The influence of aspirations on changing livelihood strategies in rural households of Ndabakazi villages in the Eastern Cape.

Zantsi, Siphe (200805155)

Submitted in fulfilment of the requirements for the degree of Masters of Science in Agricultural Economics

Supervisor:
Prof. B.J Bester
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Abstract

The objective of this study is to explore the role of aspirations on changing livelihood strategies of rural households of Ndabakazi villages in the Eastern Cape. A sample of 80 respondents was chosen randomly for the household survey and semi-structured questionnaires were used to collect the data. Focus group discussions were also used to supplement the household survey. The data was descriptively analysed using a triangulation method. The findings show that social grants, mainly pensions and non-farm employment, and child support grants are the major sources of income. The majority of the households own five hectares of land and more, in which they grow crops only in gardens adjacent to their homes. However, 29% do not produce any crops at all. Farming contributes a small portion to the household income. The choice of farming is more powerful than the external factors. Interest in farming is minimal and can be related to the declining farming activities; therefore, household aspirations have an influence on changing livelihood aspirations.

In the case of the rural areas of Ndabakazi – as indeed in many other parts of South Africa - policies of rural development mostly take a top-down approach; as a result most of these policies do not become effective in achieving the intended outcome. Development practitioners should incorporate beneficiaries when planning so as to tailor the development initiatives with the aspirations of local people for them to be effective and achieve intended goals thus a bottom-up approach. The notion that rural household farming activities have declined because they lack inputs, farming implements other necessary support is not always true. Some households are not interested in farming and they cannot be forced.

Key words: Ndabakazi, household aspirations, livelihood strategies.
Declaration

I, Siphe Zantsi, hereby declare that all the contents of this document submitted in fulfilment of the requirements for the degree of Masters of Science in Agricultural Economics at the University of Fort Hare’s Faculty of Science and Agriculture has not been previously written or submitted for degree purposes in any other university and is my original work except where due acknowledgement has been made in the text.

Signature

Date 18 January 2016
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Chapter 1: Introduction

1.1 Background
Rural development and poverty reduction are among one of the major priorities that the South African government is trying to address. The government mandated itself to halve poverty by the year 2014 (Perret et. al., 2005; Phiri, 2009; Gumede, 2013), but that does not seem to have been achieved yet. In many of the rural development initiatives, the central questions are, who the poor are, where are they located and what they do to make a living? (Alemu, 2012; Perret et. al., 2005). Worldwide literature shows that most of the poor reside in rural areas and South Africa is no exception (Shackleton et. al., 2001; Manona, 2005; Tshuma, 2012; FAO, 2012). The answers to those questions lie in studying livelihood strategies, because it is not effective to provide an intervention if the problem or the need is not well known and understood; furthermore knowing the problem or need is not enough. Their background, asset possession and how people use the available resource and opportunities at their disposal to make a living form the foundation for planning and implementing an intervention (Timmermans, 2004).

A livelihood strategy is defined “as an organized set of lifestyle choices, goals and values, and activities influenced by biophysical, political/legal, economic, social, cultural, and psychological components and designed to secure an optimum quality of life for individuals and their families or social groups” (Walker et. al., 2001:298). It is a term used to denote the range and combination of activities and choices people make in order to achieve their livelihood objectives (Timmermans, 2004). Livelihood strategies are characterized by diversity and dynamicity (Ellis, 1998). Due to changes in asset possession, for example, it is rare to find a household relying solely on one livelihood strategy and if a household used to rely on livestock for survival, then if, due to drought and disease, they die, they have to find other alternatives for generating cash such as finding a job outside farming. In addition, events which occur within the household may result in changes in livelihood strategies, for example the death of the household head who was the bread winner in the household or the aging of the household head because as the household becomes old the asset availability in the household decreases normally and the household may now rely on pension money. Moreover, the factors mentioned in the definition change from time to time and from generation to generation and this clearly shows that a change is measured with respect to time frame. Another factor of concern regarding livelihood strategies is sustainability. According
to Perret et al. (2005):10 “a livelihood is sustainable when it can cope with and recover from stresses and shocks, and maintain or enhance its capabilities and assets both now and in the future, while not undermining the natural resource base”.

A “household” on the other hand is defined as a person or group of persons living together who make common provision for food or other essentials for living. It is often confused with “family”. However, these two are different as a household may consist of only one person while a “family” should contain at least two members. In addition, members of the “household” should not necessarily be related to each other (nuclear family) (UN statistics division, 2013).

In many rural areas of South Africa it can be observed that cultivation of large fields to a great extent has declined over the years while small backyard garden cultivation is declining to a lesser extent (Andrew & Fox, 2004). Livestock farming is also declining, particularly the large stock. Rural households like their urban counterparts, purchase most and produce less of their food (Baiphethi & Jacobs, 2009). Furthermore, ever since the transition to democracy migration from rural to urban areas has been increasing, thus the rural population is declining while the urban population is growing fast (Biyase, 2012).

The consequences of the above developments have been described by researchers and attributed to changes in how rural households make their living, in other words, their livelihood strategies. Research on changing livelihood strategies, internationally, regionally and locally, reveals that livelihood strategies are changing from land-based livelihood to non-farm livelihood (Francis, 2002, Ramutsindela, 2008; Daniels et al., 2013; Walker et al., 2001; Jacobs & Makaudze, 2009). The change in rural household livelihood strategies is a consequence of factors internal and external to a household (McDermott, 2006). Literature attributes the change in household livelihood strategies to many factors including increasing requirements for cash, changes in climatic conditions, change in technology, social pressure, level of education, employment opportunities, availability of labour, access to social infrastructure, the stage in the household development cycle and others (Tsolekile, 2007; Jacobs & Makaudze, 2009; Sandvik, 2011; Anim, 2011).

However, the major influence cited is the new policies which have been implemented after the democratically elected government took control (Aleme, 2012). The Reconstruction and Development Programme (RDP) which aimed to improve access to clean water, jobs, land, education, healthcare and public works was the major policy which led to the formation of
other policies which brought a huge change to rural livelihoods (Manona, 2005). These are mostly external factors and are the most cited factors causing the changes in livelihood strategies. In the past rural household livelihood strategies were farm or land-based and there were barriers preventing them from changing to non-farm livelihood strategies as result of the apartheid laws. These barriers included access to education, freedom of movement and access to social infrastructure (Alemu, 2012). When barriers were removed by the new democratically elected government changes in livelihood strategies were observed.

The above description suggests that livelihood strategies have changed from what they were many years ago, and the change is mostly attributed to factors external to a household. These include changes in asset possession, changes in opportunities (employment), changes in institutional factors and laws. The approach used to assess and describe the change is mostly conventional (Alemu, 2012; McDermott, 2006; Timmemans, 2004). It leaves out the influence of the household goals and desires, which are better known as aspirations. Aspirations are what a person or group strives to achieve in their lives and as such they shape and influence the choice of livelihood strategy. They are broad in the sense that for every area of life every individual or group has one or more aspirations. For example, a household might have specific aspirations for their children’s education, aspirations for a house of their dreams and family size. Overall, there is a change in how rural households make their living now and this change is influenced by many factors which are external and internal to the household.

1.2 Research problem
The above subsection has been hinting about the gap that exists regarding possible causes of changing livelihood strategies (influence of aspirations on changing livelihood strategies). This subsection explores that gap, explaining what it is and why it is important to study it. It also briefly describes the feasibility of finding the lacking information (problem).

There are two broad categories of factors causing changes to how rural households make their living, namely internal and external factors (McDermott, 2006). External factors include changes in economic, social, institutional and others, whilst internal factors include goals, desires and dreams of the household as well as change that take place within the household such as household structure, size and composition. Several studies on changing livelihood strategies have been concerned mostly about external factors. But this does not fully explain the reason rural households change their livelihood strategies because some households change their livelihood strategies more than others yet they are exposed to the same external
factors. So the role of internal factors (including aspirations) is often not described when explaining causes of changes in livelihood strategies.

The issue of considering aspirations on human development is emphasized more in the social systems approach to development. The social systems approach considers human development in terms of three universally present dimensions, namely: aspirational, abilities and contextual dimensions (Brown, 1999). The aspirational dimension is concerned about that which an individual, group, household or community strive to achieve. In addition, aspirations are defined as desires and goals of an individual, group or household. The second dimension is the abilities dimension; this relates to the potential of an individual or group to achieve their goals. The third dimension is the contextual dimension; this relates the person to himself and to the people around him and also his environment (Brown, 1999). These dimensions are interrelated in such a way that what happens to one dimension has a considerable effect on the other; therefore, they should be understood in terms of one another (Brown, 1999).

Why studying livelihood strategies important and how is it useful? It is useful because it provides critical information concerning the goals, choices and activities which matter to local people, thus contributing to better planning and decision making by policy makers (Walker et al., 2001). Furthermore, studying livelihood strategies and changes in them helps to identify important historical changes which have affected households; moreover, it reveals how households have responded or adapted to these changes. In addition, it reveals the values and future orientation of individuals or households (Masae et al., 2007). Studying livelihood strategies and changes in them is important for understanding how households perceive and respond to development as well as providing an indication of existing capacity to respond adaptively to policies, and, lastly, it allows development practitioners to take a closer look at how people interact with resources and institutions to construct a way of life (Jacobs & Makaudze, 2009).

From the definition of livelihood strategy and the social systems approach, a link between livelihood strategies and aspirations can be found. An individual requires a livelihood strategy to achieve his desires and goals, thus aspirations are the driving force of livelihood strategies although there are barriers which tend to limit one from realizing their aspirations. That relates more to the ability of an individual to achieve their goals. In addition aspirations are influenced by other factors; these include the context in which the individual lives. This
context encompasses personal beliefs, societal expectations, educational and other life opportunities and constraints, among many others (Leavy & Smith, 2010).

Overall, from the above description it can be concluded that there is a gap in knowledge about causal factors to changing livelihood strategies. This gap is on the role and influence of aspirations on changing livelihood strategies. It is useful to know the influence of aspiration on changing livelihood strategies because, according to the social systems approach, aspirations are one of the dimensions that should be considered for human development. If it is known what rural household livelihood strategies in the past were and what they are at present, as well as their aspirations, it is possible to find the influence of aspiration on the changing livelihood strategies, which is what this study seeks to achieve.

1.3 Objectives, hypothesis, data required and analysis method
The overall objective or the main objective of the research is to describe the influence of aspirations in changing livelihood strategies in rural households of Ndabakazi villages. To achieve this objective the study also looked at all other possible factors that are known to cause a change in livelihood strategies in order to draw meaningful conclusions. Furthermore, to achieve the principal problem of the research which in this case is stated as the overall objective Leedy & Ormrod (2010) argued that the best way is to break down the principal problem into sub-problems which are stated here as specific objectives. Unpacking the problem helps to simplify the research in such a way that when the sub problems (specific objectives) are addressed, the principal problem (overall objective) will also be addressed.

There were three specific objectives which the study sought to realise in order to achieve the overall objective. Below is the description of the objectives together with a brief description of how they will be addressed.

The first specific objective was to describe what the livelihood strategies are in the study area as well as how they have changed overtime. This specific objective sought to describe the activities that are used by rural households to make a living (at the time of data collection and in the past). Sources of income are needed to achieve this objective and this information was obtained from the household heads through survey questionnaires and group discussions with household heads. This data was then analysed using descriptive statistics. It was hypothesised that rural households rely on social grants, remittances and non-farm employment for a living, detailed information is provided in chapter 4.
The second specific objective was to identify external causes of changes in livelihood strategies. This specific objective sought to pick influential factors which are external to the household such as important events that have caused changes in household lives. Descriptive statistics was used to analyse the information. The relevant hypothesis was that rural households’ livelihood strategies are changing because of increasing requirements for cash, changes in climatic conditions, increasing cost of living, level of education, employment opportunities, availability of family labour and improvement in social infrastructure (access to clean water, electrification).

The last specific objective was to explore the role of internal factors specifically aspirations and household characteristics in changing livelihood strategies. To achieve this objective information about manifestation of the aspirations to the household was required. Education, areas of survival and preferred job opportunities are the major variables used to measure aspirations. To analyse this information a triangulation which is the use of a combination of research methods to double check the interpretation of data from different angles was used. Rural livelihood framework was used together with chi-square and descriptive analysis. Since it is exploratory in nature i.e. literature on it is relatively scarce if any, therefore there could not be a hypothesis but rather a question the study sought to answer was: what is the specific role that aspirations of the rural households have on changing livelihood strategies? This objective requires intensive qualitative information because aspirations are not quantifiable unless they are listed and that will not be helpful in achieving this objective. Measuring aspirations is quite challenging, however it is very important in closing the gap about livelihood change. There are very few studies, if any, that have looked the role of aspirations in accounting for the change in livelihood strategies. Therefore using a conventional econometric model will not be helpful in achieving this objective due to the nature of the study (requires intensive qualitative data), hence there is no conventional econometric model used in the study (in chapter four more details are provided for the methodology).

1.4 Significance of the study
This subsection highlights the rational of the study in the existing body of knowledge as well as the development, planning and policy implications.

One of the millennium development goals was to eradicate extreme poverty and hunger. Furthermore, the South African government is faced with the challenge of development. As the country is still developing, the challenge is more on the most marginalized and poor
former homelands which have been deprived of important assets and neglected by the former apartheid government. So far there have been several development initiatives that have been implemented both in pre- and post-apartheid; to mention a few: betterment planning, Farmer Support Programme (FSP), Massive food production, food security projects, Reconstruction and Development Programme (RDP), and National Growth and Development Strategy (NGDS). Many of them have not been successful in the sense that they have not achieved their broad goals. It can be argued using the social systems approach to development that, in order for development strategies to make a meaningful contribution to the group intended to, they should be tailored with aspirations, abilities and the context of the group or individual concerned. Several researchers have emphasized the importance of studying livelihood strategies and pointed out the importance of, knowing what rural households have (assets) and how they use these assets to make a living in the face of vulnerabilities. This offers a significant insight for planning a development strategy. One of the major duties of agricultural economists is to plan and recommend development initiatives and policies; therefore, studying livelihood strategies is a prerequisite for rural development.

1.4 Delineation and limitations of the study
The dissertation describes the influence of aspirations in rural households of Ndabakazi. In simple terms the research seeks to find out what the relationship is between rural households and farming and how this can be used to explain the decline in farming activities among rural households. Thus the research does not cover all household aspirations, only education and employment-related aspirations are covered. The research does not intend to make a comparison between the villages in the study but results are presented in villages just to demonstrate how the overall results came about; hence in other parts they are not presented per village.

1.5 Outline of the dissertation
The dissertation consists of seven chapters. Chapter two describes changes in livelihood strategies of rural households by comparing livelihood strategies used now and those that were used in the past. It goes further to give an account of the changes in livelihood strategies by describing the drivers of this change. The third chapter presents the conceptual framework guiding the dissertation. Chapter four describe in depth the methodologies used in the research. In the fifth chapter survey findings are presented followed by analysis in chapter six and, lastly, a summary and conclusions are drawn in the last chapter.
Chapter 2: Changes in livelihood strategies and factors influencing a change in livelihood strategies

2.0 Introduction
This chapter presents a review of the literature with regard to changes in livelihood strategies in rural households of South Africa. It starts off by identifying and classifying livelihood strategies. It further goes on to describe livelihood strategies that are commonly used as well as how, in the past, these strategies were used. The idea is to provide insight by making comparisons on how rural households used to make a living and how they do it in the present.

2.1 Overview and classification of livelihood strategies
In many rural areas of Africa households undertake a variety of economic activities to meet their daily basic needs (Ellis, 2000; SLSA, 2003; McDermott, 2006). Furthermore in rural South Africa people can obtain income from various sources. These include income from wages, salaries and commissions; from own businesses; from sale of farm produce and services; from remittances; and social grants (Alemu, 2012). Income forms a major part of livelihood strategies as individuals today rely on cash (Leibbrandt et al., 2000). The average literature (Alemu, 2012; Ellis 1998; and Barret, et al., 2001) suggests that there are three main broad categories of livelihood strategies which are: ‘farm’ which basically refers to livestock and crop production; ‘non-farm’ (non-agricultural income sources such as wage employment, self-employment and property income); and ‘non-labour’ which includes all income that is from non-labour. Such income includes state transfers in the form of social grants and remittances which are the transfers by migrant labourers to rural dwellers. It has to be understood that rural households rarely rely on only one livelihood strategy for a living but rather they combine different economic activities, thus there is livelihood diversification (Manona, 1999; Agergaard & Thomsen, 2006). The main livelihood strategy is selected by looking at the activity that contributes most to household income. Some researchers, however, seem to ignore the services and benefits that are generated by certain activities such as agricultural activities whereas they should add value to the service (Andrew et al., 2003; Gilimani, 2005).

2.2 Farming as a livelihood strategy
Farming is practiced in most rural areas of South Africa to a larger extent extensively and to a lesser extent intensively (Tshuma, 2012). The first is the most dominant form of farming in rural areas mainly by households for subsistence purposes, whereas the latter is practiced by a
few individuals mainly for commercial purposes. A vast majority of rural households in South Africa are involved in household agricultural production primarily for home consumption (Gilimani, 2005). The extensive producers are mainly white farmers and community projects which are supported by government as one of the forms of reducing poverty and food insecurity in rural areas among other things (Andrew et. al., 2003). Two activities constitute farming namely: crop and livestock rearing. Some researchers tend to focus on one side when referring to farming (crop production, for example) when making conclusions about declining agricultural activities. However, livestock is part of the farming activities that contribute significantly to both the rural economy and national economy. For example, livestock is the largest agricultural subsector; furthermore, the largest contributor of beef cattle is communal farming (National Department of Agriculture, 2006).

2.2.1 Livestock
Livestock fulfils a number of important roles or functions in the lives of rural communities in developing countries (Andrew & Fox 2004; Gilimani, 2005; Hebinck & Lent, 2007; Somoro, 2009). Their roles are categorized as for social, cultural and economic reasons. For example, livestock provides food, income, draught power and manure, and it serves as a store of wealth for nearly one billion poor people in developing countries (Upton, 2004). Apart from social and cultural objectives of keeping livestock, stock owners in developing areas have changed their objectives of keeping livestock, with the commercial objectives becoming increasingly more important. Nkosi & Kirsten (1993) reported that stock owners are beginning to see the economic value of keeping and selling livestock.

Livestock enterprise development for small-scale farmers is considered as a potential mechanism for generating income for many rural households, thereby alleviating poverty and improving the livelihoods of the rural poor (Upton, 2004). Livestock income goes towards buying things the farmers cannot make for themselves. These include paying for school fees, medicine and transport. Small stock with their higher rates of reproduction and growth can provide a regular source of income from sales, especially from milk and milk products like butter and cheese (Musemwa et. al., 2008).

It is difficult for poor households to access credit from financial institutions; therefore, livestock act as their capital investment. Moll (2005) and Hoddinott (2006) highlighted that the poor often do not have access to standard financial markets, including banks. Livestock offers an alternative for storing their wealth although there is risk; they provide a reasonably
robust hedge against inflation. Moreover, they can be sold and transformed into cash when needed. Similarly, keeping livestock is considered as an alternative form of insurance, providing the family with assets that can be sold in times of crisis (Upton, 2004).

Historically livestock has long been a major part of the rural economy. It fulfils a number of roles in making a living for rural communities, which are social, cultural and for food security. In the past livestock was primarily kept for rituals, draught power, and for social status (Hoddinott, 2006). Selling of livestock was rare; instead there was a form of empowering others through livestock called ‘loaning’. From what has been said on the role of livestock currently, a change can be observed regarding the role of livestock to rural livelihoods (Nkosi & Kirsten, 1993). The major difference in the use of livestock by rural households now compared with the past is that they were kept for social service and cultural purposes in the past and rural households relied on them mostly for their living in such a way that most household kept livestock and in large quantities. However, currently a decline in the numbers of livestock and the number of households keeping them has been cited by many researchers (Ngcaba, 2002; Andrew & Fox, 2004; Hebinck & Lent, 2007).

2.2.2 Crop production
According to the study conducted by Gilimani (2005) in the Eastern Cape and KwaZulu Natal, crop production is one of the main contributors to the livelihood of rural households. In South Africa in the former homelands, especially where climate is conducive for rain-fed cultivation, the majority of households in these areas are involved in crop production with other livelihood activities (Tregurtha, 2009). Furthermore, the importance of crop production to rural livelihoods is noted from the food security point of view and in generating income (Argegaard and Thomsen, 2006). Its role differs from household to household and from location to location. It is also argued that poor households are the ones that rely more on subsistence crop production (Baiphethi & Jacobs, 2009). The main crop grown is maize together with other food crops such as beans and vegetables. They are grown in small plots mainly for home consumption. The vegetables mostly grown are cabbage, spinach, tomatoes, carrots and pumpkin. Production of these by rural household is very important as a coping strategy although they contribute a small portion of household income (Gilimani, 2005). Mjonono et. al. (2009) argued that some households cultivate gardens to reduce household expenditure through food exchange while at the same time some rural households in some communities engaged in production for the market. Most of these appear to be subsistence producers selling food or cash crops to supplement household income. There are also some
reported cases of larger scale production for the market (Mjonono et al., 2009). A large survey conducted in KaNgwane and reported by Mjonono et al. (2009) indicates that the sale of crops makes a significant contribution to household income for the majority of rural households which employ a wide variety of livelihood strategies.

There is a link between livestock keeping and crop production in rural communities, as manure from stock is used to fertilise crop fields and animals, particularly cattle and donkeys, are used to plough the fields (Somoro, 2009).

A change in crop production between now and in the past can be measured through production and the area of land cultivated. From the above description it has been stated that rural households mostly cultivate backyard gardens and others do not cultivate at all. Furthermore, Baiphethi & Jacobs (2009) highlighted that rural households use to produce most of their food but currently that is not true. In addition, research shows that rural households relying on farming activities as their major source of income have been declining since the 1960s (Tregurtha, 2009). This trend is estimated to increase in future due to the influence of climate change (IPCC, 2012). The decline in crop production by rural households is attributed to a number of factors such as marketing challenges, obsolete infrastructure, availability of labour, and insufficient draught power animals, and this ultimately causes a change in livelihood strategies (Andrew et al., 2003). There is a general notion that youth view agriculture as a low paying activity due to the fact that the realisation of benefits takes a long time and this might also have an influence on this trend because when they establish their own households there are high chances that they will not engage themselves in agricultural activities (FAO, 2012).

2.3 Non-farm livelihood strategies
The aggregate literature is of the notion that the vast majority of rural residents rely mostly on non-farm sources for a living (Ngcaba, 2002; Baiphethi and Jacobs, 2009; Alemu, 2012; Daniels et al., 2013). Furthermore, non-farm sources account for 60-80% of rural household income (Daniels et al., 2013). This is not surprising as research claims that there is a decline in reliance on farming activities by rural households (Andrew & Fox, 2004; Hebinck & Lent, 2007). A study conducted by Alemu (2012) found that households who depend on non-farm activities for a living are better off than those who depend on farming activities, and this trend is not unique to South Africa: it is common in most sub-Saharan countries (Baiphethi & Jacobs, 2009).
Some literature (Ngcaba, 2002; Andrew & Fox, 2004; Baipethi & Jacobs, 2009) suggests that, historically, agriculture formed the basis for rural communities, as most black people were forced to be concentrated in the homelands, due to the pass laws which controlled the movement of citizens. Employment in cities, mainly in mines and other industries, was the common form of employment beside self-employment and other employment within the village such as building houses (Phiri, 2009). It was men (mostly) who had to leave home to seek for employment while the wife would look after children (Hebinck & Lent, 2007). This employment was used to supplement agricultural activities to buy consumer goods and to invest more in farming by buying more livestock. The notion that rural households used to produce most of their food suggests that agriculture was the major livelihood strategy for many rural households. Overall, as much as the non-farm employment was important to rural households as it put cash on the table, agricultural activities contributed the largest share to household income; hence it was regarded as the primary source of livelihood.

2.3.1 Wage employment
Wage employment refers to the income or remuneration from regular or casual employment (Leibbrandt et. al., 2000). Research by Alemu (2012) in livelihood strategies of rural households found that non-farm employment is the superior livelihood strategy, in which wage employment falls. Furthermore, Alemu (2012) found that wage earners are better off than other groups of household pursuing other livelihood strategies. The household earning wages are employed in government - some are educators, nurses, police officers - while the other group works as domestic workers, such cleaners, looking after livestock, and, lastly, there is the self-employed group hawking in town or selling vegetables and fruit (Alemu, 2012).

In the past rural areas were known to be the source of cheap labour especially for commercial farmers (Grub, 2005). Wage employment was to supplement the then commonly used livelihood strategy, i.e. agricultural activities. However, that has changed as agricultural activities are used to supplement social grants and wage income, and this is influenced mostly by the increased requirement for cash (Hebinck & Lent, 2007).

2.4 Non-labour livelihood strategies
This form of livelihood strategy is characterised by non-work. It includes state transfers in the form of social grants and migrant transfers (remittances). Most of its forms (child support, old
age, and care dependence grants) were introduced by government as a form of poverty alleviation strategy due to the alarming rate of unemployment in the country (SPII, 2012).

2.4.1 Social grants
In South Africa levels of inequality are quite high. This means the gap between the rich and the poor is very wide. This can be attributed to the high unemployment rate, particularly in rural areas where social grants are the main income for the majority of the households (Studies in Poverty and Inequality Institute –SPII, 2012).

Social grants are part of government programmes addressing poverty and inequality. There are six different categories of social grants in South Africa, namely: old age, war veteran, disability grant, foster care grant, dependence grant and child support grant (Neves et. al., 2009). The old age grant is the one on which the government spends the most and it also has the highest number of recipients followed by the child support grant, the care disability grant, the foster care and, lastly, the war veteran grant. It is clear that the most common grants are old age and the child support grants (Lekezwa, 2011; Gumede, 2013). As far as the rural household distribution is concerned, a significant proportion of rural households are pensioners living with grandchildren; the middle age group is the smallest, with most having migrated to urban areas to seek employment.

According to Lekezwa (2011), social grants have a positive impact in reducing poverty although their impact is not huge simple because the rate of increase is far beyond that of the inflation rate. Furthermore, it is reported that more than 30% of households in South Africa depend on social grants as their main source of income, bearing in mind that a considerable percentage of the household income of the poor is spent on food. This better explains the contribution of social grants to food security. According to Neves et. al., (2009) social grants help in decreasing the gap between the poor and the rich by 49%. Social grants also elevate welfare, consumption and access to social services such as health and education. Moreover, social grants generate potential economic benefits, such as improving recipients’ ability to manage risk and insecurity, facilitating saving and investment, and supporting the development of local markets. In addition, social grants help to empower recipients in a social context (Neves et. al., 2009). Social grants also facilitate investments in human capital (nutrition and schooling), along with investments in productive assets and activities. Finally, social grants enable recipients to engage with credit markets on generally more favourable terms (SPII, 2012).
Historically social grants (particularly the old age grant) have long been playing a significant role in wellbeing of the rural household (Manona, 1999). It is, however, reported that prior to 1994 (during Apartheid) the most common form of social grants which were eligible to black South Africans were the old age grant and the care dependency grant. These grants were, however, not paid monthly as they are now (Lekezwa, 2011). Another issue that has to be noted is the decline in employment. According to Leibbrandt et. al. (2000), this started in the late 1990s and continued to increase up to now. It is one of the burning issues that the government is trying to address. Lekezwa (2011) indicated that the high unemployment rate and the development plans of the democratically elected government introduced other forms of social grants, namely war veteran, foster care and child support grants. These changes in social grants have ultimately led to changes in the livelihood of the rural households. Due to lack of employment, social grants have now become the most dominant source of income for rural households, bearing in mind that a significant proportion of the income of the poor is spent on food (Baiphethi & Jacobs, 2009). This better explains that social grants have also an important role to play in the food security of the rural households.

### 2.4.2 Remittances

Remittances are the transfer of money by migrants to their households from their destinations or the savings they bring or send home (Biyase, 2012). These vary from one household to another and within households depending on how vulnerable the household is with respect to poverty and need for cash. They also depend on the income from migrant workers, and these remittances provide a link between the migrant and the relatives left behind; for this reason migration is closely linked to remittances (Cadavid, 2004).

The flow of remittances is from urban to rural areas. This is not surprising considering the findings that the unemployment rate is relatively higher in rural areas than in urban areas and also due to the fact that there are more industries in urban areas; therefore, more people from urban areas are employed (Rwelamira & Kirsten, 2003). According to Biyase (2012), changes in remittance income alone accounted for 10% of household transition into and out of poverty between 1993 and 1998. Remittances provide a significant proportion of the rural income. It is estimated that 32% of the rural income is made up of remittances (Rwelamira & Kirsten, 2003).

Ever since the transition to democracy in South Africa, strict measures which were constraining black people from migrating to cities have been abolished and there has been a
substantial increase of migration from rural to urban areas. This has led to a decline in rural population and a rapid increase in urban populations (Manona, 1999; Cadavid, 2004). This has strongly influence the changes in remittances given the fact that most people migrate to find employment and that urban areas provide better employment opportunities. However, the high unemployment rate threatens the importance of remittances.

Historically, men as the head of the household were responsible for taking care of the family, i.e. putting food on the table. They worked mostly in mines. Only the few educated ones remained in the villages working in government as educators and other employment in government. Even young adult men were urged to go to the mines in order to start their own families (Manona, 1999). Africans are the biggest group of remittance recipients in South Africa and they have always been, while African women and parents are the biggest group of recipients (Cadavid, 2004).

Given the high unemployment rate, the abolishment of pass laws and high migration rate, and the fact that migration is encouraged by poverty, it can be concluded that the rate and quantity of remittances have increased. This change can be linked with the changes in livelihood strategies.

2.5 Factors influencing a change in livelihood strategies
A livelihood is made up various activities and assets, including material capital, human capital and financial assets. These factors require strategies to combine them. The decision for a household to pursue a certain livelihood strategy is dynamic; it is influenced by a change in relationship between individuals within a society, opportunities for access and ability to make use of the opportunities in order to make a living (Walker et. al., 2001). From the definition of a livelihood strategy it was mentioned that a livelihood is derived from biophysical, social, political, economic, social, and cultural and psychological factors. Furthermore, the change in livelihood strategies is regarded as an adaptive response to changes in the above mentioned factors (Walker et. al., 2001). Two broad factors are cited for the changes in livelihood strategies, namely endogenous and exogenous factors to a household (McDermott, 2006). One thing that we should keep in mind is that the livelihood strategies continue to change from land-based to non-farm strategies. This sub-section describes the drivers behind this change.
2.5.1 Exogenous factors

2.5.1.1 Increased requirements for cash

The notion that rural households used to produce most of their food and the increasing literature on the knowledge that the poor spent most of their income on food - as much as 60% - better explains that rural households did not relied mainly in cash in the past (Matshe, 2009), while the barter trade and kinship among rural communities where one household would exchange maize for potatoes also made it simpler for them to use less cash (Gilimani, 2005). The food that was produced was sufficient for the whole household all the year round, in such a way that it would last until the next harvest was ready for consumption. Another important trade besides barter trade was the trade that occurred between rural households and the then white settlers who owned shops, where rural households would exchange their harvest, usually maize, for consumer goods in the retail stores. Even in the case of emergency cases such as death, rural households would exchange livestock for necessary goods required for the funeral, such as a coffin. Moreover, even inputs such seeds were taken from the previous harvest and for fertilisation manure was used and draught power for ploughing and weeding. In addition, labour for weeding and harvesting, if hired, was paid for with the harvest (maize, beans, pumpkins, melons, etc.) (Andrew et. al., 2003; Hebinck & Lent, 2007).

However, currently things have changed; households require cash for food, travelling, clothing, electricity and for communication purposes such as airtime. As opposed to the past, rural households now purchase farming inputs (seeds, fertiliser, etc.) (Baiphethi & Jacobs, 2009). The hired labour for weeding is paid; some households even hire labour for looking after livestock since children now attend school on a regular basis (Andrew & Fox, 2004; Hebinck & Lent, 2007). The evidence of this is that less than 10% of the rural households use agriculture as a main source of income (Baiphethi & Jacobs, 2009 and Daniels et al., 2013).

2.5.1.2 Level of education

The process of teaching and learning or transfer of knowledge from one individual or group to another is how education is defined by Sandvik (2011). Furthermore education can be formal or informal; in this context focus will be on the formal education. Education is viewed as a tool to enable individuals to acquire skills which will enable them to find decent employment and acquire assets thus reducing vulnerability and increasing the standard of living and most importantly, letting people out of poverty (Ellis, 1998).
According to the Department of Education report (2001), the level of education in South Africa in the past was very low especially among the black community which was concentrated in rural areas. This is credited to the apartheid laws and policies which were in favour of whites. To mention the major one, the Bantu education forced learners to be taught in Afrikaans in every subject. Another common reason in the former homelands is that first people in rural areas relied mostly agriculture, and children were used to look after stock, cattle, sheep and goats. After the transition to democracy, the education system has been the first priority and equalised for every race. Although it has not been high, the level of education has increased. Literature (Matshe, 2009; Baiphethi & Jacobs, 2009; Alemu, 2012) suggests that better off households in rural areas are the educated ones. This gives a clear insight that education is directly linked to livelihood strategies pursued by rural households and that changes in education have great potential with regard to the activities used by households to meet their basic needs.

2.5.1.3 Employment opportunities
According to the Development Bank of Southern Africa (DBSA, 2011), South Africa is one of the leading nations in terms of unemployment rate; in 2010 it was estimated to be around 25%. The same author went further highlighting that, of this percentage, a significant proportion is from the rural dwellers and young people. The definition of unemployment encompasses the issue of willingness. Although the present generation have better access to education than the one before democracy, the trends of unemployment continue to increase. This illustrates that it is either the education system is not equipping people with necessary skills needed by the industries or the industries do not create enough employment. Unemployment in South Africa is gender and race related (DBSA, 2011; Tshuma, 2012). It is highest among females, the black population and youth. The fact that it is race related better explains that it is rural as the majority of the black population is found in rural areas. This is also highlighted by evidence from the literature (Perret, 2001; Matshe, 2009; Alemu, 2012) which states that the majority of households in rural areas rely on social grants for a living, since there are fewer employment opportunities.

2.5.1.4 Availability of labour
Citing from the existing body of knowledge (Manona, 1999; Ngcaba, 2002; Andrew & Fox, 2004; Hebinck & Lent, 2007; Alemu, 2012) that farming activities as a livelihood strategy in rural households is declining, the unavailability of family labour has been mentioned as one of the reasons field crop production is abandoned. This is explained by the massive number
of active rural youth who leave rural areas in search of employment elsewhere in the country, most of the time in urban areas (Tregurtha, 2009). This is a result of the inability of rural areas to provide employment opportunities for its population. Historically rural areas were the main source of agricultural labour which was regarded as the cheapest labour (Grub, 2005). Family labour to a large extent was used and to a lesser extent is still the most common used labour by subsistence farmers (Andrew & Fox, 2004; Andrew et. al., 2003). However, this is greatly affected by the prevalence of disease such as HIV/AIDS and the prioritisation of education as opposed to the past where children were used in most of the farming activities and also the perception of youth towards agriculture - they regard it as a dirty work job (Anim, 2011).

These factors and others make it difficult for rural households to manage field crop production and, in turn decreasing the dependence on agriculture as a livelihood strategy. Subsistence farming is labour intensive, hence they tend to divert their livelihood strategies to rely mostly on non-farming sources and less on agricultural activities (Gilimani, 2005; ECA, 2006). Furthermore, the declining average family size occurring in most rural areas as a result of migration, and the change in family structure where many households are made up of pensioners and grandchildren who cannot manage all the farming related activities on their own are some of the reasons rural households changed their livelihood strategies by cultivating only home gardens adjacent to their homesteads (Hebinck & Lent, 2007).

2.5.1.5 Impact of HIV/AIDS

The impact of the HIV/AIDS pandemic is the matter that is receiving more attention in South Africa (Langeni, 2012). Mitigation and the reduction of the pandemic was one of the millennium development goals, among others. South Africa is the leading nation in terms of the number of infected individuals (Drimie, 2002; Langeni, 2012). Furthermore, a few years later after the transition to democracy the rate of infection of the pandemic increased (Langeni, 2012). Langeni (2012) also argued that in 2008 the number of infected individuals had increased by 20% more than that recorded in 2000. The impact of the pandemic has had a serious implication for the livelihood strategies and their dynamics (Economic Commission for Africa, 2006). Firstly, the majority of households in rural areas are engaged in one or more agricultural activities (Slater & Wiggins, 2005; Tshuma, 2012). On the one hand, it is known that subsistence farming is labour intensive and much dependent on family labour due to its nature (resource poor) (Economic Commission for Africa-ECA, 2006). On the other
hand, it is cited that the pandemic affects the most active working class aged between 15 and 49. This class, besides being active in work, is also sexually active which is one way and the most common way in which the virus spreads (Langeni, 2012).

Migration is also included in the influence of spreading the disease as the majority of the rural population migrate to cities to seek for greener pastures (Andrew et. al., 2003; FAO, 2012). Secondly, research articulates a direct link between poverty and spreading of the virus (ECA, 2006). Furthermore, the poor are said to be more vulnerable to the pandemic than any other group; this is so because of the lack of literacy/knowledge about ways of protecting themselves and ways in which the virus spreads. Widows and young girls are more prone to exchange of sex for money or gifts (Langeni, 2012). The other issue is that of teenage pregnancy which has increased at an alarming rate. This reveals the practice of unprotected sex (De Waal & Whiteside, 2003). Relating the virus to livelihood strategies, the money that was intended for food and other social needs because of the pandemic virus it is now diverted to medicine and the other active family members who were supposed to be working will spend their time taking care of the sick family member. The prevalence of HIV/AIDS affect the incomes of the households as well as remittances as it affects mostly the economically active group and ultimately affects the flow of remittances to the rural areas. These sources of income are important in rural households because they give them buying power for farming inputs. In this way the households’ livelihood strategies change and they then depend on state transfers in the form of social grants (Drimie, 2002).

2.5.1.6 Social pressure (life style)
Life style is defined by Tsolekile (2007) as a way of living of individuals, households and societies, they manifest it physical, psychological and social and economic environment on daily basis. Historically rural areas have been the most under developed regions; these areas lacked the necessary basic services such as electricity, clean water and safe housing (Agegaard & Thomsen, 2006). However, the democratic government, through the policies of rural development, is trying to address the matter. In some rural areas these basic services have been made available (Manona, 2005). The availability of these basic services results in changes in daily activities of the rural residents; these include fetching water from the rivers, going long distances to cultivate large fields. Instead, time is spend watching television and other modern activities which leads to changes in aspirations.
2.5.1.7 Climate change
Climate change is one of the greatest challenges of the 21st century; globally the evidence of climate change is certain (IPCC, 2012). The most vulnerable countries are the underdeveloped and developing countries most of which are found in Africa. These are vulnerable because the majority of citizens are relatively poor and live below the poverty line (Quinn et al., 2011). Research highlights that the majority of the poor reside in rural areas; in South Africa the same is true (Shackleton et al., 2001; Manona, 2005; Tshuma, 2012). In the past rural households primarily relied on agricultural activities to make their living; however, that has changed (Hebinck & Lent, 2007; Alemu, 2012; Daniels et al., 2013).

The most evidence of climate change is the unreliability of rainfall and high temperatures, drought, and high occurrence of hail storms (IPCC, 2012). These highly affect agricultural activities as they are mostly dependent on climate over which we have no control, thus there is high risk and uncertainty in relying on agricultural production. On one side literature highlights that rural livelihood strategies are changing from land-based strategies to non-farm strategies (Hebinck & Lent, 2007; Alemu, 2012; Daniels et al., 2013). Climate has an influence on this change due to the high risk involved. In most of the studies highlighting decline in agricultural activities (Ngcaba, 2002; Andrew & Fox, 2004; Hebinck & Lent, 2007) the issue of unreliability of rainfall has been cited among other reasons for abandoning field cultivation. The influence of climate also impacts on the issue of sustainability of agriculture as a livelihood strategy; therefore, the higher the risk the more households will rely less on the strategy which is thus the general trend.

2.5.1.8 Influence of new policies
In its attempt to address the inequalities of apartheid the South African government has adopted a number of macroeconomic frameworks since the transition to the democratically elected government in 1994. These include the Reconstruction and Development Programme (RDP) in 1994, the National Growth and Development Strategy (NGDS) in 1996, the Growth Employment and Redistribution Strategy (GEAR) in 1996, and later a Medium Term Strategic Framework (MTSF) (Manona, 2005).

The Reconstruction and Development Programme was the second major government policy document during South Africa’s transition to democracy in 1994. The major objective of the RDP was to reduce poverty affecting the majority of people especially in rural communities, thereby rectifying the inequalities and injustices of the past. Access to water, jobs, land,
education, healthcare and public works were among the priorities highlighted in the RDP (Gumede, 2013).

After the RDP, in 1996 the Growth, Employment and Redistribution (GEAR) programme was introduced by the Department of Finance, although it did not follow the exact goals of the RDP. Its major goals were to create employment and economic growth through reduction in the amount of debt South Africa must pay back each year on loans (Manona, 2005). The other policy introduced was the Medium Term Strategic Framework. Its main focus is on rural development. It was strengthened by the introduction of the Comprehensive Rural Development Programme (CRDP) which was intended for agrarian transformation, rural development and land reform (Manona, 2005).

These policies have a great impact on the way households make a living. As their essence was to provide a better life, more especially for the previously disadvantaged group which is the black population mostly found in rural areas. However, different scholars like Tsolekile (2007), and Agergaard and Thomsen (2006) argue that they at some point promoted urbanisation which changed the aspirations of rural people, hence they tend to rely mostly on non-farm activities to make a living.

2.5.2 Endogenous factors

2.5.2.1 Events that occur within the household
One of the drivers of change in livelihood strategies is events that occur within the household (McDermott, 2006). These events include the death of the household head or the bread winner in the household. In cases (mostly) where only the head of the household or only one member of the household is working, this leaves the other members with no option but to seek other means of making a living and in most case this may not be in the same category as the deceased member, for example, the death of the household head working in a non-farm job as a wage earner, with the current situation of the high unemployment rate occurring in the country, other household members may not necessarily find work as wage earners. A similar case to this is retrenchment or that of the loss of a job, which may lead to one finding other means of living and again it may not be in the same category. For example, retrenchments from mines which occurred mostly during the early 1990s where most of the migrant labour from the former Transkei and Ciskei, mainly household heads, lost their jobs and had to find other means of living; that is where the change of livelihood strategies comes in.
The other case is the aging of household heads. Usually household head(s) seek a form of employment or income generating activity so to speak when they are still physically active (Hebinck & Lent, 2007) but there is the aging time when they are no longer physically active; usually they survive with savings (the least) but not all are lucky to do so, especially rural households in which the majority are; poor in such a case they may be eligible for a state transfer in the form of an old age social grant. In that way they have to change their livelihood strategies.

All these cases sometimes lead to a decline in one form or another in livelihood assets, hence it result in a change of livelihood strategy. Remember livelihood strategy change is an adaptive response to changes in livelihood assets (Walker et al., 2001). For example in the past where rural households relied mostly on agricultural activities, loss of employment meant declining capital assets and the household would not be investing more on buying more livestock. Furthermore, in the case of the death of the household head (male) this may mean a decline in family labour management. Based on the studies investigated about the declining agricultural activities (Ngcaba, 2002; Andrew and Fox, 2004; Hebinck & Lent, 2007) the death of a household head (male) is cited as a reason for moving to garden cultivation and abandoning fields.

2.5.2.2 Aspirations
Aspirations are the desires, aims, objectives, ambitions or goals. They differ between individuals, group or household (Brown, 2000) because each individual, group or household is characterised by uniqueness; for example, although households may be of the same race, live in the same location, and work in the same environment they may not necessarily have the same goals about life hence their aspirations may differ. These are regarded as the drivers of life in the sense that they are what individuals, groups or households strive to achieve (Brown, 2000).

Experience elsewhere (Thailand) reveals that households or individuals tend to limit their goals to a level which they think may be attainable for them. Making an example for the ambition to have a good job, this requires a certain education qualification and social connections; therefore, poor household that do not meet these requirements adjust their ambitions to a lower level of just having a job (Masea et al., 2007). This is what Ackoff et al. (2006) termed as separating ends meet from planning which will be described later in the next chapter (conceptual framework). This is where one first thinks about the means of
achieving the goal before having the goal; meaning their goals are set with reality constraint in mind thus necessary skills required to achieve that goal. Walker et. al (2001) in Indonesia found that education for children is major important aspiration to the parents. Some parents were willing to even sell their land in order to pay for their kids’ education. It was also noted that land based livelihood strategies or activities were not in the interest of their children as parents reported.

While aspirations differ between individuals, groups or households, it was noted that these are common and important among households: areas of survival, good job, consumption, education, family, place and social status (Masae et. al.,2007 ; Leavy & Smith, 2010). Aspirations are also influenced by other factors such as culture, exposure to different environments, for example aspirations of a rural household owning a television who see how civilised people live, may not be the same as for a rural household without television or any form of information communication technology (ICT). Now that many people in rural areas of South Africa have access to ICT, mobile phones, televisions and radios (Fourie, 2008) that means also their aspirations change. Changing aspirations changes lifestyles: they want to buy convenient foods as opposed to traditional meals and do certain modern activities.

Aspirations are an important driver of the livelihoods both rural and urban household, individuals or group. There is very limited literature on aspirations and livelihood change. However, this is required in closing the gap in knowledge about what drives the change in rural household livelihood strategies.

2.6 Concluding remarks
In wrapping up, this chapter has been reviewing literature on commonly used livelihood strategies and livelihood strategies that were commonly used in the past as well as the factors driving the change. It started off by classifying livelihood strategies into three broad categories: a livelihood that is made by farming activities (crop and livestock production), non-farm livelihood strategies which include income derived from wage employment outside agriculture and self-employment, then the last category is non-labour that is made by state transfers and migrant transfers.

The main change is that rural households now rely on non-farm and non-labour livelihood strategies to make their living. This does not mean, however, they do not practice farming activities but what it means is that non-farm and non-labour strategies make the largest
contribution towards the household needs and income. This is on the contrary to the past where rural households used farming as a major livelihood strategy and supplemented it with non-labour and non-farm strategies.

The change in livelihood strategies is influenced by several factors. These factors are categorised into two groups, endogenous and exogenous factors. The exogeneous factors include increasing requirements for cash, level of education, employment opportunities, availability of labour, impact of HIV/AIDS, social pressure, the impact of climate change and the influence of new policies. Endogeneous factors include events that occur within the household such as the death of the household head and aspirations.
Chapter 3: Conceptual framework reflecting possible influence of aspirations on livelihoods

3.0 Introduction
This chapter presents the conceptual framework that is adopted in the dissertation. This facilitates the organization of the dissertation and serves as a guiding principle of this research. It familiarizes the reader with important terms used in the research and how they relate to each other and to the sample studied. Thus the conceptual framework provides logic for the dissertation. The theoretical background of how the framework was developed is provided.

3.1 Sustainable livelihood framework (SLF)
Firstly, the sustainable livelihood framework which was developed by English researchers (Chambers & Conway, 1991) in the early 1990s, which has been widely adopted by researchers and development agencies in developed and developing countries. It is the theoretical framework which seeks to make a meaningful relationship between livelihood assets, livelihood strategies together with policies and institution and livelihood outcomes (Timmermans, 2004). It is based on the five livelihood assets, social capital, natural capital, physical capital, human and financial capital as shown in figure 1. These assets form the foundation of livelihoods; it is by making use of these assets that a livelihood outcome can be achieved. However, attainment and use of these assets affected by Policies, Laws and institutions and further by natural hazards which are referred as Vulnerability context. The availability of the livelihood assets together with institutions determine which livelihood strategy will be pursued as well as the outcome.

The main objective of the SLF is to provide insight and links to how rural households use the resources available in their disposal in the face of vulnerability and institutions, culture and laws to choose livelihood strategy in order to achieve the livelihood outcomes. It accepts that households are rational in their decision making model. It also accepts the interaction that exists between livelihood resources, institutions, culture, laws, strategies and outcomes. Therefore, it provides a basis for understanding livelihoods and critically thinking about them.

A typical Livelihood Framework is depicted in Figure 1, below. It illustrates the argument that the use of several types of the household’s “livelihood assets” combine with the
institutional environment (e.g. policies, institutions and processes) to influence the household’s livelihood strategies, resulting in its “livelihood outcomes” (McDermott, 2006).

Figure 1: Sustainable livelihood framework
Source: McDermott, 2006

However, the typical SLF has its limitations. By its nature it is too general; it can be used in any livelihood research and it can be interpreted in various ways to reach different conclusions. It does not consider the influence of aspirations on the choice of livelihood strategy; instead it only considers the influence of institutions, culture and beliefs. Even though it can be argued that aspirations are encompassed in the livelihood outcome, the listed livelihood outcomes do not necessarily reflect the aspirations of rural households as aspirations differ between households. Furthermore, it emphasizes the point that the choice of livelihood strategy is driven by the vulnerability context (Timmermans, 2004). Moreover, it can be argued that SLF uses a typical conventional approach in analysing the way rural households construct their way of living. Many studies on livelihoods and changing livelihood strategies of rural households both internationally and locally have been using SLF; as result, they all apply the conventional approach to changing livelihood strategies. On one side local research emphasize the influence of new policies which have been implemented after the dawn of democracy. Therefore, their conclusions about factors causing rural households to change their livelihood strategies do not reflect the complete picture of the driving factors in changing rural livelihoods.
3.2 Household development cycle

Another useful approach which is worth looking at when studying changes in livelihood strategies is the household development cycle (McDermott, 2006). The cycle involves a series of stages, namely: the establishment phase where the household may be still dependent on the parental group. The second phase is expansion, where the new household becomes more independent and children are born. Thirdly, consolidation, which involves the growth of the household and to its pinnacle point, children have become adults and this is the most advanced stage a household reaches where labour and capital are most abundant.

The fourth stage is one of dispersion or fission, where the children of the household move out and to live their own households and, therefore, no longer contribute labour and/or capital in the form of regular remittances to the household. The fifth and final stage is one of decline where the households’ labour availability, earning potential and asset base decreases (McDermott, 2006).

The approach is useful in addressing the argument that arises that though research may find factors influencing the changes in rural household livelihood strategies, the household stage in the development cycle is often not considered. It can be argued that households in different stages in the development cycle may respond differently to changes in the external environment, i.e. changes in economic stability, changes in technology, changes in policies and so forth. Furthermore, as we have seen in SLF that assets form the basis on which livelihoods are based. Therefore, households in different stages of the development cycle differ from one another in terms of asset possession; therefore, the changes in household livelihood strategies may be influenced by the stage in the development cycle and not necessarily by a change in the external environment. Overall this suggests that the measure of change in livelihood strategy is not influenced only by the external environment. The stage in the household development cycle must also be considered in dictating influential factors on rural household changing livelihood strategies in order to reflect the true picture because the unit of analysis (household) is not always homogeneous.

In addition, it must be taken into consideration that the stages in the household development cycle may differ between regions and cultures. Moreover, there have been emerging factors over time which disrupts the pattern of the cycle. These include the issue of HIV/AIDS pandemic which leads to child-headed households and thus it may not be useful for this research.
3.3 Expansionist systems approach
In taking the discussion further, it is important to look at the systems approach. The systems approach emphasizes the notion of interaction between elements and sub-systems in a system. The first one was developed by Dillon (1997), who was then the professor in the University of New England from the late 1960s to the early 1980s. He promoted the notion that farm household research which is similar in some cases to rural household research should be based on an expansionist systems approach rather than a reductionist mechanistic approach. His point of view was that a farm household is a system and that in order to study it research should not study its sub-system alone without considering other sub-systems and their influence on the whole system. He further stated that the system rather be studied as a whole and how it is influenced by the external environment and other systems. He also emphasized the elements of purposiveness, complexity and subjectivity in household systems. In his latest work he then studied pure subsistence farming systems. However his point of view has not found its way to the SLF.

3.4 Social systems approach
Another systems approach is the social systems approach. This approach considers human development in terms of three universal dimensions, namely aspiration, contextual and abilities dimension (Brown 1999). It suggests that man is driven by his goals and desires within his context in the cosmic environment to use his abilities in order to achieve his goals. It further emphasizes the issue of expansionism, that these dimensions should be understood in terms of one another i.e. the system (Brown, 2000).

![The Social Systems Approach](image)

**Figure 2: Social systems approach**
Source: Adapted from Brown, 2000
This is similar to Dillon’s expansionist systems approach as they both promote the understanding of the whole system rather than sub-systems alone. A direct comparison, however, cannot be made since the objectives of these systems are not necessarily the same and it is not the intention of the research to make a comparison but to adopt a way of thinking.

3.5 Idealisation
Idealization is another useful model for constructing ideas and planning which was developed by Ackoff et al. (2006). It separates ends planning, i.e. what is desired, from means planning, that is, how to achieve the desires. The model avoids the limitation that comes naturally to the reality constraints. It suggests that we have to think about how to achieve our goals after having them first, not the other way around. It further states that we cannot clearly state what we want if we know we have constraints. In addition, it emphasizes the importance of studying the system as a whole rather than sub-systems (Ackoff et al., 2006).

Overall the idealization model emphasizes the drawing up of aspirations, stating them clearly without first thinking about the means of achieving them. This brings another useful idea to our knowledge, i.e. to carefully know our goals. From this description our primary goals differ from the secondary goals, that is, those formulated with reality constraints in mind. These theories and frameworks have provided the grounds for our thinking; now we can develop a conceptual framework which blends all these reviewed frameworks and systems. This framework will try to address all the limitations of the reviewed frameworks and build on their strengths for the context and nature of this dissertation.

3.6 Rural livelihood framework
On the basis of the arguments presented above, an improved Rural Livelihoods Framework has been developed as part of this study. It is presented in figure 3, below.
This framework suggests that the main driving force of livelihoods begins with aspirations, which are affected by the external environment and the livelihood assets available from the household as argued by Brown (2000). The external environment represents the context in which the household lives and exposure to social infrastructure, while the livelihood assets represent resources and assets available for the household’s disposal. They enable the attainment of a livelihood outcome which is a livelihood strategy. These assets include human capital, financial capital, natural resources, and social and physical capital (Chambers & Conway 1991). Access to these resources is influenced by the external environment, institutions and policies, culture and beliefs. Then the access to livelihood resources together with aspirations and policies influence the choice of livelihood strategy; for example, if a household has no skills and education, it is limited to certain livelihood strategies. The livelihood strategy also represents the abilities dimension of the social systems approach. Finally, the livelihood strategy influences the livelihood outcomes as some livelihood strategies are not sufficient and sustainable, hence the household turns to use more than one livelihood strategy.
3.7 Methods used in similar studies
This study appreciates the work done by other researchers as they provided the platform for thinking and planning for this dissertation. This subsection provides a review of related and closely related previous studies in relation to the methods that they have used to gather and interpret information. Firstly, there is a study by Alemu (2012) which looked at livelihood strategies in rural South Africa with implications for poverty alleviation. The study classified livelihood strategies and found the dominant one and then related the classes to welfare. In doing so it used a two test approach. In classifying the livelihood strategy the household consumption expenditure was used over per capita income consumption for two reasons: respondents are not comfortable to disclose their income for a number of reasons, and income is susceptible to many fluctuations. The stochastic dominant test was used to determine the dominant and superior livelihood strategy. The multinomial regression model was also used to check factors that prevented the rural household from pursuing high returning livelihood strategies.

Another similar study was conducted in Molas, Indonesia, about livelihood strategies in community planning (Walker et. al., 2001). The study used the sustainable livelihood approach as an assessment method in the community with the major objective of determining the influence of tourism which was in the early stages of introduction in the area over farming and fishery which were the main livelihood strategies. It used a rural appraisal to gather data accompanied by systematic observation, mapping history and current land use practices.

Frederiksen et. al. (1998) used the same approach as Walker et al.,(2001) in determining the changes in livelihood strategies and land use practices in rural areas in relation to upgraded infrastructure in Kampung Gumbang. He also used rural appraisal, both rapid and participatory rural appraisal, since it is a cost effective, time saving method, while at the same time it is a way of getting indigenous knowledge. McDermott (2006) in his study of assessing changes in livelihood strategies in two contrasting environments applied a retrospective approach which basically relies on memory recall of the respondents about changes in their livelihood strategies with a length of the recalling period of more than 10 years. The approach is advantageous in that it allows for understanding of a change in one sitting, which makes it suitable for cross-sectional design studies. A similar study was in Mission location, Butterworth, by Ngcaba (2002) which sought to investigate the declining agricultural activities using betterment planning as a benchmark. Focus groups discussions and key informants were used and the responses were recorded with tape recorder to reach
conclusions. Another study by Oor & Muwale (2001) which looked at changes in livelihood strategies over a period of 10 years used the sustainable livelihood approach and rapid rural appraisal to assess the changes in livelihood strategies. Andrew & Fox (2004) used aerial photographs together with individuals and group discussion to gather information about households. Furthermore, Hebinck & Lent (2007) in their book also used aerial photographs and interviews with individuals and groups supplemented by observations. Daniels et al. (2013) used sources of income to track rural livelihood profiles over a four year period. Overall the use of aerial photographs, rural appraisal and interviews with groups and individuals are the commonly used methods to track a change in livelihood. We focused only on cross-sectional studies since this research was a cross-sectional one. The research adopted the retrospective approach. Individual and group discussions from these methods and more details regarding the methods used in this research will be explained in the methodology chapter. Phiri (2009) used and applied the livelihood framework as a guiding tool in gathering and analysis of information in his study. He argued that for livelihood research it is important to apply a retrospective approach to view what events have influenced the lives of the people under the study and how they have responded. He further argued that households change over time; what worked then and elsewhere may not necessarily work for other areas. He then applied a phonological approach by carrying out a participatory observation to further understand how rural households construct their lives.

3.8 Implications for this dissertation
This study has reviewed research methods used by other researchers in similar studies and developed a framework which is built up from existing theories. Now the question that is remaining is what then? Or what do we do with all this material? Overall, sustainable livelihood framework, has been widely adopted by researchers in livelihood related studies. Aerial photographs and rural appraisal have also been used by many researchers. Hence this dissertation adopted the use of a rural livelihood framework and a retrospective approach. Unfortunately, past aerial photographs of the area under study could not be found and participatory observation could not be possible due to time constraints. Therefore, this dissertation will be guided by the rural livelihood framework in analysing the data.
Chapter 4: Study area and methodologies

4.1 The study area

4.1.1 Location and population
Ndabakazi consists of six villages, namely: Ejojweni, Lengeni, Komkulu, Mziteni, New rest and 666. Ndabakazi is near the N2 and is located 10 kilometres from Butterworth (see figure 4). Ejojweni, Komkhulu and 666 are close to each other and closer to the N2 road, Ejojweni is opposite to Mambendeni but it is not shown on Google maps. Lengeni, New rest and Mziteni (on the map written as Mzitheni) are on the other side of the river called Ndabakazi and are far from the N2 road as shown in figures 5 and 6 respectively. Butterworth was first established as a Wesleyan mission station and was named after Joseph Butterworth (ECSECC, 1999). It falls under the Mnquma Local Municipality which consist of Nqgamakwe, Kentane and Butterworth as depicted in figure 4. In turn, Mnquma Local Municipality falls under the Amathole District Municipality. Butterworth is the main service area for Mnquma municipality. It shares borders with Mbashe, Intsika yethu and the Great Kei municipality. According to Statistic South Africa (2014), in the census of 2011 the municipality had a population size of 252 390 people. Out of this population 56.7% is of the working age (15-64), 34.3% the young (0-14) and the remaining 9% are elderly (65+). It has an unemployment rate of 44.2% of which youth accounts for 55.7%. It has 69 732 households.
Figure 4: Map showing the position of Ndabakazi in Butterworth
Source: Google maps

Figure 5: Map showing Ejojweni, Komkhulu and Lengeni
Source: Google maps
4.1.2 Climate and agricultural potential

The following table shows the monthly daily average rainfall for Butterworth from 2000 to 2013. The most rainfall comes in summer. November and December receive an average of 64 mm per month. Less rainfall comes in June with less than 20 mm per month. Temperatures on the other hand rise in January with an average of 25 degrees Celsius. They drop in July with an average of 7 degrees Celsius. Ndabakazi receives about 590 mm of rain per annum, with most rainfall occurring mainly during summer furthermore; it receives the lowest rainfall (8 mm) in June and the highest (89 mm) in March. In addition the average daily maximum temperatures range from 19.2 °C in July to 25.6 °C in February; moreover the region is the coldest during July when the temperatures drop to 6.2 °C on average during the night (SAexplorer, 2013). The environment within the Ndabakazi area has a limited range of habitats, including mainly flat grassland areas with few localised trees and forestry (Coastal and Environmental Services, 2012).
Table 1: Average daily rainfall of Butterworth in millimeters

<table>
<thead>
<tr>
<th>Year</th>
<th>Jan</th>
<th>Feb</th>
<th>Mar</th>
<th>Apr</th>
<th>May</th>
<th>Jun</th>
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<th>Sep</th>
<th>Oct</th>
<th>Nov</th>
<th>Dec</th>
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<td>15.4</td>
<td>0</td>
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<td>68.2</td>
<td>60.4</td>
<td>28.0</td>
<td>12.0</td>
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<td>3</td>
<td>32.6</td>
<td>36.4</td>
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<td>39.0</td>
<td>61.4</td>
<td>41.0</td>
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<td></td>
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<tr>
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<td>20.3</td>
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<td>30.4</td>
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<td>36.8</td>
<td>26.2</td>
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<td>88.8</td>
<td>99.2</td>
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</table>

Source: S A weather service

In Mnquma Local Municipality out of the 69 732 households 38 300 practice agriculture, of these 51% keep livestock while 15.4% produce crops and 32% practice both crops and livestock (Stats SA, 2014)

The agricultural potential of the area has been cited by researchers (Ngcaba, 2002; Coastal and Environmental Services, 2012) who argued that it is not explored to the full potential. The area is made up of the grassland biome which is suitable for dairy, sheep, cattle and maize production since it has good rains. The discussion by the researcher with the staff from the Eastern Cape Department of Agrarian Reform (Butterworth district) revealed that the area used to be the mainstay in field crop production, particularly maize, however, that is not the case now. They further mentioned that tractors were given by the then Transkei government to local villages, based on the production potential of the area.

Livestock farming is also practised by a number of households in the area such as sheep, goats and cattle. According to the Department of Rural Development and Agrarian Reform (Butterworth district) the latest statistics (2013) available at the time this study was conducted show that in Ndabakazi there were 572 cattle, 2451 sheep and 161 goats. Unfortunately, statistics from the 90s could not be found. This would have enabled a comparison and given an insight into the declining livestock numbers.
4.2 Sample size and research design
A sample of 80 respondents was chosen for the research. Four villages out of the six villages that make up Ndabakazi were chosen. The other two villages were left out because they are new villages and the concept of change in livelihood strategies would not really apply because not all the households in the new villages were born in one of the older Ndabakazi villages. Each of the four selected villages had approximately 200 households. A sample of 20 households for each village was chosen. The idea was to survey at least 10% of the households. Simple random sampling method, which is a probability sampling, was used to select respondents and snowball sampling was used to select focus group members. Therefore, every household in the village had an equal chance of being selected. This ensured that the respondents represented a true sample of the population. In addition this improved the validity and reliability of the data and in turn of the conclusions (Leedy & Ormrod, 2010).

The study followed a cross sectional design in such a manner that the data was collected once and interpreted due to time period constraints as well as that of other resources including money. This is different from longitudinal studies as studies of this nature involve a change. Longitudinal studies are conducted through a series of years depending on the nature of the research, moreover data is collected at the commencement of the study and at the end to describe change (Farrall, 2006).

4.3 Data collection method
Semi-structured questionnaires were used to collect information from household heads. The study made use of both quantitative and qualitative data. The study used primary data supplemented by secondary data. Primary data was obtained from the household heads and food security manager while secondary data was obtained from Department of Rural Development and Agrarian Reform (Butterworth branch) mainly livestock statistics and historical information about production and farming in Ndabakazi. A retrospective approach was adopted to obtain data. The retrospective approach studies involve relying on the respondent’s memory to recall what has happened in the past (McDermott, 2006). Usually research of this nature which seeks to find changes over a long period of time are longitudinal studies as change is measured with respect to time frames (McDermott, 2006). However, through the retrospective approach, a change can be found using a single data collection thus saving resources, money and time. This method does have its own limitations: firstly, the ability to remember differs from individual to individual; secondly, the effect of age, i.e. as an individual becomes older the ability to remember may decline and, thirdly, the effect of
the time frame means that usually the longer the period, the harder the ability to remember very well. The questionnaire was designed to capture demographic information, livelihood assets, livelihood strategies and aspirations (see Appendix A). The questionnaire was, however, not structured to collect data (especially for production and household expenditure) for a series of years for the above mentioned reasons and that (1) it would have increased the time for interviews which would violate the ethical issue of fatigue as most of the respondents struggled to remember the production quantities and expenditure of their last production season (2013) therefore it would have been much more difficult to obtain the data hence only the data for the most recent production season (2013) was captured as the data collection for this study was done in September 2014. (2) Recording time-series data from sampled households for three years only would not have been appropriate as changes in livelihood strategies are structural changes that occur over much longer time periods.

Focus groups were also used to supplement the information obtained from the household survey. This was a group discussion facilitated by the researcher. It consisted of eight household heads because smaller group is easy to manage and everyone will have a chance to engage in the discussion and was done combining respondents from two villages, Komkhulu and Ejojweni. Household heads over the age of fifty years of age, both females and males, were selected through the help of the herdmen for the group discussion. They were selected because they lived in the area for many years. Some were born in the area so they knew what was happening in the past.

4.4 Data analysis
The nature of this study requires a combination of both detailed quantitative and qualitative data. Quantitative data included livestock numbers, the crop yield and living expenses (food, school fees, transport cost) which can be analysed using descriptive statistics (mean, percentages). Qualitative data about structural changes in livelihood strategies was captured as well. Combinations of quantitative and qualitative data were analysed using analytical triangulation, e.g. interpreting changes in quantitative variables in the light of known structural changes (expressed qualitatively). This amounts to analysing the data from different angles to double-check interpretation. It is one of the best ways of improving validity and reliability in analysing qualitative data (Phiri, 2009).

Aspirations are challenging to measure as they are not quantifiable; thus they require qualitative description and analysis. The variables used to measure aspirations include
preferred areas of living, education for the children and desired employment for the children. Using conventional econometric model for such data will be a challenge in addressing the objective of the study which is to describe the role of aspirations in changing livelihood strategies. The study used the rural livelihood framework which was developed from the sustainable livelihood framework and social systems approach to general describe theoretical how aspirations influence the change in livelihood strategies (see chapter 3), furthermore, to measure correlation between aspirations variables and livelihood variable chi-square tests were used.

As elaborated in the previous chapter (3) many studies of this nature i.e. studies investigating the change in livelihood, they mainly require qualitative data as a result most of them used descriptive statistics and sustainable rural livelihood framework instead of the econometric model. Among them there are three published masters’s dissertations (see McDermott, 2006; Timermans, 2004; & Ngcaba, 2002). Hence this research did not make use of econometric model.

4.4.1 Why econometric model is inappropriate for this research

In addition to the above explanation of why a detailed econometric model has not been used in the research, this subsection will further describe the reasons. This description is based on the attempts that were made in using an econometric model with the help of a professional statistician. According to Learned, Erudite, Scholarly known as LAERD statistics (2013) one of the econometric models suitable for explaining a relationship between one variable of interest (dependent variable) and two or more variables of interest (independent variable) is the multiple regression which you have one dependent variable against two or more dependent variables as in the case of this research. Where livelihood strategy is the dependent variable against the aspiration variables which are: preferred areas of living, education for the children and desired employment for the children.

However the data collected in this study do not pass all the assumptions of multiple regressions and multivariate analysis because the dependent variable is categorical that is a household livelihood strategy is measured as farming or non-farming or non-labour (remittances, old age and child support grant). One type of regression which suits such that therefore may be the ordinal regression (LAERD statistics, 2013). However the data for this research again violates one of the assumptions of ordinal regression and of any kind of regression analysis (1) the response of from the survey fall mostly in one category i.e. there is
no enough variation for an example preferred area of living, 86% preferred to live in rural areas while only 14% preferred living in urban areas (see chapter 5) (2) there is correlation among the independent variables which leads to multicollinearity. This leads to some variables to be insignificant while theoretical are expected to significant based on the literature reviewed. Consequently, this may again lead to misinterpretation as some of variables will be insignificant because of multicollinearity while in a different case they may be significant (Neos & Mevik, 2001). Nevertheless, the major reason for inappropriateness of regression is the imbalance in responses. Therefore, even if the independent variables are run one by one with the dependent variable there is not enough variability. The above reasons have led to the use of chi-square tests.

4.4.2 Chi-square
Chi-square is a statistical technique used to measure statistical significance between variable. However, it does not measure the causal relationship between variables. It is possible to use chi-square when:

- The sampling method used to obtain data is a simple random sampling.
- The population is at least ten times larger than the sample.
- The variable under study is categorical.
- The expected value of the number of sample observation in each level of the variable is at least 5.

The general formula for chi-square test is as follows:

\[ \chi^2 = \sum_{i=1}^{k} \frac{(O_i - E_i)^2}{E_i} \]

Where \( \chi^2 \) represent a chi-square value,

- \( O \) = observed frequency,
- \( E \) = expected frequency
- \( \sum \) = summation of observed frequency less expected frequency, squared, divided by the expected values
- \( k \) = number of cells
Only $3 \times 2$ and $2 \times 2$ tests were possible due to the nature of the data. In each case the test assessed the degree of association between a variable describing some aspect of aspirations or livelihood strategy on the one hand, and some demographic variable on the other hand. Details of the combinations so assessed are provided in chapter 6.

4.5 Ethical aspects relevant to the research
Ethics form a fundamental ground on which research is built, because they guide the research to follow acceptable morals and an acceptable code of conduct which does not compromise the well-being of the society and those directly involved in the study (Huysamen, 1994; Leedy & Ormrod, 2010). Consideration of ethical issues is of enormous importance in the research as it influenced the data obtained more especially if the research primarily dependent on primary data. Consequently, in the end it also influenced the research findings. There are several important ethical issues that have to be considered in research but they differ according to the type of research; for example, in applied research the ethical issues to consider may be different to those to be considered for basic research which includes social research (Huysamen, 1994). For this dissertation the relevant ethical issues included informed consent, confidentiality, and fatigue. These were addressed in the following manner:

**Firstly**, to address the issue of informed consent, a meeting with the chief was arranged to ask for permission to collect data because rural areas mostly are ruled by chiefs and headmen. Then the researcher was introduced to the headmen of the village concerned and introduced to the villagers. The researcher explained the specific nature of the project in detail and how the participation of the households is important to reach the goal of the research. Furthermore, the researcher explained all the potential risks of participation and the voluntary nature of participation.

**Secondly**, to address confidentiality, the researcher explained the anonymity of respondents that their responses would not be linked to the information they gave in any manner unless they granted permission to do so; instead questionnaires will be labelled with numbers and the name of the respondent, if given, would be written on a separate page which would only be accessed by the principal investigator.

**Finally**, to address the issue of fatigue, the questionnaire was made more precise such that it did not took more than 30 minutes to answer the questions; furthermore, since it was administered by the researcher who understood and knew what data he was looking for, some
questions were easily answered. In addition, the questions in the questionnaire were then translated into the local language (isiXhosa) as well as all the negotiations (informed consent, meetings, and so on).
Chapter 5: Presentation of the findings

5.0 Introduction
This chapter presents the results of the field survey which was conducted in Ndabakazi villages of Ejojweni, Komkhulu, eLengeni and Mziteni. The data was collected in September 2014. Tables and charts are used to present the information. It starts off with demographic information followed by household assets, production and costs as well as household expenditure, and then the aspirations are presented before the concluding remarks.

5.1 Demographic characteristics
Demographic information of the respondents is important as the management of livelihood assets and decision making are influenced by the manner in which the household is structured (Phiri, 2009).

5.1.1 Gender of the household head

Table 2: Gender of household head

<table>
<thead>
<tr>
<th>Gender</th>
<th>Ejojweni</th>
<th>Komkhulu</th>
<th>Lengeni</th>
<th>Mziteni</th>
<th>Total</th>
<th>Tot %</th>
</tr>
</thead>
<tbody>
<tr>
<td>Male</td>
<td>7</td>
<td>8</td>
<td>9</td>
<td>6</td>
<td>30</td>
<td>37%</td>
</tr>
<tr>
<td>Female</td>
<td>13</td>
<td>12</td>
<td>11</td>
<td>14</td>
<td>50</td>
<td>63%</td>
</tr>
<tr>
<td>N</td>
<td>20</td>
<td>20</td>
<td>20</td>
<td>20</td>
<td>80</td>
<td>100%</td>
</tr>
</tbody>
</table>

Figure 7: Gender distribution
The household gender distribution of Ndabakazi villages is dominated by females (63%) and males account for only 37% of the respondents. In all the four villages females had the highest proportion, with Mziteni village having the highest female proportion. This is not surprising because even in the national census females have the highest proportion compared to their male counterpart (Stats SA, 2014). This is also shown by the age distribution and marital status distribution where more respondents were elders over sixty years and most of them widowed. Gender has a significant role in farming especially in household farming, where most household members are women (Muchara, 2011).

5.1.2 Age distribution of the household head

Table 3: Household age in years

<table>
<thead>
<tr>
<th>Age category</th>
<th>Ejojweni</th>
<th>Komkhulu</th>
<th>Lengeni</th>
<th>Mziteni</th>
<th>Total</th>
<th>%</th>
</tr>
</thead>
<tbody>
<tr>
<td>30-39</td>
<td>0</td>
<td>0</td>
<td>1</td>
<td>2</td>
<td>3</td>
<td>40.0%</td>
</tr>
<tr>
<td>40-49</td>
<td>3</td>
<td>3</td>
<td>4</td>
<td>4</td>
<td>14</td>
<td>17.4%</td>
</tr>
<tr>
<td>50-59</td>
<td>3</td>
<td>4</td>
<td>5</td>
<td>3</td>
<td>15</td>
<td>18.6%</td>
</tr>
<tr>
<td>≥60</td>
<td>4</td>
<td>13</td>
<td>10</td>
<td>11</td>
<td>48</td>
<td>60.0%</td>
</tr>
<tr>
<td>N</td>
<td>20</td>
<td>20</td>
<td>20</td>
<td>20</td>
<td>80</td>
<td>100%</td>
</tr>
</tbody>
</table>

Table 3 illustrates the age of the respondents in each village under the study to show any similarities or differences of gender distribution among the villages. The ages were categorized into four groups, the first one was that of ages between thirty and thirty-nine, the second category goes from forty to forty-nine, while the third category goes from fifty to fifty-nine and then the last one aimed at categorizing pensioners was sixty and above. The reason for grouping age was due to the fact that some household do not really feel comfortable disclosing their age to strangers (researchers) and therefore they tend to give false information. However, this method of grouping has yielded fruitful results and has been widely adopted by researchers (Mngomezulu, 2010; Muchara, 2011). The findings reveal that many households in Ndabakazi are pensioners, i.e. persons over the age of sixty. In all the four villages many respondents fall into the “60+” age group followed by the middle class which is between the ages of “50-59” and “40-49”. The remainder, the smallest group, had the age range “30-39” and it accounted for only 4 percent. These findings suggest that migration among the youth is high or they have not established their households. It might be because they have migrated to urban areas to seek for employment opportunities due to insufficient opportunities in rural areas to provide labour markets. In addition, literature
claims that rural urban migration has increased since the transition to democracy and the abolishment of pass laws which made the movement of black people difficult.

5.1.3 Marital status of the household head

Table 4: Marital status of household head

<table>
<thead>
<tr>
<th>Marital status</th>
<th>Village</th>
<th>Total</th>
<th>Total %</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Ejojweni</td>
<td>Komkhulu</td>
<td>Lengeni</td>
</tr>
<tr>
<td>Single</td>
<td>2</td>
<td>1</td>
<td>4</td>
</tr>
<tr>
<td>Married</td>
<td>8</td>
<td>10</td>
<td>6</td>
</tr>
<tr>
<td>Divorced</td>
<td>0</td>
<td>1</td>
<td>0</td>
</tr>
<tr>
<td>Widowed</td>
<td>10</td>
<td>8</td>
<td>10</td>
</tr>
<tr>
<td>n</td>
<td>20</td>
<td>20</td>
<td>20</td>
</tr>
</tbody>
</table>

The marital statuses of the respondents are presented in table 4 and figure 8. Table 4 shows the composition by village while figure 8 depicts the overall results for the four villages (Ndabakazi).

Marital status is critical in African households; it helps to predict the stableness of the household. Married household head tend to be more stable in production and receive support from both parties as it is in an African household where a man’s duty is to provide for the family while the female stays home and takes care of children and household duties (Muchara, 2011). In all the villages the widowed household head was the dominant class followed by married and single household heads. Divorced household heads were the least class of respondents. Therefore, the overall results for marital status followed the same pattern in the villages as depicted in figure 8. The results are not surprising as most of the respondents were females over sixty years of age. This corroborates the marital status results since the males are usually older than their female partners when married; therefore, it is likely that they die first before their wives (females). When looking at the age of the respondents, it can be seen that the second most respondents were between the ages of fifty and fifty-nine who are likely to be married. The singles class of respondents might be associated with the respondents who are between the ages of thirty and thirty-nine. The divorced class of respondents is the least class and that can be explained by again the age of the respondents (household heads). In African societies it is a shame to divorce and the older class of Africans still holds that belief.
Figure 8: Marital status of household head

5.1.4 Origin of the household head

Table 5: Origin of household head

<table>
<thead>
<tr>
<th>Place of origin</th>
<th>Village</th>
<th>Total</th>
<th>Total %</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Ejojweni</td>
<td>Komkhulu</td>
<td>Lemngeni</td>
</tr>
<tr>
<td>From the village</td>
<td>10</td>
<td>13</td>
<td>16</td>
</tr>
<tr>
<td>Not from the village</td>
<td>10</td>
<td>7</td>
<td>4</td>
</tr>
<tr>
<td>N</td>
<td>20</td>
<td>20</td>
<td>20</td>
</tr>
</tbody>
</table>

Table 5 depicts the place of origin of the household head. This is crucial when tracking the change in livelihood strategies because respondents who were born in the village are likely to know the livelihood strategies of people of the villages rather than someone who just came from another place. The majority of the respondents were born in the respective villages as depicted in the table 5. Only respondents from Mziteni came from the outside. However, this does not mean they do not have a clue of what was going on in the village. Remember that most of them are over the age of sixty which means they have stayed there for quite some time and the majority of them are those who are/were married to someone from that particular village as they claimed so in the focus group discussion.
5.1.5 Average household size
Table 6: Average household size per village

<table>
<thead>
<tr>
<th>Variable</th>
<th>Village</th>
<th>Overall</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Ejojweni</td>
<td>Komkhulu</td>
</tr>
<tr>
<td>Average household size</td>
<td>4.7</td>
<td>5.3</td>
</tr>
<tr>
<td>Maximum</td>
<td>7</td>
<td>8</td>
</tr>
<tr>
<td>Minimum</td>
<td>1</td>
<td>1</td>
</tr>
</tbody>
</table>

Table 6 summarizes the mean household size in the four villages and the average household size in the selected villages that constitute Ndabakazi. From the table it can be seen that the average size of the household in Ndabakazi households is five persons per household with the highest household composed of eight persons per household and the household with fewest persons had only one person per household. When looking at the villages Ejojweni and Komkhulu had the highest average persons per household.

5.1.6 Migration
Table 7: Average migration

<table>
<thead>
<tr>
<th>Variable</th>
<th>Village</th>
<th>Overall</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Ejojweni</td>
<td>Komkhulu</td>
</tr>
<tr>
<td>Average migration</td>
<td>3.7</td>
<td>2.2</td>
</tr>
<tr>
<td>Maximum</td>
<td>8</td>
<td>5</td>
</tr>
<tr>
<td>Minimum</td>
<td>1</td>
<td>1</td>
</tr>
</tbody>
</table>

Table 7 depicts the migration in household members of Ndabakazi. Rural areas are seen by many as areas which have limited employment opportunities. As a result many people leave rural areas for urban areas to seek employment opportunities. Most of the people who leave rural areas are the youth and middle aged persons. From the table the average number of people migrating in Ndabakazi is approximately three persons per household. The most that migrate per household is eight persons whilst the least is only one member. Ejojweni have the greatest average of migration than the other villages; as a result it also had the most members migrating per household.
5.1.7 Distribution of the household members

Table 8: Average household composition by gender and age per village

<table>
<thead>
<tr>
<th>Household composition</th>
<th>Village</th>
<th>Total</th>
<th>Overall total</th>
<th>Total %</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Ejojweni</td>
<td>Komkhulu</td>
<td>Lengeni</td>
<td>Mziteni</td>
</tr>
<tr>
<td>Male children</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>≤10</td>
<td>7</td>
<td>10</td>
<td>9</td>
<td>6</td>
</tr>
<tr>
<td>&gt;10</td>
<td>9</td>
<td>7</td>
<td>12</td>
<td>12</td>
</tr>
<tr>
<td>Female children</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>≤10</td>
<td>6</td>
<td>9</td>
<td>7</td>
<td>8</td>
</tr>
<tr>
<td>&gt;10</td>
<td>14</td>
<td>10</td>
<td>16</td>
<td>9</td>
</tr>
<tr>
<td>Adult males</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>≤60</td>
<td>21</td>
<td>15</td>
<td>8</td>
<td>11</td>
</tr>
<tr>
<td>&gt;60</td>
<td>2</td>
<td>0</td>
<td>0</td>
<td>0</td>
</tr>
<tr>
<td>Adult female</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>≤60</td>
<td>15</td>
<td>16</td>
<td>12</td>
<td>9</td>
</tr>
<tr>
<td>&gt;60</td>
<td>1</td>
<td>5</td>
<td>3</td>
<td>2</td>
</tr>
<tr>
<td>Total</td>
<td>75</td>
<td>72</td>
<td>67</td>
<td>57</td>
</tr>
</tbody>
</table>

Figure 9: Distribution of household members

Table 8 and figure 9 summarise the structure of the households in Ndabakazi villages. Table 8 clearly shows the composition of households in the villages and consequently the
composition in Ndabakazi. The figure (9) provides a short cut to understanding the composition of household members of Ndabakazi.

The results show that the households are composed mostly of adults (male and female) less than sixty but older than twenty-one years of age. This is followed by children (both male and female) who are ten years and above but less than twenty-two years, i.e. persons who are most likely to be still at school. However, the proportion of female children is higher than that of the male children. Male children are the second least in household composition while adult male and female over the age of sixty were the least group in terms of their proportion in household composition.

These results suggest that there is a high proportion of people over the age of thirty and thirty-five who are still living with their parents, whom under ‘normal’ society circumstances should have their own households. Furthermore, this suggests that there is family labour available because in most cases, based on the survey data, these members are unemployed.

5.2 Household assets

5.2.1 Land

![Land ownership chart]

Figure 10: Land ownership
Table 9: Average land holding in hectares per household

<table>
<thead>
<tr>
<th>Land ownership</th>
<th>Ejojweni</th>
<th>Komkhulu</th>
<th>Lengeni</th>
<th>Mziteni</th>
<th>Total</th>
</tr>
</thead>
<tbody>
<tr>
<td>hectare</td>
<td>4</td>
<td>3</td>
<td>6</td>
<td>10</td>
<td>23</td>
</tr>
<tr>
<td>≤4</td>
<td>4</td>
<td>2</td>
<td>2</td>
<td>10</td>
<td>18</td>
</tr>
<tr>
<td>&gt;4</td>
<td>12</td>
<td>15</td>
<td>12</td>
<td>0</td>
<td>37</td>
</tr>
<tr>
<td>N</td>
<td>20</td>
<td>20</td>
<td>20</td>
<td>20</td>
<td>80</td>
</tr>
</tbody>
</table>

Land is a fundamentally important production factor. In South Africa there is still an imbalance in land holding which is as a result of the apartheid regime, particularly the Native Land Act of 1913. Other developments such as betterment planning influenced land holding in the rural areas of South Africa, including the former Transkei where Ndabakazi is located (Andrew et al 2003). On the other hand literature points out a significant percentage of land lying fallow in most rural areas of the country (Andrew & Fox, 2004). Figure 10 and table 9 illustrate the state of land ownership in the Ndabakazi villages. The results reveal that most respondents in the villages own more than five hectares of land except in one village (Mziteni) where most respondents own less than a hectare. Following this group is the group of respondents who own less than a hectare; these are mainly respondents who have no fields - only back yard gardens. The least respondents own 2-3 hectares. In Mziteni more respondents cited that the majority of people did not own land but rather they borrowed land from the state about which it has not said anything until now. In the other three villages most respondents have large fields. The age of the respondents corroborated the state of land ownership in these villages. In the group discussion the respondents highlighted that large fields were given in the past, i.e. the first people to arrive in the village. They went further stating their concerns regarding the availability of land for their children. This concern arises because of the demand for land as a result of population growth. The amount of land available is small and it is reserved for grazing.

5.2.2 Why not producing on fields?
When asked why respondents do not undertake crop productions, a variety of reasons were cited. These include the distance from the homestead to the fields. This makes crops prone to livestock damage as the fields are just near the grazing land separated by fences. Furthermore, in weeding periods it is not easy to reach the fields; as result they receive lower yields since the crops are not thoroughly and completely weeded, as stated by many respondents. The other common reason given was the expensiveness of tractors charging R350 per hour in a field when the owner still has to hire planting services and labour for
weeding. It was mentioned that production cost are just too high for field production. If you do not have cattle and bigger family to work on the field, you will have to hire everything. The other mentioned reason for abandoning field production was the uneven distribution and uncertainty of rainfall. It was cited that rain falls in one month every week in such a way that they do not get a chance to prepare land and then it stops for a while. Furthermore, the occurrence of drought was mentioned to be occurring frequently. Respondents notice the change of climate even in temperatures. Most respondents mentioned lack of energy as they are old females, mentioning their health issues that they are not like their parents who were healthy throughout their lifespan. They also mentioned the unwillingness of their children to invest in farming. They do not send money for production nor do they buy livestock. The flight of more active labour was also cited. Laziness and lack of interest in farming was highlighted in the group discussion in particular regarding the younger generation. Youth is investing in fancy lifestyles buying luxury furniture and building expensive houses. It has also been revealed that youth do not like staying in rural areas especially the educated ones. In summary, there are complex reasons why people have stopped cultivating large fields and these reasons differ between households and some are interrelated.

5.2.3 Government initiatives in the area
One of the government initiatives of addressing food insecurity and unemployment in rural areas was to establish food security projects. Due to the large fields lying fallow in the area and given its history in maize production, the Zanokhanyo food security project was established in 2002 in the area. The project is situated in Ejojweni and was intended for people from Ejojweni, Komkhulu and Lengeni because of their close proximity to the area. The project is funded by the Department of Social development. The project was intended to empower people of the community and to reduce food insecurity and the unemployment rate. In its establishment the project aimed at producing poultry (broiler chickens), pigs and vegetables. A tractor was given, and two mules together with an ox drawn planter were purchased. The chairwoman, Mrs Pikela, confirmed that in the early years of its establishment there were more members and they were producing large quantities but over the years people have been dropping out of the project and now they are just a few females, less than 10 members. The project now in addition to the tractor owns a van.
Figure 11: Ownership of farming implements

Figure 11 above illustrates the ownership of farming implements by households in the villages that constitute Ndabakazi. These implements include ox-drawn ploughs, ox drawn-planters, yokes, spade/fork, rakes and hand hoes. These are implements that are mainly used by households for crop production. All the respondents own either fork spade or spade. While many respondents own rakes, yokes, planters and ploughs respectively. Many of them claim that they had these farming implements while they were still active in crop production, i.e. cultivating large fields. They also had more cattle. The most commonly cited reason for not owning these implements were the selling of these implements by children and grandchildren to traders who buy old irons. It was cited that some even steal and sell them in order to buy tobacco or alcohol. All this happens after the death of the husband because it is usually males who look after ox-drawn material and yokes. Therefore, many respondents do not use animal traction in these villages.
5.2.5 Livestock

Table 10: Livestock distribution in villages

<table>
<thead>
<tr>
<th>Livestock type</th>
<th>Village</th>
<th>Ejojweni</th>
<th>Komkhulu</th>
<th>Lengeni</th>
<th>Mziteni</th>
<th>Total</th>
</tr>
</thead>
<tbody>
<tr>
<td>Cattle</td>
<td>Yes</td>
<td>5</td>
<td>7</td>
<td>10</td>
<td>7</td>
<td>29</td>
</tr>
<tr>
<td></td>
<td>No</td>
<td>15</td>
<td>13</td>
<td>10</td>
<td>13</td>
<td>51</td>
</tr>
<tr>
<td></td>
<td>N</td>
<td>20</td>
<td>20</td>
<td>20</td>
<td>20</td>
<td>80</td>
</tr>
<tr>
<td>Sheep</td>
<td>Yes</td>
<td>6</td>
<td>4</td>
<td>8</td>
<td>5</td>
<td>23</td>
</tr>
<tr>
<td></td>
<td>No</td>
<td>14</td>
<td>16</td>
<td>12</td>
<td>15</td>
<td>57</td>
</tr>
<tr>
<td></td>
<td>N</td>
<td>20</td>
<td>20</td>
<td>20</td>
<td>20</td>
<td>80</td>
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<tr>
<td>Goat</td>
<td>Yes</td>
<td>10</td>
<td>11</td>
<td>10</td>
<td>6</td>
<td>37</td>
</tr>
<tr>
<td></td>
<td>No</td>
<td>10</td>
<td>9</td>
<td>10</td>
<td>14</td>
<td>43</td>
</tr>
<tr>
<td></td>
<td>N</td>
<td>20</td>
<td>20</td>
<td>20</td>
<td>20</td>
<td>80</td>
</tr>
<tr>
<td>Pigs</td>
<td>Yes</td>
<td>7</td>
<td>10</td>
<td>8</td>
<td>5</td>
<td>30</td>
</tr>
<tr>
<td></td>
<td>No</td>
<td>13</td>
<td>10</td>
<td>12</td>
<td>15</td>
<td>50</td>
</tr>
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<td></td>
<td>N</td>
<td>20</td>
<td>20</td>
<td>20</td>
<td>20</td>
<td>80</td>
</tr>
<tr>
<td>Chickens</td>
<td>Yes</td>
<td>14</td>
<td>14</td>
<td>15</td>
<td>8</td>
<td>51</td>
</tr>
<tr>
<td></td>
<td>No</td>
<td>6</td>
<td>6</td>
<td>5</td>
<td>12</td>
<td>29</td>
</tr>
<tr>
<td></td>
<td>N</td>
<td>20</td>
<td>20</td>
<td>20</td>
<td>20</td>
<td>80</td>
</tr>
</tbody>
</table>

Table 10 show livestock ownership of Ndabakazi households. Livestock is one of the major contributors to the rural economy as it has multiple functions (NDA, 2006; Somoro, 2009). Table 11 below provides a summary of livestock ownership in Ndabakazi villages. The main livestock kept by households in Ndabakazi includes cattle, sheep, goats, pigs and poultry. The most commonly kept stock is poultry indigenous chickens (64%) i.e. 51 household out of 80 own chickens, followed by goats (46%) i.e. 37 households out of 80 households own goats, pigs (38%) i.e. 30 households out of 80 households own pigs, cattle (36%) i.e. 29 households out of 80 own cattle and the least kept are sheep (29%) as shown in table 14 that only 23 households out of the 80 household interviewed own sheep. In Komkhulu village none of the respondents owned sheep. The widespread farming of chickens may be due to their easy accessibility as they are relatively cheap and the lending is more common in chickens than in any other livestock types, claimed respondents. The number of households owning livestock is quite low compared to the past claimed most of the households. Furthermore, 11% of the households kept none of the mentioned stock types. They pointed out a number of reasons for this. These include the cost of keeping livestock: vaccines are costly and diseases are very
prominent and it is difficult to succeed without them in keeping stock. The other reason pointed out regards livestock herders. Boys now attend school on a regular basis and in other households headed by women there may be no boys which means there will be no one to look after stock. Also Emphasised was the loss of Ubuntu among the community and working together where a child is raised by a community in such a way that you can ask your neighbour’s child to do something for you, as it used to be in the past claimed most respondents. Livestock theft is one issue of concern in Ndabakazi, more especially of chickens claimed respondents pointing to teenage boys who are prime suspects of this crime. One respondent claimed that they took all her flock of chickens in one night. Responses also revealed that they do not steal only chickens. The other animal prone stock to theft is sheep which may explain the non-ownership of sheep in Komkhulu.

Table 11: Average livestock numbers per village

<table>
<thead>
<tr>
<th>Variable</th>
<th>Ejojweni</th>
<th>Komkhulu</th>
<th>Lengeni</th>
<th>Mziteni</th>
</tr>
</thead>
<tbody>
<tr>
<td>Cattle</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Average</td>
<td>6</td>
<td>3</td>
<td>6</td>
<td>5</td>
</tr>
<tr>
<td>Maximum</td>
<td>9</td>
<td>4</td>
<td>15</td>
<td>15</td>
</tr>
<tr>
<td>Minimum</td>
<td>1</td>
<td>2</td>
<td>1</td>
<td>1</td>
</tr>
<tr>
<td>Range</td>
<td>8</td>
<td>2</td>
<td>14</td>
<td>14</td>
</tr>
<tr>
<td>Sheep</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Average</td>
<td>16</td>
<td>0</td>
<td>26</td>
<td>23</td>
</tr>
<tr>
<td>Maximum</td>
<td>38</td>
<td>0</td>
<td>109</td>
<td>30</td>
</tr>
<tr>
<td>Minimum</td>
<td>2</td>
<td>0</td>
<td>8</td>
<td>17</td>
</tr>
<tr>
<td>Range</td>
<td>36</td>
<td>0</td>
<td>101</td>
<td>13</td>
</tr>
<tr>
<td>Goat</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Average</td>
<td>10</td>
<td>11</td>
<td>16</td>
<td>3</td>
</tr>
<tr>
<td>Maximum</td>
<td>21</td>
<td>25</td>
<td>36</td>
<td>14</td>
</tr>
<tr>
<td>Minimum</td>
<td>2</td>
<td>3</td>
<td>1</td>
<td>3</td>
</tr>
<tr>
<td>Range</td>
<td>19</td>
<td>22</td>
<td>35</td>
<td>11</td>
</tr>
<tr>
<td>Pigs</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Average</td>
<td>3</td>
<td>3</td>
<td>3</td>
<td>3</td>
</tr>
<tr>
<td>Maximum</td>
<td>7</td>
<td>9</td>
<td>7</td>
<td>3</td>
</tr>
<tr>
<td>Minimum</td>
<td>2</td>
<td>1</td>
<td>1</td>
<td>2</td>
</tr>
<tr>
<td>Range</td>
<td>5</td>
<td>8</td>
<td>6</td>
<td>1</td>
</tr>
<tr>
<td>Chickens</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Average</td>
<td>5</td>
<td>1</td>
<td>15</td>
<td>14</td>
</tr>
<tr>
<td>Maximum</td>
<td>18</td>
<td>25</td>
<td>26</td>
<td>21</td>
</tr>
<tr>
<td>Minimum</td>
<td>1</td>
<td>3</td>
<td>2</td>
<td>5</td>
</tr>
<tr>
<td>Range</td>
<td>17</td>
<td>22</td>
<td>24</td>
<td>16</td>
</tr>
</tbody>
</table>
The mean number of livestock, the minimum and the maximum number of livestock in Ndabakazi is summarised in table 11 above. The average number of cattle per household is five cattle per household (overall average of all villages). Lengeni and Ejojweni had the highest average compared to the other two villages despite the low number of households owning cattle in Ejojweni. The households with most cattle had 15 cattle while the least households had only one cattle. Sheep had the highest number per household than other stock type. The maximum a household had among the respondents was more than a hundred whilst the least was two sheep per household. Goats had the second highest number per household with the household owning the most having 36 and the least owning only one. In chickens the maximum a household had was 26 and the least a household owned was only one.

5.3 Crop production

5.3.1 Garden cultivation

<table>
<thead>
<tr>
<th>Cultivation of gardens</th>
</tr>
</thead>
<tbody>
<tr>
<td>Yes 71%</td>
</tr>
<tr>
<td>No 29%</td>
</tr>
</tbody>
</table>

Figure 122: Cultivation of gardens

Figure 12 shows the proportion of garden cultivation among the respondents in Ndabakazi villages. In previous sub-sections (figure 10) it has shown how much land the respondents own and it has been found that no respondent was without land even if it is just a small quantity (only garden). Although the majority of respondents own more than five hectares, there is not even a single respondent who claims to be cultivating a field. The fields in all the villages except for Mziteni are fenced and it has been quite some time since they have been fenced early in the last decade. In other villages the fence is starting to rot. In terms of garden cultivation, a larger proportion of respondents cultivate their gardens. These results corroborates what the existing literature says: rural households have not completely
abandoned crop production; they have left field cultivation and focused on garden cultivation (Andrew & Fox, 2004). The average garden size for the households who were allocated sites in the 1990s is around one hectare while those recently allocated may be around 0.5 hectares. However, most respondents are over the age of sixty; therefore, they are likely to fall under the one-hectare category.

5.3.2 Crop output

Table 12: Average crop yield in kilograms per year

<table>
<thead>
<tr>
<th>Crop</th>
<th>n</th>
<th>Min</th>
<th>Max</th>
<th>Mean</th>
<th>Range</th>
</tr>
</thead>
<tbody>
<tr>
<td>Maize</td>
<td>57</td>
<td>25</td>
<td>500</td>
<td>150</td>
<td>475</td>
</tr>
<tr>
<td>Potatoes</td>
<td>53</td>
<td>30</td>
<td>100</td>
<td>61.76</td>
<td>70</td>
</tr>
<tr>
<td>Cabbage</td>
<td>53</td>
<td>10</td>
<td>50</td>
<td>21.32</td>
<td>40</td>
</tr>
<tr>
<td>Beans</td>
<td>57</td>
<td>5</td>
<td>50</td>
<td>25.36</td>
<td>45</td>
</tr>
</tbody>
</table>

Table 12 above presents the crop output in Ndabakazi. Only the major produced crops were selected because it was easy for the respondents to recall the quantities that were produced in their previous harvest. Other crops that were produced by very few respondents were carrots, tomatoes, green peppers and onions. The crops presented in the table are listed in their order of the most produced. These are the approximate quantities harvested in the last production season which is June and July of 2014. These may not be the exact quantities due to the nature of production in households. The respondents do not keep records of production formally; however, they relate their produce in 50kg bags and buckets. Maize is the most produced crop in Ndabakazi. All the respondents who claim to be producing in their gardens planted maize in their previous production. They produce an average of 150 kilograms of maize per year. This is equivalent to three 50kilograms bags of maize. The most producing household produced 10×50 kilogram while some who produce in small gardens yield only 25 kilograms of maize. These quantities are smaller than the expected yields; for example, for maize the expected output per hectare is 2 tons under dry land (Du Plessis, 2003) which is way beyond these yields. However, they exclude the quantities consumed as green maize, therefore there may be a bit more than the recorded output. Maize is mainly produced to feed livestock (poultry). In the case of potatoes, they produce an average of 6 ×10 kilogram bags per production. The significant area of the gardens is planted with maize, claimed the respondents, and then a quarter of the garden is planted with vegetables. Pumpkins and
melons do not tolerate dry conditions so in this unevenly distributed rainfall pattern we no longer harvest them, claimed respondents. All the crops are planted during the raining seasons mostly in summer and autumn. The production is mainly for household consumption, more especially the maize. Sales are made of more perishable products when there is a surplus. These findings contradict those of Andrews & Fox (2004). They found that rural households left field production and produced intensively in gardens. In Ndabakazi this is not the case. This production is very extensive looking at the yield and the production costs.

5.3.3 Production cost

Table 13: Production cost in Rands per year

<table>
<thead>
<tr>
<th>Item</th>
<th>N</th>
<th>Range</th>
<th>Minimum</th>
<th>Maximum</th>
<th>Mean</th>
</tr>
</thead>
<tbody>
<tr>
<td>Vaccines</td>
<td>72</td>
<td>6 900</td>
<td>100</td>
<td>7 000</td>
<td>1 049</td>
</tr>
<tr>
<td>Ploughing</td>
<td>49</td>
<td>350</td>
<td>350</td>
<td>700</td>
<td>388</td>
</tr>
<tr>
<td>Fertilization</td>
<td>15</td>
<td>420</td>
<td>30</td>
<td>450</td>
<td>220</td>
</tr>
<tr>
<td>Weeding</td>
<td>49</td>
<td>350</td>
<td>150</td>
<td>500</td>
<td>329</td>
</tr>
<tr>
<td>Pesticides</td>
<td>8</td>
<td>50</td>
<td>150</td>
<td>200</td>
<td>166</td>
</tr>
<tr>
<td>Seeds and seedlings</td>
<td>56</td>
<td>440</td>
<td>60</td>
<td>500</td>
<td>156</td>
</tr>
</tbody>
</table>

In every production process there are costs involved, and the same applies to household agricultural production. Table 13 summarises the production cost of households per year. Livestock had a greater cost compared to crops, and the vaccines costs amounted to more than a thousand rand annually depending on the number of stock. Some respondents combine ethnoveterinary medicines and commercial vaccines to vaccinate and control disease in stock. They are concerned about the low number of individuals who still have that skill because commercial vaccines are very expensive. The ploughing costs on the other hand were the greatest cost in crop production with a cost of R350/garden regardless of the size. Only one respondent used animals to plough. This was followed by weeding cost which is as a result of shortage of oxen for draught power which are also used for weeding. The costs of controlling pests and buying seeds were the least costs as some households were using seeds from the previous harvest and in the case of pests they did not mention heavy spending on them.
5.3.4 Contribution of crop farming to household income

Table 14 summarises the approximate household crop production in Ndabakazi villages for the five major produced crops; beans had the highest income more than any other crop. This excluded the value of the green maize consumed because its value could not be recalled by respondents. The prices used are retail prices, which reflect the price they would have paid if they had purchased the products. The average income from their production amounts to R1 475 per year. If we subtract the cost of production, taking only the most incurred costs, namely ploughing cost, weeding and the price of purchasing seedlings, this all amounts to R874.71. The value of the money they save as result of their production is R600.21. This is a relatively small amount because it is for the whole year. Considering the average monthly spending which is more than a thousand rand a month, it contributes a small proportion of their income. Unfortunately, the value of livestock and livestock products could not be measured due to the inability to recall sales because most own only a few and selling occurs after a long time if it does, usually when the household is in need of cash for some emergences. These findings are in line with those of Gilimani (2005). He found that household production, both livestock and crop, contributes 12% to household income and maize alone contributes R256.65 per year. Furthermore, he found that milk contributed more than any other product with a value of R1112.51 per year. Despite the small contribution of household production, it has some level of importance to the rural household; however that raises many questions. Firstly, why does it make a small contribution? Secondly, given this small contribution, why should it be encouraged? In addition, how can it be enhanced to contribute more? Rural households practicing farming activities are declining both in number and in the area produced with regard to crop farming. Evidence is the large amount of land laying fallow and even the number of households producing in their gardens is declining. Not all rural households are producing crops in their gardens. The level of intensity rural households apply to farming has also declined despite the amount of money they spend for production. Some respondents mentioned that they do not finish hoeing; some said they cultivate just to consume green maize. Moreover, they have changed their consumption patterns in terms of the food stuff they consume and they depend on sales for all their food. Monde (1998) also found that rural households in Guquka depend more on purchases of food rather than on food they produce. A number of initiatives have been introduced but there have been no positive responses.
Table 14: Approximate crop income in Rands / year

<table>
<thead>
<tr>
<th>Crop</th>
<th>Average yield / year</th>
<th>Price in (R)</th>
<th>Income (R)/year</th>
</tr>
</thead>
<tbody>
<tr>
<td>Maize</td>
<td>150kg (3×50kg bags)</td>
<td>110 per 50kg</td>
<td>50kg bag×3×110=330</td>
</tr>
<tr>
<td>Potatoes</td>
<td>60 (6×10kg bags)</td>
<td>50 per 10kg</td>
<td>10kg bag×6×50=300</td>
</tr>
<tr>
<td>Cabbage</td>
<td>21 heads</td>
<td>15 per head</td>
<td>21 heads×15=315</td>
</tr>
<tr>
<td>Beans</td>
<td>25kg (5×5kg bunch)</td>
<td>106 per 5kg</td>
<td>5kg bunch×106=530</td>
</tr>
<tr>
<td><strong>Total</strong></td>
<td></td>
<td></td>
<td><strong>R1 475/ year</strong></td>
</tr>
</tbody>
</table>

5.4 Household expenditure

Table 15: Household expenditure in Rands per year/month

<table>
<thead>
<tr>
<th>Item</th>
<th>N</th>
<th>Minimum</th>
<th>Maximum</th>
<th>Average</th>
<th>Range</th>
</tr>
</thead>
<tbody>
<tr>
<td>Food</td>
<td>80</td>
<td>500</td>
<td>2 000</td>
<td>1140</td>
<td>1 500</td>
</tr>
<tr>
<td>Electricity</td>
<td>80</td>
<td>100</td>
<td>500</td>
<td>215.5</td>
<td>400</td>
</tr>
<tr>
<td>School uniform</td>
<td>75</td>
<td>300</td>
<td>2 000</td>
<td>571.89</td>
<td>1 700</td>
</tr>
<tr>
<td>School fees</td>
<td>50</td>
<td>200</td>
<td>3 000</td>
<td>1576.92</td>
<td>2 800</td>
</tr>
<tr>
<td>Repayments</td>
<td>80</td>
<td>80</td>
<td>5 000</td>
<td>423.68</td>
<td>4 920</td>
</tr>
<tr>
<td>Airtime</td>
<td>80</td>
<td>20</td>
<td>200</td>
<td>90</td>
<td>180</td>
</tr>
<tr>
<td>Transport</td>
<td>80</td>
<td>40</td>
<td>2 000</td>
<td>292</td>
<td>1 960</td>
</tr>
</tbody>
</table>

Table 15 above summarises the household expenditure for Ndabakazi households. Food accounted for the largest proportion with a monthly average of R1140, with the low income households spending R500 while the better off ones spend presumable R2000. The difference between these two groups is quite wide – R1500 - suggesting income inequality. It can also be as a result of family size; in some instances, there were some respondents who live alone. Low income households spend a significant (60%) proportion of their income on food (Baiphethi & Jacobs, 2009). Furthermore, Baiphethi & Jacobs (2009) revealed that rural households purchase most of their food rather than producing it. This seems to be the case as looking at the production side it is a relatively small percentage of food they produce.

There were a few respondents who incurred school costs although the average was the second highest; this is justified by the range of R7850. This is attributed to the government initiatives in supporting poor people to access education, thus the free education as the majority of schools, especially primary schools, are “no fee schools”. Those who had high costs on
education are probably those affording to send their children to private schools where they have to pay higher fees. The lowest payment on school fees was R200 while the highest was R3000. School uniforms the highest expenditure was R2000 and the lowest was only R300. These households explained that their children wear the same uniform for more than one year, especially if the pupil is still in the same school and the clothes still fits them. Some would use their sibling’s clothes when they have finished in that school.

Transportation cost to school/work or to town amounted to R292, with the highest cost of R2000 and the lowest being R40. This is because poor household may travel to town maybe three times a month while the high expenditure relates to those who are working in towns and in areas near towns. Repayments had a mean cost of R423.68. These were mostly the cost of death insurance, instalments from furniture shops or for vehicles for the high income households, and the difference was very wide. Electricity and airtime accounted for the lowest average cost. This is because many respondents qualify for the free electricity which is provided by government to the poor, although they cited that it is not sufficient to hold them for the whole month.

5.5 Type of food preferred and consumed

Table 16: Summary of food preferences

<table>
<thead>
<tr>
<th>Food type</th>
<th>Village</th>
<th>%</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Ejobweni</td>
<td>Komkhulu</td>
</tr>
<tr>
<td>Traditional</td>
<td>14</td>
<td>11</td>
</tr>
<tr>
<td>Modern</td>
<td>6</td>
<td>9</td>
</tr>
<tr>
<td>N</td>
<td>20</td>
<td>20</td>
</tr>
</tbody>
</table>

The above table 16 presents the type of food stuff preferred by Ndabakazi households. Most household heads still like the food they grew up with (Traditional food). This makes sense looking at their age as most of them are over sixty years of age. This is different from what they consume, however, as most eat the modern food. Various reasons were pointed out to account for what they consume in their households. Firstly, traditional food (Xhosa food), the ingredients come from what is produced and in animals. Now since their production has declined because they produce in gardens only and some are not producing at all, they do not have access to ingredients. Secondly, they claim that children do not like the traditional food. The traditional food includes Isigezenga. This is bread made from fresh maize (green maize).
Umqa wethanga is a mixture of pumpkin and maize meal. The other one is umqa womxoxozi which is a mixture of melon and maize meal.

In the focus group discussion, the households claimed that there are very few if any households who make samp from their produced maize. Rather they buy the ready samp. Samp and sour milk from cows are the only traditional foods purchased. The common food purchased by households includes maize meal, flour and yeast, samp and beans, sugar, tea and coffee, cooking oil and vegetables. Some may buy more or less than others depending on the size of the household and their income. Overall these findings suggest that Ndabakazi households have changed from the food they used to consume when they were still dependent on the food they produced. Furthermore, the most common cited reasons for preferring traditional food while using modern food was the lack of ingredients and the preparation of the food as some recipes and processing takes much time, for example the processing of maize into samp locally known as ukungqusha. The samp is readily available from the shops.

5.6 Access to information communication technology
The information communication technology (ICT) plays a crucial role in household livelihood on a daily basis. It empowers rural households through information that is important to them. This may include service delivery and opportunities available and eligible for them as citizens of the country. Poverty goes beyond food insecurity and lower incomes to dissemination of information. The following table presents the access of ICT to the households of Ndabakazi. The major ICT measured is the access to electricity, television, mobile phones and radios. These were selected because they are the most powerful and available ICT measures in rural areas. The entire households interviewed had access to electricity. Ejojweni, Lengeni and Mziteni received electricity earlier than Komkhulu, around 1997 and 1998, while Komkhulu received it in the early 2000s. 90% of the respondents own televisions and most of them accessed them after they received electricity. This is the major improvement they can claim made their lives better. Most of them claimed that they stopped using firewood for cooking since now they use it occasionally because electricity is a bit expensive now. They claim that it is easier to buy a TV when you have electricity unlike in the past where you had to charge a battery and TVs were more expensive than today thanks to the Chinese market. Most of the respondents like to watch soapies. Generations was the most popular soapie in all the age groups followed by news and sport. In terms of mobile phones, 97% own one or two cellphone(s). They claim that mobile phones are affordable and they have changed their lives in various ways. They can communicate with family members.
who are far away from them. Radios are widespread in the area and 94% own one. Most have DVD players or home theatres where they can listen to music of their choice and connect to TVs to watch music videos. That is how most of the households spend their time.

Table 17: Access to ICT per village

<table>
<thead>
<tr>
<th>ICT</th>
<th>Village</th>
<th>Percentage</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Ejojweni</td>
<td>Komkhulu</td>
</tr>
<tr>
<td>Electricity</td>
<td>20</td>
<td>20</td>
</tr>
<tr>
<td>Television</td>
<td>17</td>
<td>17</td>
</tr>
<tr>
<td>Mobile phone</td>
<td>19</td>
<td>19</td>
</tr>
<tr>
<td>Radio</td>
<td>19</td>
<td>17</td>
</tr>
</tbody>
</table>

5.7 Livelihood strategies

Figure 133: Main livelihood strategies

The term ‘livelihood strategies’ describes the collection of activities a household engages in order to achieve livelihood goals. Figure 13 presents the main livelihood strategies of households in Ndabakazi. The main livelihood strategies were identified based on the activity that contributes the most to the household income. The livelihood strategies were categorised into five groups in this chapter (unlike in chapter 2) to see which social grant category contributes the most to households as depicted in figure (13). Social grants are the main source of income in Ndabakazi. Old age grants were the dominant livelihood strategies followed by non-farm income, child support grants and other forms of social grant except the
old age grant, remittances and farm income. The bigger proportion of old age grants is justified by the age of the respondents. The non-farm sources of income include government employment such as educators, police and nurses. Self-employment and petty trading are also part of this category. Child support grants accounted for 13%. There were few respondents who depended mainly on remittances, only 7%. No respondents claimed to be dependent mainly on farming activities, hence the 0%. It is rare to find households depending solely on one livelihood strategy. The following figure (13) depicts the combination of livelihood strategies pursued by households in Ndabakazi.

![Combined livelihood strategies](image)

**Figure 144: Combined livelihood strategies**

OAG- Old Age Grant | Child Support Grant | Non-farm income | Remittance

When grouping the main three contributing activities to household livelihoods, old age grants, child support grants and farming were the most frequently combined activities by most households. Following this group was the child support grant plus remittances and farming. Remittances plus child support grants and farming were the least combined activities as there were few respondents who receive remittances on a regular basis. Farming has been the least contributor in all the combinations. The question is: why farming? What does that imply? Such questions will be addressed in the following chapter. This suggests that the households of Ndabakazi depend mainly on social grants and non-farm sources of income and supplement these incomes with farming activities. These findings contradict those of McDermott (2006) that rural households have not changed from relying on farming but rather
there is a change in relative importance of the farming activities. The general household survey found that there are barriers preventing household from moving to high returning livelihood strategies. These include age, gender of the household head, and education and community characteristics in terms of basic infrastructure. In the case of Ndabakazi this is true because most of the respondents are pensioners so there are limited chances if none to be working, i.e. age is the barrier. Furthermore, people who are better off, i.e. those depending on wage income are middle aged individuals. The gender of the household head also may have an influence on these results. Female headed households turn out to be poor compared to male headed households. The education level of the household also says something on the choice of livelihood strategy. The literature highlights that households headed by well educated people are better off than others (Alemu, 2012).

5.8 Aspirations

5.8.1 Aspirations for the area of living
When respondents were asked in which area they prefer to live or build a home, the response was as follows. The areas were categorized into two, namely rural and urban areas. Most respondents (86%) preferred to live in rural areas. A number of reasons were given for this choice. The most common was that “We were born here (rural areas) … we like farming … there is plenty of land and space for farming here”. Bear in mind that most respondents were elderly people and farming was their first priority when they were still energetic. Staying in urban areas - settling there and buying a house - is regarded as a shame by elders. They believe that one has to stay in urban areas for employment purposes not for building a home or buying a house there. Furthermore, they mentioned that there is not much difference between rural areas and urban areas (referring to townships). There is electricity in both townships and in most rural areas.

5.8.2 Aspirations for children’s education and employment
“Education is the most powerful tool that can be used to change the nation” (Mandela, 2003) once mentioned those words. Poverty goes beyond food insecurity to illiteracy and powerlessness, low life expectancy and unemployment (Tshuma, 2012). This sub-section will present household aspirations with regard to education and employment for children. A question may be raised as to why aspirations for the children when dealing with household heads. As it has been seen the demographic characteristics of our sample is made up of elders who have already retired; therefore, they no longer hope for employment but rather hope for their children and /grandchildren. When respondents were asked what level they want their
children to attain as far as education is concerned, most respondents wished their children could reach university level and hold at least a degree, while others mentioned completion of matric. Concerned about the high state of unemployment, respondents think the best way to deal with the problem of unemployment is to get education. Their dream is for their children to attain well-paying jobs, preferable government employment as it holds many benefits and that it may enable them to send remittances home. Nevertheless, some of them, because of the unpleasant situation of the high unemployment rate, said they would be happy if their children got any job.

5.9 Interest of children in farming
When asked if their children showed an interest in farming, many respondents gave a negative response, saying their children do not show any interest in farming activities. All they want to do is to spend time in taverns drinking with friends. Furthermore, they went on saying they even hire labour for weeding because their own children would work in the garden when hired by someone else knowing they will be paid. The only work related to farming which most young boys do is to herd livestock before and after school. Most of the out of school youth do not show any interest in farming. When interviewed, the members of the project who are few middle aged females said that all the youth who were participating in the project pulled out. They do not want to work, and they want quick cash for alcohol. This raises a question: do rural people see farming as an activity from which they can make a living?

5.10 What has changed over time?
From the literature reviewed and the discussion held with the respondents it has been revealed that the rural household life is not the same as it was in the past. A number of things have changed. This sub-section identifies, describes and analyses some of these changes.

5.10.1 Household structure
Manona (1999) provided insight into how rural household structures were in the past. That homestead may be composed of a man (household head) living with his wife and their sons with their wives in the same household. Therefore, household size was much bigger than that is seen in Ndabakazi villages. Furthermore, it was made up of more energetic young members who could provide labour for agricultural activities, unlike in these days where most households are made up of the pensioners living with their grandchildren.
5.10.2 Agricultural production
It was revealed in the group discussions that agricultural production was one of the major activities in rural households. Mainly the production of maize, dry beans, pumpkins and melons because those were the major food stuff consumed. The maize was produced in large quantities from the field and in gardens. Furthermore, the produce was stored and consumed until the next production was ready for consumption, particularly maize and dry beans. Production took place through family labour and the help from neighbours and extended families. Cattle were mainly used for ploughing, weeding and planting. Moreover, it was revealed that families with no cattle also benefited from other families with cattle as long as their children participated and helped when the span of oxen was organized. Kraal manure was used combined with a bit of commercial fertilizers to fertilize crop fields. Therefore, production of crops was not costly. In terms of livestock, the majority of households owned at least five livestock type: cattle, sheep, goat, pigs and chickens. Boys used to herd stock and they did not attend school regularly; they swap with others in attending school and herding livestock. However, in present days, boys attend school on a regular basis, hence in some households a livestock herder is hired.

5.10.3 Food access and consumption
The food expenditure shows that households in Ndabakazi spend more than 60% of their income on food. They produce only small quantities of food and they mainly depend on purchases for food access. The food consumed is also different compared with what was consumed in the past.

5.10.4 Household expenditure
Household expenditure of rural households has changed from what it used to be. Households spend most of their income on food (60% and more). However, in the past they produced most of their food, in some instances up 100% of their food was home produced in a sense that they had an option of trading maize or livestock for consumer goods such as sugar, tea, coffee and cooking oil in the then white owned shops. There are added items in rural household expenditure now, electricity and air time which were not applicable in the past. Moreover, some pay for extra TV channels, e.g. DSTV. In overall terms, rural household expenditure is higher than it was in the past despite the inflation rate.

5.10.5 Household activities and time spending
Daily rural household activities have changed. It was revealed in focus group discussions that apart from working in the field and garden, women used to fetch water from the rivers, wood
from forests and cook using wood. Floor polishing using dung was another common activity for women. However, most of these activities now have been abandoned because there is electricity and tap water around the communities.

### 5.11 Concluding remarks
This chapter has presented the findings of the field survey. The findings presented shows that the respondents of the field survey were females most of them who are widowed pensioners with primary education. The average household size was five members which mostly is made up of males and females over the age of twenty-one but less than the age of sixty. The average members who are in urban areas are three members per household. Most of the household heads were not born in the villages where they have homes but they were married to men of the respective villages. The majority of them own five hectares of land but they produce only in gardens adjacent to their homes but 29% do not produce at all. Maize, potatoes, cabbage and beans are the most produced crops with an average yield of 150kg, 62kg, 21 heads and 25kg of beans respectively. The most commonly owned stocks are chickens, goat, pigs, cattle and sheep respectively with an average of 9, 10, 3, 5 and 22 respectively. Most households spend an average of R1140 on food and have electricity, TV, radios and mobile phones. They like traditional food but consume modern food in their homes. They want their children to attain tertiary education and at least hold a university degree and work for the government. The youth do not show an interest in farming but want quick cash and spend most of their time in taverns.
Chapter 6: Analysis of the findings

6.0 Introduction
This chapter provides a detailed analysis of the findings using the rural livelihood framework. It starts off with relating livelihood assets of Ndabakazi households to the livelihood framework presented in chapter 3. It then discusses the access of these assets by households after analysis of livelihood strategies. A correlation between livelihood and aspiration variables is made and some specific cases are used in analyzing the change in livelihood strategies. Before the wrap up of the chapter, a critical analysis of the understanding gained from the insights into aspirations in relation to livelihood change is discussed.

6.1 Livelihood assets
Livelihood assets form the foundations on which a livelihood is based. One cannot attain any livelihood outcome without livelihood assets. Let us look at the livelihood assets for the study sample. There are five livelihood assets as assumed by the rural livelihood framework developed in chapter 5, namely natural capital, physical capital, social capital, financial capital and human capital. Starting with the natural capital, the rural household of Ndabakazi have land available to them. Most own more than five hectares. Apart from that, they also share grazing land, rivers and dams for water. From the grazing land they exploit natural herbs and wood for fuel. Secondly, looking at physical capital. This refers to the basic infrastructure available which is essential for a living. All household have access to electricity, the villages are accessible, there are gravel roads and the two villages of Komkhulu and Lengeni are close to the N2 road joining East London and Butterworth.

In terms of social capital which relates to social resources such as family kinship, co-operatives and other household co-operatives, family kinship still exists in the community although its degree has been reported to be declining. It was further mentioned that it is rare to get help from people e.g. for weeding. Instead, you have to hire help. However, it was mentioned that household at least ask for salt from neighbours. Furthermore, the food security project serves as a co-operative in which community members can work together to farm. The social grants, remittances and income derived from non-farm sources represent financial capital. Lastly, there is the human capital. The average household size of five people per household which is made up of men and women above the age of 21 but less than 60 represent the labour pool for the household which is mainly needed to carry out farming activities.
6.2 What influence does the access of livelihood assets have?
These building blocks of livelihood (assets) are influenced by a number of factors, namely laws, institutions, policies, culture and so forth. In the case of Ndabakazi households, the major influential factor in accessing most of the assets is the age of household head. This limits the household to only social grants. The education level also has an important role as it influences the type of employment and decision making. If most of them had higher education, they may have more retirement investments. With regard to younger household heads, the employment opportunities and education create a barrier for them to access livelihood assets particularly financial capital. Financial capital influences the access to other livelihood assets; for example, if you have a reasonable source of income, you can hire labour. You can also buy land and livestock.

6.3 Household aspirations
The households aspire to see their children obtaining higher education and getting university degrees so that they can qualify to work in well-paying jobs, preferable in government. The long term goal is for them to have sustainable sources of income as well as for the parents to receive remittances. What happens when people are educated? Experience from the respondents reveals that they leave rural areas and stay in urban areas with their families. This has implications because if all the children of the community are educated probably most would want to leave rural areas. Who would be there to farm? Literature denotes that poor people globally are mostly found in rural areas (Perret, 2001 and Perret et al., 2005; FAO, 2012). Furthermore, literature suggests that better off households mainly depend on non-farm sources of income while the poor rely on agriculture (Baiphethi & Jacobs, 2009; Alemu, 2012). An important question to be asked is why is that the case? This suggests that when household incomes increase they move away from agriculture. A study which sought to track the livelihood changes of rural households by Daniels et al. (2013) found that there were few individuals who moved into agriculture as a main source of income as opposed to those who moved away.

6.4 Correlation between aspiration variables and livelihood strategies
This sub-section analyses the relationship between aspiration-related variables and livelihood-related variables. Some of the variable could not be tested due to low frequency counts as the chi-square does not take numbers less than five.
6.4.1 Gender and aspirations for the area of living
Table 18 shows the results of chi-squared analysis for the relationship between gender of the household head and aspirations for the area of living i.e. how does gender of household head influence the choice of the area of living- do females prefer to stay in rural areas more than males or do females prefer to stay in urban areas more than males? The results show no relationship between these variable. This means there is no correlation between gender and aspirations for the area of living, thus gender has no influences on the decision for the choice of the area of living.

Table 18: Gender of household head and aspirations for the area of living

<table>
<thead>
<tr>
<th>Variable</th>
<th>Male</th>
<th>Female</th>
<th>Total</th>
<th>Critical value=3.843</th>
</tr>
</thead>
<tbody>
<tr>
<td>Gender of household head</td>
<td>30</td>
<td>50</td>
<td>80</td>
<td>Degrees of freedom=1</td>
</tr>
<tr>
<td>Aspirations for area of living</td>
<td>28</td>
<td>61</td>
<td>89</td>
<td>Probability=0.409811</td>
</tr>
<tr>
<td>Chi-squared=0.682</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

Conclusions: Accept the null hypothesis

Null hypothesis- the variables are INDEPENDENT (i.e. they are not related)
Alternative hypothesis- the variables are RELATED

6.4.2 Livelihood strategy and aspirations for area of living
Table 19 presents the results for the chi-square test between livelihood strategies and area of living. Only old age grant, child support grants and non-farm income could be tested due to the low frequency count for others. The results show no relationship between livelihood strategy and aspiration for the area of living. In other words, the choice of the area of living is not influenced by the livelihood strategy pursued by the household. However, literature paints a different picture. It reveals that since rural households have more space for agricultural activities they should be farming or rural households choose to live in rural areas so that they can pursue farm-based livelihood strategies. However, it seems to be a different story. The majority of households (86%) preferred rural areas over urban areas and their reason was that rural areas have more space where they can build many houses and do some farming activities.
Table 19: Livelihood strategy and aspirations for the area of living

<table>
<thead>
<tr>
<th>Variable</th>
<th>OAG</th>
<th>CSG</th>
<th>Non-farm</th>
<th>Total</th>
<th>Statistical measures</th>
</tr>
</thead>
<tbody>
<tr>
<td>Livelihood strategy</td>
<td>48</td>
<td>10</td>
<td>16</td>
<td>74</td>
<td>Critical value=5.991</td>
</tr>
<tr>
<td>Aspirations for area of living</td>
<td>45</td>
<td>5</td>
<td>15</td>
<td>65</td>
<td>Degrees of freedom=2</td>
</tr>
<tr>
<td>Total</td>
<td>95</td>
<td>15</td>
<td>31</td>
<td>141</td>
<td>Probability=0.536347</td>
</tr>
</tbody>
</table>

Chi-squared= 2.131

Conclusions: Accept the null hypothesis

**Null hypothesis**- the variables are INDEPENDENT (i.e. they are not related)
**Alternative hypothesis**- the variables are Related

6.4.3 Land ownership and cultivation of gardens

Table 20: Correlation between land ownership and cultivation of gardens

<table>
<thead>
<tr>
<th>Variables</th>
<th>Less than a hectare</th>
<th>2-3 hectares</th>
<th>Five or more hectares</th>
<th>Total</th>
<th>Statistical measures</th>
</tr>
</thead>
<tbody>
<tr>
<td>Land ownership</td>
<td>23</td>
<td>18</td>
<td>37</td>
<td>78</td>
<td>Critical value= 5.991</td>
</tr>
<tr>
<td>Cultivation of gardens</td>
<td>20</td>
<td>10</td>
<td>27</td>
<td>57</td>
<td>Degrees of freedom=2</td>
</tr>
<tr>
<td>Total</td>
<td>43</td>
<td>28</td>
<td>64</td>
<td>135</td>
<td>Probability=0.666228</td>
</tr>
</tbody>
</table>

Chi-square= 2.324

Conclusions: Accept the null hypothesis

**Null hypothesis** - the variables are INDEPENDENT (i.e. they are not related)
**Alternative hypothesis** – the variable are RELATED

Table 20 presents a chi-square test between land ownership and cultivation of gardens. The cultivation was limited to gardens only because they were the only cultivated land in the previous season. No respondent cultivated fields, in fact, no household cultivates fields in the
entire community. The results depict no correlation between these variables. Garden cultivation is not influenced by land ownership. Households need land in order to cultivate. This is what is known; however, interest is in the choice of cultivating the land because most households of Ndabakazi have access to land. There were no households who claimed to be renting land or are in a contract for land. However the size of land does not have an effect on the choice of whether to cultivate it or not since the access to land is not a question in this case.

6.4.4 Education and livelihood strategies

The following table (21) presents a chi-square test between household livelihood strategies and the level of education. Only two categories of the level of education could be tested due to the low frequency count of other categories. The results show that there is a correlation between education and livelihood strategies. In other words, choice of livelihood strategy is influenced by education level. This is corroborates what literature says. Well educated household heads are expected to pursue well-paying livelihood strategies whilst those with low standard of education or none are expected to pursue low returning livelihood strategies (Alemu, 2012),

Table 21: Correlation between education and livelihood strategies

<table>
<thead>
<tr>
<th>Variable</th>
<th>Primary</th>
<th>Secondary</th>
<th>Total</th>
<th>Statistical measures</th>
</tr>
</thead>
<tbody>
<tr>
<td>OAG</td>
<td>37</td>
<td>7</td>
<td>44</td>
<td>Critical value=3.843</td>
</tr>
<tr>
<td>Non-farm</td>
<td>9</td>
<td>9</td>
<td>18</td>
<td>Degrees of freedom=1</td>
</tr>
<tr>
<td>Total</td>
<td>46</td>
<td>16</td>
<td>62</td>
<td>Probability=0.00533</td>
</tr>
</tbody>
</table>

Chi-square=7.754

Conclusion: Reject the null hypothesis (i.e. the variables are related)

**Null hypothesis** – the variables are INDEPENDENT (i.e. they are not related)

**Alternative hypothesis**- the variables are RELATED

6.5 Changes in investment strategies

Investments are one of the fundamental ways of storing wealth as assets. Rural households in the past invested in farming, both livestock and crop production as these go together. Men worked in other non-agricultural industries such as mining, but they would invest in buying livestock. This was more like a norm in such a way that every man’s dream was to own livestock and cultivate large areas of land. Livestock carried a bigger value to the rural
community as it performed multiple functions encompassing the rural livelihood. These include draught power-ploughing, transporting the harvest and fire wood, rituals and adding to food security and other social services. Households would even exchange livestock for maize. However, the offtake has always been low.

Today this not the case in many rural communities including Ndabakazi. Even if you travel you see expensive houses in rural areas, as you would see them in urban areas, with luxury furniture and televisions as indicated in the previous chapter. The number of rural households owning televisions in Ndabakazi is more than 90%. All this suggests that investment strategies of rural households have changed over time from farming to housing and furniture. This, however, is not an economically valid investment as the value of the property would have a lower value in rural areas than it would in urban areas. Yet livestock still has the same value.

6.6 Specific cases
This sub-section analyses the changes in how people construct their living now compared to the past using specific cases drawn from the survey data-group discussions. What is revealed from these cases is that 1) Livelihoods of rural households have changed over time and the change is from farming activities to non-farming activities, particularly non-labour strategies. This change is revealed by the decline in the number of livestock owned as well as the area of land cultivated which relates to yield. 2) Investment strategies have changed. Investing in livestock has declined while crop investment has increased in the sense that it is more costly to produce now than before due to hiring of tractors, labour for weeding and so on, even though the area cultivated has been decreased. 3) Aging plays a big role in the decline of farming activities in rural areas. The case of one household below suggests that when parents get old there is no one to continue with the farming activities. 4) The household size and family labour, in fact, the structure of the household, has changed over time as revealed by one household below. In addition, kinship between neighbours and villagers at large has declined over time as people are now more cash orientated.

The following are the livelihood stories as told by three of the respondents:

I am 72 years of age. I was married to a man from Komkhulu village in 1963, He died in 2002. He worked in Cape Town Dairies for many years. He used to send money to buy livestock while He was working. I stayed at home taking care of the household activities and livestock. We had cattle, sheep, goat, pigs and
chickens. We produced in field and garden. We harvested more than 20 bags of maize, 5 bags of beans, pumpkins and melons. We consumed these until the next produce is ready for consumption, we only buy sugar, tea, coffee and cooking oil some times. My neighbours and relatives helped me in weeding and harvesting then I would give them maize and pumpkins when they need them. We ploughed and plant using cattle. We grouped them so that we can form a span. I stopped producing in the field in 2004 after the death of my husband I could not work in the field anymore I do not have energy and I am sick. My livestock died after the death of my husband now I am left with 2 cattle, 3 goats and 2 pigs. I only produce in garden hiring tractor for ploughing and a horse for planting. I also hire labour for weeding R50 a person per day. Sometimes I do not finish weeding because of money as a result I get low yield 1 or 2 bags of maize. Farming today is costly we just do it because we used to do it.

I am 52 years of age. I live alone; my wife died 3 years ago. My eldest child works in Cape Town some are still in school there. I worked in mines since 1985, I build my home and buy livestock. I got retrenchment in 1999. We depended on our child support grant and some odd jobs. We were producing both in the field and garden but we stopped because fencing is not properly erected and it is old. Now I use spade to prepare my garden. I depend on remittances from my children and produce from my garden, I sell some cabbage when I have them in large quantities.

I am 42 years of age; I live with my wife and 3 children. We mainly depend on the child support grant. We are not working, we get some odd jobs such as plastering houses and erecting fence while my wife do laundry in other rich families but they do not come on a regular basis. I have more than 6 hectares of land, I inherited these fields from my father but we only produce in a small portion of the garden because we do not have money to hire tractor to cultivate the whole garden. I do not have cattle my father’s cattle died I am left with only 5 goats. My grandfather had many sheep more than 100, 27 cattle and 5 horses but they all died after him. We use to produce maize, beans, melons and pumpkins in large quantities. We consume these produce until the next produce is ready for consumption. We ploughed with cattle. We were 15 in my home including my
grandfather and grandmother, my father and my mother, my siblings and uncles. We all worked in the field and garden.

6.7 Could the changes in livelihood strategies and the causes of the change be understood by looking at non-aspiration factors only?
Livelihoods are complex in such a way that they involve many factors and in turn these factors are influenced by a number of other factors. Several studies that have described livelihoods as well as the causes of their changes have referred to the complexity and interaction of the factors causing the change. Therefore, they do not point at one factor to account for the change. Furthermore, there is a general assumption that livelihood research follows, that because rural household have land available to them and poverty is mostly associated with rural areas, they should be farming. In addition, the factors that are mentioned to be the causes of the change in livelihood strategies are not found in or influence all households in the same way.

It is important; therefore, to look at how much influence does each category of these factors, i.e. external and internal, have on livelihood strategies. In other words which one affects the choice of livelihood more than the other? It should also be understood that households have the freedom of choice. If they choose not to pursue farming related livelihoods, they can never be forced to do so. Even if there are external influential factors that may be limiting, if households want to pursue farm related livelihoods, they will try by all means to do so. Therefore, their choice which in this context is the livelihood strategy has the final say in the matter. This suggest that aspirations have more power in the decision of choosing a livelihood strategy in that way they put us in a better position to understand the change in rural livelihood as well as the causes.

6.8 Concluding remarks
This chapter has been analysing the livelihood assets of the study sample in the context of the livelihood framework as well as correlation between some aspirational and demographic variables. Rural households of Ndbakazi have all the assets needed to make a living. They have natural capital (land and livestock), physical capital (electricity, roads and tap water) social capital (although it is lacking but there is still some kinship between households), and in terms of financial capital social grants, non-farm income and remittances provide the finance; however, these sources are not sufficient and sustainable. The access to these assets is influenced by age and level of education. The choice of the area of living is not influenced by gender and it does not influence the area of living. The education level influence the
choice of livelihood strategy whilst garden cultivation is not influenced by the size of the land which a household own. The livelihood investment of rural households has changed from farming to non-farm investments. Aspirations have more power in the choice of livelihood strategy, especially in choosing whether to farm or not; therefore, they enable us to understand the complete picture of livelihoods.
Chapter 7: Summary, conclusions and implications

7.0 Introduction
This is the final chapter of the dissertation. It provides a summary of the research and draws conclusions based on the objective of the research. The conclusions are based on the findings as well as the synthesis of the reviewed literature. The implications of the conclusions are described. The idea is to give meaning to the knowledge generated by the research and also provide insight for the way forward.

7.1 Summary
The literature reveals that in many rural areas of South Africa large areas of land which in the past were used for crop production remain unused. At the same time, the literature tells a story of increasing reliance on social grants among rural households. In the past, rural households produced most of their food, in some cases all of their food. This suggests that farming was a major activity in rural households. This was the case despite the fact that they were deprived of productive assets such as land and government services such as input subsidies which were enjoyed by whites. These days, however, rural households depend on the market for their food. Several studies have investigated the cause of this scenario and pointed out many factors to account for this change. The factors can be categorized into two: those internal to the household and those external to the household. These include the impact of the social grants, which have increased households’ dependence on cash. Increased migration of the rural population has occurred, especially the youth who provided family labour for farming, leaving the old with grandchildren in rural areas. The impact of climate change has been mentioned, specifically unreliability and uneven distribution of the rain. The impact of the HIV/AIDS pandemic which kills the active population has also been mentioned. It takes much of rural household’s time in caring for the sick and uses up resources which could have been invested in farming. The outcomes of new policies such as Reconstruction and Development Programme, which facilitated provision of clean water, electricity and other infrastructure in rural areas has changed rural life.

This study applied a retrospective approach in conjunction with the rural livelihood conceptual framework. The framework was developed from the social systems approach and the sustainable livelihood framework. Data was collected from 80 household heads, and from focus group discussions, using semi-structured questionnaires.
The findings show that Ndabakazi households are made up of females, most of them are widowed pensioners with primary education with an average household size of five members mostly made up of males and female over the age of twenty-one but less than the age of sixty. The average number of people who are in urban areas are three members per household. Most of the household heads were not born in the villages. They originate from other areas but they were married to men of the respective villages. The majority of them own five hectares of land and more, where they work the land only in gardens adjacent to their homes. However 29% do not produce crops at all. Maize, potatoes, cabbage and beans are the most produced crops. Farming contributes a small portion to the household income. Pensions, non-farm employment, and child support grants are the major sources of income.

7.2 Conclusions
The question underpinning the research is what are the aspirations of rural households towards farming? In other words, do they see farming as an activity they can use to make ends meet? The main objective of the research was to explore the influence of aspirations in changing rural household livelihood strategies with three specific objectives: to describe livelihood strategies as well as changes in livelihood strategies, to identify external causes of changes in livelihood strategies and to explore specifically the role of aspirations in changing livelihood strategies.

The main livelihood strategies of Ndabakazi households are social grants, non-farm income sources and remittances. Therefore the relevant hypothesis that was made which states that the main livelihood strategies in Ndabakazi are social grants, remittances and non-farm employment accepted. Households use more than one activity to make a living. Farming activities still occur; however, their relative importance and contribution to household income is very small. Farming in the past was the major activity in Ndabakazi, both livestock and crop production, because they produced most of their food, in some cases 100%, although non-farm sources and other activities also contributed to household income. Therefore, livelihood strategies have changed over time. There is no concrete evidence as to the exact period when the livelihood strategies changed; nevertheless, it is clear that it took a number of years. However, the change has been more noticeable after the transition to democracy which gave rights to black people, for example, the right of moving and residing anywhere in the country and the improvement of rural infrastructure.
There are a number of external causes which explain the change. It was hypothesised that livelihood strategies change because of increasing requirements for cash, changes in climatic conditions, increasing cost of living, level of education, availability of family labour, employment opportunities and improvement in social infrastructure. Some were accepted and to some there is no enough evidence to accept. The increased requirement for cash given by the increased household expenditure focusing on a number of items not the amount of cash spent because, of course, inflation has an impact as well as cost of living has gone up. Additional items include electricity cost and airtime and mostly food items. Infrastructure (electricity) has an impact on the change of rural lifestyle and consequently on the livelihood strategies. In terms of the level of education there is no enough evidence showing the impact. Employment opportunities have an impact due to the flight of young people to cities to find better opportunities.

With respect to internal factors, household demographic information, particularly age of the household head and structure (size) may be held accountable for the declining participation in farming. Events such as the death of the husband influence the participation of households in farming both livestock and crop production. With respect to farming aspirations, households show very little evidence of interest in farming even given the support they have (food security project) compared to the past. Furthermore, evidence from the survey suggests that farming is not viewed as an activity that one can use to make ends meet. In conclusion the declining participation in farming activities relates to the little interest households show in farming activities and, therefore, this influences the change in livelihood strategies. Therefore aspirations have a role in the household decision to engage themselves in agricultural activities. All of the respondents have land but not all of them engage in agricultural production and for those who lack infrastructure and inputs, the food security project is the alternative however there are very few members. Evidence from the survey shows that investment strategies of rural household have changed away from farming. Therefore it can be concluded that aspirations play a role in changing livelihood strategies of rural household.

7.3 Implications of the conclusions
So many development initiatives have been introduced to develop and empower farming rural households by the South African government (Tregurtha, 2009). To name a few, the Farmer Support Programme (FSP) in which people were given loans for purchasing inputs in the assumption that they will pay back the loans when they have harvested the crops. The programme was not quite effective, it left people with loans they could not afford to repay.
Given that there have been other initiatives introduced like the formation of a community food security project (Siyazondla), a partnership between the Department of Social Development and the Department of Rural Development and Agrarian Reform. However, so many initiatives such as the Zanokhanyo Food Security Programme and Massive food production have not achieved their intended goals. An important question to ask is why gave they failed? In rural development initiatives a top-down approach is always followed. Phiri (2009) in his study argued that development is not like a disease diagnosed by a doctor who then prescribes medication to the patient. The social systems approach also emphasizes the incorporation of all the stakeholders i.e. the development practitioners and the beneficiaries in order for development to be achieved. In all of the above cases the big elephant is the aspirations of the rural people. Rural people know better than development practitioners. Thus local knowledge is important in development. In South Africa policies of rural development always take the top down approach i.e. development practitioners assume that rural household lack inputs and financial service that is the reason they do not engaged in agricultural production and that because there is much land available in rural areas, rural household should be farming. As a result, most of them do not become effective in achieving intended goals. Policies should be tailored with the aspirations of local people for them to be effect and achieve their intended goals thus a bottom-up approach. Typical example is the Zanokhanyo food security project. Further research-longitudinal research is needed in this area to explore more the role of aspirations over a long period of time.
List of references


BROWN, L.R., 1999. An evaluative discussion of the capacity of decision making models to serve as the basis of development: Going much further with the Social Systems Approach. Unpublished BSc Agric Honours Seminar, University of Fort Hare.


http://www.datafirst.uct.ac.za/saproject/sa_project/workshop/spp_projects/project.gloria.cada


SOUTH AFRICAN WEATHER SERVICE rainfall statistics for Butterworth measured from East London branch.


Appendix A: Survey Questionnaire
University of Fort Hare
Department of Agricultural Economics and Extension
Household survey questionnaire for the Ndababakazi villages

Name of the village……………………………………………………………………………………………
Questionnaire reference number…………………………………………………………………………
Date of the interview…………………………………………………………………………………………

SECTION A: HOUSEHOLD DEMOGRAPHIC INFORMATION
A1. Gender (Household head)

<table>
<thead>
<tr>
<th>Male</th>
<th>Female</th>
</tr>
</thead>
</table>

A2 Age

| 30-39 | 40-49 | 50-59 | 60+ |

A3 Marital status

| Single | Married | Divorced | Widow |

A4 Occupation of household head

A5 Household composition, structure and occupations

<table>
<thead>
<tr>
<th>Members of the household</th>
<th>Gender</th>
<th>Level of education</th>
<th>Age</th>
<th>Occupation (e.g. working, studying, unemployed, etc.)</th>
</tr>
</thead>
<tbody>
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</tbody>
</table>

A6 How many members of the household are in urban areas? .................................................
A7 Were you born in this village? ...........................................................

SECTION B: PRODUCTION

B1 How much land do you own?

<table>
<thead>
<tr>
<th>≤ a hectare</th>
<th>≤4 hectares</th>
<th>&gt;4 hectares</th>
</tr>
</thead>
</table>

B2 Do you have the following equipment?

<table>
<thead>
<tr>
<th>Equipment</th>
</tr>
</thead>
<tbody>
<tr>
<td>Plough</td>
</tr>
<tr>
<td>Planter</td>
</tr>
<tr>
<td>Cultivator</td>
</tr>
<tr>
<td>Yoke</td>
</tr>
<tr>
<td>Rake</td>
</tr>
<tr>
<td>Fork spade</td>
</tr>
<tr>
<td>Hoe</td>
</tr>
<tr>
<td>Other (specify)</td>
</tr>
</tbody>
</table>

B3 Do you produce crops on your land?

<table>
<thead>
<tr>
<th>Yes</th>
<th>No</th>
</tr>
</thead>
</table>

B4 If no, reasons

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B5 If yes, what crops did you produce in the previous year (2013)?

<table>
<thead>
<tr>
<th>Type of crop</th>
<th>Type and amount of inputs used on previous production season</th>
<th>Type of labour used</th>
<th>Expected quantity Seasonally</th>
</tr>
</thead>
<tbody>
<tr>
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</tbody>
</table>

B6 What do you think should be done by government to help people to produce?

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..................................................................................................................................................
..................................................................................................................................................
..................................................................................................................................................
..................................................................................................................................................

B7 Farming cost in the previous production season (2013)

<table>
<thead>
<tr>
<th>Activity</th>
<th>Relevant cost in R (seasonally)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Ploughing</td>
<td></td>
</tr>
<tr>
<td>Fertilization</td>
<td></td>
</tr>
<tr>
<td>Pesticides</td>
<td></td>
</tr>
<tr>
<td>Weeding</td>
<td></td>
</tr>
<tr>
<td>Vaccination</td>
<td></td>
</tr>
</tbody>
</table>
B8 Do you sell your produce?

Yes  No

B9 If yes, where?

........................................................................................................................................
........................................................................................................................................


B10 What type of livestock do you have currently (2014)?

<table>
<thead>
<tr>
<th>Livestock type</th>
<th>Quantity/numbers</th>
<th>Typical annual usage</th>
<th>Products and by products</th>
</tr>
</thead>
<tbody>
<tr>
<td>Cattle</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Sheep</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Goats</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Pigs</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Chickens</td>
<td></td>
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</tr>
</tbody>
</table>

B11 What challenges do you encounter in producing crops?

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B12 What challenges do you face farming livestock?

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........................................................................................................................................
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### SECTION C: CHANGES IN HOUSEHOLD EXPENDITURE

C1. Household expenditure

<table>
<thead>
<tr>
<th>Expenditure</th>
<th>Relevant cost in R (monthly)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Food</td>
<td>P/M</td>
</tr>
<tr>
<td>Transport to work/school/shops</td>
<td>P/M</td>
</tr>
<tr>
<td><strong>EDUCATION</strong></td>
<td></td>
</tr>
<tr>
<td>School fees</td>
<td></td>
</tr>
<tr>
<td>School uniforms</td>
<td></td>
</tr>
<tr>
<td>Books</td>
<td></td>
</tr>
<tr>
<td><strong>ENERGY</strong></td>
<td></td>
</tr>
<tr>
<td>Wood</td>
<td>P/M</td>
</tr>
<tr>
<td>Electricity</td>
<td></td>
</tr>
<tr>
<td>Gas</td>
<td></td>
</tr>
<tr>
<td>Remittances</td>
<td></td>
</tr>
<tr>
<td>Repayments</td>
<td></td>
</tr>
<tr>
<td><strong>OTHER COSTS</strong></td>
<td>p/m</td>
</tr>
<tr>
<td>Airtime</td>
<td></td>
</tr>
</tbody>
</table>

C2 Do you receive remittances from other family members?

<table>
<thead>
<tr>
<th>Yes</th>
<th>No</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td></td>
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</tbody>
</table>
C3 How have the following changed over the past 20 years and how have the changes influenced your lifestyle?

a) Production from farming activities
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b) Food access
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c) Household expenditure
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d) Household income
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e) Time management
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f) What important events do you think may have caused the changes in the above factors?
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...................................................................................................................................................
...................................................................................................................................................
...................................................................................................................................................
g) Rank sources of income according to their importance
1……………………………………
2……………………………………
3……………………………………
4……………………………………

SECTION D: HOUSEHOLD ASPIRATIONS

D1 Do you have the following:

<table>
<thead>
<tr>
<th>Television</th>
<th>When did you acquire them</th>
<th>Anticipated change</th>
</tr>
</thead>
<tbody>
<tr>
<td>Radio</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Mobile phone</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Electricity</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Others</td>
<td></td>
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</tbody>
</table>

D2 Which TV programmes do you watch?
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D3 Ideally, where would you want to live (urban or rural)? Explain your answer.
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D5 What kind of employment would you want your children to have?
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D6 Do you think they will be able to find such employment? Y or N

D7 If no, why?

D8 What level would you want your children to reach when studying, e.g. complete matric or hold a university degree? Explain.

D9 Which food do you eat? Traditional or Modern food?

D10 Explain your choice?

D11 What can be done to make your life better?

THANK YOU FOR YOUR CO-OPERATION!!!
Appendix B: Focus Group Questionnaire
University of Fort Hare
Department of Agricultural Economics and Extension
Focus group questionnaire for the Ndababakazi villages

1 Were you born in this community?

2 Tell me about livelihoods in this community in the past before 1994?
   A) In general
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      …………………………………………………………………………………………………
      …………………………………………………………………………………………………
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      …………………………………………………………………………………………………
   B) Your specific case
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3 What has changed: major changes you see with respect to how people construct their way of living, farming, sources of income, household expenditure and lifestyle in general?
   A) In general
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B) Is there any evidence of changes we can all notice?

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4 How have these changes influenced the way you live?
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5 Did they change it for the better or worse?
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6 Do you think people like to live in rural areas? Explain
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7 What level would you want your children to reach when studying, e.g complete matric or hold a university degree, Explain.
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8 What do you think is the best employment for your children? Explain.
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9 Do you think people still prefer the traditional food over modern food? Explain
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10 How is the interest of youth towards farming?
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THANK YOU FOR YOUR CO-OPERATION!!!