresses the coordination between the different role players on the different levels of society, both governmental and non-governmental

(Carney et al., 1999). When structures are strengthened their functioning improve and they become more effective in alleviating poverty (Carney et al., 1999).

According to Carney et al. (1999) and Valdés-Rodríguez and Pérez-Vázquez (2011), CARE identifies three attributes and the interactions between these attributes determine a household's livelihood strategies. These attributes are human abilities, access to assets and the existence of economic activities (Carney et al., 1999; Krantz, 2001). CARE also identifies the following three types of activities which can be used in the relief process, namely: Livelihood promotion, livelihood protection, and livelihood provisioning during emergencies (Frankenberger et al., 2002; Carney et al., 1999). Livelihood promotion is a holistic approach to strengthen and diversify livelihoods, livelihood protection prepares livelihoods for shocks and manages shocks, and livelihood provisioning focusses on the supply of livelihoods during emergencies (Carney et al., 1999).

CARE uses the Household Livelihoods Security Assessments (HLSA) toolkit to roll out their sustainable livelihoods program (Frankenberger et al., 2002). Critique from within the organisation against the CARE HLSA toolkit is that the holistic approach leads to a time consuming, extensive and complex process driving up the project cost (Cannon et al., 2003). Although the CARE toolkit lends itself to integration with other models, Cannon et al. (2003) are doubtful on some of the CARE toolkit's vulnerability aspects. Cannon et al. (2003) also criticises CARE's open definition of vulnerability, calling it non-specific and vague leading to a wide inclusion. Where the other agencies include shocks, such as natural disasters into vulnerability, CARE does not. CARE only includes social marginalisation, like poverty into their definition of vulnerability.

The strengths of the CARE toolkit include that it sheds light on the links between external socio-political processes within the wider community and the household's context (Cannon et al., 2003; Carney et al., 1999). CARE has used its program effectively to organise data on vulnerable groups which assist in understanding local problems, threats and conditions better (Frankenberger et al., 2000).

2.2.2 DFID's approach to sustainable livelihoods

DFID is the British state department responsible for poverty reduction and alleviation (DFID, 1999). In 1997, DFID made the SLA framework a core principal in their fight against poverty (Brocklesby & Fisher, 2003; Solesbury, 2003). Similar to other agencies, DFID adopted Chambers and Conway's (1992) definition of sustainable livelihoods, but lessens the emphasis on sustainability (Carney et al., 1999).

Initially, DFID programmes were resource focussed (Carney et al., 2000). More recently, DFID's programmes are designed to enhance sustainable livelihoods by directly supporting assets, and

the effective functioning of institutions both public and private (Carney et al., 1999; Krantz, 2001). Better functioning and more effective institutions indirectly strengthen livelihoods (Carney et al., 1999; Morse & McNamara, 2013).

Using the SLA as a framework, DFID found that the framework assists in establishing connections between livelihood aspects, which is useful for both planning and assessing purposes (Carney et al., 1999; Krantz, 2001). The framework is also more people orientated by measuring outcomes to the difference it makes to the poor, rather than achieving a specific goal (Carney et al., 2000; Solesbury, 2003). Being versatile, the framework can also be utilised as a checklist to support project management (Carney et al., 1999).

Brocklesby and Fisher (2003) voiced their concern that DFID's approach is not in touch with grassroots community issues and practices, while Moser et al. (2001) feel that DFID's framework does not address the influences of power and power relationships adequately. By lacking coordination between different institutions and neglecting to research the role of power, DFID's framework leaves room for misunderstanding the effect of institutional bodies and actions (Adato & Meinzen-Dick, 2002). Adding to critique, Brocklesby and Fisher (2003) state that DFID framework is out of touch with local communities, their needs and the dynamics of their needs. Cortes (2008) criticises DFID's view that physical assets should not be privately provided due to a possible forming of dependency, but should be provided by authorities that supply infrastructure.

Carney et al. (1999) regard DFID's ability to build upon existing experiences and the practical approach towards a situation as their most important asset. In a similar vein, Valdés-Rodríguez and Pérez-Vázquez (2011) opine that DFID's direct support to individuals' assets is pivotal in strengthening individuals' asset bases. They continue by underlining the difference made to the poor by DFID's support to government and non-government structures (Valdés-Rodríguez & Pérez-Vázquez, 2011).

2.2.3 UNDP approach to sustainable livelihoods

In 1995, UNDP adopted the sustainable livelihoods approach as part of the sustainable human development (SHD) agenda (Carney et al., 2000). In line with other livelihood frameworks, UNDP builds upon Chambers and Conway's 1992 definition of sustainable livelihoods with an emphasis on sustainability (Carney et al., 1999).

From their initial environmental focal point, UNDP adopted the SLA, and currently their programmes are in support of a strong asset-based approach (Carney et al., 2000; Krantz, 2001). UNDP focuses on providing basic needs, the understanding of assets and possible changes that assets may experience (Carney et al., 1999; Morse & McNamara, 2013; UNDP, 2016). Within

their sustainable livelihoods framework, UNDP emphasises livelihood strengths, rather than the weaknesses (Carney et al., 1999). Furthermore the focus falls on providing instantaneous support by encouraging community involvement in the relief process, instead of a traditional hand out relief (UNDP, 2016). Active participation by the communities themselves is encouraged (UNDP, 2016).

An emphasis is placed on generating an income as soon as possible (UNDP, 2016). Once income is generated there will be an economic ripple effect within the community (UNDP, 2016). There is also an emphasis on the diversification of livelihoods portfolios, more savings, the establishment of small business, the promoting of community building and a unique focus on investment and technology (Carney et al., 1999; UNDP, 2016).

As part of their relief work the UNDP designed their 3x6 approach being employed within UNDP’s livelihoods framework. The toolkit assist communities who are experiencing, or are in the aftermath of a shock making it a suitable instrument to be used amongst the world’s increasing number of refugees (Carney et al., 1999; UNDP, 2016). The toolkit consists of three organising principals and six fundamental steps implemented in three separate phases (UNDP, 2016). The three organising principals are inclusiveness, ownership and sustainability (UNDP, 2016). This three-track approach is based upon livelihood stabilisation, income generation, economic recovery, lasting economic growth and inclusion of the marginalised into the economy (UNDP, 2016). Table 2-1 below indicates the six organising steps as it is applied within the three phases.

Table 2-1: The UNDP 3x6 approach.

	Phase 1 - Stabilisation: Inclusion	Phase 2 - Transition: Ownership	Phase 3 - Sustainability
Organising steps	Engaging	Savings	Investing
	Generating income	Joint venturing	Accessing markets

(Adapted from UNDP, 2016).

Phase 1 focuses on livelihoods stabilisation by creating emergency employment, while Phase 2 concentrates on rebuilding of ventures and creating ownership (UNDP, 2016). Phase 3 focuses on lasting development and institutional support (UNDP, 2016).

Though the integration of all role players is regarded as the most important strength of the UNDP, it is acknowledged that it is not possible to pay attention to all links and relationships between micro and macro environments (Carney et al., 2000; Krantz, 2001). Both Carney et al. (2000) and Krantz (2001) suggest that certain important links are identified that can be concentrated on. Carney et al. (1999) continues by mentioning that the UNDP approach underplays the attention

that intra-household relations should receive. Empowerment cannot always be enhanced by personal development, sometimes it needs to come from institutional change (Carney et al., 1999). In line with Carney et al. (1999)'s critique, Adato and Meinzen-Dick (2002) point out that the UNDP's focus on technology and investment can make the approach out of touch with local conditions, because technology's successful utilisation often depends on interaction with other features or circumstances. The cost of technology can make it inaccessible and under certain circumstances it can only be afforded collectively (Adato & Meinzen-Dick, 2002). The effective use of technology owned collectively depends largely on the strength of their social asset, once there is a breakdown in social asset the use of the technology can decrease or even be lost in spite of the price and sacrifice made to acquire it (Adato & Meinzen-Dick, 2002).

2.2.4 Oxfam's approach to sustainable livelihoods

The use of the SLA by Oxfam goes back to 1993 (Solesbury, 2003). Like the other organisations discussed in this section, Oxfam also base their work on Chambers and Conway's 1992 definition of sustainable livelihoods (Carney et al., 1999).

After an earlier focus prioritising resources, Oxfam moved to a holistic approach aiming to improve a livelihoods portfolio rather than only focussing on resources (Carney et al., 2000). Furthermore, Oxfam utilises the SLA for planning and assessment of their programmes (Carney et al., 2000, Solesbury, 2003). The SLA supports the Oxfam principals of food and income security, paid employment, labour rights and improved working conditions (Carney et al., 2000; May et al., 2009). As part of meeting these requirements, the original Oxfam SL toolkit was developed in the United Kingdom from experiences working with Black and Minority Ethnic (BME) single parents, in particular single mothers and other marginalised urban and rural groups, mostly non-native English speakers (Arad research, 2016; Oxfam 2013).

The Oxfam SLA toolkit has a focus on the diversity of poverty experiences emphasising individual experiences and a dynamic environment (Arad research, 2016; Carney et al., 2000; Oxfam, 2013). By catering for diverse experiences, a better understanding of poverty is framed that aids in formulating more personalised and effective solutions for the poor (Arad research, 2016; Quinn, 2018; Oxfam, 2013). Assisting the poor in understanding their own poverty, enables them to discover their own solutions (Oxfam, 2013). The toolkit is flexible and was at first used as a research tool and later transformed into an effective tool addressing poverty issues (Oxfam, 2013). The flexibility of the toolkit allows for one-to-one tailor-made support as well as for group work (Arad research, 2016; Cortes, 2008).

Critique against the toolkit include time constrains and that a relationship of trust is needed for the interviewee to be open enough to voice their personal issues and circumstances (Perry, 2016;

Scullion et al., 2017). Budget constraints do not always allow for projects to continue over extended periods of time to accommodate the timely process of relationship and trust building (Perry, 2016). Carney et al. (1999) argue that the broadness of the framework as applied by Oxfam complicates making connections between environmental factors and people’s living conditions. Perry (2016) adds to the critique by pointing out that the one-to-one session can bring sensitive personal information to the surface that can be difficult for the consultant to deal with.

The open-ended questions of the toolkit help to give deeper insight into the history and circumstances of an individual (Carney et al., 1999; Oxfam, 2013). Oxfam uses language in their SL approach that is suitable for a diverse community and compatible with local languages, concepts and needs (Carney et al., 1999). For example, where an environmental based language is needed the language can be adapted to suit the situation (Carney et al., 1999). Adding the better understanding and wider focus give Oxfam a better understanding of the poverty circumstances of the individuals (Carney et al., 2000; Krantz, 2001; May et al., 2009).

Where the toolkit was employed, increased self-esteem and improved networks occurred (Oxfam, 2013). Table 2-2 below gives a summary of the comparison between the different agencies’ sustainable livelihood incorporation into their programmes.

Table 2-2: A comparison of various sustainable livelihoods approaches.

	CARE	DFID	UNDP	Oxfam
Date agency accepted the SLA	1994	1997	1995	1993
Definition	Based on Chambers and Conway’s 1992 definition	Based on Chambers and Conway’s 1992 definition, with a reduced emphasis on sustainability	Based on Chambers and Conway’s 1992 definition, with an emphasis on sustainability	Based on Chambers and Conway’s 1992 definition with an emphasis on sustainability and environmental changes
Initial focus	Community issues	Resources focus	Environmental orientated	Research tool and resource focus
Focus areas	Livelihood securities and Livelihood promotion Livelihood protection	Livelihood needs Structures and links within the broader society Functioning of institutions	Instantaneous support Macro-micro links within broader society Providing the basic needs	The assumption that all have the ability and skills to improve themselves Focus on strengths

	CARE	DFID	UNDP	Oxfam
	Livelihood provisioning	The change in livelihoods, rather than a specific outcome A specific pro-poor approach	The understanding of assets and possible changes in it Livelihood strengths The use of technology as a way out of poverty	Concerns the dynamic environment including power relations More holistic approach strengthening livelihoods portfolios
Links to other approaches	Are basic needs and rights based, as well as focussing on assets	Links to the basic needs approach	Have an assets-based approach focussing on providing basic needs	Have a broad appeal with no links to a specific approach
Basic principals	3 attributes: Human abilities Access to assets Existence of economic activity	6 underlying principles: People centred, responsive and participatory Multi-level partnerships Addressing key dimensions of sustainability	Three organising principals: Inclusiveness, ownership and sustainability Livelihood stabilisation, income generation and economic recovery Lasting economic growth and inclusion of the marginalised into the economy	Two principals: Food and income security Paid employment, labour rights and improved working conditions
Critique	High cost Wide and non-specific Vulnerability concept Omits natural disasters from vulnerability	Not in touch with grassroots practices and issues Underplays power and power relations Can lead to dependency	Underplays intra- household links Need to allow more room for external empowerment	Time consuming to build relationships Budget constrains due to long time frames A broad framework complicates drawing connections Sensitive personal information can

	CARE	DFID	UNDP	Oxfam
				surface in one-to-one sessions
Strengths	Show links between external processes and the household Helps to better understand local conditions	Ability to build upon existing experiences Direct support of individual assets and structures	Integration amongst role players Focus on immediate relief	Allows for deeper insight into issue Uses suitable language

2.3 Definitions of poverty

Scholars agree that it can be problematic to define poverty due to the relative nature of the concept, and the difficulty to measure it (Boltvinik, 1999; Bradshaw, 2007; Greenwell et al., 2001; Valentine, 1968). Scholars studying poverty are confronted by the decision of when a person is poor, and of what a person must be deprived of to be poor (Amir-ud-Din, Usman, Abbas & Javed, 2017; Boltvinik, 1999). Contributing to the topic, Bradshaw (2007) points out that poverty definitions are greatly influenced by political and social views, and that context should be considered when interpreting a definition, for example the statistical definition of poverty can be manipulated by authorities to let it appear as if poverty is on the decrease.

Bradshaw (2007) regards poverty as the lack of necessities based on shared values of human dignity. Bradshaw (2007) lists then the most important necessities as: basic food, shelter, medical care and safety, but points out that context must be regarded when these needs are determined. Cobb (2016) agrees with Bradshaw that poverty is defined by the lack of resources or necessities. While Bradshaw (2007) and Cobb (2016) focus on providing for basic needs, Sen (1999) focuses on satisfying a person's basic needs in the definition of poverty. Like Bradshaw (2007), Sen (1999) points out the importance of context in identifying needs because needs are relative, based on experiences and social environment, and can differ from place to place and person to person.

The World Bank (2019) adds the second school of thought by using a monetary value or also called a money-metric approach to define poverty. The bank established an international poverty line of US \$1.90 a day using the PPP (purchasing power parity) to convert currencies, though this minimum amount can differ from region to region (The World Bank, 2019). In 2022 the poverty line will be updated to US \$2.15 (The World Bank, 2022). According to Statistics South Africa (2021) the South African food poverty line is R624 per month. This breaks down to R20.80 a day. At an exchange rate of R15.48 to the US dollar, it amounts to US \$1.34 a day (SARB, 2022), while the upper bound poverty line is R44.50 a day, or US \$2.87 a day (Statistics South Africa,

2021). This Rand to Dollar exchange rate was according to the SARB (2022)'s exchange rate for 10 June 2022. This single measurement simplifies the measuring and comparing of poverty across different regions to each other (Ravallion et al., 2009). Ravallion (1996) admits the shortcomings of a single-dimensional money-metric approach but advocates that instead of writing the approach off, additional dimensions for non-market goods should be added to the approach to make it a multi-dimensional approach. Foster (1998) reasons that absolute poverty benchmarks should be adjusted as economic circumstances change.

The third school of thought is mentioned by Valentine (1968), Garroway and De Laiglesia (2012) who focus on inequality and the relativity of poverty. In this case, poverty is defined by the gap in income rather than by necessities (Garroway & De Laiglesia, 2012). The relative approach sets the poverty benchmark on a comparison of needs between what is acceptable within the community and what the individual or household possesses (Foster, 1998; Valentine, 1968).

From the poverty definitions mentioned in this study, the following opposing views on poverty can be put into words: On the one hand, there is the debate that poverty is relative (Boltvinik, 1999; Bradshaw, 2007; Sen, 1999; Valentine, 1968), and multi-dimensional (Amir-ud-Din et al., 2017; Boltvinik, 1999; Bradshaw, 2007). Scholars also see poverty as depriving people of necessities or people having a lack of access to the necessities (Amir-ud-Din et al., 2017; Bradshaw, 2007; Sen, 1993). On the other hand, there is the view of absolute poverty giving a monetary value to poverty (The World Bank, 2019).

It is clear that numerous scholars give poverty a relative character (Boltvinik, 1999; Bradshaw, 2007; Foster, 1998; Greenwell et al., 2001). If poverty is relative it can differ between time and place (Wratten, 1995). What was regarded as an acceptable level of wealth 50 years ago, may be regarded as poor in our current day community. Poverty also differs over space (Wratten, 1995). What is regarded as an acceptable level of wealth in a rural community in a developing country, may be regarded as poor in a high-income urban community making it problematic to have one poverty benchmark for different and diverse communities (Sen, 1999). The relativity of poverty and the difference in factors, such as cost of living will challenge the World Bank's definition of US \$2.15 a day. Poverty differs over space and between communities. Having one yard stick for all, ignores context in the poverty definition (Bradshaw, 2007).

Cobb (2016) challenges Valentine (1968) and Garroway and De Laiglesia (2012) using inequality in his definition of poverty, stating that inequality and poverty are two different concepts. Cobb (2016) distinguishes between these two concepts by pointing out that poverty has to do with a lack of necessities, while inequality refers to the income gap between rich and poor. Cobb (2016) argues that though there can be a big income gap, poverty can be limited because people's basic

needs are met. Since the late 1960s, poverty in many developed countries decreased in spite of an increase in income inequality (Cobb, 2016).

2.4 Approaches to poverty alleviation

From the variety of poverty definitions, a number of approaches for poverty studies have been formulated. The following approaches will be discussed in this section, namely: the basic needs, social services and infrastructure approach; the social change and network approach and the monetary approach.

2.4.1 Basic needs, social services, and infrastructure approach

The ILO (International Labour Organisation) report for the 1976 World Employment Conference describes basic needs as food, clothing, housing, education and public transport (Streeten, 1984). While the ILO conference formulated five material needs, Streeten (1979) argues that basic needs are material and non-material needs including the need for self and group decision-making, self-reliance, political freedom and security, cultural and national identities and to feel a sense of purpose in both personal and work lives. Streeten (1979) continues by stating that the basic needs approach focuses on providing opportunity for the holistic development of an individual encompassing physical, mental and social aspects that need to be developed.

In reaction to the basic needs approach, scholars argue that within the provision of basic needs the redistribution of resources alone is not enough to address poverty. There should be a strengthening of what Page and Pande (2018) calls the “invisible infrastructure”. Invisible infrastructure includes social services and institutions, like health and educational facilities, as well as governmental and other structures supporting the poor (Page & Pande, 2018). Adding to the list of critique is that the focus falls on satisfying needs rather than on generating income (Streeten, 1979). A question can be asked if a predetermined list of basic needs, like the ILO list, really caters for diversity between communities and even households. Wouldn't people with unique circumstances have unique basic needs? Shouldn't people determine their own list of basic needs? Increasing urbanisation leads to changing needs and a bigger emphasis on the cash component of an individual's budget (Lucci et al., 2018). Streeten (1979) listed needs for a predominantly rural population which will make him out of touch with a predominantly current day urban population.

The importance of creating, maintaining and strengthening social structures and service delivery is clear. By strengthening social structures, like the state and local non-profit organisations (NPO's) the poor can be supported (Dahrendorf, 1974; Dassah & Ngatse-Ipangui, 2019; DFID, 1999).

2.4.2 Social and network changes

In an attempt to transform low-income communities the focus often falls on economic change, while social change is underplayed (Biswas-Diener & Patterson, 2011). Social change, and in particular network building and strengthening social relationships play a pivotal role in the transformation of low-income communities (Biswas-Diener & Patterson, 2011; Lin, 1999; Pietersen, 2017). People investing in their social networks experience an improvement in their health, life satisfaction levels and economic state, while feeling unwanted and alone is a barrier to overcome and need to be dealt with if poverty is to be addressed (Cleaver, 2005; Lin, 1999). Extended social networks also increase the number of options the poor have to seek support (Cleaver, 2005).

From the preceding discussion it is evident that more than just economic change is needed in transforming poverty, the presence of social change is also cardinal. A more complete discussion of the transformational value of social change will be done under the section on social asset.

2.4.3 Monetary approach

The monetary approach works on the concept that poor people need money to buy life necessities, if they are given money they will not be poor anymore (Shapiro & Haushofer, 2016). The question arises on how the benchmark is determined to decide who is poor and who is not, how much or what is needed not to be poor anymore. The approach is a common and a widely supported approach (Shapiro & Haushofer, 2016). The international and South African poverty benchmarks have already been discussed under the poverty definitions sections.

A distinction can be made between the absolute and relative benchmarks within the monetary approach to poverty (Fransman & Yu, 2019). Absolute monetary poverty refers to a poverty line with a specific monetary value, and someone earning less than this amount will be regarded as being poor (Fransman & Yu, 2019; Ravallion et al., 2009). Relative monetary poverty uses a certain percentage of the poorest population of an area's income as the poverty line, e.g. earning what the poorest 20% of the population earns is regarded as poor (Govender et al., 2007).

One of the most common implementations of the monetary approach is sending cash transfers, for example, social grants, or migrant workers sending money home (Shapiro & Haushofer, 2016). Shapiro and Haushofer (2016) feel that although cash transfers bring immediate relief, it is not sustainable and do not improve resilience against shocks and threats, while Banerjee et al. (2008) found that the grants are likely to cultivate a dependency with the receiver.

2.4.4 Poverty-relief approaches in urban areas

Caution must be taken not to over-simplify poverty studies, it is pivotal to keep the diversity within poverty in mind when studying the phenomenon (Lloyd-Jones & Rakodi, 2014). More traditional and single dimensional poverty-relief approaches, such as the monetary approach, has less effective outcomes in urban areas due to the cultural differences between urban and rural areas (Colantonio, 2009; Lucci et al., 2018). Poverty studies should acknowledge the complexity of diversity between both rural-urban and intra-urban differences (Lloyd-Jones & Rakodi, 2014). Lloyd-Jones and Rakodi (2014) advocate for a multi-dimensional approach to poverty, arguing that although many benefits were recorded from single dimensional projects, such as infrastructure improvements, the fact that other aspects were neglected limited the success of the projects.

In the city, people need a larger cash component to survive than their rural counterparts. Differences in dietary expenses where household members purchase food and eat more individually, and increased transport cost adds to the cash component of budgets (Lucci et al., 2018). In Kampala, for example, the poor can spend up to 50% of their income on transport, thereby increasing the non-food component of their budget (The World Bank & International Monetary Fund, 2013).

There are intra-urban poverty differences which need to be accommodated by acknowledging the spatial differences amongst the urban poor (Lloyd-Jones & Rakodi, 2014). A mere focus on specific geographical areas, such as officially recognised informal settlements exclude some of the most vulnerable facing risks living in marginal areas, like on flood plains and next to railway lines (Lloyd-Jones & Rakodi, 2014).

2.5 Female-headed households and poverty

The literature on poverty suggests females are more susceptible and exposed to poverty than males, both internationally and in South Africa (Cheteni et al., 2019; Mutyenyoika et al., 2017; Nadim & Nurlukman, 2017; Posel & Rogan, 2012; The World Bank Group, 2018). Even scholars, such as Fransman and Yu (2019) who believe that the gender poverty gap in South Africa is on the decline, acknowledge that females are still more susceptible to poverty than males. With female-headed households on the increase in South Africa, addressing female poverty will be addressing more than 50% of South African poverty (Rogan, 2016).

Because different genders have different poverty experiences, it is vital to differentiate between genders' experiences in order to get a better understanding of gender poverty issues. For example, childbearing and traditional female caring duties put a high demand on female

household heads' free time and resources (Cheteni et al., 2019). This mean that they have less time to gather livelihoods and focus on strengths and resources, like education (Rogan, 2016). Driven by their caring duties, female household heads are inclined to spend a larger portion of their budget on food, which leaves less for other necessities (Cheteni et al., 2019). Table 2-3 below gives a summary of the main factors influencing female poverty. There are a number of factors limiting female participation in the labour market increasing their vulnerability. For many years women, especially in developing countries, have been subjected to labour market discrimination (Todaro & Smith, 2012). A second major challenge is a female's caring responsibilities often forcing her to leave her employment (Cheteni et al., 2019; Quinn, 2018; Rogan, 2016). This topic is discussed in the section on female-headed households and poverty.

Table 2-3: Major factors influencing poverty amongst female-headed households.

Influencing factors	Example
Caring responsibilities	Female-headed households tend to have more caring duties resulting in increased expenditure and less free time (Cheteni et al., 2019; Quinn, 2018; Rogan, 2016).
Cultural norms and traditional expectations	Discriminating societal norms lead to discrimination in and outside the workplace (Cheteni et al., 2019).
Workplace discrimination	On average, males earn higher wages than females (Cheteni et al., 2019; Rogan, 2016).

Living in patriarchal societies, women are often excluded from decision-making, high status levels, economic opportunities and resources leading to an underrepresentation in important assets, like land ownership (Cheteni et al., 2019; Department of Women, 2015). Being exposed to workplace discrimination, female household heads are without the higher male income (Cheteni et al., 2019; Rogan, 2016). Marginalised in the main stream economy, low-income females often need to deal with more insecure informal sector employment which makes them vulnerable to job losses, and leaves them earning less (Parry & Gordon, 2021). Earning less reduces the accumulation of assets and reduces resilience against shocks which increase vulnerability (Cheteni et al., 2019).

Being female and poor make a woman more vulnerable and exposed to risks and abuse (Department of Women, 2015). A woman often need to hide livelihoods and assets, like money in order to protect it from family trying to swindle her out of it (Field et al., 2016). They also need to watch against health threats that can interfere with her ability to work and they need to consider their offspring's safety (Page & Pande, 2018). In addition to the mentioned challenges, South African women's poverty is being aggravated by high levels of unemployment, sexual violence, and HIV-Aids.

Recently, Jain et al. (2020) highlighted that South African female poverty increased more than male poverty during COVID-19, pointing out that active employment amongst South African females declined by 49% between February 2020 and April 2020. Women are inclined to be caregivers and often work as medical personnel which exposed them more to the disease, which in turn impacted negatively on their livelihood portfolios (United Nations Women, 2020; Wenham et al., 2020). Adding to the woes of COVID-19, is an increase in gender based violence during lockdown which worsened the situation even further for women (United Nations Women, 2020).

2.6 Urbanisation of poverty

For the first time in 2007, the world's urban population surpassed the rural population in numbers (The World Bank, 2021). With the urbanisation of the world population came the urbanisation of poverty requiring a shift in focus from rural poverty relief to urban poverty relief (Beall, 2005; Lloyd-Jones, 2002). The failure of urban economic growth to keep up with the high rates of urbanisation, especially in the rapid urbanising developing world leads to acute forms of poverty concentrated in urban areas (Beall, 2005; Lloyd-Jones, 2002; Parnell, 2005). The urbanisation of poverty created a need for traditional rural poverty-relief models and approaches to be set aside and transformed in favour of a focus on the urban poor (Lucci et al., 2018). The effect of COVID-19 and accompanying measures, like the hard lockdown and slowing economic activities increased South African poverty and inequality levels affecting the urban poor considerably (Jain et al., 2020). The estimations are that between 1 million and 1,7 million individuals fell into poverty during this period with the low-income workers, self-employed, and females been the most affected (Jain et al., 2020). In the rest of this section a multi-dimensional approach to urban poverty relief will be advocated, followed by a look into intra-urban, and rural-urban poverty variations.

2.6.1 Categorising the urban poor and poverty

Scholars and organisations have created classifications and groupings to understand the urban impoverished better. DFID determined three categories into which the poor can be divided, namely, improving, coping and declining conditions (Lloyd-Jones & Rakodi, 2014). Improving households are in a position to improve their quality of life and have access to adequate resources to do so (Lloyd-Jones & Rakodi, 2014). Coping households are relatively fine at a specific point in time, but do not have enough livelihoods to absorb shocks and threats (Lloyd-Jones & Rakodi, 2014). Declining households are very susceptible to shocks and threats and have declining livelihoods (Lloyd-Jones & Rakodi, 2014). DFID also categorises the needs of the urban poor into three categories: survival, security and quality of life (Lloyd-Jones & Rakodi, 2014). Table 2-4 below categorises these categories.

Table 2-4: The needs of the poor.

	Declining poor	Coping poor	Improving poor
Survival	Free and accessible healthcare	Free or affordable healthcare	Affordable healthcare
	Cash, pensions, unemployment and disability benefits	Food subsidies and public works programmes	State and employer insurance schemes
	Food subsidies, legal aid	Financial	Regulations against discrimination, etc. enforced
	Housing/shelter	Community-based support	Financial services – loans
Security	Income stream	Income stream	Income stream
	Tenure rights	Secure housing tenure/ownership	Home ownership
	Basic education, plus some skills training	Skills up-gradation opportunities	Enterprise development schemes
	Savings schemes	Education, legal support	Loans for enterprises
	Community support systems	Savings and credit	Legal support
Quality of life	Participate in decision-making about matters of immediate concern	Participate in community-based decision-making	Health and safety at work
	Environmental improvements	Environmental improvements	Environmental improvements Political role

(Lloyd-Jones & Rakodi, 2014)

On her turn, Beall (2005) names three dimensions of urban livelihoods that are important to the urban poor in Africa. First, it is money and being able to afford life necessities, second, it is social networks that will support the poor and last it is the collective action of the poor (Beall, 2005). Lloyd-Jones & Rakodi (2002) agree with Beall (2005) on the importance of the cash component but mentions, assets and tenure as the main wellbeing indicators.

2.7 Sustainable livelihoods

The Sustainable Livelihoods Approach (SLA) is a holistic multi-dimensional approach to poverty developed in answer to the critiques of the single-dimensional approaches discussed in Section 2.4 of this chapter. The SLA aims to understand each persons' poverty individually.

2.7.1 Introduction to the Sustainable Livelihoods Approach (SLA)

The concept of sustainable livelihoods has its origin initially in rural agricultural development and later in the adoption of Agenda 21 at the Rio summit (Morse & McNamara, 2013). The development of the Sustainable Livelihoods Approach is further developed more specifically on the Agenda 21 principle that all individuals should be able to “earn a sustainable livelihood” (Louw, 2005; Meyer, 2013; Morse & McNamara, 2013; United Nations, 1992).

In contrast to traditional theories of development having a macro-environment focus, such as industrial and economic development hoping that it leads to job creation, the SLA has a holistic participatory approach with a focus on the micro-environment (Morse & McNamara, 2013). The SLA attempts to understand people’s poverty experiences with solutions been identified on ground level (Gutierrez-Montes et al., 2009; Morse & McNamara, 2013; Serrat, 2017).

Toner and Franks (2006) describe the SLA as a set of guiding principles, while DFID (1999) and Morse and McNamara (2013) describe the SLA as a framework for assessing people’s livelihoods. Scholars agree that the SLA is a “tool” rather than a development theory, which makes it usable under different situations (DFID, 1999; Morse & McNamara, 2013; Serrat, 2017; Toner & Franks, 2006). One of the most influential sustainable livelihood scholars, Ian Scoones, summarises sustainable livelihoods as follows: “A livelihood comprises the capabilities, assets (including both material and social resources) and activities required for a means of living. A livelihood is sustainable when it can cope with and recover from stresses and shocks, maintain or enhance its capabilities and assets, while not undermining the natural resource base” (Scoones, 1998:6).

Scoones (1998) identifies five different livelihood assets, or also called capitals namely: natural assets, human assets, economic assets, physical assets and social assets. These assets will be discussed in more detail in the section on different livelihood assets later in this chapter. Though the different assets are definable there are no clear-cut borders between them (Morse & McNamara, 2013). No livelihood or asset stand in isolation, they are interconnected and support each other (Pietersen, 2017).

Carney et al. (1999) indicates six integrated and underlying principles of the SLA. The SLA is people-centred, which means focussing on people’s context, needs and livelihoods (Carney et al., 1999). The SLA is responsive and participatory where the poor themselves are concerned with prioritising livelihoods and livelihood issues (Carney et al., 1999). It is multi-levelled by addressing issues on both local and higher levels, it is conducted in partnership with both the public and the private sector (Carney et al., 1999). It is a sustainable approach by addressing the four key dimensions to sustainability; namely: economic, institutional, social, and environmental

sustainability (Carney et al., 1999). The SLA is dynamic by lending external support, acknowledging the fluid character of livelihood strategies and it must be flexible to keep up with changes in the environment (Carney et al., 1999). Figure 2-1 is a schematic representation of the SLA and the inter-relations between the different sectors of the approach.

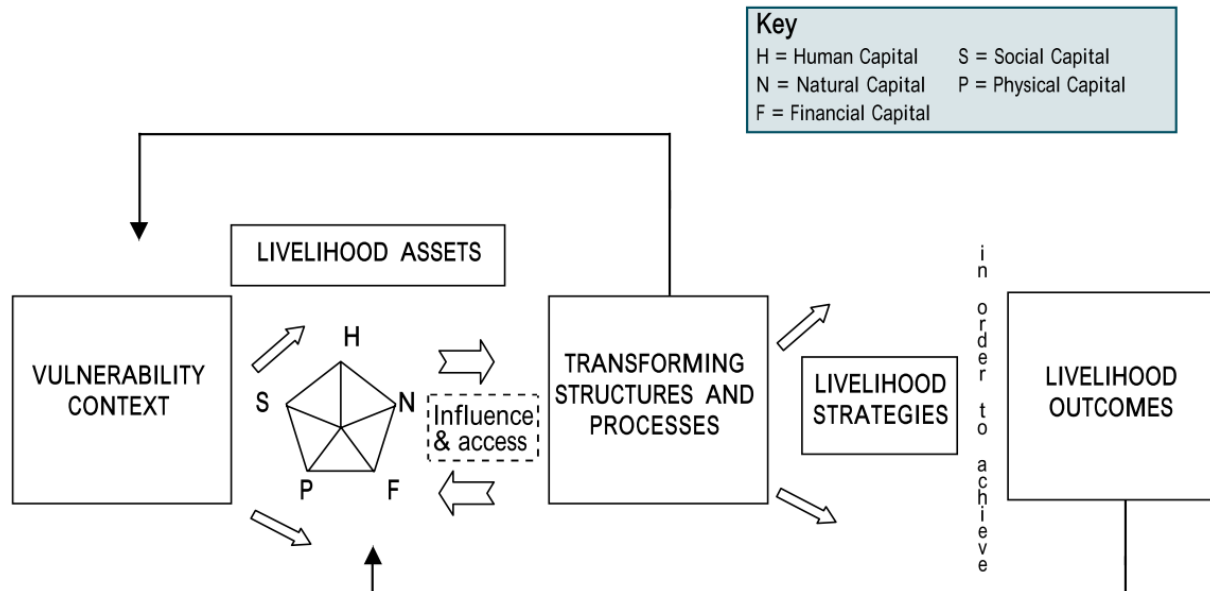


Figure 2-1: Schematic representation of the SLA.

(DFID, 1999).

It can be concluded that sustainable livelihoods (SL) have a holistic approach to poverty relief and eradication. It aims to satisfy not just physical needs, but also other needs, such as emotional and physiological needs. The belief that the poor have the abilities and resources to improve their own living conditions is fundamental to the SLA (Ferreira et al., 2013).

2.7.2 Basic determinants of livelihoods

According to Chambers and Conway (1992), there are two basic determinants of livelihoods. First, there are predetermined livelihoods one is born into, and second, there are livelihoods that are more selectable. In the debate on predetermined and selectable livelihoods, Hatlebakk (2012) asks two questions. How much of a person's current livelihood state can be attribute to the person's own livelihood strategies? The second question is, why do certain individuals manage to escape poverty and others not, in spite of their quite similar backgrounds?

Though other scholars do not name livelihoods specifically as selectable or predetermined as Chambers & Conway (1992) do, they do support the concept that livelihoods are predetermined or selectable. Predetermined livelihoods are usually linked to social or economic status or to

physical ability (Chambers & Conway, 1992; Daskon & Binns, 2010; Hattlebakk, 2012). When born into a rural community, the choice of occupation is limited and a person often has little choice but to become a subsistence farmer (Hattlebakk, 2012). Another example of predetermined livelihoods is cultural norms and stereotypes, such as a female’s social status hindering her access to livelihoods (Chambers & Conway, 1992; Daskon, & Binns, 2010). In line with the mentioned examples, being born with a physical impairment can serve as a predetermined livelihood restricting access to livelihoods, like employment opportunities.

Selectable livelihoods often come with an increase in opportunity brought about by economic growth (Chambers & Conway, 1992; Kulik., et al, 2007). Though the cost of a proper qualification may make it a predetermined livelihood to someone in a low-income household, the same qualification may be a selectable livelihood to someone from a high-income neighbourhood who can afford the qualification (Chambers & Conway, 1992). A pre-determined livelihood can change due to circumstances or policy change (Chambers & Conway, 1992 Kulik, et al., 2007). Programs, such as the National Student Financial Aid Scheme (NSFAS) improves access to education which may have been inaccessible previously due to predetermined economical standings.

2.8 Livelihood outcomes

The dynamic nature of livelihood outcomes leads to diverse outcomes for different people (Scoones, 1998). Drawing up outcomes becomes especially problematic when coming to non-monetary outcomes, like self-esteem where individual’s outcomes can differ as their personal circumstances differ (Ashley & Carney, 1999). As circumstances change, livelihoods can change, for instance violence can change outcomes with an immediate focus on survival (Lautze & Raven-Roberts, 2006). Examples of possible outcomes can include sustainable resource use, money management, general well-being, vulnerability and food security (DFID, 1999; Scoones, 1998).

There can be trade-offs between livelihoods in order to reach desired outcomes. In Brasilia, youth traded food for brand-name clothing to increase social status (DFID, 1999). To measure the value of such a trade-off, the outcomes can be measured against the livelihood criteria mentioned in Table 2-6, which is a compilation of outcomes suggested by different scholars. Finally, the link between livelihood outcomes and assets should be mentioned. Livelihood outcomes cannot be achieved without assets (Zhang & Fang, 2020).

Table 2-5: Criteria for formulating sustainable livelihood outcomes.

Time to be economically productive must be created (DFID, 1999; Scoones, 1998).
Poverty must be reduced (Scoones, 1998).

Well-being must improve. Well-being encompasses all aspects of human existence (DFID, 1999; Krantz, 2001; Scoones, 1998).
A livelihood must be adaptable and be able to absorb and recover from shocks (Ashley & Carney, 1999; Scoones, 1998).
Livelihoods must be sustainable (Chambers & Conway, 1992; DFID, 1999).
Livelihood programs must lead to an increase in assets (Ashley & Carney, 1999; Krantz, 2001).
Food security must be attained (DFID, 1999).

Core to livelihood outcomes, lie sustainability. Outcomes must be social, economic, and environmentally sustainable (Chambers & Conway, 1992; DFID, 1999; Masud et al., 2016). The sustainability between these elements are inter-related, sustainability cannot be achieved in one without it being achieved in other sectors as well (Chambers & Conway, 1992). Chambers and Conway (1992) state a livelihood is sustainable when "it can cope with and recover from stress and shocks, maintain or enhance its capabilities and assets lasting for the next generation" (p.6). By mitigating shocks, a livelihood can be made sustainable (DFID, 1999; Morse & McNamara, 2013).

It is important to note that there can be trade-offs between the livelihood outcomes (Erenstein, 2011; Scoones, 1998). An example of such trade-offs can be when someone shares food with his or her neighbour in order to build social assets with the neighbour. In Brasilia the trade-off was youths trading food for brand-name clothing (DFID, 1999). The spin-off effects of livelihoods can also influence one another. Nkambule and Chirau (2018) use the example of "stokvels" which is created with a financial motive but end up playing a very important emotional role as well. A second example of spin-offs are the improved self-esteems and improved household negotiating powers coming with saving programs (Ashraf et al., 2009).

2.8.1 Social sustainability

Social sustainability is determined by factors of inclusion and exclusion (De Haan, 2000). Inclusion has the ability to either exert unreasonable pressure onto social relationships which can lead to a breakdown in the relationship, or it can lead to bonding assets with a positive effect (De Haan, 2000). On the other hand, exclusion can decrease social assets (De Haan, 2000).

2.8.2 Economic sustainability

Economic sustainability is achieved when a person or household is able to maintain their expenses at a certain level of wealth over a period of time (DFID, 1999). Care should be taken that different people's livelihood outcomes are not in competition or infringing with each other's

outcomes (DFID, 1999; Tao & Wall, 2009). A new spaza shop in the neighbourhood may affect existing spaza shops' business.

2.8.3 Institutional sustainability

Sustainable institutions support the acquisition of sustainable livelihoods, while improved livelihoods can influence institutions to become more sustainable (Adato & Meinzen-Dick, 2002; Otioku, Ackah & Forkuor, 2017). Pfahl (2005) uses societal expectations, public participation and a reasonable degree of accountability as measurements to determine the sustainability of institutions.

2.9 Vulnerability

Livelihoods are under constant assault from uncertainties, insecurities, shocks, and threats (DFID, 1999; Philip & Rayhan, 2004). The poor and vulnerable have the least control over these negative external impacts increasing their vulnerability (Kaya, 2018; Otioku et al., 2017; Zhang & Fang, 2020). The more vulnerable, the greater the impact of shocks (Philip & Rayhan, 2004). The poor and vulnerable are often forced to take risks and expose themselves to unnecessary risks increasing their vulnerability (Noble et al., 2006; Ramachandran, 2006).

Vulnerability can be broken down into three categories (Adato & Meinzen-Dick, 2002; DFID, 1999; Masud et al., 2016). First, unpredictable shocks, like floods or fire that destroy assets directly (Adato & Meinzen-Dick, 2002; DFID, 1999; Masud et al., 2016). Second, trends which are more predictable changes with a negative influence on livelihoods e.g., an economic recession (Adato & Meinzen-Dick, 2002; DFID, 1999; Masud et al., 2016). Third, seasonal shifts that appear only during certain times of the year (Adato & Meinzen-Dick, 2002; DFID, 1999; Masud et al., 2016).

It is paramount to identify shocks and threats in order to manage them and limit the impact on livelihoods in the best possible way (Adato & Meinzen-Dick, 2002). Not all shocks affect everyone in the same way (Adato & Meinzen-Dick, 2002). Those involved in agriculture, for example, will be more affected by drought than a person working in a factory (Adato & Meinzen-Dick, 2002; DFID, 1999). Certain shocks can be controlled by external interventions, like a peace treaty ending conflict (DFID, 1999). Reforming policies and structures to the benefit of the poor can help to neutralise shocks and threats (Adato & Meinzen-Dick, 2002).

If shocks can be mitigated, vulnerability is reduced. A principal part of mitigating shocks is the maintenance and strengthening of assets to give the assets a higher resilience against shocks and threats making it more sustainable (Olewiler, 2006). When livelihoods are diversified, the impact of the shocks is spread across all livelihoods limiting the impact of the shock (Morse & McNamara, 2013). A shock cannot always be avoided, but it can be managed. Livelihood

resilience, the ability to bounce back after a shock, and the managing of a shock are therefore more important mitigation methods than avoiding a shock (Brooks, 2003; Kulig, 2000).

The two most common coping methods for low-income people is to cut on their diet and buy less food (Amendah et al., 2014). Because food makes up a large proportion of their budgets, it is the likely place to save money (Amendah et al., 2014). The second common coping mechanism is to borrow money (Amendah et al., 2014). Credit is discussed in the section on financial assets.

It is important that future livelihoods are valued during times of shocks (Ansell et al., 2014; Wunder et al., 2014). Last, it is important to state that any mitigation methods must be culturally acceptable and there must be a higher degree of public participation for mitigation methods to be effective (Brooks, 2003; Trospen, 2002).

2.10 Different SLA assets

Scholars identify five basic livelihood assets, also called capitals (see table 2-5) (Krantz, 2001; DFIF, 1999; May et al. 2009). These assets form the basis of an individual or community' holistic development. The five assets are defined by Scoones (1998) as follows:

Table 2-6: The five different livelihood assets

Livelihood asset	Asset description
Natural assets	Natural resource, such as raw materials from nature, and environmental processes, for example, the hydrological cycle.
Human assets	Referring to skills, knowledge, and labour. Labour includes a person's ability to labour, influenced by health and physical condition.
Economic or financial assets	Economic assets, such as cash, credit, savings, and other economic assets.
Physical assets	Referring to infrastructure, such as buildings and roads and equipment, such as tools or technologies.
Social assets	Refer to social resources, such as social networks, affiliations and associations.

(Scoones, 1998).

2.10.1 Natural assets

Scoones (1998) defines natural assets as the stock of materials or information and environmental services contained within an ecosystem useful for livelihoods. These goods are often free and can have an economic value and can be used, or it can be turned into physical assets (Dalu & Shackleton, 2018, Hoffman & Olivier-Smith, 2002; McSweeney, 2005; Shackleton & Shackleton, 2004;). Olewiler (2006) points out that the degree natural assets available is a sustainability

indicator. Humans are in competition with natural assets, though they are dependent on it at the same time, they may clear wetland areas responsible for water purification in order to build housing (Olewiler, 2006). Humans also substitute natural assets with physical assets, like a wetland with a constructed water purification system (Olewiler, 2006). Olewiler (2006) points out that maintenance to natural assets is as important as maintenance to all other assets if it is wished to maintain the assets and keep on deriving use from it. It should also be noted that natural assets are not just limited to harvesting, but also to providing services (Olewiler, 2006).

Poor people are especially dependent on these affordable or free goods and services from nature to strengthen livelihoods and absorb shocks and threats (Dalu & Shackleton, 2018; Hoffman & Oliver-Smith, 2002). In urban areas the use of natural assets decreases from being the highest in low-income neighbourhoods, like RDP housing and informal settlements to being the least in the high-income neighbourhoods (Kaoma & Shackleton, 2014). The products used were mainly firewood, fruits, traditional medicines, wood for building material (Kaoma & Shackleton, 2014), and the cultivation of vegetable gardens (Amendah et al., 2014; Kanosvamhira, 2019). At Swartvlei in the Western Cape, local residents used natural material to protect a bridge against flooding, while 70% of flood victims in Port St Johns, Eastern Cape depended upon and used natural assets to lessen the effects of the shock caused by the flood (Dalu & Shackleton, 2018; Hoffman & Oliver-Smith, 2002). While the residents of Swartvlei used natural assets to rebuild damaged housing, the natural assets in the form of vegetation also serves as a flood barrier to the neighbourhood (Kaoma & Shackleton, 2014). If the harvesting of the natural building material is not done in a sustainable way, it can increase the possibility of future flooding. This is in line with Olewiler (2006)'s opinion that the harvesting of natural assets must be sustainable.

Urban green infrastructure provides essential ecological services, such as reducing pollution and noise, serves as recreation locations that are important for mental health and serves as meeting places to build social assets (Baur & Tynon, 2010; Haines-Young & Potschin-Young, 2018; Kruize et al., 2019). With increasing urbanisation and the accompanying competition between urban land-uses, there is a need for multi-functional land-uses (Cilliers et al., 2020). The pressure on greenspaces to make space for other land uses, such as housing is increasing (Cilliers et al., 2020).

Cilliers et al. (2020) suggest a multi-functional use of green spaces, where possible these spaces are also utilised for urban agriculture or vegetable gardens. Kanosvamhira (2019) and Amendah et al. (2014) add vegetable gardens as highly utilised urban natural assets. Vegetable gardens improve diets leading to better health, saves money on the food budget and can serve as an income (Amendah et al., 2014). Unfortunately, in South Africa residents are cautious to use urban

green spaces due to the believe that it has high crime rates, illegal dumping and vandalism of infrastructure (Mashalaba, 2013).

Apart from the mentioned benefits of urban natural assets islands, Lauwaet et al. (2018) indicates that the greening of cities reduces the formation of urban heat islands.

2.10.2 Social assets

The value of social networks in bringing about economic change and individual transformation are already discussed under the section on social and network changes. It has also been mentioned that social networks form the cornerstone for social change (Biswas-Diener & Patterson, 2011; Iecovich et al., 2011; Lin, 2008; Mnguni-Letsoalo, 2015; Pietersen, 2017).

Though scholars differ on the definition of social assets, the following can be derived from different scholars' definitions: Social assets occurs within the framework of a network, organisation or social structure where there is interaction between members. It is a collective asset for mutual benefits with exchange, reciprocity and mutual benefit and trust are unmissable features of social assets (Beukes, 2019; Coleman, 1988; Gilbert & McLeman, 2010; Irving, 2005; Onyx & Bullen, 2000; Putnam, 1993). Because of their lack of education and proximity, social connections must be close enough to help in times of crisis (Sidloyi & Bomela, 2016).

Pichler and Wallace (2007) refer to formal and informal social assets. Formal social assets refer to more organised social environments and organisations, often with required membership (Pichler & Wallace, 2007). Informal social assets refer to more informal group meetings for the sake of benefitting mutually (Pichler & Wallace, 2007). Formal and informal assets can be directly proportional to each other, often the absence of the one lead to the formation of the other (Pichler & Wallace, 2007; Sik, 1994; Sotiropoulos, 2004). Where there are a lack of formal assets provided by the state, informal assets will increase to fill the void left by the absence of formal assets (Evers & Laville, 2004). Formal assets, like burial societies and stokvels were created for support by residents filling the void of the absence of institutional assets, these organisations play an important support role in the formation of social assets within South African low-income societies (Sidloyi & Bomela, 2016). The burial societies are not just a source of financial support but it also provides emotional support to its members (Sidloyi & Bomela, 2016). The value of burial societies is underlined by this study with 75% of the participants belonging to societies, and one participant carrying membership of three different societies.

Irving (2005) describes social assets as “risk pooling” and “social insurance”. Social assets have the potential to create wealth and social upliftment within communities (Kilpatrick et al., 2003; Sidloyi & Bomela, 2016). The most important building blocks for social assets to form are trust

and reciprocity (Beukes, 2019; Coleman, 1988; Gilbert & McLeman, 2010; Irving, 2005; Onyx & Bullen, 2000; Putnam, 1993). A well-balanced social asset portfolio serves as a “buffer”, helping the poor to cope with shocks, it serves as a safety net which can be called upon during times of need and compensates for a lack of other types of assets, for example, shared labour (DFID, 1999; Kilpatrick et al., 2003). In their study, Sidloyi and Bomela (2016) found that low income females relied more on friendship ties than on family ties. These friendship ties have the potential to create small business opportunities (Sidloyi & Bomela, 2016).

Some scholars regard religious assets as a separate asset, others include it into the broader definition as a subdivision of social assets (Barker, 2008). The importance of religious assets is underlined by 94% of this study’s participants attending church on a regular basis.

The following statement highlights the value of social assets: Social assets can be seen as “a last resort”. When you have nothing to fall back on, you can call on your social network (DFID, 1999).

2.10.3 Physical assets

Physical assets refers to infrastructure, equipment, tools, or technologies that humans need to meet their needs (DFID, 1999; Khuzwayo, 2016; Scoones, 1998). Nawrotzki (2012) considers physical assets more valuable than cash due to its ability to either generate financial assets, or to be exchanged for financial assets.

The assets can be grouped into either public or private goods (DFID, 1999). Public goods are infrastructure provided by outsiders, like the state, and can be used without cost, for example, a public library (DFID, 1999). Private goods belong to a particular individual and can be used to produce, or can be rent out for an income, e.g., a sewing machine or tools (DFID, 1999).

The following components of physical assets are regarded as priority in building sustainable livelihoods: Affordable transport, proper shelter and water supply, sanitation, clean and affordable energy, and access to communication (DFID, 1999; Khuzwayo, 2016). Khuzwayo (2016) and DFID (1999) highlight the importance of water and sanitation as fundamental in creating healthy living conditions which is a crucial aspect in the fight against poverty. Apart from creating better health, bringing water closer saves time on water collection, increasing productivity (Ndikumana & Pickbourn, 2017).

Due to issues such as land availability, access to finances and high cost, the urban poor are often excluded from formal housing (Chirisa & Matamanda, 2016). With informal housing and insecure tenure comes a number of issues increasing the poor’s marginalisation (Durand-Lasserve, 2006). There is a reluctance to improve and invest in the dwelling and household when the occupants do not have ownership or security of tenure (Durand-Lasserve, 2006). With insecure tenure

inheritance is not possible and wealth is lost instead of inherited (Durand-Lasserve, 2006). Informal settlements are often on marginalised land exposed to risks (Durand-Lasserve, 2006). Worsening the living conditions are the challenges going with providing services to a temporary and unplanned settlement (Durand-Lasserve, 2006). Informal housing occupants have little access to legal support while secure tenureship leads to long-term planning and the mobilisation of household resources (Durand-Lasserve, 2006). Though the South African RDP housing programme has been hailed as a major success story in its category of subsidised housing to the poor, there are challenges, such as poor quality of some dwellings (Chirisa & Matamanda, 2016). Residents are often awarded houses away from their area of livelihoods and social networks (Chirisa & Matamanda, 2016).

2.10.4 Economic or financial assets

Most scholars agree that financial assets consists of regular and sustainable income, savings or credit (Chen et al., 2013; DFID, 1999; Xu, Deng, Guo & Liu, 2019). Scoones (1998) broadens the definition by including basic infrastructure and production equipment and techniques classified by other scholars as physical assets (Khuzwayo, 2016). In this study, the first mentioned definition of financial assets, namely “financial assets consist of regular and sustainable income, savings or credit” will be used. The importance of financial assets lies in its ability to acquire other assets, and therefore, a number of scholars put it central to the other assets (DFID, 1999; Mukisa et al., 2020). The poor often lack adequate financial assets to acquire other assets needed (Mukisa et al., 2020).

One of the most effective ways in strengthening financial assets is through direct cash transfers bringing immediate relief to poverty (Shapiro & Haushofer, 2016). Though the relief is immediate, it is not regarded as sustainable, once it is consumed the individual is still poor (Shapiro & Haushofer, 2016). While the practice of cash transfers strengthens livelihoods on the receiving end, it weakens the livelihoods at the sending end by lowering the senders cash stocks (Sidloyi & Bomela, 2016). Several scholars argue though, that direct cash transfers in South Africa made through old age pension and other social grants and money does have a positive influence on food security and therefore on wealth as well (Burns et al., 2005; Schatz et al., 2012). Banerjee et al. (2008) warn that the social grant pay-outs in South Africa can lead to the forming of a dependency, such a dependency can influence livelihood accumulation in a negative way.

Following the argument that financial assets are the most important of all assets, women in a self-help chicken project in Mthatha indicated financial reasons for withdrawing from the project, they did not had the money to pay expenses, like medicines for the chickens (Sidloyi & Bomela, 2016).

Instead of providing cash to pay for a veterinarian, physical assets in the form of information, or a free veterinarian could be provided.

Savings make investment in other assets easier improving long term wealth, or it can be used to pay for important life events, like weddings or education (Breitwieser, 2016). Savings can also increase livelihoods in trying times, as well as increase livelihood resilience during shocks and threats (Breitwieser, 2016). Apart from increasing the ability to absorb shocks and to increase other assets, it was found that saving programs amongst women in Macedonia, the Philippines, and Mthatha, also had a positive effect on the participants' self-esteem, position of authority in the household, and decision-making power (Nkambule & Chirau, 2018).

Not all scholars are in agreement on the possible positive effects of providing credit to the poor. Baiyegunhi, Fraser, and Darroch (2010) argue that often high-interest rates and administrative cost in low-income areas lead to credit only making a marginal difference to household poverty levels. Improved credit accessibility could increase credit's impact on poverty due to interest and administrative cost that needs to be paid (Baiyegunhi et al., 2010). The pressure on lenders to use credit for daily necessities also reduces the long-term effectiveness of credit programs (Baiyegunhi et al., 2010). In many societies the poor has limited access to credit and need to turn to the informal market for credit creating a number of concerns, such as high interest rates and mafia style collections (Straub, 2005). In Sesotho the word "pokola", meaning donkey, is used for loan sharks referring to the brutality the loan shark kicks you with to get the money back.

2.10.5 Human assets

Scoones (1998) defines human capital (assets) in the context of sustainable livelihoods as, "the skills, knowledge, ability to labour and good health and physical capability important for the successful pursuit of different livelihood strategies" (p.8). Xu et al. (2019) argue that human assets is the one asset needed to acquire and utilise all other assets. The link between human assets in the form of improved qualifications and skills and the exit from poverty is evident from studies around the world (Li, Goetz & Weber, 2018; Saeed & Ali, 2012; Zhang & Fang, 2020).

Often human asset issues, such as bad health and a lack of education or training are the source of poverty and blamed for the lack of a low standard of living (Crea et al., 2017; DFID, 1999; Potocky-Tripodi, 2002; Saeed & Ali, 2012; Zhang & Fang, 2020). A well-acknowledged benefit of improved human assets is that it opens up better employment opportunities which lead to increased income which strengthens livelihoods portfolios and increase livelihood resilience (Roy, 2020; Saeed & Ali, 2012; Zhang & Fang, 2020). The positive effect of formal education and training is even more evident in societies where females' access and participation in the labour market has been restricted (Roy, 2020).

Though training improves chances of employment, the training must be relevant to the economic conditions in order to improve chances of employment (Blattman & Ralston, 2015). In South African townships entrepreneurship training programs were found to be more effective and relevant than vocational training programs (Blattman & Ralston, 2015).

The value of formal education has been expressed by Mr. Nelson Mandela, “It is through education that the daughter of a peasant can become a doctor, that the son of a mineworker can become the head of the mine, that a child of farmworkers can become the president of a great nation. It is what we make out of what we have, not what we are given, that separates one person from another” (Mandela, 2013:99).

The relationship between health and human assets is best illustrated by healthy people who are more productive than sick people (Hsieh et al., 2012; Roy, 2020; Saeed & Ali, 2012). Saeed and Ali (2012) found that health factors, such as chronic disease and disability factors weaken human assets. Health issues do not just lower productivity but also increase medical cost loading an additional financial burden on the household (Roy, 2020). Low-income households are often over-dependant on one or two sources of income, when health issues or disability affect the breadwinner’s ability to be productive the negative effect is bigger than with a more diverse income portfolio (Roy, 2020). Studies in the USA, China, Ethiopia, and Taiwan found that the good health of low-income workers influence their earnings in a positive way (Hsieh et al., 2012; Roy, 2020).

2.11 Strengths of the Sustainable Livelihoods Approach

This section will pay attention to scholars confirming that they have experienced the strengths in practice. The people-centred nature of the SLA allows for identifying individuals’ strengths and assets so that it can be employed effectively in designing interventions (Khuzwayo, 2016; Mazibuko, 2013; Tao & Wall, 2009). A number of scholars found that the framework provided by the SLA serves well to run poverty alleviation programs (Khuzwayo, 2016; Macfadyen & Corcoran, 2002; Mazibuko, 2013). Including different aspects give the SLA a holistic nature useful to identify several different assets which can be paid attention to simultaneously (Krantz, 2001; Macfadyen & Corcoran, 2002; Morse et al., 2009). Because the SLA is a participatory approach, it allows for the understanding of unique poverty experience, which allow for the formulation of unique solutions (Arad research, 2016; Carney et al., 1999; Oxfam, 2013).

2.12 Critique against the Sustainable Livelihoods Approach

Morse et al. (2009) call the SLA “a broad banner that covers many disparate practices”, emphasising the non-specific nature of the SLA (p.58). It is difficult for one approach to cover all

possible aspects of people's existence (Lautze & Raven-Roberts, 2003). It is questionable if effectiveness is not sacrificed by generalising a wide variety of assets, of which many are relative and divided into only five different asset groups (Smyth & Vanclay, 2017).

The in-depth interviews can bring unique issues to the fore making it difficult to find common denominators (Morse et al., 2009). When listening to the poor and their stories, there is the danger that the researcher can romanticise the poor's conditions and stories (De Satgé & Holloway, 2002). The in-depth interviews also create the risk to turn the SLA project into a data collecting exercise with no action taken if not handled by trained and knowledgeable staff (Morse et al., 2009). In order for the data that are collected to be trustworthy, a relationship of trust between the interviewer and interviewee is crucial. If the relationship of trust is not strong enough it can influence the quality of the information (Morse et al., 2009). A relationship of trust takes time to build. The whole process of using in-depth interviews for data collection is a time-consuming process putting pressure on the budget (Morse et al., 2009).

The relativeness of poverty and the poor's circumstances make it difficult to define poverty concepts, relative concepts increase likelihood that poverty and the self-definable context of the poor may be misinterpreted (Krantz, 2001; Lautze & Raven-Roberts, 2006).

The SLA is not developed for emergencies and conflict situations (Lautze & Raven-Roberts, 2003; Macrae et al., 1997; Morse et al., 2009). In particular, violence is not adequately addressed in the SLA, with violence as one of the major threats to livelihoods (Macrae et al., 1997; Richards, 1996). Because people are often exposed to violence and vulnerability needing immediate relief, the SLA with a focus on longer-term sustainability is not all that relevant to them (Lautze & Raven-Roberts, 2006; Macrae et al., 1997). Longley and Maxwell (2003) agree that vulnerability is being under-played in the SLA and they suggest that vulnerability is being placed more central to livelihoods theories. Resilience and vulnerability should receive more attention, vulnerabilities can be complex and include protection and daily survival (Lautze & Raven-Roberts, 2003; Longley & Maxwell, 2003; Macrae et al., 1997).

The SLA has a strong focus to use only what exists within the poor's sphere of influence (De Satgé & Holloway, 2002). By providing the poor with only what they have access to, can enforce the current inequalities and inputs from outside can make notable sustained improvements (De Satgé & Holloway, 2002). The SLA underestimates the importance of structural constraints which often can be better influenced from the outside (Murray, 2002). Both DFID and UNDP address this limitation by including the influencing of structures in their toolkit (DFID, 1999; UNDP, 2016). The 'actor-orientated' local focus of the sustainable livelihoods framework has however been critiqued for its tendency to downplay structural constraints, such as politics and power, and its

failure to engage with processes of economic globalisation, challenges of environmental sustainability and transformation shifts in rural economies (De Haan, 2007; Scoones, 2009). Context should be given to all critique. It should be kept in mind that SLA toolkits and other poverty-relief programs are often designed for specific circumstances and will have shortcomings in other situations.

2.13 Conclusion

This chapter gave an overview of current literature and debates on the Sustainable Livelihoods Approach, female-headed households' livelihoods and urban poverty. The shift in the literature from rural poverty studies to urban poverty studies has been highlighted. The Sustainable Livelihoods Approach has been suggested as a holistic and participatory framework to study the multi-dimensional character of urban poverty. The uniqueness of female livelihoods was discussed together with a brief background on female poverty. Lastly, the Sustainable Livelihoods Approach was discussed highlighting aspects in the approach relevant to female urban poverty.

CHAPTER 3 METHODOLOGY

3.1 Introduction

In this chapter, the methodology of the study and the methods used to determine the sustainability of the livelihoods of female-headed households in Zamdela, Sasolburg are discussed. First, the research design is described, followed by a discussion on the data collection and analysis methods. The chapter will continue discussing the ethical considerations of the study followed by laying out how a participatory approach based on the 'Sustainable Livelihoods Approach' was used to conduct this study.

3.2 Research design

As this study focuses on the sustainability of the livelihoods of female-headed households, it was decided to use the Sustainable Livelihoods Approach (SLA) because as May et al. (2009:6) state about the SLA "...it examines people's lives as a whole, rather than focussing exclusively on their financial situation and also because it starts from their strengths, their assets and resources rather than their needs". Therefore, following the SLA, a participatory approach was used in this study. A discussion of this research method is given in this section.

According to Murray (2002), most of the conventional research methods on poverty follow a straight-line process approach starting with identifying a problem, doing a study on the problem, formulating policy and lastly the new policy is expected to improve living conditions. Such linear studies do not take political context into account. Information on who is responsible for the implementation of the policy, what the conflicting interests are and the intended outcome of the project or policy are often omitted (Murray, 2002). Murray (2002) opines that with conventional research approaches where outsiders launch and drive an investigating project, their findings and the project they launch are not relative to local needs, are not very effective and often terminate when they leave the community. Participatory research approaches stand in opposition to these traditional approaches as the participants take centre stage in the research. This often leads to unique and relevant findings which can be implemented to bring about change in a community (Cornwall & Jewkes, 1995).

Cornwall and Jewkes (1995) define participatory research as follow: "Participatory research focusses on a process of sequential reflection and action, carried out with and by local people rather than on them" (Cornwall & Jewkes, 1995:1). Cornwall and Jewkes (1995:1) continue by saying "local knowledge and perspectives are not only acknowledged but form the basis for research and planning". From Cornwall and Jewkes 1995's definition, the importance of the participants' role in the research process is evident. Participants become "co-researchers" in the

sense that they are the ones who understand the situation the best and therefore they are the ones who create data from their perspective. They are not mere subjects of research. This is in line with other scholars underlining the same principles for research (Bryman, 2012; De Vos, et al, 2011; MacDonald, 2012; McTaggart, 1989; Whyte, 1991). When participants are actively involved in the research they identify the social issues the research should focus on, instead of the issues being identified by a subjective researcher (Maguire, 1987; McTaggart, 1989). The higher degree of ownership also cultivates the participants' trust in the research and increases the research's credibility (Brydon-Miller et al, 2003; Chandler & Torbert, 2003; MacDonald, 2012; Maguire, 1987; McTaggart, 1989).

The second point, which is important from Cornwall and Jewkes (1995)'s definition is the focus on local knowledge that forms the base of the data. With participatory research the centre of power lies with the participants and not the researcher (Chandler & Torbert, 2003; MacDonald, 2012). This is in agreement with scholars stating that with participatory research community members get the opportunity to describe their own circumstances in detail leading to a better understanding of their circumstances (Chandler & Torbert, 2003; MacDonald, 2012; Maguire, 1987; McTaggart, 1989; Whyte, 1991).

Several authors regard participatory research as a suitable method for researching community issues, such as this study (Greenwood & Levin, 2006; Maguire, 1987; Whyte, 1991; Young, 2006). Given the sense of non-participation and disempowerment experienced by vulnerable communities, a clear need exists in this study for the active participation of community members throughout the research process (Moyo, 2014). Where there is no active participation from within a community, change may be irrelevant to the local circumstances and questions arise if the community members have the ability to influence their circumstances (Brydon-Miller et al., 2003; Pietersen, 2017). The perception is created that the reason why the stimulus for change comes from outside, is because the community is not able to drive the change themselves (Ferreira et al., 2013; Pietersen, 2017). If they had the ability to change their circumstances, they would have done it (Ferreira et al., 2013; Pietersen, 2017). By making use of participatory research the participants feel empowered and the research gives them a feeling of being in control (Chambers, 1994). The chance that the research results are meaningful is more likely with participatory research (Chambers, 1994).

3.3 Data collection process

In the following section the selection process of the participants, sample size, tools from the *Oxfam Sustainable Livelihood Approach toolkit for Wales* (2013) used to collect the data, and the interview and group session processes will be discussed.

3.3.1 Selection of participants

Lamprianou (2002) recommends the use of gatekeepers when doing research to gain access to a community. Lamprianou (2002) motivates the use of gatekeepers stating that a gatekeeper is familiar with the community, has the ability to help recruit suitable participants and helps to bridge cultural gap. An initial challenge in the research process was the death of the gatekeeper who was a well-known member of the Methodist congregation in Zamdela. He offered to assist in recruiting participants stating that his influence in the congregation will help to recruit participants from the congregation. His attempts to recruit were unsuccessful, he contributed the lack of interest to a lack of trust amongst community members and the fact that there will be no direct reward for the participants to join the study. After he passed away, a new gatekeeper was recruited who did assist in recruiting some participants, but not enough. A second gatekeeper assisted in recruiting the remaining participants. The gatekeepers were needed to serve as contact between the researcher and the community. Being familiar with the community, the gatekeepers were able to assist with organising appropriate venues and could advice the researcher on cultural matters, such as the custom to provide food with every meeting.

In preparation for the information meeting with the participants, the researcher and the gatekeeper had a meeting with the ward councillor. The purpose of the meeting was to inform the councillor of the research project that will take place in his ward. The meeting was arranged on advice of the gatekeeper arguing that if the councillor approves of the meeting and the research, it will be easier to recruit participants and that it may help to build a trust relationship between the participants and the researcher. The councillor approved of the research and an information meeting was arranged at Mabane Crèche with the help of the gatekeeper.

3.3.2 Information meeting

Before the interviews were conducted, an information meeting was held to inform potential participants of the purpose of the research and what would be expected of them. The meeting was held on a Saturday afternoon to accommodate those participants who may need to attend funerals on a Saturday morning or those who may have had other commitments during the week.

During the information meeting, COVID-19 protocols were adhered to with a 1,5 m space between participants, meeting in a ventilated room, desk and chairs were sanitized, participants' hands were sanitised on entering and everyone wore masks.

The researcher used two-metre-long sheets of brown paper that was stuck to the front wall of the class on which the researcher wrote and drew to give background on the SLA and to explain the purpose of the research. The sheets of brown paper served as a recording of what was discussed

on the day, and made it easy for the researcher to revisit the sheets to be reminded of the discussions of the day. A brief explanation of the SLA was given, to provide a background to the study. As part of giving background on the SLA, a mind map showing the sustainable livelihoods assets was drawn on the paper. The researcher also wrote his name and contact details on the paper for the participants who wish to copy it. This would make it easy for the participants to contact the researcher if they wished to. It was explained that participants had to give consent, that they can withdraw from the study at any time, can ask any questions regarding the study, and that their identity would be protected. It was also explained that there would be no direct benefit to participating in the study and that participation is voluntary.

Following the information session, lunch was provided on the recommendation of the gatekeeper. Soup, sandwiches, and cold drinks were served in disposable cups and cutlery in order to be compliant with the COVID-19 regulations at the time. According to the gatekeeper, in the participants' culture, it is expected that lunch is provided after a meeting like this. She also added that participants may have come straight to the session after attending to other commitments earlier in the day without visiting their homes to have lunch.

3.3.3 Sampling methods and sample size

Criterion sampling was used as tool to select the participants in the study. The participants had to meet the following criteria: they had to be female and the head their households and they also had to reside in Zamdela, Sasolburg. In addition, snowball sampling was used to identify potential participants in the study. The gatekeeper recruited potential participants who in turn introduced the researcher to more participants.

As several in-depth interviews had to be conducted with each participant, the sample size of the study was small. Sixteen females who headed their households, volunteered to participate in the study. This number is similar to other studies conducted in South Africa by Sidloyi and Bomela (2016) and Khuzwayo (2016) who used participatory methods to study the livelihoods of females. This study uses the SLA to study the livelihoods of specific households, and not general livelihoods within the community, therefore large numbers of participants are not needed (May et al., 2009).

3.4 The interview process

Interview sessions were conducted at Mabane Crèche, the Zamdela Arts and Culture Centre and at participants' homes when preferred. Tool number 3 (The managing wheel), tool number 4 (Semi-structured interviews) and tool number 5 (Livelihoods strategy tool) were completed

during an interview session, while tool number 6 (Mapping public assets) and tool number 12 (Identifying livelihood solutions) were completed during a group session.

Scholars regard interviews as a suitable tool to use in studies like this one working with females, marginalised and vulnerable groups (Bryman, 2012; Corbin & Morse, 2003; Liamputtong, 2013). Interviews provide the marginalised, like females, with the opportunity to voice their opinions and tell their stories (Leedy & Ormrod, 2014; Liamputtong, 2013). Allowing people to share their stories and experiences empowers them (Greeff, 2011; Liamputtong, 2013). Reflecting on this research most participants agreed that the interviews allowed them opportunity to tell their stories and talk about their problems which had a therapeutic effect, making them feel better and even helped in getting perspective on their problems. The interview process allows for important and complex information to come to the fore, voiced by the participant from their own perspective (Bryman, 2012; Bryne, 2012; Liamputtong, 2013). The interactive nature of face-to-face interviews, which include eye contact, body language and the opportunity for the participants and interviewer to see each other, allows for relationship and trust building (Johnson & Rowlands, 2012). This addresses MacDonald (2012)'s concern that a lack of trust can hamper the trustworthiness of the study.

An interesting phenomenon was that most participants preferred not to be interviewed alone, but rather with a second participant. Where participants preferred to be interviewed with another participant, it was conducted in such a way. Wilson et al. (2016) call the method where two or three participants are interviewed simultaneously, but each participant still answers the questions individually, pair depth interviewing. In line with the existing literature (Arksey, 1996; Morris, 2001), the following was observed during the paired depth interview process: Conducting a paired depth interview allowed for interaction between the participants. Discussing questions and commenting on each other's answers allowed for information to surface which would not have surfaced otherwise creating opportunity for follow-up questions (Arksey, 1996; Morris, 2001). For example, a participant asked the second participant in the interview regarding her ex-husband. The researcher was not aware of the existence of an ex-husband and could ask if the ex-husband pays child maintenance. In this case, the ex-husband did not pay maintenance which may be a possible livelihood to explore.

In one of the interviews, one participant dominated the interview and from time to time answered questions on behalf of the second participant. Arksey (1996) and Morris (2001) caution that this behaviour can occur in paired depth interviews. The interviewer made sure that both participants got a fair opportunity to answer their own questions. He also reminded the dominant participant of the importance that each respondent gives their own answer. Figure 3-1 shows the researcher and two participants engaged in an in-depth interview.



Figure 3-1: The researcher and two participants in an interview

(Khanya, 2021).

3.4.1 Interpretation and translation of the interviews

With the help of an English lecturer at Flavius Mareka FET college two students were recruited to do interpretation and translation during the interviews and group session. The same student was not available for all the sessions, which made it necessary to have a second interpreter to interpret the other sessions. Participants were asked if they preferred to communicate with the researcher through an interpreter or to communicate directly in English. The interpreter translated most of the interview sessions and the group session from English into Sesotho, and vice versa. Where the researcher could follow the Sesotho answers of the respondents, the interpreter still translated to ensure the researcher understood the answer correctly.

The researcher asked a question or explained what was required by a tool, the interpreter then translated into Sesotho. Interpreting from Sesotho to English, there were instances where the participant spoke too long without giving the interpreter opportunity to translate. In such instances the participant was asked to repeat her answer, or the part which the interpreter was not able to initially translate. Although the interpreter was trained beforehand, there were certain issues that surfaced during the first few interview sessions. The interpreter had to be reminded that she should not answer on behalf of the participants and that the participants' words must be translated as close as possible to the original words. The translation was also verified with the translation in the scripts.

3.4.2 Data collection tools

Five tools from the Oxfam SLA toolkit for Wales (2013) were used for data collection in this study. This toolkit is a participatory tool with a holistic approach to livelihoods focussing on the individual diversity of poverty experiences and dynamic environments (Arad research, 2016; Carney et al., 2000; Oxfam, 2013). The toolkit does the investigation from the perspective of the poor themselves (Arad research, 2016; Oxfam, 2013). Furthermore, the flexibility of the toolkit allows for the tools to be adapted to be more suitable for local conditions (Arad research, 2016; Cortes, 2008). Its versatility allows it to be used in interview sessions as well as in group sessions (Arad research, 2016; Cortes, 2008). The Oxfam SLA toolkit has been used with success in Wales amongst groups with similar characteristics as this study. It was used amongst low-income groups, predominantly females, black people and other minority groups (Quinn, 2018; Scullion et al., 2017).

Adhering to Scullion et al. (2017)'s warning on time constraints, only five of the twelve tools from the Oxfam toolkit were selected for this study, namely: the managing wheel, structured interviews, the livelihoods strategy tool, the mapping public assets tool and the identifying livelihood solutions tool. These tools were selected to meet the study objectives. Other factors that were kept in mind during the selection process of the tools were how the tools can help to understand the uniqueness of the different participants' situations. The tools chosen also had to be of a reflective nature and assist in identifying possible solutions to livelihood barriers, and the strengthening of livelihoods identified by the participants.

3.4.2.1 The managing wheel (Tool number 3)

The managing wheel was used to assess the sustainability of livelihood strategies used by female-headed households (Oxfam, 2013). By completing the managing wheel, opportunity was created for follow-up questions on income and expenditure (Oxfam, 2013). By listing all income and expenditure in a visual way, participants got a visual idea that made it easy to see if their livelihoods are sustainable (Oxfam, 2013). This tool was completed during the interview session. The purpose of the tool is to investigate the coping strategies of the participants, such as financial management and additional sources of household income (Oxfam, 2013).

First, the participants had to list their incomes and expenditures on the tool (see Figure 3-2). The concept from the Oxfam toolkit is that weekly income and expenses should be listed on the managing wheel. The in- and outflow of money will be written under the day it usually occurs. It was found that many of the participants' income and expenses were not on a regular weekly base, and therefore income and expenses columns were added under which the in- and outflow of money could be listed, instead of listing it under the different days of the week. Next to the listed

amounts it was indicated if it was other than monthly income or expenses, for example, weekly. Where income or expenditure were not constant or weekly, participants were asked to make estimations. Some participants did piece work, or were involved with recycling or selling resulting in an irregular income. Participants who were part-time employed got paid weekly or daily. It was also indicated when an income was seasonal, like selling vegetables from the community garden.

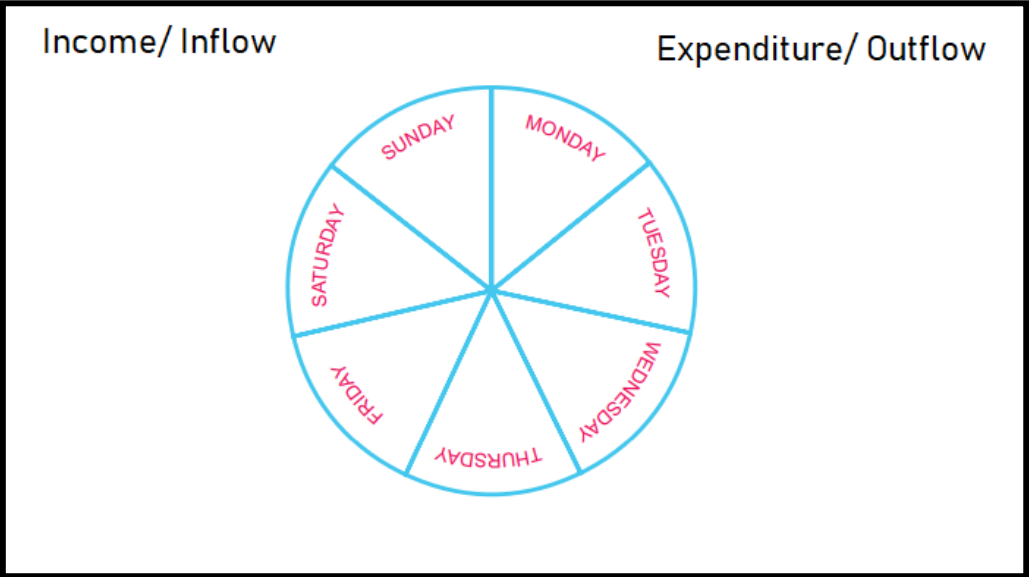


Figure 3-2: The managing wheel

(Oxfam, 2013).

After the participants listed their income and expenditures, they were asked to answer the following questions as part of the managing wheel tool (Oxfam, 2013):

- Who goes shopping?
- Do you get help from family or neighbours? Do you do anything for them in return?
- Are there days of the week (or month) when there is no more money left? What do you do then?
- How do you budget for expensive items?
- What happens if the cooker breaks down or you lose a purse?

Some participants did not make complete listings of their income and expenses. For example, one participant indicated that she could not remember what her monthly grocery expenses were.

3.4.2.2 Semi-structured interviews (Tool number 4)

The purpose of this tool was to determine the asset base of the participants and how they employ their assets as livelihoods (Oxfam, 2013). The tool also aims at assessing the sustainability of these assets (Oxfam, 2013). The questions that were used were adapted from the interview schedule (Refer to Appendix 1) of Tool number 4 (semi-structured interviews) in the Oxfam (2013) toolkit. The tool allows for open-ended and follow-up questions. This in turn allows for more clarity and deeper insight (Bryman, 2012; Bryne, 2012; Liamputtong, 2013). The questions in the interview schedule are grouped under the following subheadings: The introduction questions (Questions 1 - 4), public asset questions (Questions 5 - 10), social asset questions (Questions 11 - 14), physical asset questions (Questions 15 - 21), human asset questions (Questions 22 - 27) and financial asset questions (Questions 28 - 33).

3.4.2.3 Livelihoods strategy tool (Tool number 5)

The livelihoods strategy tool enables the participants to reflect on the state, and on the sustainability of their own livelihoods, while allowing the researcher to document the state of their current livelihoods strategies (Oxfam, 2013). Before the tool was completed, the concepts of livelihood strengths and barriers were explained to the participants. After the explanation, the participants had to use the tool to list their livelihood strengths and barriers (see Figure 3-3). The tool was completed individually during the interview session.

STRENGTHS	BARRIERS

Figure 3-3: Livelihoods strategy tool

(Oxfam, 2013).

3.4.2.4 Mapping public assets (Tool number 6)

Tool number 6 was completed during the group session. The Mapping public assets tool aims to establish which public assets (local services) are used by participants and how they use these assets (Oxfam, 2013). In addition, the barriers they face using these assets were mapped out. The tool was also used to investigate the benefits, limitations and accessibility of the public assets as experienced by the participants (Oxfam, 2013).

The participants named the public assets they used. A list of the assets was written on the brown paper in front of the room (see Figure 3-4 below). The participants were asked to discuss how these journeys to various public assets helped or hindered them in achieving a sustainable livelihood. Next to each asset the benefits that participants derive from the asset were written. The researcher drew an example of a possible asset map on a sheet of brown paper for all to see (see Figure 3-5). Participants then had to either use assets listed on the brown paper, or they could add assets not listed on the paper to compile their own asset map.

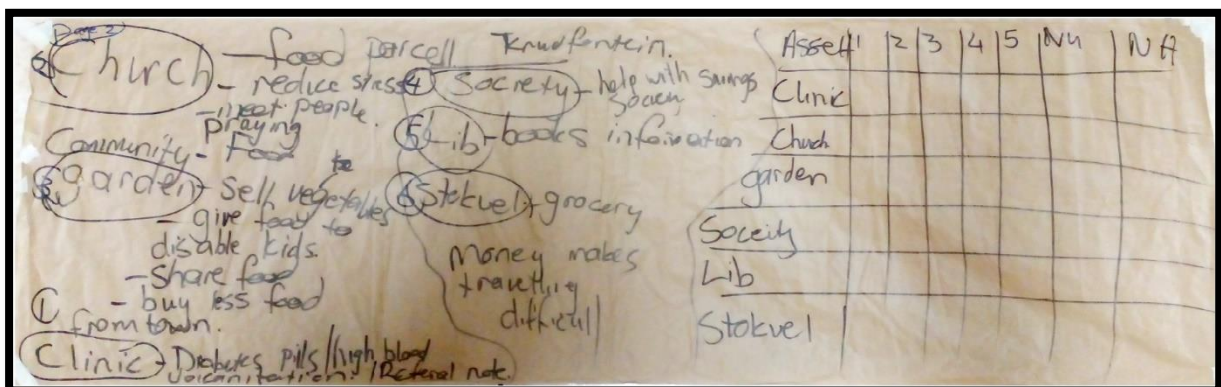


Figure 3-4: The list of assets compiled by the participants and the rating scale example.

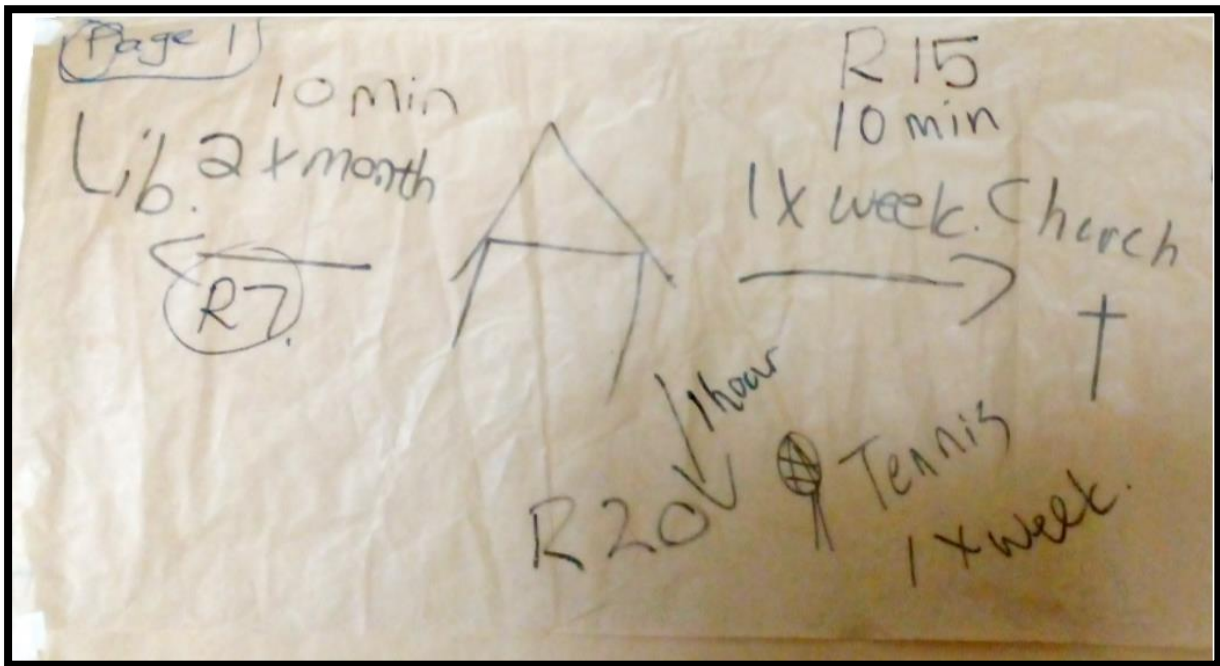


Figure 3-5: An example of an asset map done by the researcher.

Participants had difficulties in understanding the tool and completed their asset maps in a different way from what was suggested by the tool. This was in spite of the original tool having been simplified after it was found a challenge for a participant during the first interview. Although the tool was not part of the interview process, the participant in the first interview was asked to complete all the tools and to evaluate the tools so that adaptations could be made to make the tools more user friendly for the group session.

Figure 3-6 shows a completed asset map from a participant and all the participants' asset maps were completed in more or less similar way. Participants had to draw their house in the centre of the page and then draw all the assets they visited regularly around the house, linking it with a line to the house as shown by the researcher in Figure 3-5. Information on frequency of visits, travel time and travel cost had to be written on the map. From Figure 3-6 it is clear that the participants had difficulty putting their regular journeys into a spatial representation. The concept of a map, or spatial representation may have been unfamiliar to the participants.

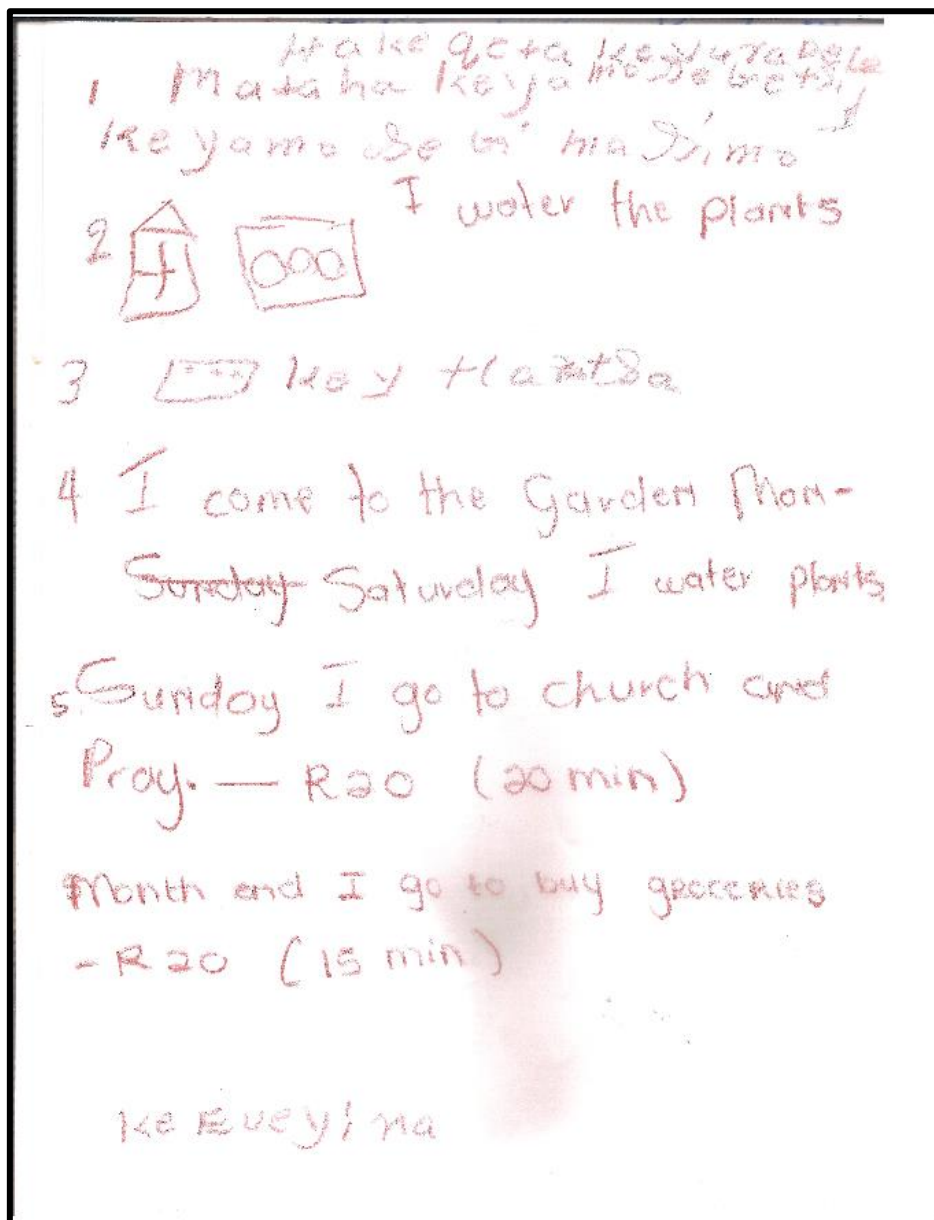


Figure 3-6: An example of a participant’s asset map.

The participants were asked to discuss how these journeys to various public assets helped or hindered them in achieving a sustainable livelihood. A ranking list of the importance of the assets visited was compiled by each participant. An example of the ranking list was done on brown paper in front of the venue (Figure 3-4). After the researcher explained the rating of the public assets (see Figure 3-4), each participant used the template of the tool (see Figure 3-7) provided to them to complete the ranking of the use derived from visiting each asset. The following scale was used to assess the value of each public asset: 1=terrible, 2=bad, 3=OK, 4=good, 5=excellent, /NU=never used it and NH=never heard of it.

Rating key:
 1=Terrible/2=Bad/3=OK/4=Good/5=Excellent/NU=Never used it /NH=Never heard of it

Assets	1=Terrible	2=Bad	3=OK	4=Good	5=Excellent	NU=Never used it	NH=Never heard of it

Figure 3-7: The asset rating scale.

3.4.2.5 Identifying livelihood solutions (Tool number 12)

The purpose of this tool is to help the participants to break down their livelihood problems in order for them to understand their problems better so that they can better sustain their livelihoods (Oxfam, 2013). The tool assisted participants in finding possible causes of livelihood barriers, and then to identify possible solutions to their livelihood problems and barriers (Oxfam, 2013). This tool was completed during the group session.

The group listed livelihood barriers they are experiencing. The barriers were written on the brown paper in front of the venue for all to see (see Figure 3-8). Participants could either list the same barriers as they identified using Tool 5, or they could list other barriers. The barriers they listed in Tool 5 were put up for them to see. After listing the barriers on the brown paper, the group identified the four most common barriers they experience from the list. The barriers were linked to a table where participants then decided which organisation and which institutional level is the most likely to influence this barrier (see Figure 3-8). The participants came up with ideas on how they can influence these barriers and what obstacles they will experience, and what resources they will need trying to influence the barriers.

Barriers	local	Provincial	National ORG
① Pension ② Salary too small - Too many dependants	④ The custom to share/help A force me to share my little		X Gov X Gov
③ Children unemployed Supporting grand children Depend on other for survival - want to be independent			X Gov Besides and little help Some community member help Some family help from Gov.

Figure 3-8: Listing livelihood barriers and the responsible parties to address barriers.

The participants had difficulties identifying solutions to the barriers, although during the interviews they came up with possible solutions to some of the barriers. For example, under Tool 3 participants were asked if there is a way to increase income and four of the participants did come up with a possible way to increase income, which can address the problem of a “too small salary”.

3.5 Group work

A challenge identified during the information session was the late arrival of participants. Experiencing the challenge during the information session, gave the researcher time to plan around it for the group session. If participants were going to arrive late during the group session it will reduce the number of participants in the session which will influence the data that are to be collected during the session. To accommodate late arrivals at the group session, the session was started with the meal, instead of having the meal at the end of the session. This was effective because a number of participants did arrive during the course of the meal. Stew, fruit and cold drinks were provided for the meal.

A group session was attended by seven participants. The session was conducted to complete Tool number 6 (Mapping Public Assets) and 12 (Identifying livelihood Solutions). Recommendations in the Oxfam SLA toolkit (2013) were followed to determine if tools should be completed during the group work or during the interview session. Additional to the recommendations in the toolkit to utilise group work, group work was used because of several benefits described by scholars. Participants feel safe within a group and are willing to share information and feelings they will not share during an interview when they are on their own (Greeff, 2011; Liamputtong, 2013; McTaggart, 1989; Wellings et al., 2000). Groups also create a safe environment for the marginalised, like the poor and females, to interact with each other and express themselves (Liamputtong, 2013). Furthermore it accommodates diversity and help participants not just to discover knowledge and information about themselves, but to also share

valuable knowledge and experiences (Greeff, 2011; Liamputtong, 2013; Maguire, 1987). From the researcher's perspective, group work allows the researcher to investigate a number of different perceptions simultaneously (Nyamathi & Shuler, 1990).

3.6 Data analysis and interpretation

The following steps were used in analysing the data: First, the data were prepared and organised as suggested by Creswell (2012). All the notes from the interviews and the group work sessions were transcribed (Creswell, 2012) by a professional language practitioner and uploaded to the ATLAS.ti software programme. ATLAS.ti software was used to identify codes and to do searches for words and phrases, as well as to compare the original text answers of the different participants to each other. Second, an Excel spreadsheet was used to summarise each participant's response to all questions and activities into a single row, while answers were grouped under different columns. Setting out the information on the spreadsheet helped analysing the demographic data, age and gender of the participants. After the data were organised, the researcher, like suggested by Creswell (2012), read through the transcripts to get a broad impression of the information.

Furthermore, data were analysed by identifying common patterns and themes in the data and to see the differences which exist across households (May et al., 2009). The codes from the spreadsheet and ATLAS.ti could be compared to each other as verification. Codes identified through ATLAS.ti and the spreadsheet mostly corresponded, where codes differed it was due to the spreadsheet's ability to show all responses to the same question in one view. This made it easier to group responses into relevant categories. Audio-recordings were made of all sessions. The recordings were used to make sure that the interviews and group work sessions were correctly captured, and that the transcriptions were correct and complete.

3.7 Limitations of the study

Morse et al. (2009) emphasise the general nature of the SLA indicating that the SLA tries to cover to wide spectrum and therefore miss out on detail. It is difficult for one approach used in a single study to cover all possible aspects of people's existence (Lautze & Raven-Roberts, 2003). The Oxfam SLA toolkit for Wales does not cover natural assets in the same detail as the other assets are covered in the toolkit. Though the study was done in an urban environment, natural assets can still play an important role in the participants' existence.

In order for the collected data to be trustworthy, a relationship of trust is needed between the interviewer and interviewee (Morse et al., 2009). A strong relationship of trust is built over time. There was little time to cement a relationship of trust before the interviews were conducted. Due to the COVID-19 pandemic, contact time with the participants were limited which influenced the

relationship of trust and created time limitations during the interview processes. Though the researcher is able to speak a limited Sesotho and is partly familiar with townships, there was still a culture gap between the male Afrikaans-speaking middle-income researcher, and the low-income predominant Sesotho-speaking female participants. An interpreter was used to bridge the language gap.

3.8 Ethical considerations

In order to make sure that the study was carried out in an ethical manner and that it adhered to the ethical regulations of the North-West University, ethics approval was obtained from the Faculty of Natural and Agricultural Sciences Research Ethics Committee. The researcher also partook in ethical training, offered by the University. This risk category of this study was classified as “No Risk”. The ethics number for this study is NWU-01546-20-A9. See Appendix 2 for the study’s ethics approval letter.

Before the study commenced, potential participants in the study were informed about the research process and the purpose of the study. It was explained that the study was approved by the University’s Ethical Committee and that participation in the study was voluntary. The potential participants were also informed that there was no direct reward for participating in the study. Participants were made aware that they could ask questions regarding the research at any time, and that they were free to leave the research project at any time without any implication to them. Each participant completed an informed consent form (see Appendix 3) to give her written consent that her personal and other information disclosed during the study may be used for the purposes of the study. They also gave permission that all the sessions they were involved in may be audio-recorded. Before any recordings were made, the participants were reminded that if they felt uneasy with the recording, the interview would not be audio-recorded.

The in-depth nature of qualitative research can lead to sensitive and confidential information being shared by the participant, requiring that ethical considerations must be addressed (Arifin, 2018). Talking about poverty can be upsetting to participants and participants can feel uncomfortable sharing sensitive information. It is important that participants feel safe, and their feelings are protected as far as possible. Where participants were reluctant to answer questions, they were not pressurised to answer the questions and the researcher moved on to the next question.

The interviews and group session were postponed due to the high number of COVID-19 infections during the scheduled time. To reduce the risk of contracting COVID-19, the sessions were conducted later in the year when there were less COVID-19 infections recorded.

3.9 Conclusion

In this chapter, the research design and methods on which the study is based are discussed. The use of participatory research methods is motivated by underlining the contribution of the participants to the research dealing with poverty issues and marginalised communities. An explanation is given of the mixed methods participatory research model that was used to conduct the study. Data collection was done through semi-structured interviews and group work. The data were analysed using an Excel spreadsheet and ATLAS.ti software. Finally, the chapter addressed ethical concerns of the research. In the next chapter, the research results will be concluded.

CHAPTER 4 RESEARCH FINDINGS

4.1 Introduction

This chapter contains an analysis of the data and a detailed discussion of the themes that emerged from the study. The sustainability of the livelihoods employed by female-headed households in Zamdela, Sasolburg, will be discussed in this chapter. Furthermore, various assets that people draw on to create their livelihoods, and possible solutions to the problems faced by female-headed households in sustaining livelihoods are discussed.

4.2 Profile of the participants

Sixteen females, who head low-income households in Zamdela, participated in the study. Female-headed households were self-identifiable. A summary of these participants' demographic characteristics appears in Table 4-1.

Table 4-1: Demographic characteristics of the participants.

Demographic characteristics	Class	Number of participants	% of participants
Age	20-29	0	0
	30-39	4	25
	40-49	3	19
	50-59	4	25
	60-69	4	25
	70+	1	6
Education	Primary school education	2	13
	Secondary school education	9	56
	Tertiary education	0	0
	Undisclosed	5	31
Income	R0- R2000	7	46
	R2001 – R4000	5	31
	R4001- R6000	1	6
	R6001- R8000	1	6
	R8001- R10000	0	0
	R10001 +	1	6
	Undisclosed	1	6

The age of the participants ranged from the youngest belonging to the age group 30 to 39 years, and the oldest participant belonging to the age group of 70 years and older. None of the participants was younger than 30 years of age. There were 25% of the participants in the age group of 30 to 39 years, and the majority of the participants (56%) were in age classes of 50 years and older. Most of the participants (69%) were not married. Of the 31% who were married, their husbands were either unemployed, absent due to being a migrant labourer, or in need of care due to a physical disability.

Of the participants, 13% attained Grade 12 and another 13% had only a primary school education. None of the participants had a tertiary education. Thirty-one percent chose not to disclose their level of education. In spite of the general low level of education, 75% of the participants indicated that they possessed a skill which could be used to generate an income. Fifty per cent of the participants had received training in skills, such as child minding, technical skills, HIV counselling, business, or school patrol. Thirteen percent of them had technical training certificates in bricklaying or plumbing.

The monthly income of the participants ranged between R780 to R14 680. Most of the participants (46%) earned between R0 – R2 000 a month. The participant, with the highest income, listed R14 680 as her monthly income, of which R2 280 was temporary income in the form of stipends received from two learnerships she partook in. She also listed an income of R6 000 a month for plumbing and R4 000 a month in revenue from selling chickens. It is not clear if her income from plumbing and selling chickens were for one specific month she did well in, or if it was part of her regular monthly income. Her high income distorted the average income of the participants. With her income included in the calculation, the average income of the participants was R3 245. When this particular participant's income was omitted from the calculation, the average income for the rest of the participants dropped to R2266, which would be a more representative income for the group. One participant, however, did not disclose her income and expenditure.

Eighty-seven per cent of the participants received a regular monthly income in the form of social grants, pensions or wages. Only 13% of the participants acknowledged that their income was enough to get by. The majority of the participants (87%) felt that their income was inadequate. Of the two participants who indicated that she had an adequate income, one was employed part-time, and the other earned an income mainly through entrepreneurial activities. Both these participants had diverse income portfolios which included entrepreneurial activities such as selling clothes, renting out power tools, breeding chickens to sell or doing plumbing.

None of the participants were employed full-time. Three participants (19%) were employed part-time with two of them employed as domestic workers, while the third was a farm labourer. Of the three employed participants, one completed Grade 10, one Grade 11 and the third Grade 12.

4.3 Managing household finances

In this section, the focus falls on the financial assets of the participants and how they managed their household finances. First, the sources of income of participants will be discussed and how it was spent. Second, the strategies that participants used to budget on a low income are explained.

4.3.1 Sources of income and expenses

The participants used the managing wheel tool (refer to Section 3.4.2 in Chapter 3) to list their monthly income and expenses. One participant did not list any income but only listed expenses. During the course of the interview, she mentioned that she earned an income from recycling. Other participants similarly initially omitted expenses and income when completing the managing wheel, but mentioned it later on during the interview. It is not clear why they did not list it all initially. Possible reasons can be that they were unfamiliar with the format of the tool used to list income and expenses. It is also possible that participants were reluctant to disclose their personal information.

Some of the most common monthly expenses listed by the participants included paying their municipal rates and taxes, tithes to the church and their children's school fees. None of the participants had to pay rent or bonds on their houses, as most of them owned their homes which were fully paid for, or it was owned by a relative. Most of the participants also contributed towards stokvel and burial societies. They also spent their income on groceries, electricity, clothes, and public transport.

Eighty-one percent of participants depended on either social grants, mostly child support grants or pensions to see them through the month. These social grants and the monthly salaries earned by the three participants who were formally employed, were the only regular sources of income listed by participants.

In addition to the social grant income, half of the participants relied on a form of seasonal, or sporadic income received either from selling of vegetables from their gardens, a stipend for attending a learnership, or financial help received from family. These income sources are helpful for the moment but are not regarded as sustainable income.

When the incomes were measured against the South African poverty lines, 19% of the participants earned below the upper bound poverty line (R44.50 a day) and no participant earned below the South African food poverty line (R624 per month) (Statistics South Africa, 2021). When temporary and seasonal income, like the vegetable gardens and learnership stipends were omitted, 19% of the participants earned below the poverty line and 13% below the food poverty line.

4.3.2 Budgeting on a low income

When asked whether they budgeted, most of the participants indicated that they do. However, 25% of the participants indicated that they do not budget. The reasons given for not budgeting was that they earned a low income, or they were not working. Even though participants indicated that they do not budget, they did acknowledge that they prioritised and only bought essentials. Others saved some of their money on a regular basis. However, they did not acknowledge these methods as budgeting.

Table 4-2 indicates the different budgeting methods the participants used. The most popular budgeting methods were to “buy early” or to “buy a little bit at a time”, and to save on a regular base. Regarding buying early and a little bit at a time, one of the participants indicated that she started buying school clothes and stationery around December, instead of leaving all for January. On buying a little bit at a time a participant indicated that she buys things “small by small through the year”. Another said that she will look at the situation, she will buy the dress this month and the shoes the next month. By spreading the expenses over several paydays the expense from one payday is less.

Table 4-2: Budgeting methods of the study participants.

Method	Number of participants	% of participants
Buy early/buy little bit at a time	4	25
Save on a monthly basis	5	31
Buy on lay-by	3	19
Only buy what there is money for	1	6
Only buy what is needed	1	6
Wait until the end month to buy	1	6
Did not answer	1	6

The second most popular budgeting method was saving money. Though only 31% indicated that they use savings as a budgeting method through the course of the interview, 50% of the

participants indicated that they do save money. One participant indicated that she saved her money in a bank account giving the security the account provided as the motivation, she did not mention interest as a motivation. Another said that she saved her money in a tin instead of banking it.

Another popular method of budgeting employed by the participants was to buy goods on lay-by. Lay-buying gives the customer the opportunity to pay the purchase price of an item over a number of months. Smaller instalments make it easier to buy. However, the goods can only be collected once the full price of the goods has been paid for up front.

As part of budgeting and financial planning, participants were asked if there was a way to reduce their expenses. Although fourteen of the participants (87%) indicated that they cannot reduce their expenses during times of shocks, they were nevertheless often forced to do so at times due to financial difficulties. Of all the participants, 13% said that they are able to reduce their monthly expenses by either reducing their spending on groceries or electricity, while one participant (6%) said that she was not sure if she could reduce her expenses or not. Some participants were convinced that reducing their expenses was not possible, as one participant stated: “There are no expenses to reduce. Corona is killing so I cannot even take from the [burial] society”, while another participant said: “There is no way to reduce the expenses because everything that is there are important things”. The participants felt that their expenses were already scaled down to the bare necessities.

A large percentage of the participants’ income was spent on food. Table 4-3 gives a breakdown of the percentage of the participants’ income that they spent on food. From the table it is evident that most of the participants spend between 50-59% of their income on food. Some of the participants spend more than 50% of their monthly budget on food. Two participants did not disclose information on their monthly expenditure and are therefore omitted from Table 4-3.

Table 4-3: Food as a percentage of total expenses.

Percentage of income spent on food	Number of participants (n=14)	% of participants
0-29%	1	7
30-39%	3	22
40-49%	1	7
50-59%	6	42
60-70%	2	14
70% +	1	7

4.4 Coping strategies

The participants used various strategies to cope with emergencies and shocks. They also looked for support from various people. In this section, the coping strategies used by the participants will be discussed, as well as the sustainability of these strategies.

4.4.1 Social networks

The reliance on the participants' larger network is clear from responses such as: "Not so long ago the fridge broke, I asked the neighbour to keep the things that were in the fridge till the fridge was fixed." A second participant responded by calling a neighbour for initial help until her nephew could assist. Another participant said: "When things are broken I will ask someone to fix it. I will wait for the pension and pay the people afterwards". A common response was to wait until the end of the month when they receive either their social grant money or other income to have money to pay for the repairs. Asking family and friends to help and to borrow money are the two most popular coping strategies.

More than half of the money that was borrowed was borrowed from family and friends. Thirty-one percent of the money that was borrowed, was borrowed from an informal lender, or also called a loan shark due to the high interest rates asked. In Sesotho an informal lender is called a "pokola", the word "pokola" is the Sesotho word referring to a donkey because an informal lender kicks its clients like a donkey to get them to pay their debt. When asked who they borrow money from when in need, 56% of the participants indicated that they borrow from their social networks. Some participants (50%) also lend money to family and friends, although the participants reported that only about 75% of the money are usually paid back. The participants, however, did not indicate whether they paid back all the money they borrowed themselves.

4.4.2 Finding alternatives

A few participants indicated that they found alternative solutions during times of emergencies. One participant said that she would find an alternative to help her cope during an emergency, such as when something breaks. She stated: "If the kettle breaks I will use a pot to boil water. I will find an alternative." Another participant indicated that if something breaks she will use her transport money to fix it and then walk from town instead of taking a taxi. Thirteen percent of the participants indicated that they did nothing during an emergency. Even though they said that they "do nothing" during times of crisis, they are probably likely to take some sort of action during an emergency. One participant indicated that she "will wait till she is in a better position to respond", meaning that she may wait till month end when she gets money to fix the device that broke. The

researcher was conscious not to make participants feel uncomfortable and therefore did not pressurise the participants to answer questions they were reluctant to answer.

A summary of participants' coping mechanisms to shocks is shown in Figure 4-1. From the figure, it is clear that relying on social assets in the form of family and friends, and borrowing money were the two most common coping strategies. Social assets are discussed in more detail in Section 4.5.1.

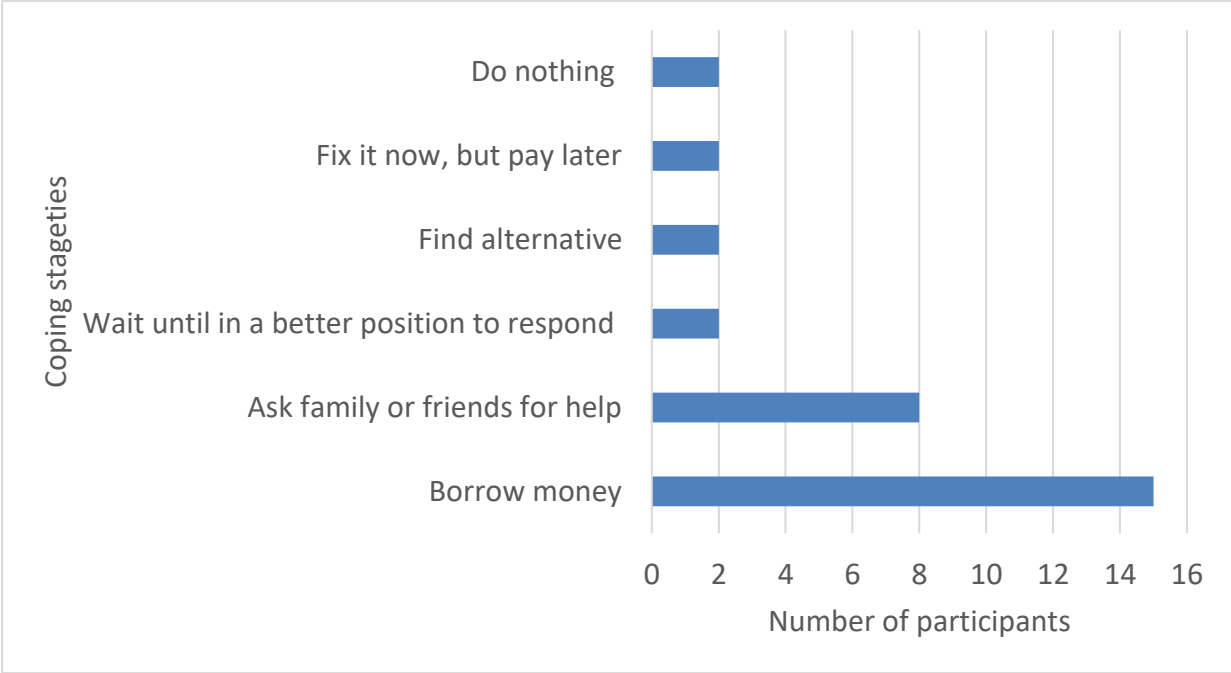


Figure 4-1: Coping strategies of the study participants.

4.5 Livelihood assets

The Oxfam SLA toolkit was used to determine the five different livelihood assets or capital namely social assets, human assets, financial assets and physical assets that the participants have available to them to create their livelihoods.

4.5.1 Social assets

When adding all the instances where participants indicated that they turn to either family or friends for support, 94% of the participants indicated that they relied primarily on the support of family and friends. Having a strong personal support system indicated a strong level of individual social assets (Sato, 2013). Figure 4-2 indicates who the participants rely on for support.

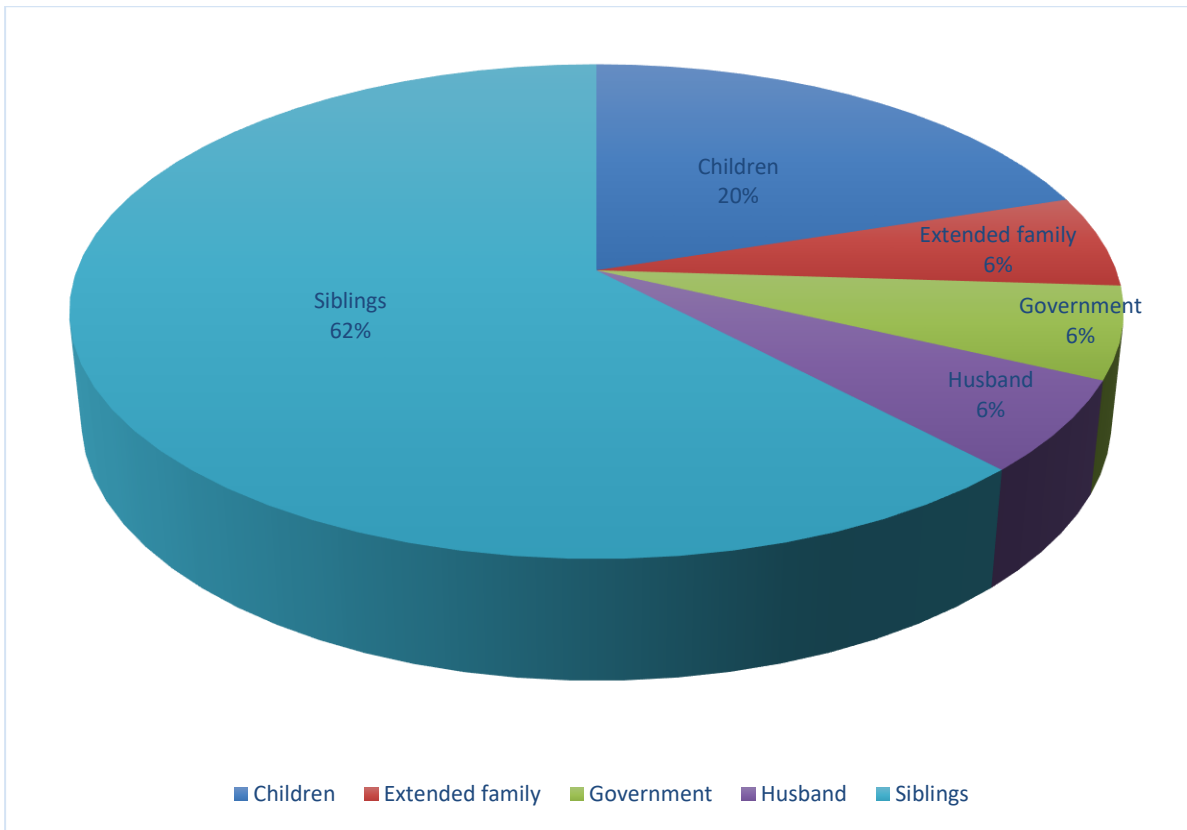


Figure 4-2: The support structure of the participants.

With such a strong reliance on support from family, attending family occasions is an important event to strengthen ties. On attending family occasions, participants comment the following: “Mostly I do not attend. If people send money I will attend.”, and “I have a small income I don’t have budget. Since it is a family occasion a contribution is needed. Where I need to contribute, I don’t attend if I do not have money.”

A strong reliance was evident on both individual and meso-level assets made up from the groups, organisations and networks participants belonged to. These organisations and groups fulfil an important function serving as space to build social assets (Walters, 2018), and often fulfil services which are not provided with the community (Knorringa & Van Staveren, 2007). The most popular organisations for the women were church, burial societies and stokvel. Church membership was the most popular with 94% of the participants indicated that they belonged to a church, 75% belonged to burial societies and 19% to stokvels. Church membership will be discussed in the section on religious assets.

In line with findings of Sidloyi and Bomela (2016), burial societies proved to be a popular support structure with 75% of the participants that belonged to burial societies. Burial societies being a popular organisation to belong to, received a surprisingly low value rating of two out of five. It sounds contradicting that 75% of the participants belong to burial societies, but its value was rated

so low. If they do not derive proper value from it, why do they have membership of it? One participant belonged to three different burial societies. The following quotations by participants indicate the importance of the societies to the women: “I go to the society every month”, and “There are no expenses to reduce. Corona is killing so I cannot even take from the society.” Stating that she is unwilling to reduce her society contributions, indicates the importance of the society membership to the person. The indication that she makes monthly visits to the society underlines the emotional and other support the person derives from her society membership (Sidloyi & Bomela, 2016).

Church membership has already been mentioned as the most popular organisation membership with 94% of participants indicating membership. Forty-four percent of the participants indicated that they attended church to relax and another 6% indicated that they read the Bible for relaxation. Twenty-five percent of the participants listed either church or faith as a strength in their lives. On the question “What activities do you do for fun?” the following were answered: “I go to church for relaxation”, while another replied that in order to relax she prays, go to church, read the Bible and do housework. In response to the question, “What is the best thing in your life?”, 25% either answered God or Jesus. Thirty-seven percent indicated that God or faith makes their life better. The following statement made by a participant linked her church attendance directly to building social assets: “I go to church and meet with other woman.” The church is also a place for her to support others: “I know a pastor who takes care of orphans, so I gather clothes and food for them. At church we get food parcels from PnP. We share the parcels with the church and the orphans.”

In the value rating exercise, the church was rated five out of five by the participants. During the group session, participants listed the following benefits they derived from their church membership: received food parcels, it reduced stress, they met people and gave them opportunity to pray.

4.5.2 Human assets

For the sake of this discussion, human assets will be divided into health and qualifications.

The link between human health and the earning of financial assets has long been argued by scholars (Crea, et al 2017; DFID, 1999; Potocky-Tripodi, 2002; Saeed & Ali, 2012; Zhang & Fang, 2020). Amongst the participants, 31% felt that their health was either poor or was deteriorating. One participant had to terminate her employment as a bricklayer, and another as a worker in a supermarket due to deteriorating health. Forty-five percent of the participants who shared a household with others indicated that at least one other household member had health issues. Eighty-one percent of the participants indicated that they had caring responsibilities either inside, or outside of the household (see Figure 4.3). Outside of the household refers to relatives and non-

relatives living in another household who is cared for on a regular base. Though the caring responsibilities does not affect the participants' health, it impacts on their free time and incurred additional medical and travel expenses (Cheteni et al., 2019; Quinn, 2018; Rogan, 2016)

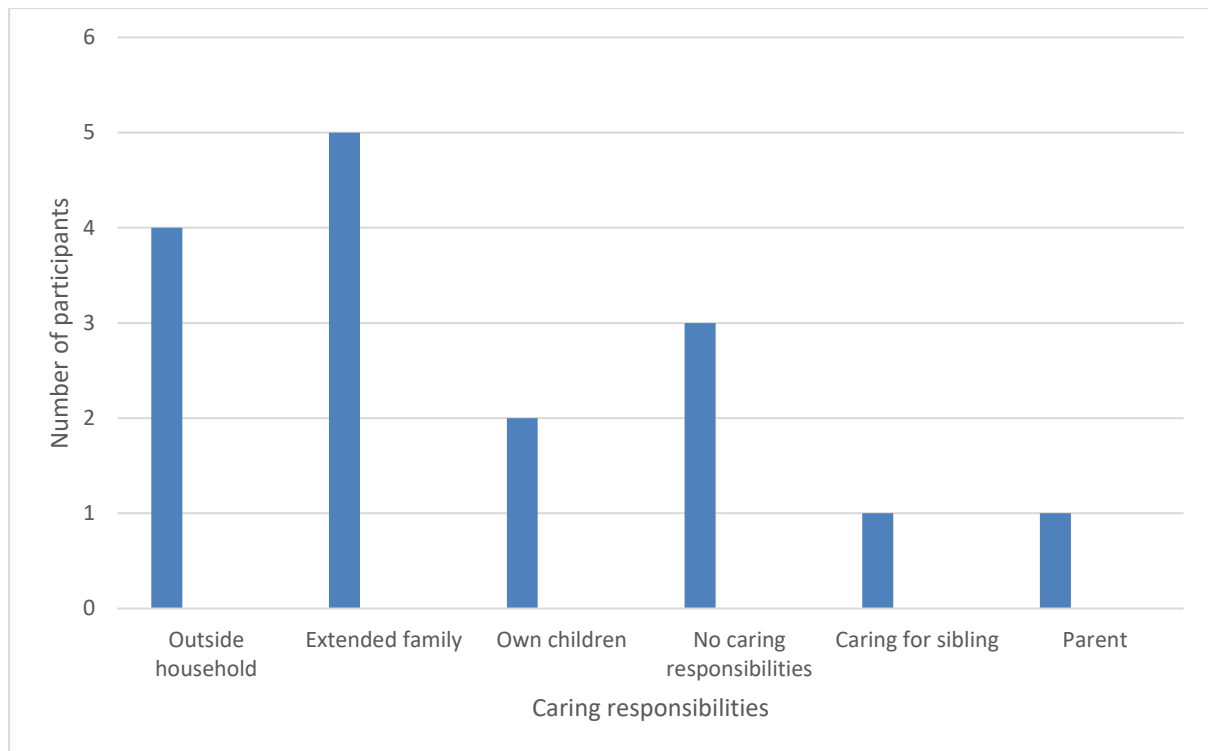


Figure 4-3: Caring responsibilities of the study participants.

Forty-four percent of the participants did not complete high school while 31% of the participants did not answer the question on how they did at school. A possible reason for not answering can be being self-conscious due to poor performance at school.

Although only 50% of the participants received some form of training, 75% regarded themselves as having a skill. The most common skill was cooking or baking. Thirty-one percent indicated that they possessed either a cooking or baking skill. Thirty-one percent indicated that they possessed a selling skill as their strongest skill, and 19% regarded their gardening skill as their strongest skill. In line with Li et al. (2018), Saeed and Ali (2012), and Zhang and Fang (2020), some participants attributed their unemployment to their lack of formal qualifications as this participant states: "I have no Grade 12 or certificate, so I cannot find a job". The link made between qualifications and employment by the participants and scholars needs to be clarified in the light of the high unemployment rate (81%) amongst participants in spite of half the participants having a qualification. It must be added that none of the participants are full-time employed.

There was a link between the three participants who had formal employment and school qualifications. Most of the participants who responded to the question on their highest school

qualification, indicated a Grade 9 level. The three participants who had employment average's qualification was Grade 11, which was two years higher than the majority of the participants. This is in line with a number of scholars who highlight the positive link between formal qualification, employment and poverty (Li et al., 2018; Saeed & Ali, 2012; Zhang & Fang, 2020).

Blattman and Ralston (2015) claim that the key to understanding the links made between qualifications and employment, lies in the relevance of the qualification. In this study, 50% of participants received some kind of training and of these certificates only one was for entrepreneurship training. Blattman and Ralston (2015) found that entrepreneurship training is more effective in creating employment in townships than vocational training programs.

4.5.3 Financial assets

An obvious measurement to determine income sustainability, would be the average income of the participants. With 81% of the participants who were unemployed, and 80% of the spouses who were also unemployed, there was a heavy dependency on social grant money and other direct cash transfers. Fifty-six percent of the participants depended on social grants as an income source and another 25% on pension payments. This gives a total of 81% of the participants who depended on either social grant or old-age pension grants as a source of income. According to the participants, these grant and pension income ranged between R400 to R3 000 a month. The social grants and pension income were small, and certain scholars regards it as unsustainable (Burns et al., 2005; Schatz, Gómez-Olivé, Ralston, Menken & Tollman, 2012), but it remained a source of regular income relieving the participants' acute poverty.

The critiques of the money metric approach to poverty relief argues that there will be goods which cash cannot buy, especially which limited cash cannot buy (Ravallion, 1996). Needs which could not be accessed by the grant money, are listed below:

- Non-attendance of social and family gatherings.
- Restoration and fixing of houses.
- Giving to their children what they need/want.
- Cannot follow their dreams.
- Be under stress due to inability to settle debt.
- Feels stuck due to inability to acquire what one wants.
- Love beautiful things but cannot afford it.

- Cannot afford a stand or house.
- Lacking privacy in the house due to house being too small for all the people living in it.

In Figure 4-4, depicting the different main income sources of the participants, the dominance of social grants as an income is clear. Two participants indicated that their monthly income is adequate. The rest of the participants felt that they earn an insufficient amount of money. Both the participants having a sufficient income had more diverse income portfolios than the rest of the participants, and they were also involved in entrepreneurial activities. They had an average income portfolio composition of 3,5 income sources compared to the average of 1,8 income sources of the study group. Their diverse income portfolios reaffirms Roy (2020)'s argument that the diversification of income portfolios increases income sustainability. The more diverse an income portfolio is, the more sustainable the portfolio is and the more resistant it is against shocks and threats (Roy, 2020).

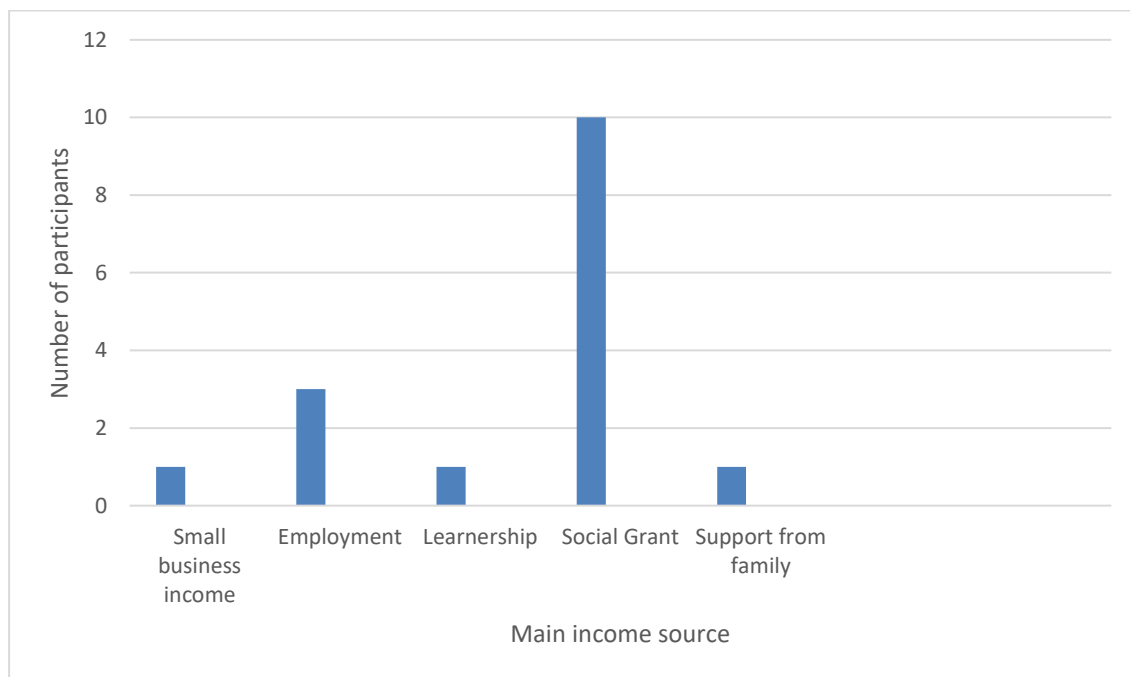


Figure 4-4: Main income source of the participants.

At the time of the fieldwork, 25% of the participants were participating in a learnership program. All of the participants who participated in the learnership listed it as a strength. There were two reasons given by participants for it being a strength. The stipend received is seen as a source of income as one participant highlights: “My daughter took a learnership that was held at the Art Centre for three months that would help with the expenses, but no more.” Seeing the value of a learnership as financial benefit rather than the development of human assets is similar to what

Cloete and Ballard (2012) found in their study that people partake in learnerships to receive a stipend.

The second opinion on the value of learnerships, is summarised by what one of the participants said: "I learn a lot and am going to start my own business." This quotation does show appreciation for the skill development that comes with the learnership. Only a quarter of those who participated in the learnership acknowledged the opportunity to improve their own human assets, the other 75% saw it as a source of income receiving a stipend.

4.5.3.1 Public assets

Page and Pande (2018) calls public assets that supports the community such as a clinic and library, invisible infrastructure. Table 4-4 below indicates the utilisation of public assets or invisible infrastructure by the participants of this study.

Table 4-4: Public asset usage by participants.

Public asset	Number of participants using the asset
Clinic	13
Art centre	5
Sport clubs	3
Library	3
Theatre	1
Recording studio	0

During the group work session, the participants compiled a list of facilities and organisations they frequently visit. After compiling the list, they rated the value they derived from the facilities and organisations with a score of one to five, with one getting the least value and 5 getting the most value. This list is a combination of public assets, and other social and non-formal organisations where they get support from. Table 4-5 shows the rating of the value derived from using a public asset by the participants.

Table 4-5: The value ratings of different public assets, community and social organisations by participants.

	Number of participants that rated the asset or organisation	Average rating
Church	6	5
Town	3	5
Garden	6	4,3
Stokvel	4	4,25
Library	3	3,6
Work	1	3
Police	2	3
Clinic	7	2,5
Society	2	2

The ratings of the public assets on the list in Table 4.5, will be included in the following discussions where relevant, while the ratings of the other social and non-formal organisations on the list will be discussed under the social assets section with a discussion on the relevant organisations.

The clinic was by far the most utilised public asset with 87% of the participants utilising it. The clinic was also the most popular asset amongst fellow household members. Thirty-one percent of the participants visited the Arts Community Centre, and 19% visited sport clubs. The library was visited by 13% of participants, the theatre by one participant (6%), and a soccer supporters club by one participant (6%).

Participants' opinions regarding the accessibility and service received at clinics were summarised by the following quotation: "Getting there is easy, but the queue is long." This statement is supported by other quotations on local clinics such as; "not easy, sometimes I wait for a long time without people attending", and "you only get helped if there is a nurse you know. Sometimes it is difficult to approach the staff due to their attitude. Sometimes an hour sometimes it becomes three hours."

From the quotations it is clear that the participants lived not too far from clinics, but that the challenges are waiting time and friendly service. A summary of participants' comments on the accessibility and service of public assets can be seen in Table 4-6. According to Table 4-5, the value derived from clinics got an average rating of 2,5 out of a possible 5. The clinic was rated

second lowest out of nine public assets. This low rating confirms the feelings expressed by participants that the service and waiting times at clinics are issues experienced.

Table 4-6: Participants responses on accessibility and service received at public assets.

	Number of participants commented	Comments
Clinic	11	Easy access (live nearby)/ Long queues/service not good/only if they know you
Art Centre	3	Easy/walkable distance
Library-	1	Easy-walking distance for Zamdela. Need to go to town
Theatre	1	Need to go to town
Home affairs	1	Easy

The Arts Community Centre was the second most utilised public asset with 31% of the study participants paying it a regular visit. The Arts Community Centre got the second highest average value rating of 4,3 out of a possible 5. A participant partaking in the community garden stated: “I come here [the Arts Community Centre] at 6:00 in the morning. It is a walkable distance and easy to access. It is more like an exercise”. The quotation is in line with other participants’ responses indicating that the Art Community Centre was easy to reach. The value of the community garden at the Art Community Centre is acknowledged by two of the three participants participating in the community garden stating that it is the best thing in their lives at the moment.

The library received a rating of 3,6 out of 5. Of the three participants that rated the library, one said that she preferred the town library because the Zamdela library is too full of people and the WiFi often does not work. The other participants were happy with the service at the Zamdela Library. On accessibility of the library, participants indicated that the Zamdela Library is accessible in the sense that it is a walkable distance from their homes. The town library is further away and taking a taxi is needed to reach it.

Town was listed by the participants as a public asset. A likely reason for seeing town as an asset is that it is a place outside of the participants’ township that provides functions like banks and government offices that is not available in their township. From Table 4-5 it is evident that the participants feel that church and town were the most useful assets. Table 4-7 lists benefits the participants derived from visiting the different assets and organisations.

During the group session, the participants mapped the public assets they visit on a frequent base indicating the assets, travel costs and time on the maps. Figure 4-5 and Figure 4-6 show examples of the asset maps compiled by the participants. The asset maps in Figure 4-5 and Figure 4-6 are not clear. Though the participants indicated that they visited the clinic on a regular basis, they did not include the clinic on their asset maps. Table 4-8 list a summary of the information from the asset maps. Even though not all the assets were listed, the asset mapping did provide an opportunity for participants to see the interconnectedness between assets, and to reflect on their own level of engagement regarding the assets (Taliep et al., 2020). The many benefits listed in Table 4-7 for church and the gardens confirms the high use rating the institutions received from the participants. The maps were used in cooperation with benefits derived from the different assets (see Table 4-7). The maps created awareness of assets and served as an opportunity to share information (Taliep et al., 2020).

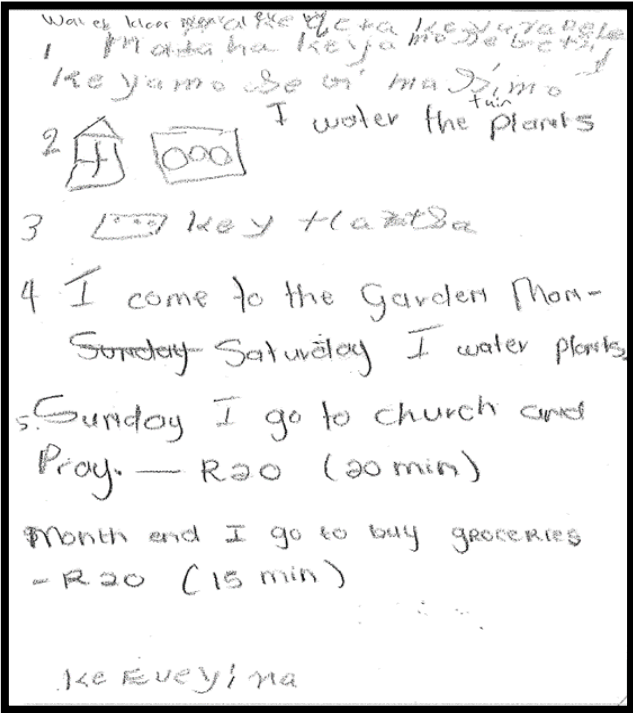


Figure 4-5: Example of an asset maps drawn by the participants.

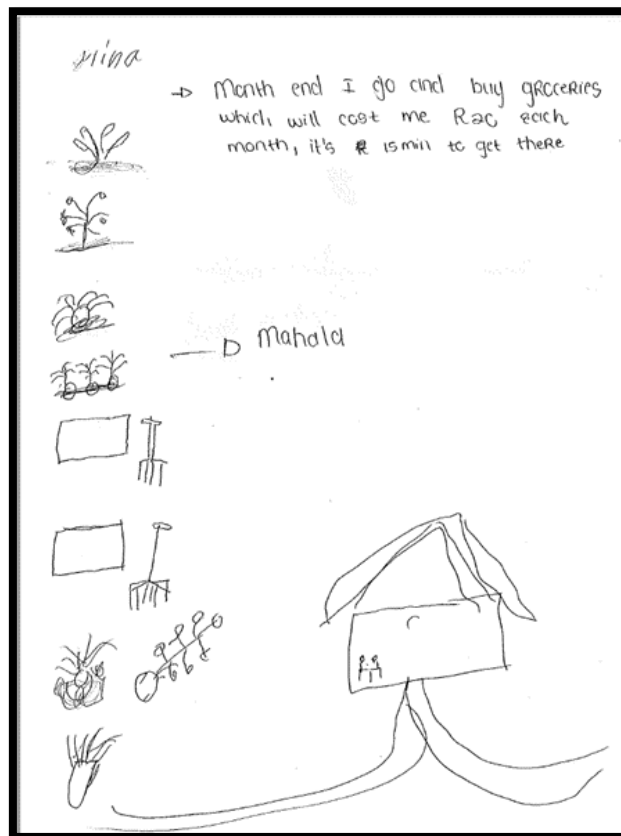


Figure 4-6: Example of an asset map drawn by a participant.

Table 4-7: List of assets benefits compiled by the group during group work.

Facility	Benefit derived from assets
Church	Receive food parcels
	Reduce stress
	Meet people
	Praying
Community garden	Sell vegetables
	Give food to disabled kids
	Share food
	Buy less food from town
Clinic	Receive diabetes and high blood pills
	Receive vaccinations
	Referral notes
Society	Help with savings
Library	Books

	Information
Stokvel	Groceries
	Share food

Table 4-8: A summary of the asset maps.

Destination	Times listed	Frequency	Average return costs in Rand	Duration
Town	2	Once a month	R20	15-30 minutes
Church	4	Between once and twice a week	R15	20 minutes
Community garden at the Arts centre	1	Daily	No cost-walking distance	
Work	1	Twice a week	R48	45 minutes

The common journeys made by the participants are to town at month end at an average cost of R20 return (this amount is for October 2021), and church. The journey to town varies from between 15 minutes to 30 minutes. The journey to church will be between once and twice a week depending on the participant at an average cost of R15, and a travel time of 20 minutes. All the participants walk to the community garden at the Arts Community Centre. The journey to town takes the longest and cost on average the most.

4.5.4 Physical assets

Housing and equipment were identified as physical assets amongst the participants. Transport will also be analysed as part of physical assets.

Housing is more than a shelter improving dignity and health, it is also a meeting place for the household, an investment mechanism, and a base for economic and other activities (Durand-Lasserve, 2006). Classified according to ownership, the participants reside in one of three different housing types. Most participants (75%) lived in an RDP housing, 19% in bond houses, 6% (one participant) in a shack. Figure 4-7 is an example of a standard RDP house, while Figure 4-8 is an example of a typical shack. The bond houses are houses that were either purchased by the participants or built with a bond from the bank. All the participants who lived in bond houses indicated that their houses have been paid for in full, and that there was no outstanding debt on the houses. Table 4-9 gives a breakdown of the different types of ownership.

Table 4-9: Types of housing of the participants.

Type of dwelling	Number of participants	% of participants
RDP	12	75
Bond House	3	19
Informal housing (shack)	1	6



Figure 4-7: A standard RDP house.



Figure 4-8: An example of a shack.

Sixty-nine percent of the participants were the owners of their dwellings, while 6% had joint ownership with a spouse.

A significant implication of the high percentage of house ownership is that none of the participants were paying for their accommodation, bringing financial relief. The secure tenureship provided by the high degree of house ownership motivates investment into the houses and makes the house part of the inheritance, relieving the next generation's poverty (Beall, 2005; Durand-Lasserve, 2006). Extensions to RDP houses are common, either as a shack or as a brick room. Figure 4-9 shows a backroom that has been constructed to an RDP house. Only 13% of the participants paid

municipal rates and taxes. One of the participants indicated that she paid R150 a month municipal tax. According to participants, they applied to be exempted from property taxes because they are unemployed.



Figure 4-9: A shack as a backyard room.

In spite the numerous benefits of free housing, only 19% of the participants indicated their housing as a strength.

Thirty-one percent of the participants indicated that they had tools or equipment they can use to generate an income, such as power tools, stoves, washing machines and a sewing machine. In cases where the equipment was utilised to earn money, 50% of the participants indicated that often they were paid late for the services they rendered or cash flow as a problem. Using her sewing machine to generate income, one participant commented: “People bring clothes once in a while. People pay me after a long time.” Another participant remarked, “I use my stove for baking. They will pay me afterwards”. Supporting the quoted phrases indicated that participants possess equipment that can be used to generate an income, highlighted delayed payment or non-payment as reasons for doing so.

Nineteen percent (three) of the households represented in the study had someone in the household who owned a vehicle, although two of the vehicles were not in a working order. The low number of vehicles available in the household for the participants to use, meant that the participants were dependent on public transport. All 16 participants used public transport in the form of taxis, which were either sedan taxis (also called 4+1) or minibus taxis. Apart from local taxis to travel to town, long distance taxis were used by 19% of the participants and 6% of the participants used trains.

Opinions around the taxis that were voiced during the interviews were mainly on safety and the attitude of the drivers. Comments made by the participants included: “They are not safe because people do not wear masks”, and “the drivers are not always friendly”. Participants said that they often had quarrels with the drivers, especially over drop-off points. One participant commented, “I think accident about the taxi’s”, other participants stated: “Most of the time we quarrel with the drivers, but we have no choice but to use it. Participants indicated that the taxi drivers drop them at any point along the road, even if it is not at the commonly accepted point. One participant summarised the feeling by saying, “The taxis are not safe both metre and minibus, they are not”.

The general feeling amongst participants were that though they are not happy with the service of the taxis, they have no choice but to use it. Only one of the participants mentioned that taxis were expensive to use.

4.6 Livelihoods strengths and barriers

As part of the interview process, participants were asked to list their livelihood strengths and barriers.

Human assets emerged as the strongest strength amongst the participants with social assets being the second strongest strength. Table 4-10 gives an outline of the different strengths identified by the participants, while Table 4-11 shows a comparison of the different assets that were mentioned as strengths.

Table 4-10: Strengths listed by the participants.

Strengths	Type of asset	Number of participants	% of participants
Family	Social	10	60
Personal skill	Human	8	50
Learnership	Human and financial	4	25
Equipment	Physical	4	25
House	Physical	4	25
Church and faith	Social	4	25
Employment	Human	3	19
Income	Financial	3	19
Friends	Social	2	13
Personal business endeavours	Human	2	13
Help other	Social	2	13
Personal good health	Human	2	13

Strengths	Type of asset	Number of participants	% of participants
Vehicle	Physical	2	13
Having a garden	Natural	2	13
Recycling	Human	1	6
Family member's employment	Human	1	6

*Learnership is counted for both financial and human assets.

Table 4-11: A comparison of the different assets that were mentioned as strengths.

Assets	Number indicated as strength	% of the total assets
Human	21	37
Social	18	32
Physical	10	17
Financial	7	12
Natural	1	2
Total number of strengths	57	

In Table 4-10 the numeric occurrence of the strengths is shown, as well as the asset each strength falls under. Learnerships were counted for both financial and human assets. Learnerships are acknowledged under human assets as training, although it can be categorised under financial assets because of the stipend attendees receive. Four participants indicated a learnership stipend as a source of income. According to Table 4-10 natural assets are underutilised as a strength. Table 4-10 indicated that equipment which is rated as an important livelihood used to accumulate financial livelihoods, is only mentioned four times.

4.6.1 Livelihood barriers

Unemployment and caring duties were the two strongest barriers experienced by the participants. In both instances, 40% of the participants indicated it as a barrier. Table 4-12 is a summary of the different barriers mentioned by the participants, one participant could mention more than one barrier. The limitation that caring duties put on free time limiting employment has already been mentioned. Health problems were mentioned by 25% of the participants as a barrier. The relationship between health, qualifications, and the ability to be productive has been discussed under the human asset section.

Table 4-12: Barriers identified by the participants.

Barrier	Number of participants	% of participants
Unemployment self	6	40
Caring duties	6	37
Lack of money	5	31
Cash flow for business	5	31
Health problems	4	25
Family health problems	3	19
Unemployment family	3	19
Emotional challenges	3	19
No qualification	2	13
Broken or lack of equipment	2	13
Boyfriend	1	6
Bad people	1	6
Beer	1	6
Poor neighbours/friends/family	1	6
Debt	1	6
High travel cost	1	6

4.6.2 Addressing barriers

During the group session participants completed a chart indicating common barriers and the level of society responsible for addressing these barriers (see Table 4-13). It is significant that the participants felt that the government was responsible for addressing all four the barriers. The barriers are; income too small, children been unemployed, must support grandchildren and the custom to help others or to share your livelihoods with others. For two of the four barriers, members of society were seen as co-responsible for addressing the barriers. The participants’ expectation that change must predominantly be initiated from outside the community, is in opposition to scholars such as Chirisa and Matamanda (2016) and Pietersen (2017) who feel strongly that community members themselves must take the responsibility for change. Further investigation into the mind-set of the participants on who’s responsibility it is to bring about change, can be made. By addressing the barriers households’ resilience can be improved. People have direct contact with what is in their micro system. Being in contact with a phenomenon does create opportunity to manage it.

Table 4-13: The level of society responsible for interventions.

Barrier	Explanation of the barrier	Level of society that is expected to intervene		
		Local level	Provincial level	National level
Income too small	Too many dependants to support.			Government
Children are unemployed				Government
Supporting grandchildren	Depends on others for survival. Want to be independent.	Little help-some community members help.		Government
The custom to share/help	You are forced to share the little you have, which makes it even less.	Some family helps now and then.		Government

4.7 Vulnerability, sustainability and threats

A number of scholars classify threats into three groups (Masud et al., 2014). First unpredictable shocks, second predictable shocks and last there are seasonal shifts (Adato & Meinzen-Dick, 2002). Unpredictable shocks come unexpectedly (Adato & Meinzen-Dick, 2002), and one is therefore poorly or unprepared to manage the shock, like a fridge that breaks. A predictable shock is an expected shock (Masud et al., 2014), and one can prepare yourself to manage the shock like expenses for children’s school at the beginning of the year. Seasonal shocks come on a regular basis and one is aware that they will be coming (Adato & Meinzen-Dick, 2002), such as shifts in vegetable seasons and temporary stipends that are relied upon as income. The stronger a person’s livelihoods portfolio is, the easier it becomes to manage these shocks. In contrast to predictable and seasonal shocks, one has a better opportunity to prepare and therefore manage the shocks. Unpredictable shocks come as a surprise and therefore are more likely to have a devastating effect on a livelihoods portfolio. It is difficult to prepare and manage an unpredictable shock. Having a diverse livelihoods portfolio helps to manage or lessen the impact of shocks and threats. For example, when the stipend of a learnership is terminated which is a predictable shock, the impact on a livelihoods portfolio is not as severe when there are other livelihoods such as breeding chickens to sell or a sewing machine that can be used to generate income. In a case where the livelihood portfolio only consists of a social grant and a stipend, the loss of the stipend will have a much greater impact on the livelihoods portfolio.

As part of relieving pressure on livelihoods the possible reduction of expenses was also investigated. Eighty-one percent of the participants said that they could not reduce expenses. Only 13% of the participants indicated that they may be able to reduce expenses. Where participants did indicate that expenses can be reduced, it was either on electricity or groceries. The impact on low-income households when they are forced to reduce expenses can result in dietary expenses been cut, like discussed in Section 4.3.2 in this chapter.

Another danger to low-income livelihoods portfolios, are the pressure to sacrifice future livelihoods in order to survive today, the pressure to do so increases during times of shocks (Ansell et al., 2014; Wunder et al., 2014). An example from the study, is the maintenance of a vehicle which was sacrificed in the past due to pressure on livelihoods resulting in a broken vehicle today which cannot be utilised to gather livelihoods.

According to Breitwieser (2016) and Olewiler (2006), savings, regardless of whether it is accumulated through stokvels or by saving money in a tin, increases people's resilience against shocks. A total of 56% of the participants indicated that they made use of saving methods. The most popular saving method was stokvels. Stokvel savings were commonly used to cover expenses for occasions such as Christmas. One participant indicated that she saved money in a bank account, she felt that a bank account provided security for the money. Though many participants engage in savings, savings are not utilised to acquire physical assets, which, when used to generate and income will strengthen current livelihoods, lead to a diversification of livelihood portfolios, and increase livelihood resilience.

Competing livelihoods can hold a threat to fellow community members' livelihoods. No competing livelihoods were mentioned by participants. The only livelihood which could have been a competing livelihood was the vegetable gardens. The market for cheap food in Zamdela is a very large market and therefore it is unlikely that the market has reach the point of saturation for vegetables with only less than half of the participants involved in vegetables gardens.

Judging the vulnerability and sustainability of the livelihoods portfolios aspects, such as the seasonal shifts in the livelihoods, the over dependence on certain livelihoods and the sustainability of direct cash transfers, will be investigated.

When looking at the diversity of the livelihoods portfolios, 25% of the participants had portfolios consisting of three or more income sources. One can argue that 75% of participants having two or less income sources in their livelihoods portfolios were at risk (Morse & McNamara, 2013).

The high number of participants relying on social grant payments also indicates sustainability concerns risking the forming of dependency upon the grant.

4.8 Conclusion

This chapter presented the research findings on the livelihoods' sustainability of female-headed households in Zamdela. It was found that the participants relied strongly on social assets for support during challenging times. While social assets were the most common support net during emergencies, participants saw their human assets as the strongest livelihood strength with social assets as their second strongest livelihood strength. Though many of the households had a stable income in the form of social grant or pension payments, the income was mostly regarded as too small and income portfolios lacked diversity. Participants acknowledged housing and vegetable gardens as important livelihood assets making a difference in more than one area of their lives. The emotional value of these two livelihoods is underlined by scholars in the literature and has been confirmed by this study. The relationship between human capital and wealth was reiterated by the participants, while the lack of a qualification and poor health were stated as common barriers. Another significant barrier to change in the households, was the expectation that change must come from the outside, instead of being initiated from the inside.

CHAPTER 5 GENERAL DISCUSSION AND CONCLUSION

5.1 Introduction

In this final chapter, the research findings are discussed and used to answer the primary and secondary research questions posed in Chapter 1 of the study. Possible implications of the findings of the study are reflected upon in this chapter. Furthermore, the chapter discusses the limitations of the study, and recommendations for future research are made.

5.2 The sustainability of income sources

This study found that the participants had limited diversity in their livelihoods portfolios. Furthermore, livelihoods portfolios had an over dependency on a single income source in the form of social grants support. The lack of income portfolio diversity (Morse & McNamara, 2013), and the dependency on a single income source, often that of the household-head, reduced the sustainability of the participants' livelihoods portfolios. If the single main income ceases to exist, it will be a severe shock to the household.

The high dependency on temporary income sources created more sustainability concerns. Temporary income sources are helpful for the moment but is not regarded as sustainable income because at the most it only lasts for a season or a few months after which it ceases to exist. Adding to the sustainability concerns is the strong reliance on social grant pay-outs. Banerjee et al. (2008) warn that a reliance on social grant pay-outs can create an attitude of dependency which may further jeopardise the participants' accumulation of livelihoods. In opposition to the dependency created by the grant pay-outs, the grant was for many of the households their main and sometimes only income strengthening their livelihoods. In opposition to the dependency created by the grant pay-outs, the grant was for many of the households their main and sometimes only income strengthening their livelihoods.

Surviving on a low income left the study participants with a number of market and non-market goods which they could not access. When one lacks income, it is difficult to afford consumer goods, while an important non-market good that participants could not acquire was the attendance of family gatherings due to financial constraints. All family members attending an occasion are expected to contribute financially to the occasion, not having money to contribute makes members feel uncomfortable and therefore not attending. With social assets being the predominant asset amongst participants, attending family occasions provide opportunity to strengthen support structures. Living on a limited income, the majority of the participants indicated that they do not think that their income was enough to sustain their standard of living. Noble et al. (2006) and Ramachandran (2006) warn that surviving on a too small income creates the threat of sacrificing

tomorrow's livelihoods to survive today. Being able to reduce household and other expenses will assist in absorbing shocks, although in this instance most participants felt that their low income was already under pressure which made it difficult to reduce expenses in any way. The only two ways suggested by the few participants who did indicate that it may be possible to reduce expenses were a cut in the groceries and electricity budgets. Where the poor are not able to reduce expenses, they are likely to cut their food budgets because that is where they spend the most (Amendah et al., 2014).

Participants in this study spend on average half their monthly budgets on food. A cut in the dietary budget will possibly result in either eating less or revert to a less nutritious and cheaper diet, with possible health implications (Amendah et al., 2014). When households are forced to reduce expenses, a likely cut in their dietary budget can ignite a vicious circle of deteriorating health and increasing poverty, leading to reduced productivity, leading to lesser ability to accumulate livelihoods, leading to increasing poverty and leading to dietary expenses making up larger percentages of the household budget and more dietary cuts as indicated in Figure 5-1.

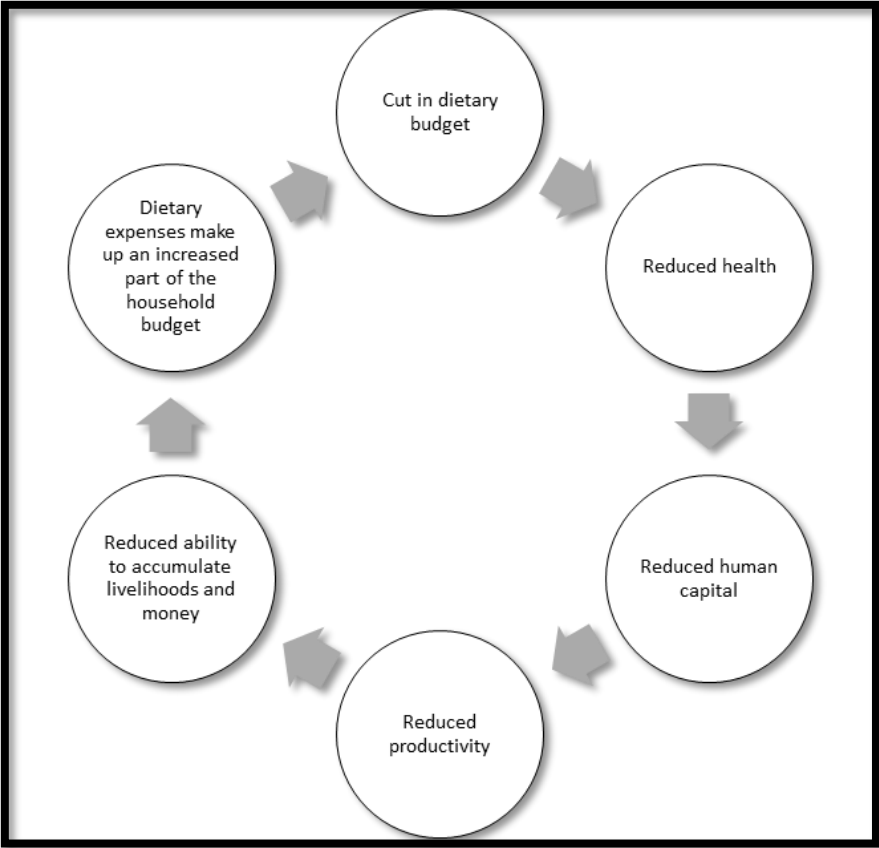


Figure 5-1: The vicious circle of dietary budget cuts.

5.3 Coping strategies

The two most popular coping strategies in this study during times of shocks were borrowing money and relying on social assets. In instances where money was borrowed, it was borrowed more often from social networks, and less often from loan sharks. Borrowing from social networks saves financing cost in comparison to borrowing from loan sharks or other sectors of the informal market. Borrowing from the informal market with high financing cost increases vulnerability and contributes to the vicious cycle of a larger part of the income going to debt settlements, leaving less to cover living expenses (Mullainathan & Shafir, 2009).

Though borrowing money to cover daily expenses is not a sustainable practice, borrowing from one's social network is a more sustainable practice than borrowing from a financial institution or loan shark. Straub (2005) opines that poor accessibility to formal credit institutions in low-income neighbourhoods leaves borrowers with little choice but to turn to the informal market. In the instance of this study, the informal market mostly consisted of the participant's social networks.

More than half of the participants indicated that they make use of saving methods. Though these savings boost the sustainability of livelihoods (Breitwieser, 2016; Carney et al., 1999; Olewiler, 2006), only a few of the participants utilised their savings to invest in physical assets which could boost their livelihoods portfolios over a long period of time. The savings were mostly used to cover living expenses and specifically for paying for life events or occasions, such as Christmas. The most popular way of saving was through stokvels.

5.4 The asset base of households

Four different capitals or assets have been explored in this study, namely, social assets, physical assets, human assets, and financial assets. The Oxfam SLA toolkit for Wales, which was used as data collecting tool for this study does pay attention in the same detail as the other four assets.

5.4.1 Social assets

As indicated in the section on the sustainability of livelihoods, in this chapter the participants in this study possess very strong social assets. There was a high level of reciprocity detected within the participants' social networks strengthening their social assets. Scholars highlight reciprocity as a main building block of social assets underlining the value of the high level of reciprocity amongst the participants (Beukes, 2019; Coleman, 1988; Gilbert & McLeman, 2010; Irving, 2005; Onyx & Bullen, 2000; Putnam, 1993). The importance of the participants' networks in their daily struggles to survive was clear, nearly all the participants indicated that they at some point in time relied on their social networks for support.

Church was the most popular social institution visited amongst both the participants and their fellow household members. The church also received the highest rating for use from the participants. According to the participants the church satisfied spiritual needs, it also provides opportunity to access and strengthens social assets. The church is also a place to serve and support others. Some scholars feel that there are higher levels of trust amongst congregation members than present in other sectors of society (Ammerman, 1996; Beukes, 2019; Schoeman, 2012), this may be an explanation why the church was popular amongst the study participants.

Burial societies were the second most popular social institution amongst the participants. Like with the high church attendance, the high burial society attendance led to the conclusion that societies contribute markedly to the participants' well-being and financial planning. One of the participants belonged to three different societies. The statement made by one participant that she cannot reduce her financial contributions to the society because of the increased mortality rates during the COVID-19 pandemic, highlights the financial importance of the societies to the participants. Valuing the society for the financial planning was also found by Sidloyi and Bomela (2016) in a study conducted in the Eastern Cape, focussing on low-income pensioner female household heads.

5.4.2 Physical assets

In general, there was a lack of physical assets amongst the study participants. Where physical assets were present it was not always used to generate an income, cash flow problems or non- or delayed payments from customers deterred participants to employ the physical assets to earn an income. In the instance where physical assets were employed productively to earn an income it was done effectively and confirmed Nawrotzki (2012)'s finding that physical assets should be valued highly due to its ability to generate financial assets.

With the exception of one participant living in a shack, all the participants resided in brick houses. The brick houses were mostly RDP housing, with a few paid off bond houses. The houses either belonged to the household-head or to a close relative. The ownership and the fact that all dwellings were paid for, resulted in secure tenureship and low accommodation cost for all the households. The secure tenureship also motivated investment (Durand-Lasserve, 2006), such as building extensions to existing houses. Common extensions are either a room added to the house, or a loose standing room in the backyard. These extensions can be built from either bricks or can be a shack. The low accommodation cost is in contrast to Chirisa and Matamanda (2016) finding that the urban poor in Africa, including South Africa are exposed to high accommodation cost increasing their marginalisation. Lower accommodation cost relieved pressure on the participants' stressed budgets increasing sustainability and countered their marginalisation (Chirisa &

Matamanda, 2016). The RDP houses are brick houses provided with sanitation, and therefore increased livelihood sustainability (Chirisa & Matamanda, 2016; DFID, 1999; Khuzwayo, 2016), while challenges such as the small size, lack of privacy and the inability of owners to maintain the dwellings due to financial constraints decreased the suitability brought by housing.

Although the shack dwelling may not have contributed as much to livelihood sustainability as the brick houses did, certain aspects of it did influence sustainability and long-term poverty alleviation in a positive way. The shack was built upon a stand registered in the participant's son's name. In accordance to Durand-Lasserve (2006) statement that property becomes part of inheritance relieving coming generations' poverty, a participant registered her stand in her disabled sons' name to ensure that he inherits it. Having the property registered into her son's name avoids transfer fees which he would have to pay on inheritance if the property was in her name. The high level of property ownership by females in the study was in contrast to the finding from the Department of Women (2015) that there are low levels of land ownership by South African females.

Public assets such as public transport, community facilities such as clinics and public libraries, have also been addressed in this study. Affordable and reliable transport is regarded as a pivotal component of building sustainable livelihoods (DFID, 1999; Khuzwayo, 2016). In this instance the participants relied without exception on public transport in the form of minibuses and sedan taxis. However, they felt that the taxis were not safe and pleasant to use. The cost, availability and frequency of taxis were also raised as a concern lowering the sustainability of the transport. A quote from the interviews summarises the safety issue by indicating that "when I think taxi, I think accident". A number of participants indicated that they have no choice but to use the taxis because it is the only available public transport.

The low rating of the clinic can negatively impact on the participant's health and therefore also on human assets ability. The negative attitude towards the clinic has the potential to make people reluctant to refer others to the clinic (Munyewende & Nunu, 2017). A reluctance to use the clinic can have a negative influence on the society's health and therefore also on productivity. Different scholars link health and productivity to each other arguing that healthy people have a higher productivity (Muthwa, 1994; Page & Pande, 2018; Quinn, 2018).

5.4.3 Human assets

Human assets emerged as the second strongest asset amongst the study participants. It influenced the study either through the participants' health or by their qualification or skill. Analysing how health affected the participants, participants were either affected by their own health or by the health of those around them. Their own health problems restricted their ability to

be productive as indicated by some participants, while the health of those around them resulted in caring duties limiting their time to be productive. The correlation found by other scholars that caring duties increase female unemployment was also evident in this study (Cheteni et al., 2019; Quinn, 2018; Rogan, 2016). Females are traditionally more burdened by caring duties than males are (Cheteni et al., 2019). A concern that participants do not possess over the necessary cash to access proper medical care was also raised and is in agreement with Roy (2020)'s findings on the matter that low-income communities' medical care is affected by the lack of affordability of medical care.

Participants either contributed their unemployment to their lack of qualification or stated that having a qualification does not help because a household member who do have a qualification is unemployed. Arguing that their unemployment is due to a lack of qualification, corresponds with scholars such as Li et al. (2018), Saeed and Ali (2012) and Zhang and Fang (2020) point of view that acquiring a qualification does improve changes for better employment opportunities.

From numerous studies the nutritional, financial and skill development benefits that coincides with vegetable gardens are highlighted (Keatinge et al., 2012; Laurie & Faber, 2008; Mkhawani et al., 2016; Talukder et al., 2000). From this study a physiological and networking benefit of the community garden came to the fore. Participants indicated that the garden project is the best thing in their lives. The garden gave them a sense of purpose. They felt purposeful when they could sell vegetables at affordable prices to other poor people, and even gave the vegetables away for free. Being able to build social networks was also listed as a benefit of the community garden.

5.4.4 Financial assets

The reliance on grant payments and often on the grant payment of a single household member, has been discussed under the sustainability of income sources in this chapter. Most of the participants relied on grant payments as a source of income, while half of the participants relied on temporary income. The low employment rate under the participants and the high seasonal income created unstable and limited financial assets.

5.5 Participants' livelihood barriers

As discussed in Chapter 3 and 4, participants identified four major barriers to their lives. Participants had to say on which level of society the barriers should be addressed, local, provincial or national. The following barriers were cited: low incomes; unemployed children; supporting grandchildren and the custom to share or help. All four of the barriers were income or money related. Participants indicated that they expect the national government to address all four the barriers, with two of the barriers co-addressed by the government and the local community.

The expectation that the government is responsible to intervene with all the barriers is seen as denial of one's own ability and confidence to address local issues (Corbridge, 2007; Segal, Silverman & Temkin, 1995). It has already been mentioned that Banerjee et al. (2008) cautions that an over dependency on social grants can lead to a lower self-confidence. Scholars argue the importance of community members needing to take responsibility for their own fate (Biswas-Diener & Patterson, 2011; Moyo, 2014). The dependency on outside agents, like government and other organisations for change, is in conflict with Chirisa and Matamanda (2016) and Pietersen (2017)'s opinion that community members themselves must take the responsibility for change and not look to the outside to bring about change. Underlying to the improvement and changes in the lives of the participants, lie their networks and the ability to bring about change themselves.

Furthermore, the lack of income and unemployment were seen as the most common livelihood barrier by the participants pointing out an expectation that financial assets are the expected solution to their livelihood struggles. The prominence the participants put on financial assets underlines scholars' opinions that financial assets lie central to livelihoods because of its ability to acquire other assets (DFID, 1999; Mukisa et al., 2020). As mentioned in Chapter 2, it must be noted that financial assets are effective in acquiring physical assets but cannot acquire all needs. For example, clean air, health and social assets are problematic to buy. Emphasising the role of financial assets so strongly can lead to a neglect in the development of other assets, which may have more potential for development.

5.6 Possible livelihood solutions

In this section, suggestions will be made on the basis of the literature study and the information and insights gathered by this research on how the participants can strengthen their livelihoods. When people talk about solutions it helps their mindset to move to a point where they start to believe that there are solutions to their problems (Oxfam, 2013). Bringing the believe that change is possible is fundamental to the process of change (Oxfam, 2013).

It is clear from the study that the assets most relied upon were social and human assets. The other assets were less utilised. With this in mind, the following possible solutions has been discussed in this chapter to improve the livelihoods of the participants. Livelihoods portfolios must be diversified. A possible way of doing it is through entrepreneurship training and support. A number of existing livelihoods, such as chicken breeding, vegetable gardens and baking can be strengthened through entrepreneurship. Entrepreneurial activities have the potential to strengthen, diversify and improve the sustainability of the livelihoods. At the time of the study, 46% of the participants used entrepreneurial activities to increase their income, and a further 20% indicated that they had entrepreneurial ideas which they wished to execute. Blattman and Ralston (2015)

found that entrepreneurial training in South African townships is more effective in strengthening livelihoods than vocational training programs. The strong social assets possessed over by the participants does have the potential to support entrepreneurship (Sidloyi & Bomela, 2016).

It was already mentioned that a significant number of the household-heads experienced time constraints due to the demands of caring responsibilities. Providing caring duty support or a reward system for caring for a person can free up time which can be used to be productive (Njororai & Njororai, 2013).

The stokvels saving schemes have been hailed by the participants for contributing to their livelihoods. Ashraf and Galor (2013) and Nkambule and Chirau (2018) put it forward that saving programs have the ability to boost the participant's self-confidence, keep in mind that the poor often have low self-esteem (Breitwieser, 2016). More savings have the potential to increase the acquisition of physical assets which are under-utilised by the participants.

The seasonal income and dietary benefits from vegetable gardens can be extended by looking at planting winter crops. The severe Highveld winters may pose a risk in this regard. To address dietary concerns brought about by the seasonality of the gardens, Mkhawani et al. (2016) suggest bulk food purchases. Some of the participants cultivated their own vegetables. With the financial and dietary benefits of the gardens, more participants can be assisted to cultivate their own vegetables.

Possible public assets which is under-utilised are the public library and the recycling centre. Only two participants visited the library. In a low-income community, a library is a source of knowledge, a place to acquire a skill and is a centre for community programs (Denoon-Stevens & Ramaila, 2018; Hart, 2012; Mnkeni-Saurombe & Zimu, 2015), the library can be utilized to upgrade skills and to gain knowledge and information which can be utilised to strengthen or explore new livelihoods. Only one participant is involved in recycling. More participants can be supported to start recycling.

5.7 Recommendations for research

In general, research on natural assets in urban areas is limited to green spaces leaving scope for a wide range of urban natural assets to be studied. More specific investigation can focus on the use of natural assets in South African urban areas by low-income female headed households. Coping strategies of households during times of shocks and financial constrain can be investigated further. Future investigation can explore how expenses can be reduced, or how income can be increased. Scholars suggest that the management of seasonal shocks, like the

seasonality of vegetable gardens, or a temporary income that terminates, be researched (Adato & Meinzen-Dick, 2002; DFID, 1999; Masud et al., 2016).

With the emphasis on social assets there is scope to research the popularity and value of church and burial society memberships amongst black South African and township females. The impact and the social and economic role of these institutions in the community has scope for investigation.

Furthermore, investigating the mind-set of the participants that change should come and be initiated by the authorities and outside organisations can make a useful contribution to the community development literature. Studies on how to involve the community members in the transformation of the community and how to counter the feeling of dependency within low-income communities are needed.

5.8 Conclusion

There is a strong dependency on social grants and temporary income amongst participants increasing livelihood vulnerability. In order to improve sustainability of the livelihoods of female-headed households, livelihoods portfolios must be diversified.

The participants of this study possess very high social assets on which they rely strongly during times of crisis. A key principle that must be followed to bring about positive change within the community is the realisation by the participants that change must come from within in the community and that the community does possess what is needed to bring about change.

LIST OF REFERENCES

- Adato, M., & Meinzen-Dick, R. S. (2002). *Assessing the impact of agricultural research on poverty using the sustainable livelihoods framework* (89). Washington: IFPRI.
- Amendah, D. D., Buigut, S., & Mohamed, S. (2014). Coping strategies among urban poor: Evidence from Nairobi, Kenya. *PLoS one*, 9(1), e83428.
- Amir-ud-Din, R., Usman, M., Abbas, F., & Javed, S. A. (2017). Human versus physical capital: issues of accumulation, interaction and endogeneity. *Economic Change and Restructuring*, 52(4), 351-382.
- Ammerman, N. (1996). *Congregation and Community*. New Jersey: Rutgers University Press.
- Ansell, N., Hajdu, F., van Blerk, L., & Robson, E. (2014). Reconceptualising temporality in young lives: exploring young people's current and future livelihoods in AIDS-affected southern Africa. *Transactions of the Institute of British Geographers*, 39(3), 387-401.
- Arad research. (2016). *Building Livelihoods & Strengthening Communities in Wales external evaluation*. London: Oxfam.
- Arifin, S. R. M. (2018). Ethical considerations in qualitative study. *International Journal of Care Scholars*, 1(2), 30-33.
- Arksey, H. (1996). *Collecting data through joint interviews*. *Social Research Update*. University of Surrey, 15.
- Ashley, C., & Carney, D. (1999). *Sustainable livelihoods: Lessons from early experience* (Vol. 7): Department for International Development London.
- Ashraf, Q., & Galor, O. (2013). The 'Out of Africa' hypothesis, human genetic diversity, and comparative economic development. *American Economic Review*, 103(1), 1-46.
- Ashraf, N., Karlan, D., & Yin, W. (2009). Female empowerment: Impact of a commitment savings product in the Philippines. *World development*, 38(3), 333-344.
- Baiyegunhi, L., Fraser, G., & Darroch, M. (2010). Credit constraints and household welfare in the Eastern Cape Province, South Africa. *African Journal of Agricultural Research*, 5(16), 2243-2252.

- Banerjee, A., Galiani, S., Levinsohn, J., McLaren, Z., & Woolard, I. (2008). Why has unemployment risen in the new South Africa? 1. *Economics of Transition*, 16(4), 715-740.
- Barker, M. (2008). The role of religious capital in relating religion and economic development. *Third Sector Review*, 14, 1-8.
- Baur, J. W., & Tynon, J. F. (2010). Small-scale urban nature parks: Why should we care? *Leisure Sciences*, 32(2), 195-200.
- Beall, J. (2005). Urban Livelihoods. In C. T. R. C. Ben Wisner (Ed.), *Toward a new map of Africa* (1st ed., pp. 97-112).
- Beukes, J. W. (2019). Leveraging social capital of the church for development: A case study of a farming community in Wellington. *HTS Teologiese Studies/Theological Studies*, 75(4), 10.
- Biswas-Diener, R., & Patterson, L. (2011). Positive psychology and poverty. In *Positive psychology as social change* (pp. 125-140): Springer.
- Blattman, C., & Ralston, L. (2015). *Generating employment in poor and fragile states: Evidence from labor market and entrepreneurship programs*.
- Boltvinik, J. (1999). *Poverty measurement methods: An overview*. UNDP Social Development & Poverty Elimination Division. k.
- Bradshaw, T. K. (2007). Theories of Poverty and Anti-Poverty Programs in Community Development. *Community Development*, 38(1), 7-25.
- Breitwieser, A. (2016). *Escaping the Poverty Trap: Formal Savings and Asset Accumulation in Rural Malawi*. Claremont McKenna College,
- Brocklesby, M. A., & Fisher, E. (2003). Community development in sustainable livelihoods approaches—an introduction. *Community development journal*, 38(3), 185-198.
- Brooks, N. (2003). *Vulnerability, risk and adaptation: A conceptual framework* (38). Norwich: Tyndall Centre for Climate Change Research.
- Brydon-Miller, M., Greenwood, D., & Maguire, P. (2003). Why Action Research? *Action Research*, 1(1), 9-28.
- Byrne, B. (2016). Qualitative Interviewing. In C. Seale (Ed.), *Researching Society and Culture* (Fourth ed., pp. 217-236). Sage Publications Ltd.

- Burns, J., Keswell, M., & Leibbrandt, M. (2005). Social assistance, gender, and the aged in South Africa. *Feminist economics*, 11(2), 103-115.
- Cannon, T., Twigg, J., & Rowell, J. (2003). *Social vulnerability, sustainable livelihoods and disasters*. Report to DFID conflict and humanitarian assistance department (CHAD) and sustainable livelihoods support office, 93.
- Frankenberger, T. R., Luther, K., Becht, J., & McCaston, M. K. (2002). *Household Livelihood Security Assessments: A Toolkit for Practitioners*. Tucson, Arizona: CARE.
- Carney, D., Drinkwater, M., Rusinow, T., Neefjes, N., Wanmali, S., & Singh, N. (2000). *Livelihoods approaches compared. A brief comparison of the livelihoods approaches of the UK Department for International Development (DFID), Cooperative for Assistance and Relief, Oxfam and the United Nations Development Programme (UNDP)*. London: DFID.
- Carr-Hill, R. (2013). Missing millions and measuring development progress. *World Development*, (46), 30-44.
- Chambers, R. (1994). *Paradigm shifts and the practice of participatory research and development (paper 2)*: Institute of Development Studies.
- Chambers, R., & Conway, G. (1992). *Sustainable rural livelihoods: practical concepts for the 21st century* (296). Brighton: Institute for Development Studies.
- Chandler, D., & Torbert, B. (2003). Transforming inquiry and action: Interweaving 27 flavors of action research. *Action Research*, 1(2), 133-152.
- Chen, H., Zhu, T., Krott, M., Calvo, J. F., Ganesh, S. P., & Makoto, I. (2013). Measurement and evaluation of livelihood assets in sustainable forest commons governance. *Land use policy*, 30(1), 908-914.
- Cheteni, P., Khamfula, Y., Mah, G., & Casadevall, S. R. (2019). Gender and poverty in South African rural areas. *Cogent Social Sciences*, 5(1).
- Chirisa, I., & Matamanda, A. R. (2016). Addressing Urban Poverty in Africa in the Post-2015 Period. Perspectives for Adequate and Sustainable Housing. *Journal of Settlements and Spatial Planning*, 7(1), 79-87.
- Cilliers, E. J., Lategan, L., Cilliers, S. S., & Stander, K. (2020). Reflecting on the potential and limitations of urban agriculture as an urban greening tool in South Africa. *Frontiers in Sustainable Cities*, 2(43).

- Cleaver, F. (2005). The inequality of social capital and the reproduction of chronic poverty. *World development*, 33(6), 893-906.
- Cloete, G. E., & Ballard, H. (2012). Factors influencing academic resilience of trainees in entrepreneurial development programmes: A case from Saldanha Bay Municipal Area in South Africa. *International Journal of Technology Management & Sustainable Development*, 10(3), 217-230.
- Cobb, A. J. (2016). How firms shape income inequality: Stakeholder power, executive decision making, and the structuring of employment relationships. *Academy of Management Review*, 41(2), 324-348.
- Colantonio, A. (2009). *Social sustainability: a review and critique of traditional versus emerging themes and assessment methods*. Paper presented at the Second International Conference on Whole Life Urban Sustainability and its Assessment, Loughborough, UK.
- Coleman, J. S. (1988). Social Capital and the Development of Human Capital. *American Journal of Sociology*, (94), S95-S120.
- Corbin, J., & Morse, J. M. (2003). The unstructured interactive interview: Issues of reciprocity and risks when dealing with sensitive topics. *Qualitative inquiry*, 9(3), 335-354.
- Corbridge, S. (2007). The (im)possibility of development studies. *Economy and Society*, 36(2).
- Cornwall, A., & Jewkes, R. (1995). What is participatory research? *Social science & medicine*, 41(12), 1667-1676.
- Cortes, G. P. (2008). The sustainable livelihoods approach: Principles and tools to analyse and define intervention strategies in the Economic Justice area. (Thematic paper for change n2). Barcelona: *Intermón Oxfam*.
- Crea, T. M., Loughry, M., O'Halloran, C., & Flannery, G. J. (2017). Environmental risk: Urban refugees' struggles to build livelihoods in South Africa. *International Social Work*, 60(3), 667-682.
- Creswell, J. (2014). *Research Design: Qualitative, quantitative & mixed methods approaches*. London: SAGE.
- Creswell, J. W. (2012). *Qualitative inquiry and research design: Choosing among five approaches*. (3 ed.). Thousand Oaks: Sage.

- Dahrendorf, R. (1974). Citizenship and beyond: The social dynamics of an idea. *Social research*, 673-701.
- Dalu, M. T., & Shackleton, C. M. (2018). The potential use of natural resources in urban informal settlements as substitutes for financial capital during flooding emergencies. *Physics and Chemistry of the Earth, Parts A/B/C*, 104, 18-27.
- Daskon, C., & Binns, T. (2010). Culture, tradition and sustainable rural livelihoods: exploring the culture–development interface in Kandy, Sri Lanka. *Community Development Journal*, 45(4), 494-517.
- Dassah, M. O., & Ngatse-Ipangui, R. (2019). Impact of social entrepreneurs on community development in the Cape Town Metropolitan Municipality area, South Africa. *TD: The Journal for Transdisciplinary Research in Southern Africa*, 15(1), 1-10.
- De Haan, L. (2000). Globalization, localization and sustainable livelihood. *Sociologia Ruralis*, 40(3), 339-365.
- De Haan, L. (2007). Studies in African livelihoods: current issues and future prospects. *African Alternatives* (pp. 59-72): Brill.
- D-maps. (2022). *South Africa*. Retrieved from https://d-maps.com/carte.php?num_car=23735&lang=en&as_qdr=y15
- De Satgé, R., & Holloway, A. (2002). *Learning about livelihoods: insights from Southern Africa* (Vol. 1): Oxfam.
- De Vos, A., Strydom, H., Fouche, C., & Delport, C. (2011). *Research at Grassroots: For the social sciences and human service professions* (A. d. Vos Ed. 4 ed.). Pretoria: Van Schaik.
- Denoon-Stevens, S. P., & Ramaila, E. (2018). Community facilities in previously disadvantaged areas of South Africa. *Development Southern Africa*, 35(4), 432-449.
- Department of Women. (2015). *Department of Women: Strategic Plan: 2015-2020*.
- DFID. (1999). *Sustainable livelihood guidance sheets*. London: DFID.
- Durand-Lasserve, A. (2006). Informal settlements and the Millennium Development Goals: global policy debates on property ownership and security of tenure. *Global Urban Development*, 2(1), 1-15.

- Erenstein, O. (2011). Livelihood Assets as a Multidimensional Inverse Proxy for Poverty: A District-level Analysis of the Indian Indo-Gangetic Plains. *Journal of Human Development and Capabilities*, 12(2), 283-302.
- Evers, A., & Laville, J.-L. (2004). *The third sector in Europe*: Edward Elgar Publishing.
- Farrington, J., Carney, D., Ashley, C., & Turton, C. (1999). Sustainable livelihoods in practice: early applications of concepts in rural areas. *Natural Resource Perspectives*, (42).
- Ferreira, R., Ebersöhn, L., Thabe, M., & Pietersen, W. (2013). Building Networks of Care: Volunteers Partnering with Teachers in Supporting Vulnerable Children. *Procedia-Social and Behavioral Sciences*, (106), 585-590.
- Fezile Dabi District Municipality. (2020). *Fezile Dabi District Municipality: Profile and Analysis District Development Model (20/52)*. Sasolburg: Fezile Dabi District Municipality.
- Field, E., Pande, R., Rigol, N., Schaner, S., & Moore, C. T. (2016). *On Her Account: Can Strengthening Women's Financial Control Boost Female Labour Supply?* (26294). Cambridge: National Bureau of Economic Research.
- Foster, J. E. (1998). Absolute versus relative poverty. *The American economic review*, 88(2), 335-341.
- Frankenberger, T. R., Drinkwater, M., & Maxwell, D. (2000). *Operationalizing Household Livelihood Security: A Holistic Approach for Addressing Poverty and Vulnerability*. Atlanta: CARE.
- Frankenberger, T. R., Luther, K., Becht, J., & McCaston, M. K. (2002). *Household Livelihood Security Assessments: A Toolkit for Practitioners*. Arizona: CARE.
- Fransman, T., & Yu, D. (2019). Multidimensional poverty in South Africa in 2001–16. *Development Southern Africa*, 36(1), 50-79.
- Garroway, C., & De Laiglesia, J. R. (2012). *On the relevance of relative poverty for developing countries* (314). Paris: OECD.
- Gilbert, G., & McLeman, R. (2010). Household access to capital and its effects on drought adaptation and migration: a case study of rural Alberta in the 1930s. *Population and Environment*, 32(1), 3-26.
- Govender, P., Kambaran, N., Patchett, N., Ruddle, A., Torr, G., & Zyl, N. v. (2007). Poverty and inequality in South Africa and the world. *South African Actuarial Journal*, (7), 117-160.

- Greeff, M. (2011). Information collection: interviewing. In S. F. de Vos, Deport (Ed.), *Research at grass roots: For the social sciences and human service professions* (4 ed., Vol. 4, pp. 341-388).
- Greenwell, H., Harding, A., & Lloyd, R. (2001). *An introduction to poverty measurement issues* (55). Canberra: National Centre for Social and Economic Modelling.
- Greenwood, D. J., & Levin, M. (2006). *Introduction to action research: Social research for social change*: SAGE publications.
- Gutierrez-Montes, I., Emery, M., & Fernandez-Baca, E. (2009). The sustainable livelihoods approach and the community capitals framework: The importance of system-level approaches to community change efforts. *Community Development*, 40(2), 106-113.
- Haines-Young, R., & Potschin-Young, M. (2018). Revision of the common international classification for ecosystem services (CICES V5. 1): a policy brief. *One Ecosystem*, (3), e27108.
- Hart, G. (2012). Moving beyond “outreach”: Reflections on two case studies of community library services in South Africa. *South African Journal of Libraries and Information Science*, 80(2), 42-55.
- Hatlebakk, M. (2012), Regional variation in livelihood strategies in Malawi. *South African Journal of Economics*, 80, 62-76.
- Hoffman, S., & Oliver-Smith, A. (2002). *Catastrophe and Culture: The Anthropology of Disaster: Santa Fe*. NM: School of Advanced American Research Press.
- Hsieh, W.-J., Hsiao, P.-J., & Lee, J. (2012). The impact of health status on wages—evidence from the quantile regression. *Journal of International and Global Economic Studies*, 5(1), 35-66.
- Lecovich, E., Jacobs, J. M., & Stessman, J. (2011). Loneliness, social networks, and mortality: 18 years of follow-up. *The International Journal of Aging and Human Development*, 72(3), 243-263.
- Irving, M. (2005). *Informal savings groups in South Africa: investing in social capital*. Cape Town: Open UCT.
- Jain, R., Budlender, J., Zizzamia, R., & Bassier, I. (2020). *The labor market and poverty impacts of COVID-19 in South Africa* (number 264 version 1). Cape Town: Southern African Labour and Research Unit.

- Johnson, J., & Rowlands, T. (2012). The interpersonal dynamics of in-depth interviewing. In Jaber F. Gubrium, James A. Holstein, Amir Marvasti, & a. K. D. McKinney (Eds.), *The SAGE Handbook of Interview Research : The Complexity of the Craft* (2 ed., pp. 99-114). Thousand Oaks: SAGE Publications.
- Kanosvamhira, T. P. (2019). The organisation of urban agriculture in Cape Town, South Africa: A social capital perspective. *Development Southern Africa*, 36(3), 283-294.
- Kaoma, H., & Shackleton, C. M. (2014). Collection of urban tree products by households in poorer residential areas of three South African towns. *Urban Forestry & Urban Greening*, 13(2), 244-252.
- Kaya, H. D. (2018). The Global Crisis and Poverty. *Studies in Business and Economics*, 13(3), 63-73.
- Keatinge, J. D., Chadha, M. L., Hughes, J. d. A., Easdown, W. J., Holmer, R. J., Tenkouano, A., Afari-Sefa, V. (2012). Vegetable gardens and their impact on the attainment of the Millennium Development Goals. *Biological Agriculture & Horticulture*, 28(2), 71-85.
- Khanya, M. (2021). *The researcher and two participants in an interview*. [photograph].
- Khuzwayo, H. A. (2016). *A sustainable livelihood approach to poverty reduction: participatory experiences of women involved in art and craft co-operative in Bhambayi, KwaZulu-Natal*.
- Kilpatrick, S., Field, J., & Falk, I. (2003). Social capital: An analytical tool for exploring lifelong learning and community development. *British educational research journal*, 29(3), 417-433.
- Krantz, L. (2001). The sustainable livelihood approach to poverty reduction. *SIDA. Division for Policy and Socio-Economic Analysis*, 44.
- Kruize, H., van der Vliet, N., Staatsen, B., Bell, R., Chiabai, A., Muiños, G., Aberg Yngwe, M. (2019). Urban Green Space: Creating a triple win for environmental sustainability, health, and health equity through behavior change. *International Journal of Environmental Research and Public Health*, 16(22), 4403.
- Kulik, C. T., Pepper, M. B., Roberson, L., & Parker, S. K. (2007). The rich get richer: Predicting participation in voluntary diversity training. *Journal of Organizational Behavior: The International Journal of Industrial, Occupational and Organizational Psychology and Behavior*, 28(6), 753-769.
- Kulig, J. C. (2000). Community resiliency: The potential for community health nursing theory development. *Public Health Nursing*, 17(5), 374-385.

- Lamprianou, I. (2022). Surveying through gatekeepers in social research: methodological problems and suggestions. *International Journal of Social Research Methodology*, 25(6), 783-795.
- Laurie, S. M., & Faber, M. (2008). Integrated community-based growth monitoring and vegetable gardens focusing on crops rich in β -carotene: Project evaluation in a rural community in the Eastern Cape, South Africa. *Journal of the Science of Food and Agriculture*, 88(12), 2093-2101.
- Lautze, S., & Raven-Roberts, A. (2003). *The vulnerability context: Is there something wrong with this picture?* Paper presented at the FAO International Workshop on Food Security in Complex Emergencies.
- Lautze, S., & Raven-Roberts, A. (2006). Violence and complex humanitarian emergencies: implications for livelihoods models. *Disasters*, 30(4), 383-401.
- Lauwaet, D., De Nijs, T., Liekens, I., Hooyberghs, H., Verachtert, E., Lefebvre, W., Broekx, S. (2018). A new method for fine-scale assessments of the average urban heat island over large areas and the effectiveness of nature-based solutions. *One Ecosystem*, (3), e24880.
- Leedy, P., & Ormrod, J. E. (2014). *Pearson New International Edition: Practical research Planning and Design* (1 ed.). Essex: Pearson.
- Leibbrandt, M., Woolard, I., Finn, A., & Argent, J. (2010). *Trends in South African Income Distribution and Poverty since the Fall of Apartheid*.
- Li, M., Goetz, S. J., & Weber, B. (2018). Human capital and intergenerational mobility in US counties. *Economic Development Quarterly*, 32(1), 18-28.
- Liamputtong, P. (2013). *Qualitative research methods*. (4 ed.): Melbourne: Oxford University Press.
- Lin, N. (1999). Social networks and status attainment. *Annual Review of Sociology*, 25(1), 467-487.
- Lin, N. (2008). A network theory of social capital. *The Handbook of Social Capital*, 50(1), 69.
- Lin, N., & Smith, J. (2001). *Social Capital: A Theory of Social Structure and Action*. Cambridge, United Kingdom: Cambridge University Press.

Rakodi & T. Lloyd-Jones (Eds.). *A People-Centred Approach to Reducing Poverty*. Earthscan, London (pp.xiv–xvii).

Lloyd-Jones, R. (2002). *A People-Centred Approach to Reducing Poverty*, Earthscan, London.

Lloyd-Jones, T., & Rakodi, C. (2014). *Urban livelihoods: A people-centred approach to reducing poverty*. Routledge.

Longley, C., & Maxwell, D. (2003). *Livelihoods, chronic conflict and humanitarian response: a synthesis of current practice* (89). London: Overseas Development

Louw, L. (2005). *Die bevordering van volhoubare ontwikkeling in die Suider-Afrikaanse ontwikkelingsgemeenskap: 'n regsvergelende ondersoek*. North-West University,

Lucci, P., & Bhatkal, T. (2014). *Monitoring progress on urban poverty: Are current data and indicators fit for purpose*(405). London: Overseas Development Institute.

Lucci, P., Bhatkal, T., & Khan, A. (2018). Are we underestimating urban poverty? *World development*, (103), 297-310.

MacDonald, C. (2012). Understanding participatory action research: A qualitative research methodology option. *The Canadian Journal of Action Research*, 13(2), 34-50.

Macfadyen, G., & Corcoran, E. (2002). Literature review of studies on poverty in fishing communities and of lessons learned in using the SLA in poverty alleviation strategies and projects. *Rome International Institute for Environment and Development*.

Macrae, J., Bradbury, M., Jaspars, S., Johnson, D., & Duffield, M. (1997). Conflict, the continuum and chronic emergencies: a critical analysis of the scope for linking relief, rehabilitation and development planning in Sudan. *Disasters*, 21(3), 223-243.

Maguire, P. (1987). Doing participatory research: A feminist approach. *ScholarWorks@UMass Amherst*.

Mahmood, S. A. I. (2012). Impact of climate change in Bangladesh: The role of public administration and government's integrity. *Journal of Ecology and the Natural Environment*, 4(8), 223-240.

Mandela, N. (2008). *Long walk to freedom: The autobiography of Nelson Mandela*. Hachette UK.

- Mashalaba, Y. B. (2013). Public open space planning and development in previously neglected townships. *University of the Free State*,
- Masud, M. M., Kari, F., Yahaya, S. R. B., & Al-Amin, A. Q. (2016). Livelihood assets and vulnerability context of marine park community development in Malaysia. *Social Indicators Research*, 125(3), 771-792.
- May, C., Brown, G., Cooper, N., & Brill, L. (2009). *The Sustainable Livelihoods Handbook: An asset based approach to poverty*. London: Church Action on Poverty.
- Mazibuko, S. (2013). Understanding underdevelopment through the sustainable livelihoods approach. *Community Development*, 44(2), 173-187.
- McTaggart, R. (1989). *16 trends of participatory research* Paper presented at the The Third World Encounter on Participatory Research, Managua, Nicaragua.
- Meyer, D. F. (2013). *An exploration of revitalization strategies for rural areas: The case of the Northern Free State*. North-West University,
- Mitlin, D., & Satterthwaite, D. (2013). *Urban poverty in the global south: scale and nature*. Routledge.
- Mkhawani, K., Motadi, S. A., Mabapa, N., Mbhenyane, X. G., & Blaauw, R. (2016). Effects of rising food prices on household food security on female headed households in Runnymede Village, Mopani District, South Africa. *South African journal of clinical nutrition*, 29(2), 69-74.
- Mnguni-Letsoalo, M. A. (2015). *Volunteers' use of memory work to promote psycho-social support of clients facing poverty-related adversity*. University of Pretoria,
- Mnkeni-Saurombe, N., & Zimu, N. (2015). Towards tackling inequalities in South Africa: the role of community libraries. *Information Development*, 31(1), 40-52.
- Morris, S. M. (2001). Joint and individual interviewing in the context of cancer. *Qualitative Health Research*, 11(4), 553-567.
- Morse, S., McNamara, N., & Acholo, M. (2009). Sustainable Livelihood Approach: A critical analysis of theory and practice. *Geographical paper no. 189*, 1-67.
- Mosala, S. (2022). The South African Economic Reconstruction and Recovery Plan as a response to South African economic crisis. *Journal of BRICS Studies*, 1(1), 55-67.

- Moser, C., Norton, A., Conway, T., Ferguson, C., & Vizard, P. (2001). *To Claim Our Rights: Livelihood Security. Human Rights and Sustainable Development*, London: Overseas Development Institute.
- Moyo, C. S. (2014). Active participation of rural women in developmental issues: Poverty alleviation lessons for South Africa. *Gender and Behaviour*, 12(1), 5994-6001.
- Mukisa, N., Zamora, R., & Lie, T. T. (2020). Assessment of community sustainable livelihoods capitals for the implementation of alternative energy technologies in Uganda–Africa. *Renewable Energy*, (160), 886-902.
- Mullainathan, S., & Shafir, E. (2009). Savings policy and decision-making in low-income households. In R. B. Blank, MS (Ed.), *Insufficient funds: Savings, assets, credit, and banking among low-income households*, (Vol. 121, pp. 140-142). New York: Russel Sage Foundation.
- Munyewende, P. O., & Nunu, W. N. (2017). Patient satisfaction with nurse-delivery primary health care services in Free State and Gauteng provinces, South Africa: A comparative study. *African Journal of Primary Health Care and Family Medicine*, 9(1), 1-8.
- Murray, C. (2002). Livelihoods Research: Transcending Boundaries of Time and Space. *Journal of Southern African Studies*, 28(3), 489-509.
- Muthwa, S. W. (1994). Female Household Headship and Household Survival in Soweto. *Journal of gender studies*, 3(2), 165-175.
- Mutyenyoka, E. M., Tirivangasi, H. M., & Mugambiwa, S. S. (2017). Dichotomies of chronic and episodic rural-urban poverty: a South African context. *Africa Insight*, 47(1), 1-12.
- Nadim, S. J., & Nurlukman, A. D. (2017). The impact of women empowerment on poverty reduction in rural area of Bangladesh: Focusing on village development program. *Journal of Government and Civil Society*, 1(2), 135-157.
- National Planning Commission. (2011). *National Development Plan (NDP)*. Pretoria.
- Nawrotzki, R. J. (2012). The politics of environmental concern: A cross-national analysis. *Organization & Environment*, 25(3), 286-307.
- Ndikumana, L., & Pickbourn, L. (2017). The impact of foreign aid allocation on access to social services in sub-Saharan Africa: the case of water and sanitation. *World development*, (90), 104-114.

- Njororai, F., & Njororai, W. (2013). Older adult caregivers to people with HIV/AIDS in Sub-Saharan Africa: a review of literature and policy implications for change. *International Journal of Health Promotion and Education*, 51(5), 248-266.
- Nkambule, S. J., & Chirau, T. J. (2018). The Significance of Social Capital in State Provided Housing: The Case of Hlalani, South Africa. *Bangladesh Sociological Society*, 15(1), 118.
- Noble, M., Babita, M., Barnes, H., Dibben, C., Magasela, W., Noble, S., Roberts, B. (2006). *The provincial indices of multiple deprivation for South Africa 2001*.
- Nyamathi, A., & Shuler, P. (1990). Focus group interview: a research technique for informed nursing practice. *Journal of advanced nursing*, 15(11), 1281-1288.
- Olewiler, N. (2006). Environmental sustainability for urban areas: The role of natural capital indicators. *Cities*, 23(3), 184-195.
- Onyx, J., & Bullen, P. (2000). Measuring social capital in five communities. *The journal of applied behavioral science*, 36(1), 23-42.
- Openstreetmap.org. (2023). Sasolburg. Retrieved from <https://www.openstreetmap.org/search?query=sasolburg#map=14/-26.8334/27.8411>
- Otieku, E., Ackah, C. G., & Forkuor, D. (2017). Motivations, income determinants and livelihood vulnerability of female teenage head porters in Kasoa, Ghana. *International Journal of Social Economics*.
- Oxfam. (2013). *The Sustainable Livelihoods Approach: Toolkit for Wales*. London: Oxfam.
- Øyen, E. (2008). The Paradox of Poverty Research: Why is Extreme Poverty not in Focus? Paper presented at the Forum for Development Studies.
- Page, L., & Pande, R. (2018). Ending Global Poverty: Why Money Isn't Enough. *Journal of Economic Perspectives*, 32(32), 173-200.
- Parnell, S. (2005). Constructing a developmental nation-the challenge of including the poor in the post-apartheid city. *Transformation: Critical Perspectives on Southern Africa*, 58(1), 20-44.
- Parry, B. R., & Gordon, E. (2021). The shadow pandemic: Inequitable gendered impacts of COVID-19 in South Africa. *Gender, Work & Organization*, 28(2), 795-806.
- Perry, J. (2016). *An Independent review of Oxfam's Sustainable Livelihoods Approach Work in the UK*. London: Oxfam.

- Pfahl, S. (2005). Institutional sustainability. *International journal of sustainable development*, 8(1-2), 80-96.
- Philip, D., & Rayhan, M. I. (2004). *Vulnerability and Poverty: What are the causes and how are they related*. Bonn: Center for Development Research.
- Pichler, F., & Wallace, C. (2007). Patterns of formal and informal social capital. *Europe. European sociological review*, 23(4), 423-435.
- Pietersen, W. J. (2017). *The value of social networks to community volunteers from high-risk communities*. University of Pretoria,
- Posel, D., & Rogan, M. (2012). Gendered trends in poverty in the post-apartheid period, 1997–2006. *Development Southern Africa*, 29(1), 97-113.
- Potocky-Tripodi, M. (2002). *Best practices for social work with refugees and immigrants*: Columbia University Press.
- Putnam, R. (1993). The prosperous community: Social capital and public life. *The American prospect*, 13(Spring), Vol. 4.
- Quinn, L. (2018). *Oxfam Cymru and South Riverside Community Development Centre Skills for Life Project: Final evaluation report*. London: Oxfam.
- Ramachandran, N. (2006). Women and food security in South Asia: Current issues and emerging concerns. Food insecurity, vulnerability and human rights failure. Research paper. Springer.
- Ravallion, M. (1996). Issues in Measuring and Modelling Poverty. *The Economic Journal*, 106(438), 1328-1343.
- Ravallion, M., Chen, S., & Sangraula, P. (2009). Dollar a day revisited. *The World Bank Economic Review*, 23(2), 163-184.
- Richards, P. (1996). *Fighting for the rain forest: war, youth and resources in Sierra Leone*, James Currey. In: Oxford.
- Rogan, M. (2016). Gender and Multidimensional Poverty in South Africa: Applying the Global Multidimensional Poverty Index (MPI). *Social Indicators Research*, 126(3), 987-1006.
- Roy, N. S. (2020). Wage Rate: Is this Return to Education or Return to Physical Capability? Evidence from Rural India. *The Indian Journal of Labour Economics*, 1-19.

- Saeed, A. M., & Ali, D. E. (2012). Sustainability of the livelihood strategies of the internally displaced residents of Soba El Aradi settlement in Khartoum State, Sudan. *Ahfad Journal*, 29(2).
- SARB. (2022, 10 June 2022). *Current market rates*. Retrieved from: <https://www.resbank.co.za/>
- Satterthwaite, D. (1995). Urban poor: recognising its scale and name. *IDS Bulletin*, 28, 9-23.
- Sato, Y. (2013). Social capital. *Sociapedia.isa*.
- Schatz, E., Gómez-Olivé, X., Ralston, M., Menken, J., & Tollman, S. (2012). The impact of pensions on health and wellbeing in rural South Africa: does gender matter? *Social science & medicine*, 75(10), 1864-1873.
- Schoeman, W. J. (2012). The involvement of a South African church in a changing society. *Verbum et Ecclesia*, 33(1), 1-8.
- Scoones, I. (1998). *Sustainable rural livelihoods: a framework for analysis* (72). London: Institute of Development Studies.
- Scoones, I. (2009). Livelihoods perspectives and rural development. *The journal of peasant studies*, 36(1), 171-196.
- Scullion, L., Wilding, M., Jones, K., & Martin, P. (2017). *Evaluation of DWP & Oxfam Livelihoods Training Project*. Oxford: Oxfam.
- Segal, S. P., Silverman, C., & Temkin, T. (1995). Measuring empowerment in client-run self-help agencies. *Community mental health journal*, 31(3), 215-227.
- Sekhampu, T. J. (2013). Determinants of Poverty in a South African Township. *Journal of Social Sciences*, 34(2), 145-153
- Sen, A. (1993). Capability and well-being⁷³. *The quality of life*, (30).
- Sen, A. (1999). Development as Freedom (New York: Anchor). *South Indian ICT Clusters, Indian* 227.
- Serrat, O. (2017). The Sustainable Livelihoods Approach. *Knowledge Solutions: Tools, Methods, and Approaches to Drive Organizational Performance* (pp. 21-26). Singapore: Springer Singapore.

Shapiro, J., & Haushofer, J. (2016). The Short-term Impact of Unconditional Cash Transfers to the Poor: Experimental Evidence from Kenya. *The Quarterly Journal of Economics*, 131(4),

Sidloyi, S. S., & Bomela, N. J. (2016). Survival strategies of elderly women in Ngangelizwe Township, Mthatha, South Africa: Livelihoods, social networks and income. *Archives of gerontology and geriatrics*, (62), 43-52.

Sik, E. (1994). Network capital in capitalist, communist and post-communist societies. *International Contributions to Labour Studies*, 4(0), 73-93.

Smyth, E., & Vanclay, F. (2017). The Social Framework for Projects: a conceptual but practical model to assist in assessing, planning and managing the social impacts of projects. *Impact Assessment and Project Appraisal*, 35(1), 65-80.

Solesbury, W. (2003). *Sustainable livelihoods: A case study of the evolution of DFID policy* (217). London: Overseas Development Institute.

Sotiropoulos, D. A. (2004). Formal weakness and informal strength: Civil society in contemporary Greece (16). London: *The London School of Economics and Political Science*.

Statistics South Africa. (2016). Zamdela. Retrieved from https://www.statssa.gov.za/?page_id=4286&id=7309

Statistics South Africa. (2020). *Poverty in Perspective: Contextualizing Poverty and Inequality in the WC, with further emphasis on the generational and endemic nature of poverty as it affects women and the girl child in the WC*. Statistics South Africa. Pretoria.

Statistics South Africa. (2021). *National Poverty Lines*. Retrieved from Pretoria: <https://www.statista.com/>

Straub, S. (2005). Informal sector: the credit market channel. *Journal of Development Economics*, 78(2), 299-321.

Streeten, P. (1979). Basic needs: premises and promises. *Journal of Policy Modelling*, 1(1), 136-146.

Streeten, P. (1984). *First Things First: Meeting Basic Human Needs in the Developing World*. London: Oxford University Press.

- Taliep, N., Lazarus, S., Cochrane, J., Olivier, J., Bulbulia, S., Seedat, M., James, A. (2020). Community asset mapping as an action research strategy for developing an interpersonal violence prevention programme in South Africa. *Action Research*.
- Talukder, A., Kiess, L., Huq, N., De Pee, S., Darnton-Hill, I., & Bloem, M. W. (2000). Increasing the production and consumption of vitamin A-rich fruits and vegetables: lessons learned in taking the Bangladesh homestead gardening programme to a national scale. *Food and Nutrition Bulletin*, 21(2), 165-172.
- Tao, T. C., & Wall, G. (2009). A livelihood approach to sustainability. *Asia Pacific Journal of Tourism Research*, 14(2), 137-152.
- The World Bank. (2018). *Overcoming Poverty and Inequality in South Africa: An Assessment of Drivers, Constraints and Opportunities*. Washington: Hurlbat, B.
- The World Bank. (2019/08/13). *Understanding Poverty*. Retrieved from <https://www.worldbank.org/en/topic/poverty/overview>
- The World Bank. (2021/12/06). *Urban population (% of total population)*. Retrieved from <https://data.worldbank.org/indicator/SP.URB.TOTL.IN.ZS>
- The World Bank. (2022/05/2). *Fact Sheet: An Adjustment to Global Poverty Lines*. Retrieved from <https://www.worldbank.org/en/news/factsheet/2022/05/02/fact-sheet-an-adjustment-to-global-poverty-lines>
- The World Bank, & International Monetary Fund. (2013). *Global Monitoring Report 2013: Rural-Urban Dynamics and the Millennium Development Goals*. Washington: Retrieved from <https://reliefweb.int/report/world/global-monitoring-report-2013-rural-urban-dynamics-and-millennium-development-goals>
- The World Bank Group. (2018). *Returns to Investment in Education: A Decennial Review of the Global Literature*. Washington: The World Bank Group.
- Todaro, M., & Smith, S. (2012). *Economic Development*. 11th. New York, NY: Pearson Education Inc. Accessed January, 27, 2017.
- Toner, A., & Franks, T. (2006). Putting livelihoods thinking into practice: implications for development management. *Public Administration and Development: The International Journal of Management Research and Practice*, 26(1), 81-92.

- Trosper, R. L. (2002). Northwest coast indigenous institutions that supported resilience and sustainability. *Ecological Economics*, 41(2), 329-344.
- UNDP. (2016). *Global Toolkit on the 3x6 approach: Building resilience through jobs and livelihoods*. In (pp. 82). New York: United Nations Development Programme
- United Nations. (1992). *AGENDA 21*. Paper presented at the United Nations Conference on Environment & Development, Rio de Janeiro.
- United Nations. (2003). *Human Development Report, 2003 - Millennium Development Goals: A compact among nations to end human poverty*. Retrieved from New York: Kahane, M; Hryniewicz, J; Supinska, J; Herbst, I; Bratkowski, A & Pawlisz, M.
- United Nations Women. (2020). *Policy brief: The impact of COVID-19 on women*. Washington: United Nations Women.
- Valdés-Rodríguez, O. A., & Pérez-Vázquez, A. (2011). Sustainable livelihoods: an analysis of the methodology. *Tropical and Subtropical Agroecosystems*, 14(1), 91-99.
- Valdés-Rodríguez, O. A., & Pérez-Vázquez, A. (2011). Sustainable livelihoods: an analysis of the methodology. *Tropical and Subtropical Agroecosystems*, 14(1), 91-99.
- Valentine, C. A. (1968). Culture and poverty; critique and counter-proposals. *Current Anthropology*, 10(2/3), 181-201.
- Van Vlaenderen, H., & Nkwinti, G. (1993). Participatory research as a tool for community development. *Development Southern Africa*, 10(2), 211-228.
- Viljoen, D., & Sekhampu, T. J. (2013). The impact of apartheid on urban poverty in South Africa: What we can learn from history. *Mediterranean Journal of Social Sciences* 4(2).
- Wellings, K., Branigan, P., & Mitchell, K. (2000). Discomfort, discord and discontinuity as data: Using focus groups to research sensitive topics. *Culture, Health & Sexuality*, 2(3), 255-267.
- Wenham, C., Smith, J., & Morgan, R. (2020). COVID-19: The gendered impacts of the outbreak. *The Lancet*, 395(10227), 846-848.
- Whyte, W. F. (1991). *Participatory Action Research*. London: SAGE.
- Whyte, W. F. (1991). *Participatory Action Research*. London: SAGE.
- Wilson, A. D., Onwuegbuzie, A. J., & Manning, L. P. (2016). Using paired depth interviews to collect qualitative data. *The Qualitative Report*, 21(9), 1549.

- Wratten, E. (1995). Conceptualizing urban poverty. *Environment and Urbanization*, 7(1), 11-38.
- Wunder, S., Börner, J., Shively, G., & Wyman, M. (2014). Safety nets, gap filling and forests: a global-comparative perspective. *World development*, (64), S29-S42.
- Xu, D., Deng, X., Guo, S., & Liu, S. (2019). Sensitivity of livelihood strategy to livelihood capital: An empirical investigation using nationally representative survey data from rural China. *Social Indicators Research*, 144(1), 113-131.
- Young, L. (2006). Participatory action research (PAR): *A research strategy for nursing?* In: Sage Publications Sage CA: Thousand Oaks, CA.
- Zhang, C., & Fang, Y. (2020). Application of capital-based approach in the measurement of livelihood sustainability: A case study from the Koshi River basin community in Nepal. *Ecological Indicators*, (116), 106474.

APPENDIX 1: THE INTERVIEW SCHEDULE

Tool 4

Interview schedule

Introduction

- 1. Could you begin by telling me a little bit about yourself?*
- 2. What is the best thing about your life at the moment?*
- 3. What struggles do you face at the moment? (e.g. health, income, services)*
- 4. Who or what makes life better or worse?*

Public assets

- 5. What local amenities do you use (e.g. Clinic, library, soup kitchen, social worker etc.)?*
- 6. What services/amenities do people in your household use?*
- 7. What about other people who you spend time with (e.g. extended family, friends, neighbours), what do they use?*
- 8. How easy it is to access local centres and resources? If it is difficult what could be done to make it easier?*
- 9. Do you think men and women access these resources or amenities differently? If so, how?*
- 10. Do you use public transport? What do you think about public transport in your area?*

Social Assets

- 11. Who are the people who you depend on for support?*
- 12. What activities do you do for fun? Who do you do these activities with?*
- 13. What groups, networks or formal organisations are you part of?*
- 14. Are other members of the household involved with any groups/organisations/ networks?*

Physical assets

15. Describe your accommodation you live in.
16. Who owns your property?
17. Who is responsible for paying for the property?
18. How much of your weekly or monthly income is spent on paying for accommodation?
19. What sort of transport do you use, and what for?
20. Which member/s of the household own a car?
21. Do you own any equipment that you use to bring in extra income, or to do favours from people you know (e.g., sewing machine, lawn mower, DIY tools)?

Human assets

22. How would you describe your health? Have you had any major changes in your health over the last 5 years or so?
23. How is the health of other people in your household, or of those people close to your household?
24. What kind of caring responsibilities do you and other household members have? What about other people in the household?
25. How did you do at school?
26. What qualification special skills do you have?
27. Do any members of your household have any qualifications? If so, how have it helped them in life?

Financial Assets

28. What is your main income source? (This can either be the amount or the source, depending on what is most useful for your project).
29. Do you ever borrow money? If so, who do borrow the most from and how often?

30 Does anyone borrow money from you? If so, who and how often? Do they pay the money back?

31. What money can you access from friends or family? What do you use this to pay for?

32. What about other people in the household? What income do they have? How do they spend it? Is there a difference between people's income and spending in the household?

33. How is the household getting along on its current income? Do you spend more than you are earning?

APPENDIX 2: ETHICS CERTIFICATE



Private Bag X1290, Potchefstroom
South Africa 2520

Tel: 018 299-1111/2222
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Senate Committee for Research Ethics
Tel: 018 299-4849
Email: nkosinathi.machine@nwu.ac.za

ETHICS APPROVAL LETTER OF STUDY

Based on the review by the **Faculty of Natural and Agricultural Sciences Ethics Committee (FNASREC)**, the Committee hereby clears your study as no ethical risk. This implies that the FNASREC grants permission that, provided the general conditions specified below are met, the study may be initiated, using the ethics number below.

Study title: Sustainable livelihood strategies of female-headed households: A case study in Zamdela Sasolburg.																
Study Leader/Supervisor: Dr D Ah Goo																
Student: OJ Olivier																
Ethics number:	N	W	U	-	0	1	5	4	6	-	2	0	-	A	9	
	Institution				Study Number							Year			Status	
Status: S = Submission; R = Re-Submission; P = Provisional Authorisation; A = Authorisation																
Application type: Single				Risk Category:				No Risk								
Commencement date: 01/02/2020																
Expiry date: 31/08/2023																

General conditions:

The following general terms and conditions apply:

- The commencement date indicates the date when the study may be started.
- In the interest of ethical responsibility, the NWU-SCRE and FNASREC reserves the right to:
 - request access to any information or data at any time during the course or after completion of the study;
 - to ask further questions, seek additional information, require further modification or monitor the conduct of your research or the informed consent process;
 - withdraw or postpone approval if:
 - * any unethical principles or practices of the study are revealed or suspected;
 - * it becomes apparent that any relevant information was withheld from the FNASREC or that information has been false or misrepresented;
 - * submission of the annual (or otherwise stipulated) monitoring report, the required amendments, or reporting of adverse events or incidents was not done in a timely manner and accurately; and / or
 - * new institutional rules, national legislation or international conventions deem it necessary.
- FNASREC can be contacted for further information or any report templates via Roelof.Burger@nwu.ac.za 018 299 4269

The FNASREC would like to remain at your service as scientist and researcher, and wishes you well with your study. Please do not hesitate to contact the FNASREC or the NWU-SCRE for any further enquiries or requests for assistance.

Yours sincerely,

Prof Roelof Burger
Chairperson Faculty of Natural and Agricultural Sciences Ethics Committee (FNASREC)

APPENDIX 3: LETTER OF CONFIRMATION OF PROFESSIONAL PROOFREADING

Olivier Language Practitioner
Editing and Translation Service

Date: 28 November 2022

Letter of confirmation of professional proofreading

Title: The sustainability of livelihoods of female-headed households: A case study of Zamdela, Sasolburg

Author: Ockert Jacobus Olivier

Student number: 11218711

Editor: Willemien Olivier

*This paper was proofread
by
a proofreader*

LETTER OF CONFIRMATION OF ENGLISH EDITING

This is to confirm that the paper with the provisional title, The sustainability of livelihoods of female-headed households: A case study of Zamdela, Sasolburg, to be submitted by Cobus Olivier of North-West University, has been edited for language by Olivier Language Practitioner, Willemien Olivier. The document needed only a few amendments. Neither the research content nor the author's intentions were altered in any way during the editing process.

The editor guarantees the quality of the English language in this paper, provided the editor's changes are accepted and further changes made to the paper are checked by the editor.

Willemien Olivier

Honours Degree Translation Studies (2017) UNISA
Editing and Translation Service: Olivier Language Practitioner since 2008

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APPENDIX 4: SOLEMN DECLARATION AND PERMISSION TO SUBMIT



NWU Higher Degrees Administration

SOLEMN DECLARATION AND PERMISSION TO SUBMIT

1. Solemn declaration by student

I, **Oockert Jacobus Olivier**

declare herewith that the thesis/dissertation/mini-dissertation entitled (exact registered/approved title),

The sustainability of livelihoods of female-headed households: A case study of Zamdela, Sasolburg

which I herewith submit to the North-West University is in compliance/partial compliance with the requirements set for the degree:

Master of Science in Geography and Environmental Management

is my own work, has been text-edited in accordance with the requirements and has not already been submitted to any other university.

LATE SUBMISSION: If a thesis/dissertation/mini-dissertation of a student is submitted after the deadline for submission, the period available for examination is limited. No guarantee can therefore be given (should the examiner reports be positive) that the degree will be conferred at the next applicable graduation ceremony. It may also imply that the student would have to re-register for the following academic year.

Ethics number: **NWU-01546-20-A9** ORCID: **0000-0003-2574-6557**

Signature of Student: **O J Olivier** Digitally signed by O J Olivier Date: 2022.11.20 13:19:10 +02'00' University Number: **1 1 2 1 8 7 1 1**

Signed on this **20** day of **November** of 20 **22**

2. Permission to submit and solemn declaration by supervisor/promoter

The undersigned declares that the thesis/dissertation/mini-dissertation:

- Complies with the A-rules and the technical requirements provided for in the Manual for Master's and Doctoral studies and in faculty rules;
- Has been checked by me for plagiarism (by making use of TurnItIn software for example) and a satisfactory report has been obtained, and;
- That the work was language edited before submission for examination.

Faculty specific requirements as per A-rules: 1.3.2, 4.3.2, 4.3.3, 4.4.2, 4.10.4, 5.3.2, 5.4.2,

5.10.2

- Complies with regards to faculty rules on submission or acceptance by an accredited scientific journal;
- Complies with regards to faculty rules on peer reviewed conference proceedings;
- The student is hereby granted permission to submit his/her mini-dissertation/ dissertation/thesis for examination.

Signatures of supervisor(s) and Promoter(s): (only compulsory in cases where there are co- or assistant- supervisor(s/promoters)

Delia Ah Goo Digitally signed by Delia Ah Goo Date: 2022.11.28 11:41:44 +02'00'

Co-Supervisor/Co-Promoter

Assistant-Supervisor Assistant-Promoter

Original details: (10512187) M:\HDA Toolbox\Forms\Pdf fillable forms\13.Solemn Decl and Permission to submit exam copy.pdf 3 December. File reference: 7.1.11.3.2/5

APPENDIX 5: PARTICIPANT INFORMATION LETTER

Participant Information Sheet

Good morning. I am Cobus Olivier, a lecturer from North West University. I am doing research on sustainable livelihoods, and this is Mr. Siyabonga Hlophe the research assistant. The aim of the study is to investigate the sustainability of the livelihoods of female-headed households in Zamdela, Sasolburg, in order to gain a better understanding of poverty in South Africa.

I would like to invite you to participate in my Masters degree study on sustainable livelihoods. The title of my study is "Determining sustainable livelihoods used by female headed households in Zamdela." To reach the objectives of my study I need to interview female household heads. I would appreciate it if you would be willing to assist me in this aspect of the study.

I will provide you with the information you need to understand the study. You are welcome to ask questions at any time.

Interviews and group sessions will be conducted during which you will be asked to answer questions about your household's livelihoods. After the initial interviews, possible follow-up interviews may be conducted. Interviews and group sessions will last for approximately 90 minutes a session.

Participation in the study is voluntary and there is no direct benefit in participating in this study. The findings of the study will be shared with any participants on request. To improve knowledge and understanding of people's livelihoods the findings of the study will be shared through publications and conferences. The better the understanding of livelihoods are, the easier it is to strengthen people's livelihoods and standard of living.

Social distancing will be kept at all times and the researcher and research assistant will wear a mask at all times. Before the group session starts, everyone's hands will be sanitized.

Participation in the research is voluntary and you can withdraw from the research at any time. The information you provide will be treated confidentially and anonymously.

This study has been approved by the Faculty of Natural and Agricultural Sciences Ethics Committee of the North West University.

If you have any further questions about the research, please feel free to contact me at 081 305 5239 or cobus.olivier@nwu.ac.za. The supervisor of my study is Dr. Delia Ah Goo and her contact details are:

Tel: 016 9103457 or email: delia.ahgoo@nwu.ac.za.

Thank you for your time. It is highly appreciated.

APPENDIX 6: INFORMED CONSENT FORM

Informed consent form

Researcher: Mr. O J Olivier (Cobus)

Supervisor: Dr. Delia Ah Ghoo

Title of the study: The sustainability of livelihoods of female-headed households: A case study of Zamdela, Sasolburg

The purpose of the study and how it will be conducted has been explained to me. I have had the opportunity to ask questions about it and any questions I have asked, have been answered to my satisfaction.

I consent voluntarily to be a participant in this study and understand that I can withdraw at any time from the study.

I give permission that all the interviews and/or the group session in which I partake, may be audio-recorded. Yes/No (Encircled the appropriate option)

I have been informed that all information will be handled with anonymity and confidentiality . I was also informed on the possible risks and benefits of participating in the study.

Print Name of Participant _____

Signature of Participant _____

Date _____
Day/month/year