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The impact of land and agrarian reforms on poverty alleviation: lessons from the Jay Dee Rovon workers trust and Mon Desire in Joubertina, Eastern Cape-South Africa

BY

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**Submitted in partial fulfilment of the requirements for the degree of Master of
Agriculture (Agricultural Economics)**

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DECLARATION

I, Ntombozuko Mqikela, hereby certify that this dissertation is the result of my own original work and has not previously been submitted to another university for the purpose of a degree. Where use has been made of the work of others, such work has been duly acknowledged in this text.

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DEDICATION

I dedicate this thesis to my family (Late father Wala Mqikela, my mother Nogcinile Ngqula, and my sisters Zukiswa Mqikela, Ntombizakhe Mqikela and Nosipho Ngqula).

ABSTRACT

The broad objective of the study is to investigate the impact of Land and Agrarian reforms on poverty alleviation in Joubertina. Purposive sampling method (non-probability sampling) was carried out mainly on two groups of people, land reform beneficiary in Jay Dee Rovon and non-beneficiary in Mon Desire. Moreover, the stratified random sampling method was also applied in Jay Dee Rovon to choose a sample of 60 households from 129 land reform beneficiaries in Jay Dee Rovon and simple random sample of 60 applied to Mon Desire household subsistence. Binary Logistic Regression model was used to test factors that influenced beneficiary on level of production. Results indicated that age and farming experience were significant variables. Age had a negative coefficient value, meaning an increase in age was less likely to cause beneficiary to produce at commercial level. Descriptive statistics revealed that farming activities in the study areas seems to be performed mostly by relatively medium age people followed by younger people and lastly by the older people.

Moreover, farming experience with positive coefficient revealed that it is highly likely to influence the beneficiary to produce at commercial for marketing. The older the farmer the more the experience s/he had in farming activities. However, descriptive revealed, medium and young age people with little knowledge tend to be more active than older people on farming activities but on the other hand they are more capable of carrying out physical activities. The results revealed that land reform beneficiaries likely to influence the level of production for marketing while non-beneficiaries produce for home consumption and little for sale in local market. An improvement on yield results an increase on income and thus leading to a change in ownership of household's durable assets. An increase in yield also indirectly results employment recreation, increasing real wage and improve farm income thus leading to poverty reduction in JDR as compare to MD. The study recommends that the government should also assist non-beneficiaries in MD with agricultural infrastructure to improve their level of production and food security at household level.

Keywords: *Land and Agrarian reforms, beneficiaries and non-beneficiaries, rural livelihoods, poverty and poverty alleviation, Jay Dee Rovon and Mon Desire*

LIST OF ABBREVIATIONS AND ACRONYMS

AE	Alzheimer Europe
AgriSA	Agri South Africa
ANC	African National Congress
BEE	Black Economic Empowerment
CASP	The Comprehensive Agricultural Support Programme
CIMMYT	International Maize and Wheat Improvement Center
CLRB	Communal Land Right Bill
CRDP	The Comprehensive Rural Development Programme
CRLR	Commission on the Restitution of the Land Rights
DARSA	Department of Agriculture Republic of South Africa
DFID	Department for International Development
DLA	Department of Land Affairs
DRDAR	Department of rural development and Agrarian reform
DRDLA	Department of Rural Development and Land Affairs
DRDLR	Department of rural development and Land reform
ESTA	The Extension Security of Tenure Act
FAO	Food and Agricultural Organisation
GNP	Gross National Product
GDP	Gross Domestic Product
IFAD	International Fund for Agricultural Development
IPC	International Poverty Centre
IPILR	The interim Protection of Informal Land Rights Act
ISRDS	Integrated and Sustainable Rural Development Strategy
JDR	Jay Dee Rovon
KKLM	Kou-Kamma Local Municipality
LAC	Land Administration committees
LBACB	The Land Bank and Agricultural Credit Board
LCC	Land Claims Commission
LRAD	Land Redistribution for Agricultural development

LRCFS	Lund Report on Child and Family Support
LRP	Land Reform Program
MD	Moon Desire
MIT	Massachusetts Institute of Technology
NGO's	Non-Government Organisation
NDA	National Department of Agriculture
NDLR	National Department of Land Reform
NERPO	National Emergent Red Meat Producers Organization
NLA	Natives Land Act
QOL	Quality of life survey
RNR and AT	Renewable Natural Resources and Agricultural Team
SARPN	Southern African Regional Poverty Framework
SLAG	Settlement Land Acquisition Grant
SLF	The Sustainable Livelihoods Framework
SRL	Sustainable Rural Livelihoods
SSPSS	Statistical Package for Social Scientists
TLGFA	The New Traditional Leadership and Governance Framework Act
UE-Urban	Econ Development Economists
UNDP	United Nations Development Programme
UN DESA	United Nations Department of Economic and Social Affairs
UNMDGs	United Nations Millennium Development Goals
USA	United States of America
WB	World Bank
WBI	World Bank Institute
WDR	World Development Report
WSWB	Willing Seller and Willing Buyer

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CHAPTER 1

INTRODUCTION

1.1 Background of the study

Land is defined as the total dry area of the earth which is most crucial for agricultural production. It is also often referred to as the backbone of modern economic systems as well as the driver of economic development. Land has multiple uses and it has to be expected that there will be disputes regarding its ownership and use (Obi, 2006). Land is a primary means of subsistence and income generation in rural economies. The access of land allows rural dwellers to put their labour to productive use in farming activities while providing a supplementary source of livelihoods for rural workers and the poor people who live in urban area (Thwala, undated). Land can be loaned, rented/leased or sold in times of financial stress which means that it provides a degree of financial security. Land is the basis of wealth and livelihood security for future rural generations. Rights and access to land are major determinants of a household's capacity to choose and determine their own level of farm capacity and use. It also strengthens the hand of the rural poor in their participation in the labour market while contributing significantly to rural employment growth (Thwala, undated).

According to van Rooyen (2008), land is a scarce resource while overpopulation is a sad reality which exists in developing countries. For example, in South Africa, the smallholder farmers in Eastern Cape region are engaging their farming activities on relatively small pieces of land because they have limited access to land (Jari, 2009). According to Mamphondo (2007), during the apartheid era, Black South Africans were forced to live in overcrowded areas such as homelands and townships (Maisela, 2007). The Native Land Act which was initiated in 1913 by the ruling government before 1994 resulted in only ten percent of land being reserved for blacks. In the South African context, land dispossessions led to population segregations according to race with disempowering consequences for the black people (Maisela, 2007). In the homelands areas, small-scale farmers practised agricultural activities on poor quality of land with little farming activities taking place. Agriculture was mainly for family consumption due to lack of funds to purchase inputs of production such as fertilizers, seeds, among others (Mamphondo, 2007). Most agricultural practices were carried out under increasing pressure of scarce land resources managed under

insecure customary land ownership and communal grazing land. These insecure tenure systems imposed severe limits on the farming system and prevented the farmers from attaining their full potential (Machingura, 2007).

These farmers also used less capital on production due to lack of access to the bank loans. They used less advanced technology and most of them relied on hired labour for production due to lack of machinery (Jari, 2009). Most of these smallholder farmers were resource-poor in nature and were unable to produce a stable amount of output each year. This means that, even to-date smallholder farmers have lack of capital assets needed for ensuring their livelihoods (Jari, 2009). However, after the 1994 elections, the elected party (ANC) established the Land Reform Programme to rectify past injustices (Mamphondo, 2007). These policies play a significant role in finding solutions to problems regarding the limited access to land resource (Machingura, 2007). In rural areas, land is considered a major asset and input in the agrarian farming system. Agriculture continues to be the main source of income for many agrarian economies in rural communities as well as in many parts of developing countries.

Land reform that provides secure access to land is an important factor in escaping poverty. It is also a crucial aspect of social and economic transformation in South Africa in terms of correcting past injustices and poverty in rural areas (Thwala, 2003). Land reform was established to empower beneficiaries in order for them to be able to improve their economic as well as social wellbeing (Rugege, 2004). It was a need to create a strategy for poverty alleviation and food security and thus improve nutrition and rural incomes (Didiza, 2006). However, the redistribution of income and improvement of living standards in rural areas requires access to land. The redistribution of agricultural land is a catalyst of agrarian reform because it involves the redistribution of capital in rural areas (Thwala, 2003). Furthermore, the redistribution of agricultural land would also create stronger linkages between farm and off farm income-generating activities, and therefore expand opportunities for the promising youth who reside in rural areas (Didiza, 2006).

Moreover, land redistribution is inevitably a highly politicized process (Thwala, undated). It transfers land, authority and status from the advantaged to the disadvantaged community through the redistribution process (van Rooyen, 2008). It is concerned with taking land from the hands of the few and diffusing it to the hands of many (Thwala, undated). Land reform can also promote more equitable patterns of growth that shift income and power to the poor

in rural areas. Therefore, Land Reform means a lot to rural incomes as it is also the rational starting point in the effort to address the huge imbalances and inequalities that have existed for many years. Moreover, the persistence of poverty, poor economic performance and growing inequality makes such reforms both necessary and urgent. This means that, the equality in access of land is ensuring economic growth in rural areas as well as preventing severe social and political instability of the country (Thwala, undated).

Moreover, the word “reform” refers to a change particularly an institutional innovation promoted by the ruling party in an attempt to overcome economic or political contradictions (Thwala, undated). However, the ability of the reform to have a positive effect depends on effective and productive use of land. Secure access to land and its productive resources is seen as a way of improving rural livelihoods and alleviating poverty. In other words, the programmes of Land Reform makes it possible for the rural poor to access shelter, food, employment and improved livelihoods (Manenzhe, 2007). It also often acts as a catalyst which results in economic development as well as social improvements. Economic goals of land reform include enhancing levels of output and market efficiency, achieving greater incomes, increased gross domestic product (GDP) and a more favourable balance of trade while social goals of land reform include more even distribution of income, wealth and resources as well as increased access to information and education (van Rooyen, 2008).

1.2 Problem statement

In South Africa, most of the people are rural based like in other developing countries of the world. The people in rural areas live in extremely poor conditions and the majority of them are women and children. These people rely on income that depends on agricultural activities for their livelihood (Meyer *et al.*, 2009). Agriculture is their main source of employment making it their primary source of income. The poor people in rural areas tend to benefit more from economic growth that originate from agricultural sectors than industrial sectors (Pinstrup-Andersen and Shimokawa, 2006). Poverty is a prevailing factor which can be alleviated through agriculture. The World Bank suggests that only certain types of growth can achieve poverty alleviation which is mainly agricultural growth led by land redistribution. Growth in agricultural income combined with the right development policies can lead to a

vibrant non-farm sector which in turn leads to further economic growth through the industry (Thwala, 2003).

However, the South African economy features the uneven distribution of wealth in the form of land since the government which was ruling before 1994 passed laws that limited black people's access and control over land resources. The access and control of land has been at the centre of struggles between racial groups since the 1860s and the Natives Land Act of 1913 had the most serious effects on the welfare of the blacks (Rusenga, 2013). Land is an important factor of production and plays a big role in economic growth and development. However, the supply of land is limited and this raises many economic as well as political arguments. Land is a political and emotive issue in the South African context and there is a large number of unresolved issues. Due to many perspectives on the state of land reform in South Africa, the governmental, non-governmental and civil society have focused attention on the issue. The ruling government after 1994 sought to address the challenge of inequitable access to resources such as land through a comprehensive land reform programme and agricultural restructuring. However, more information is needed to provide a balanced appraisal of the situation given that the conditions that prevailed before the programme was established do not seem to have changed to any noticeable extent. Studies have also been conducted to gain further insight into the land reform process and their results have been inconclusive, at best.

Since the conception of the Land Reform Programme in 1994, many debates have been raised by the public pertaining to the effectiveness of the programme. Although the government has introduced a number of initiatives to address the challenges associated with land reform process however, serious problems remain and there is still the reality that many black people are unable to access the land for agricultural productive purposes. The effectiveness of the Land and Agrarian Reform programme has therefore come under increasing scrutiny making it necessary for further research to be conducted to establish the relevance of current approaches and the future directions in which remedial actions should go. The above scenario called for the study to be conducted to identify the impact of Land and Agrarians reform on poverty alleviation by comparing a large capital project with one in which no investment has been made at all.

1.3 Objectives of the study

The broad objective of the study is to investigate the impact of Land and Agrarian reforms on poverty alleviation in Joubertina area.

The specific objectives are:

- To identify the extent of poverty in Joubertina
- To describe the Land and Agrarian reforms being implemented in the Joubertina area
- To determine the impact of the Land and Agrarian reform on poverty alleviation in Joubertina.
- To identify the factors that influence the contribution of Land and Agrarian reform on level of production and marketing for poverty alleviation in Joubertina.

1.4 Research questions

- What is the extent of poverty in Joubertina?
- What are the needed interventions to enhance the impact of Land and Agrarian reforms on poverty alleviation in Joubertina and subsequently the rest of South Africa?
- What are the factors that influence the contributions of Land and Agrarian reform on level of production and marketing for poverty alleviation in Joubertina?

1.5 Hypothesis

- There is no poverty in Joubertina

- There are no interventions needed to enhance the impact of Land and Agrarian reforms on poverty alleviation in Joubertina and subsequently the rest of South Africa.
- There are no factors that influence beneficiary to contribute on level of production and marketing for poverty alleviation in Joubertina

1.6 Justification of the study

The purpose of the study was to investigate the impact of Land and Agrarian reforms on poverty alleviation. The study is an assessment focusing on an area where the government invested substantial capital resources such as land and agricultural infrastructure in Jay Dee Rovon farm in comparison to Mon Desire where no investment has been made. The Department of Rural Development and Land reform purchased land resource and transferred to black farmers in JDR for farming purposes and assisted them with agricultural infrastructure to produce good quality produce and higher yield. The study emphasized that, poor people of Eastern Cape live in rural areas and most of them rely on agricultural activities for their livelihood. Therefore, Land and Agrarian reform has a role to play to alleviate poverty in rural areas. However, the issue of land redistribution is taking a long time and only 7% of land transferred to black farmers (Mathekga, 2013). Some of the farms purchased by Land Reform are not operating due to lack of funds and know-how. In addition, most of the farms in South Africa are still owned by white farmers due to the policy of willing-seller and willing-buyer initiated by the government after 1994. And the issue of land is creating a tension between black and white people and the government needs to initiate a new policy in order to resolve the matter. The uneven distribution of land results in uneven distribution of wealth for all of South Africa thus leading to a decline in the economy and deepening of poverty. A study of this nature will be helpful in generating insights to tackle the aforementioned issues.

1.7 Delimitations

The study was based on the impact of Land and Agrarian Reform on poverty alleviation in Joubertina. It focused on the Jay Dee Rovon farm where government invested a huge amount

of money on land and agricultural infrastructure compared to Mon Desire where no investment has been made at all. The study also discusses the extent of poverty in Jourbetina together with the needed interventions to enhance the impact of Land and Agrarian reform on poverty and subsequently the rest of South Africa. However, this study did not extend the investigation into how livelihoods would be changed under a comprehensive land reform programme. The study was also limited to black farmers and did not include white commercial farmers.

1.8 Organization of the thesis

The thesis is organized into seven chapters. Chapter one presented the background of the study, the problem statement, objectives of the study, research questions, hypothesis, justification and delimitation of the study. Chapter two reviewed the literature on the extent of poverty in Jourbetina and a brief overview about the factors that influence beneficiary to contribute on level of production and marketing for poverty alleviation in Jourbetina. The chapter further discusses the needed interventions to enhance the impact of Land and Agrarian reforms on poverty alleviation in Jourbetina and subsequently the rest of South Africa. Chapter three described the selection of the study area and provided a geographical profile of the area. Chapter four described the research methodology, data, sampling method, research design and data analysis. Chapter five is a presentation of the results and their interpretations. Chapter six is the model empirical results of the study. Lastly, the summary, conclusions and recommendations of the dissertation are presented in Chapter seven.

CHAPTER 2

LITERATURE REVIEW

2.1 Introduction

This chapter reviews the extent of poverty through poverty indicators such as low income, unemployment, poor standard of living and inequality in Joubertina, Eastern Cape Province. The concept of poverty is also reviewed more globally. The second part focused on needed interventions to enhance the impact of Land and Agrarian reforms on poverty alleviation in rural areas and subsequently the rest of South Africa. It starts with a brief overview of the historical background of Land Reform in South Africa, the three pillars of land reform, sustainable rural livelihood framework, rural development and agrarian transformation framework. It also discusses the strategies launched by government for rural development. The last part of the chapter highlights the contribution of agricultural production and marketing and their implications for poverty reduction and economic growth.

2.2 The extent of poverty in Joubertina

According to Dzivakwi & Jacobs (2010), the Eastern Cape Province is situated in the South-Eastern part of South Africa. Large parts of the province are formed by the former homeland areas of Transkei and Ciskei. The province accounts for 13.9% of the land area of the country with extremely varied landscapes (Dzivakwi & Jacobs, 2010). The significantly high population within the province resides in and around Port Elizabeth and East London because these cities have secondary industries for employment opportunities for rural-urban migrants. However, the province still has a relatively large total population living in the rural areas and 43% of them can be categorised as poor (Dzivakwi & Jacobs, 2010).

Most of the rural areas are caught up in the long-term economic and social problems associated with poor living standards such as poverty and food insecurity, among others. The high rate of poverty and unemployment in the Eastern Cape Province may be linked directly to the historical economic neglect of these areas. These are often rural phenomena and given that many of the rural inhabitants are linked to agricultural activities, poverty is especially high among black agricultural households living in rural areas (Pauw, 2005). The poor

standard of living among blacks was largely shaped along the lines that were structured by apartheid legacy. For this reason, the reduction of poverty is one of the central goals of almost all social expenditure programmes in South Africa (Manona, 2005).

The incidence of poverty was not only transmitted through successive generations of households but at community level as well (Manona, 2005). This also affects smallholder farmers who are both poor and vulnerable. These farmers are facing severe challenges such as lack of infrastructure, management problems, weak markets and socio-economic constraints. These problems will put them under pressure to produce more and better quality food to feed rural communities (Brugere & Lingard, 2003).

2.2.1 Poverty Concepts

According to World Bank Institute (WBI) (2005), poverty is a multi-dimensional phenomenon; it is defined as a situation when people lack key capabilities such as inadequate income, education, poor health or nutrition and other areas of human development. The main focus on poverty is whether households or individuals have enough resources to meet their basic needs such as adequate food, shelter, health care and education. Osinubi (undated) argues that poverty is a lack of adequate resources to obtain/consume goods and services and these goods and services contain an objective minimum of basic needs such as food, clothes and shelter. International Poverty Centre (IPC) & United Nations Development Programme (UNDP) (2006) indicated that the availability of these resources makes the human being to be able to play a role or participate in the society. Suich (2012) argues that poverty is the lack of, inability to achieve or insufficient resource to meet the basic needs. WBI (2005) also indicated that, in the olden days, poverty was broadly defined as a result of inadequate economic growth and failing of individual which was measured per capita income or consumption and recently, poverty has broadened up including non-economic components such as political, social and cultural context. Furthermore, poverty needs to be understood as being strongly influenced by the resource that can be claimed by the society.

It can be measured by comparing an individual's income or consumption with some defined threshold below which they are considered to be poor while IPC & UNDP (2006) relate poverty with income. In other words, the higher average incomes will certainly help in

reducing poverty (WBI, 2005). Lack of income to purchase goods and services such as food, material goods among others is related to the people being poor. Low income is an important aspect of poverty and poverty affects different aspects of people's lives such as good quality of health, access to education, access to shelter among others. Furthermore, poverty is also related to inequality and vulnerability. Inequality focuses on the distribution of attributes such as income or consumption across the whole population of the country while vulnerability is defined as the risk of falling into poverty in the future (WBI, 2005). Furthermore, poverty analysts describe poverty as the condition of being poor without regard to why and how this condition occurs. IPC & UNDP (2006), argue that it is the governmental structures as well as institutions which govern society's ability to make choices that influence access to resources. In other words, it is the government responsibility for the society to have access to the basic needs and the economic and social structures determine whether and to what extent individuals access those basic needs.

Poverty is assumed to be either absolute or relative. Absolute poverty is defined as inability to meet absolute minimum requirements for human survival. The poverty status of an individual is not dependent on the condition of other human being. Absolute poverty is also measured against non-income aspects of deprivation such as food insecurity, lack of access to good health among others (IPC & UNDP, 2006). Relative poverty is considered as the status of each individual in relation to others in comparable demographic or social category. It tries to show how one individual's conditions compare to those of persons in the same community or social group (IPC & UNDP, 2006). In other words, the lifestyle of the household is dependent on the condition of other individual. The relative term means a fraction of the overall average standard of living is being attained. The relative poverty is more closely related to inequality and this means to be poor reflects the prevailing living conditions of the whole population (Lister, undated). In other word, the relative approach examines poverty or inequality of wealth and opportunity within the society (IPC & UNDP, 2006).

2.2.2 Poverty indicators/measures

The poverty indicator includes factors such as income, employment, inequality, poor standard of living, food security among others. All the indicators mentioned above can measure poverty of the country.

a. Poverty and low income

Income is a key aspect of poverty (Lok-Dessallien, undated). According to Osinubi (undated) argue that, income indicator is based on expenditure or consumption data. In other word, this assumed that individual and households are poor if their income or consumption falls below a certain threshold/minimum. Lok-Dessallien (undated) also indicated that, income refers to the main component of monetary income such as wages and salaries for the most household. It comprises of regular receipts from employment and business, transfer income from government, value of service, and private institutions among others. Income also include to the components that contribute to the current economic well-being and extend to those contribute to the future well-being (Lok-Dessallien, undated). Classically, income has been defined as the sum of consumption and change in net worth (wealth) period of time. Income poverty is measured per capita GNP or expressed in money-metric terms (Osinubi, undated). Low income is an important aspect of poverty and poverty affects different aspects of people's lives such as good quality of health, access to education, access to shelter among others. Lack of income to purchase goods and services such as food, material goods among others is related to the people being poor (WBI, 2005). Lok-Dessallien (undated) also argues that, income poverty lines define the poor people as those with a low income even if they have a high standard of living. However, Givewell (undated) argue that in most of the developing countries, most of the people live under the poverty lines in other word they live less than one dollar per day. Figure 2.1 showing difference between developed countries and developing countries:

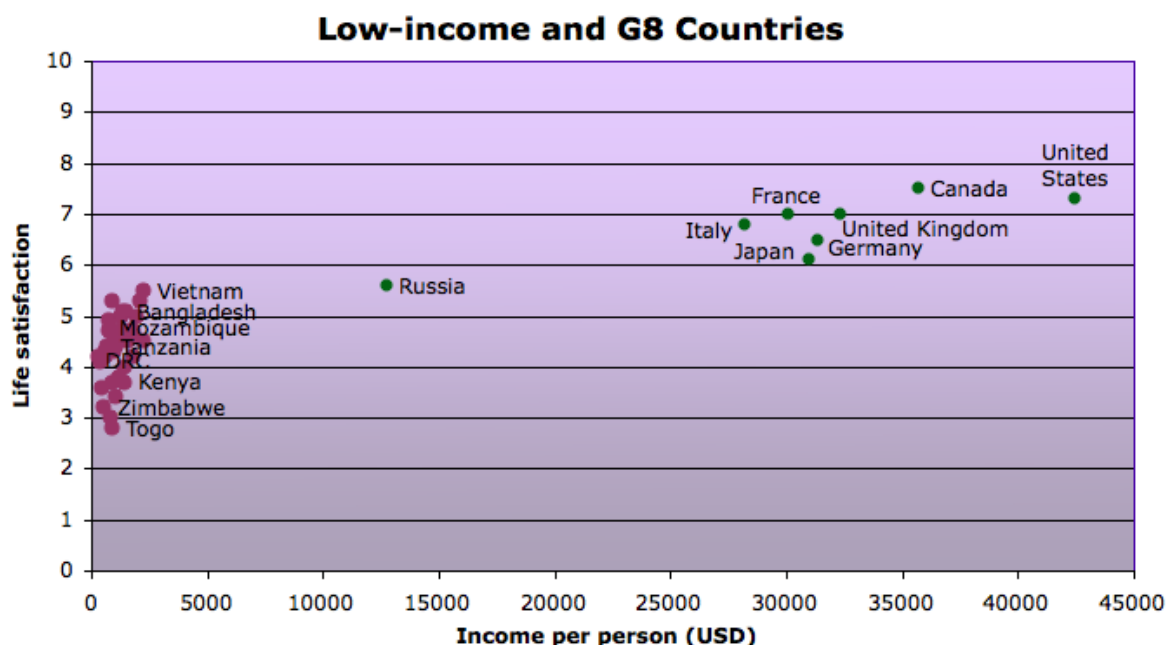


Figure 2.1 The table showing the difference between in the average low-income countries and high income countries
Source: Gallup World Poll, 2006

Figure 2.1 represents the difference between satisfaction in the average low-income country and the average G8 country is about 2.4 (little less than a quarter of the scale which ranges from 0 to 10). The 0 on the scale represents the worst possible life and 10 represent the best possible life. In other words, it shows a positive correlation between per capita income in a country and average self-reported life satisfaction. Gallup World Poll (2006) indicated that, poverty rates have been decreasing in many parts of the world; however the number of people living below the international poverty line remains high in particularly Sub-Saharan Africa. In other word, high-income countries have greater life satisfaction than low-income countries. Low income countries like Mozambique, DRC, Kenya, Zimbabwe among others falls at 0 range on scale and less than 5000 per income person while G8 (high income countries) like USA, Canada, France and United Kingdom falls at more than 7 range on scale and are more than 4000 income per person. This means that, low income countries spend their large proportion of income on food; they have lack of access to basic infrastructure and little ownership of productive assets such as machines such as tractors, implements among others. In other words, they do not have access to land ownership, they owned small piece of land. Furthermore, the ownership of television, radios and access to basic needs such as electricity, water and sanitation varies in many parts of the world.

b. Poverty and unemployment

Unemployment is defined as function of poverty (Osinubi, undated). In other words, unemployment is a major contributor to poverty (Wilkins, 1998). In general, unemployment is defined as a state of joblessness. On the other hand, the concept of unemployment may apply to any factor of production (capital, labour and land in agriculture). Many economists in the world define the concepts of unemployment in many ways. For example, Jhingan (1996), defines it as unintentional joblessness of a person who is willing to work at the prevailing rate of pay but s/he is unable to find it. This implies that all unemployed people do not want to work and those who are not prepared to work at the prevailing wage rate are not regarded as unemployment (Osinubi, undated). Anyanwu & Oakheinan (1995) also define unemployment in a context of distinction between voluntary and involuntary unemployment. Voluntary means when someone chooses not to work while involuntary means when someone is willing to work but is unable to get a job (Osinubi, undated).

In many cases, people with part time job are among the very poor while those with full-time paid employment are typical among the middle to upper class. However, poverty can be reduced through reduction of unemployment among the poor of the nation and when most of the people are unemployed they find themselves in the situation where it is difficult to obtain the basic needs such as food, clothes and shelter (Osinubi, undated). In South Africa, an unemployment rate is high among women and the youth of African in rural areas. In 1995, the unemployment rate was standing at 59% among the poor of the population as compared to 5.5% of the richest (Wilkins, 1998). On other hand, unemployment rate amongst poor households stand at 52% as compared to 29% of the overall national rate (Mbuli, 1998).

c. Poverty and inequality

Inequality is defined in terms of being the opposite of equality. In other words, it is a state of social organization that enables or gives equal access to resources and opportunities to all members (Wilkins, 1998). Inequality is concerned with distribution of wealth within a population group (Mbuli, 2008). In South Africa almost half of the people are living below the poverty line (Mail and Guidance, 2011). The apartheid policymakers resulted high levels of inequality amongst race which characterized by extreme wealth on whites and poverty on

blacks (Wilkins, 1998). An inequality has increased in amongst race in South Africa. The gap between the rich and poor, widespread poverty and inequality have left many countries in crisis (MG, 2011). Poverty in South Africa is also unevenly distributed among the nine provinces. The poverty rate is high in Eastern Cape Province stands at 71% while it is lower in Gauteng and Western Cape Province which stand at 17% and 28% respectively (Wilkins, 1998).

Most of the people who are poor lives in rural areas and the poverty rate there stand at 71%. In the Eastern Cape Province, 78% of children live in poor households as compared with 20% in Gauteng (Wilkins, 1998). Women are clearly more likely to be poor than men with the poverty rate of female headed household stands at 60% as compared to 31% for male-headed household. Poverty is concentrated among blacks in particularly Africans with stand at 61%, coloureds at 38%, Indians at 5% and 1% of whites (Wilkins, 1998). Furthermore, Lister argue that high levels of inequality contribute to high levels of poverty in many ways such low economic development or mean income; higher inequality since a smaller share of resources is obtained by those at the bottom of the distribution of income or consumption.

The higher level of inequality may result in lower subsequent growth in other word less poverty reduction. For example, access to credit and other resources may be concentrated in the hands of privileged groups, thereby preventing the poor from investing. Higher levels of inequality may reduce the benefits of growth for the poor, because a higher initial inequality may lower the share of the poor's benefits from growth (Lister, undated). In a case where one individual has all resources, the remaining population will never be reduced poverty through growth. Based on the above arguments, it would be appropriate to acknowledge that, in most cases, it would be easier to reduce poverty under relatively equal conditions (Lister, undated).

d. Poverty and poor standard of living

Standard of living refers to the level of wealth, material goods and necessities available to a certain socioeconomic class in a certain geographic area. The standard of living includes factors such as income, quality and availability of employment, poverty rate, quality and affordability of housing, gross domestic product, inflation rate, access to quality healthcare and education, life expectancy, infrastructure, national economic growth, economic and

political stability among others. The standard of living is closely related to quality of life. The real income and poverty rates are often used to determine standard of living. Income is usually the largest factor that influences the standard of living. It is typically measured by real income per person and the poverty rate.

According to Lister (undated), a low standard of living means deprivation in way of life because of insufficient resources to avoid such deprivation. If a person has low standard of life is referred as being poor and poverty refers inability to participate in society with involving both a low income and a low standard of living. Lister argument is that poverty should therefore be defined in terms actual living standards but of capability failure of basic capabilities to reach certain minimally acceptable levels. Lister suggests a definition of poverty as a situation where people lack the economic resources to realize a set of basic functioning's. In South Africa, the poor tend to live in large households with many dependents they have inadequate access to basic services such as water (Wilkins, 1998). Figure 2.1 showing the inadequate access to in-house tap water:



Figure 2.2: A poor urban community in Cape Town, South Africa with no access to piped water

Source: GiveWell, Undated

The photograph above presents the access of basic needs varies to different countries of the world. The poor urban community in Cape Town do have access to electricity but they do not have access to tap water in their houses.

e. Poverty and food insecurity

An increase to the world population growth and global development achievements resulted to a higher food demand (United Nations Department of Economic and Social Affairs (UN DESA, 2013). This also resulted an increase in an alternative strategy used for biofuels resulted an estimate change to the contribution of about 20-30% of the food prices increases (Flammini, 2008). The food price increase in 2008 has led to a diversion of about 125 million tonnes of cereal food into biofuel production. As a result, the G8 (rich countries) at the world food summit held in 2009 committed themselves to reduce poverty by half of the world undernourished population between 1990 to 1992 and 2015 (FAO, 2010). Recently the issue of poverty reduction has been at the centre of global policymaking. The drive to eradicate extreme poverty in developing countries has become more urgent, given the need to attain the United Nations Millennium Development Goals (UNMDGs) by 2015. Poverty alleviation is being the first of the eight goals and it becomes crucial since more than one billion people live on less than US\$1 per day (Ogun, 2010).

HAI (2008) reports that continuing inflation of international food and oil prices is causing an escalating food crisis in developing countries as results countries are taking steps to combat food insecurity. According to Young & Jaspers (2001) the concept of food security has developed over the past three decades and the concern has focused more on the ability of countries to secure adequate food supplies. Subsistence production may be seen as an emergence program that can be utilized by poor rural people to save their lives from hunger and ensure future consumption. Furthermore, the government programme namely, ploughing scheme, livestock improvement scheme among others has the role to play by engaging in activities that adapt, sustain against shocks such hunger and malnutrition (Oxfam, 2008). In South Africa, hunger and malnutrition is not occurring due to the shortage of food, it occurring due to inadequate access to food by certain categories of individuals and households within the population (NDA, 2006).

According to (Wenhold *et al.*, 2007), South Africa is food secure at the national level. It produces its main staple foods, exports its surplus food and imports what it needs to meet its food requirements. According to Labadarios *et al.*, (2009) argue that, food security at national level occurs when the country is able to manufacture, import, retain and sustain food needed

to support its population with minimum per capita nutritional standards. Food security at household level takes place when there is food availability as well as access to food by a household (Labadarious *et al.*, 2009). However, according to Department of Agriculture Republic of South Africa (DARSA) 2002), currently about 35% of the total population or 14.3 million South Africans are vulnerable to food insecurity. Among South African society, women, children and the elderly are extremely suffering more regard with food insecurity at household level (DARSA, 2002).

According to NDA (2006) food insecurity in South Africa has been a continuous threat for more than a third of the population. With food insecurities, people have to deal with problems of under-nourishment. Braun (2008) indicates that food insecurity is associated with a number of problems that include hunger, underweight children and chronic diseases. Achieving the goal of dietary diversity will be most difficult to low-income households because of the poverty constraints (Wenhold *et al.*, 2007). In South Africa most of rural households are typically characterised by few income-earners and many dependents. They rely on the remittances from the urban areas and social security grants which are making them vulnerable to food insecurity (DARSA, 2002). Affordability and availability have been identified as major constraints, particularly with regard to fruit and vegetable consumption (Wenhold *et al.*, 2007). The majority of households in South Africa have lack of purchasing power on food commodities due to the limited scope of income opportunities especially in the rural areas. Unemployment rates are very high in this region. Black households have the lowest standards of living and are much more vulnerable to poverty and food insecurity (DARSA, 2002). Lund Report on Child and Family Support in 1999 reported that, one child in four under the age of six years which translates to approximately 1.5 million children in South Africa is stunted due to chronic malnutrition. Food insecurity and malnutrition are highest in provinces with large rural populations including the Eastern Cape Province (DARSA, 2002).

Hunger and malnutrition in South Africa are a result of insufficient and unstable food supplies at the household. The majority of producers in the former homelands are unable to feed their families from their narrow production base. They are shortfall producers, and hence, net consumers of purchased food and rely on non-farm income to meet most of their household needs (DARSA, 2002). Moreover, these farmers also practise their agricultural activities in small pieces of land, resulting in insufficient grain to support the whole family

and the community (Dzivakwi & Jacobs, 2010). Other factors constraining smallholder farmers to produce more grain are poor agricultural infrastructure, inadequate access to functional social service, lack of ownership to land, lack of access to capital assets and currently the issue of climate change effect (Wenhold *et al.*, 2007).

Moreover, most developing African countries depend on imports for their food security, where the vast majority of small scale households, especially in rural areas, are net food buyers (IFAD, 2009). The majority of South Africans does not produce their own food but rather buy their staple foods from commercial produces (NDA, 2006). This poses a threat on food security and imposes a heavy burden on the importation of food.

2.3 Interventions to enhance the impact of Land and Agrarian reforms on poverty alleviation

The impact of land and agrarian reforms on rural people's livelihood and the local economy are criticized as one of the major obstacles to successful land reform. Land reform programme in most countries of the world is failing due to lack of government intervention to stimulate agrarian transformation (NDA, 2001). In South Africa, land reform programme was launched and implemented even before the apartheid was dissolved and the new government of ANC took control (Hebinck *et al.*, 2011). From 1990 to 2003, the apartheid government under former president F.W. De Klerk initiated some kind of restricted land reform through the form of unclear state procedures and institutional failures to manage the land reform process (Hebinck *et al.*, 2011). However, the government of ANC took place and faced with a big task of redressing the uneven distribution of land resource among race of South Africa. From 1994 to 1996, the ANC government passed major legislations to address the issue of land reform, rural development and agrarian transformation (Thwala & Selesho, 2013). These includes Restitution of Land right Act (22 of 1994), Extension of Security of Tenure Act (62 of 1997), Land reform (Labour tenants) Act 3 of 1996 and Communal Property Association Act 3 of 1996 (Thwala & Selesho, 2013). These programmes mentioned above was the need in South Africa because more than half of the provinces and about 40 % of the country's total population are therefore primarily dependent on agriculture and related industries (Thwala & Selesho, 2013).

Agriculture, small farms and non-farm rural economy are concerned with livelihood. Rural development had to be about various assets of rural access as well as the structures and process which facilitate in order for these assets to be transformed into income (Thwala & Selesho, 2013). As a result, the former President of South Africa Honourable Thabo Mbeki requested the different role-players to identify a mutual strategy that would provide enough focus to unite and grow the agriculture sector (NDA, 2001). The government issued the document which outlines a strategic sector plan for South African agriculture and contributes towards the well-being of all South Africans. The document was drafted in a consultative process with a wide range of stakeholders by the key strategic partners, namely the National African Farmers' Union, Agri SA and the Department of Agriculture among others (NDA, 2001).

Furthermore, in 2000, the government also launched the Integrated and Sustainable Rural Development Strategy (ISRDS) with the aim of developing organized and stable rural communities which will contribute to economic growth and development (Ntsebeza & Hall, 2007). Moreover, in 2007 the National Policy Conference of the ANC also proposed the draft resolution and identified rural development, land reform and agrarian change as important aspects of South Africa's programmes of economic transformation. However, this draft resolution must also come up with clear strategy to empower poor rural people in particularly those parts of their livelihood from the misuse of productive land (Ntsebeza & Hall, 2007).

2.3.1 The impact of Land and Agrarian reforms on poverty alleviation

According to Nogantshi (2011), a quarter of the world's poor is living in rural areas. For these populations, land reform that provides secure access to land is an important factor of escaping poverty. Land Reform is a crucial aspect of social and economic transformation in South Africa in terms of correcting past injustices and poverty in rural areas. Hebinck *et al.*, (2011) stated that, land reform was often implemented with a view of breaking the past injustice by transforming land right ownership to those who were dispossessed as well as reducing poverty (Hebinck *et al.*, 2011). Land reform was viewed as powerful tool for rural and agrarian development. Rural and agrarian development through land reform programme can play a significant role in poverty reduction as well as decreases the unemployment rate.

Subsequently, this also can have the greatest contribution on economic growth and development (Thwala & Selesho, 2013).

Furthermore, Manenzhe (2007) also stated that secure access to land and its productive resources is seen as a way of improving rural livelihoods and alleviating poverty. However the ability of the reform to have a positive effect depends on effective and productive use of land. Land reform program makes it possible for the rural poor to access shelter, food, employment and improved livelihoods. However, Maisela (2007), suggests that land reform program in some cases does not lead to improved incomes as many beneficiaries are threatened with insolvency. Many resettled areas experience a decline in agricultural production and lack of market access which leads to exploitative exchange, ultimately eroding the welfare of the poor. This drives the poor farmers into further poverty.

2.3.2 Historical background of land reform in South Africa

The historical background of land in South Africa is started in 1655, when Jan van Riebeeck was incidental confronted with indigenous Khoi- Khoi or Hottentots in South Africa. The Khoi-khoi people were then almost killed by white farmers (Rugege, 2004). Maisela (2007), states that relocation and segregation of people started as early as 1688 when the Khoi people were restricted from west of Salt and Liesbeck Rivers. The indigenous people gave up their land through Bantus and European wars as well as through agreements they did not understand (Maisela, 2007). Mathekga (2013) also indicated that, the indigenous farmers were removed from their land in the 19th century after the discovery of diamonds and gold. According to Rugege (2004), the apartheid government confined the indigenous African tribes to live into small unproductive land with low rainfall and reserves large fertile land for white farmers for commercial agriculture.

These areas were usually of poor quality land and little agricultural practices were taking place. The agricultural practices were mainly for family consumption (Mamphondo, 2007). The majority of blacks were dispossessed for many years due to major policy of 1913 Native Act which was set by apartheid government (Rugege, 2004). The Native Land Act was passed to disallow black people the rights and legal authority to own land outside the chosen reserves, which constituted about 7% of the land area (Mathekga, 2013). Rugege (2004)

argue that the Native Land Act of 1913 reversed only 8% of land areas of South Africa for blacks while the rest of it was reserved for white minority. This means that, the purpose of 1913 Land Act was to make more land available for white people (Rugege, 2004). The 1913 Land Act also gave assurances that white farmers owned more land as compared to blacks. This Act denied black South Africans an opportunity to be involved in cropping, tenant farming and squatter farming in white South Africa, as a result it was a weakness for economic independence for many blacks South Africans.

In 1936 the availability of land for black people increased by 5% which makes a total of 13% of land. However, 80% of land was still owned by 20% of white minority (Rugege, 2004). Approximately 82 million hectares of commercial farmland were in the hands of white people and concentrated in the hands of the 60 000 white owners while over 13 million poor black people remained overcrowded into the former homelands (Mathekga, 2013). Between 1960 and 1986 black's people were removed from white areas to overcrowded areas or homelands (Rugege, 2004). The blacks humiliated, suffered and lost their dignity due to the land issue and thus resulted for many blacks male to move in cities and mines of South Africa to look for an employment to support their families they left behind. However, after the election of 1994, the democracy government of African National Congress initiated a policy document of land reform to correct the injustice lack of land access by the majority of the country (black farmers). Land reform also alleviates poverty especially in rural areas as well as transfers and protects the owners of the previous land owner rights (Rugege, 2004). The ANC government carried out land reform into three major strategies.

2.3.3 Three aspects of Land reform

a. Land redistribution

Land redistribution means, the acquisition of the land by the government and transfer it to those do not have access to land. In other words, this calls a state to act and make land accessible for many socio-economic rights such as adequate housing and healthcare, food, water and social security (Rugege, 2004). Redistribution refers to the transfer of land to recipients who were not necessarily original owners, but were nonetheless dispossessed of land under apartheid law (Jacobs *et al.*, 2003). Land redistribution is a very important component of agrarian reform, as it involves the redistribution of wealth in rural areas. Land has a central role to play in wealth and income redistribution in Africa as a whole. Land has a

wide range of uses in the organisation of livelihoods and is also the basis of social and political power, and therefore at the heart of gender inequalities in the control of resources (Mathekga, 2013). Land redistribution policy was set out by White paper on South Africa Land Policy in 1997 with the aim of assisting the poor to purchase the land with the land acquisition grants, in order to improve their life and income. Land redistribution is also specifically aimed at transforming the racial pattern of land ownership (Jacobs *et al.*, 2003). The process of land redistribution was only intended to take five years and the ANC government set a target of 30% of agricultural land within five years. The state is supposed to redistribute 1, 64 million of hectares per year. The 24.7 million of hectares should be distributed within 15 years (Rugege, 2004).

However, this process is taking a long time and it assumed that, 30% target of land can be achieved in 2020 (Rugege, 2004). Because the acquisition of land from any sources, namely private or public was based on willing seller or willing buyer approaches (Jacobs *et al.*, undated). The land owners are not willing to sell their land to the state for redistribution as well as the state has not used its power to expropriate land. The expropriation will be used as last option when the objectives of redistribution are not met (Rugege, 2004). Furthermore, the redistribution of land is widely seen as important aspect of improving the livelihood of poor people in rural areas as well as to contribute towards the economic growth. However the needs of rural people are still seen dependent on government welfare due to long process of land reform in South Africa. Agricultural land in South Africa is still in the hands of white minority (Jacob *et al.*, undated). Land redistribution programme took place in many ways namely:

b. Settlement Land Acquisition Grant (SLAG)

SLAG was the main mechanism of redistribution implemented in 1995 to 1999. Most projects under SLAG involved groups of applicants to use their grants approximately R16 000 per household to purchase white farms for agricultural purposes and enhancing tenure rights (Jacobs *et al.*, 2003). This amount was very small to purchase land as well building farm houses. There are few workers of farm benefited on it (Rugege, 2004), as a result the grants were transferred per households while eventually in LRAD was transferred per individual (Thwala, undated). The households decided to apply for top-up loans from Uvimba bank to purchase land resource. As result of poor performance by SLAG programme

it was replaced through Land Redistribution for Agricultural development (LRAD) which is the main vehicle of redistribution (Rugege, 2004).

c. Land Redistribution for Agricultural development (LRAD)

LRAD was implemented in 2001 with the purpose of giving support to black farmers who commit themselves to farm business to become emerging farmers and then commercial farmers (Jacobs *et al.*, 2003). Hall, undated also stated that, the aim of LRAD was to create a group of black commercial farmers. This programme was developed by DLA and NDA that would be incorporate with the acquisition of land and transferred it to new black owners for agricultural development (Hall, 2004). LRAD was also seen as major government contribution for government to achieve a total of 30% of land (approximately 26.66 million of hectares) transferred to black by 2015 (Jacobs *et al.*, 2003). LRAD is a form of grant which will be used to purchase land for agricultural purposes as well as for inequity scheme (Rugege, 2004).

The grant is divided into two parts for example if an applicant contribute a sum of R500, s/he will received a grant of R20 000 for subsistence farming while if an applicant contribute R400 000 in return s/he will received R100 000 for economic farming. The high grant is to promote black emerging farmers to use land redistribution as long-run structural change in agriculture (Rugege, 2004). The LRAD grant is approximately above 15% of the total project value. LRAD was introduced into three requirements, namely, firstly, the targeted people for redistribution were women, farm workers, disabled and the youth; secondly, the applicants should have his/her contribution in the form of own capital, loans and assets or labour and lastly grants finance were made available for individuals (Hall, 2004).

However, the own contribution discouraged the poor potential beneficiaries to submit their application. The poor black farmers have lack of income to purchase farming machinery together with implements and also livestock for contribution. This is unfair for the poor people of South Africa to contribute sum of R5000 in order for them to get access to land. The programme was meant for reconciliation for land to be equal distributed among the racial group of South Africa not for what is mentioned above (Rugege, 2004). However, LRAD has more progressed in the Eastern Cape Province followed by Free-State Province as it distributes a numerous number of projects and hectares to black farmers. The LRAD involved

few participants (four beneficiaries) in the scheme unlike in the past beneficiaries were more than ten members (Hall, 2004).

d. Commonage

According to Rugege (2004), commonage is the land purchased by the National Department of Land Reform for municipality in order for poor communities living in and around rural areas to use it for livestock grazing as well as initiate small garden to increase their income and improve food security. The commonage before 1994 was accessible only for white residents of towns. However, during 1950 the apartheid municipalities started to lease it to commercial farmers. After 1994, the government set a new policy that ensure only poor black farmers have right to use the commonage land.

e. Land restitution

Land restitution refers to the transfer of land back to the original owners. Land restitution deals with land claims lodged in terms of the *Restitution of Land Rights Act, 22 of 1994* (Nogantshi, 2011). It focuses on restoring the rights of ownership of land dispossessed after 1913 of the Natives Land Act (Maisela, 2007). Furthermore, Mamphondo (2007), states that the restitution is concerned with people who were victimized by the past, compensation is given to victims of forced removals. Land restitution deals specifically with historical rights in land (Jacobs et al., undated). In other word, it corrects the legacy of removal of black majority by white minority from their place of origin. It is the constitutive element of identity, culture, history and tradition of black indigenous people of South Africa.

The aim of this policy was to reconcile some of the historical injustice legacy of dispossessed legacy. After 1994, the democratic government of the ANC passes legislation, the Restitution of Land Right 22 of 1994 Act with aim of giving the black people who were dispossessed by the colonial government to entitle the property of their original (Hall, 2004). The Act established the Commission on the Restitution of the Land Rights in order to investigate claims for land restitution and redress them to the claimants. In 1995, the government called the Land restitution claimants to submit their claims before the end of December 1998. However, most of the land restitution was not aware and they missed the date line (Hall,

2004). This also excludes some of the claimants who have no idea of having a right to land redistribution. The land owners as labour tenants, farm workers were also afraid to submit their claims.

The Commission for Restitution of Land Right is aware of unsuccessful claims, however, the Commission is unable to re-open the lodgement process due to the 1913 cut-off date which eliminated many potential claimants that were dispossessed of land right before 1913 (Hall, 2004). In addition, the White paper of Land Policy also indicates that, it is difficult to process ancestral land claimants since most of historical claims are belonged to tribal kingdom, as it will take long process to identify the eligible claimants as members of ethnic communities (eight generation) and other members emigrate from their original place to different places. Furthermore, large part of South Africa land was occupied by different group, namely, Khoi, Xhosa, Mfengu among others. These will need more verification to confirmed and identify the real owners of the land as well as the size and the value of land (Hall, 2004).

According to the latest statistics that were issued by Land Claims Commission in 2004 about 61% of claimants were completed and transferred to 616429 households (beneficiaries) with approximately 810 292 hectares of land (Hall, 2004). The former president Honourable Thabo Mbeki informed the Commission to complete all claimants by 2005. However, the Commission faced a lot of challenges to achieve the target on 2005 due to the problem of finding necessary evidence documents and some of the claimants were lack of identity documents, marriage/death certificates as a proof entitlement to restitution. However, in the interest of government that protects private property right, the states spent three billion rand on restitution (Hall, 2004). In urban, the overall 88% claims of land, 35% of it have been settled with the restoration of land while about 60% awarded financial compensation (Hall, 2004). In rural areas about 46% of rural claims settled with monetary compensation, however, this is not the interest for rural communities. These people are in need of more productive land for agricultural practises to alleviate poverty in rural areas (Hall, 2004).

f. Land tenure

Land tenure reform is led by a vision of flexible tenure regime that legally secures the rights of people occupying and using land, balancing these rights equitably against rights of owners

(Hall & Ntsebeza, 2007). This programme mainly provides people with secure tenure where they live in order to prevent unlawful evictions and to fulfil the constitutional requirement that all South Africans have a right to access land. Tenure reform however is observed as the most neglected area of the Land Reform Program (Nogantshi, 2011). Tenure reform deals with forms of holding (Hall, 2004). According to Rugege (2004), tenure reform aims at providing secure tenure to those living on land owned by others for a period of long time without secure rights. Targeted people include farm workers, former farm workers, sharecroppers and labour tenants. Most of the black people moved to commercial farms to look for a job due to the apartheid policy limited them to access for land (Hall, 2004). After 1994, the state passes a number of laws on addressing the different needs of categories of land holders as follows:

g. The Land Reform (Labour tenants) Act 3 of 1996

The Land Reform Act 1996 (Act no3 of 1996) provides protection to Land Tenants and grants them the opportunity of claiming Land (Nogantshi, 2011). This is a major law which protects labours who lived on a farm for the very period of long time. These people should have a right to used resource such as land for their livestock grazing as well for crop production. An old person which is over 65 years and unable to work should not be evicted as results of not providing labour. Some commercial farmers did not agree with this law and they indicated that some of labours tenants lived for a period of long time devalued their farm properties (Rugege, 2004).

h. The extension security of Tenure Act 62 of 1997 (ESTA)

The Extension of Security of Tenure Act of 1997 aims at protecting land occupants who have been given consent by land owners from unfair eviction while at the same time it provides long term tenure security (Nogantshi, 2011). This law protects other rural land occupiers with the agreement of owners. This Act protects a person who has tenancy agreement but not qualify for Labour Tenants Act (Rugege, 2004). This Act is comprises of many mutual rights namely, freedom of association and movement, dignity, privacy and religion. There also a right to occupiers to live together with their families as well as practices their customary laws. They also have a right to burying their family on the land as well as to visit their family

graves even no matter they are no longer occupying the farm. However, the white commercial disagreed with the Act indicated that ESTA violates their Constitutional rights. They also indicated that, the potential farm buyers would be unwilling to purchase the farm with a market price (Rugege, 2004). Most of these commercial farmers tried to illegal moved away the farm workers in their properties. However, ESTA law plays an important role in rectifying the damage which was cause by apartheid legacy. This law also empowers the Minister of Land Reform by giving subsidized grant to occupiers and former occupiers to acquire rights to land that they are currently occupying (Rugege, 2004).

i. The interim Protection of Informal Land Rights Act 31 of 1996 (IPILR)

It is the temporary measure which protects the factor occupation especially in rural areas. However, the state has failed to finalize the representation of Communal Land Right Bill. The people living in rural areas that are still using a communal land has no secure tenure to use land for livestock grazing. They used land based on customary laws due to apartheid government who passed laws to not acquire legally rights secure land. However, after 1994, the Communal Land Rights Bill fulfilled their right in order to be permitted to use communal land (Rugege, 2004). It also improves the security of tenure by giving the rural communities to acquire the title deeds in order to utilize the communal land as groups or individual (Rugege, 2004).

The communal land tenure right was transferred to traditional leaders and each individual from the community should register on behalf of the chiefs. The Department of Land Affairs disagreed with the decision and indicate that, most of the traditional leader's uses their powers and not equal share the land to the community due to relatives and friends preference. The Bill suggested that the land administration committee which excludes the traditional leaders which only elected by community members. The traditional members disagreed and indicated that the Bill is undermining their authority (Rugege, 2004). Then, the new Traditional Leadership and Governance Framework Act (TLGFA) decided to involve the members of community appointed by senior traditional leaders and 40% of councillors. These stakeholders mentioned above will continue control decision with regards with communal land matters under new law. The responsibility of Land Board is to look all the activities that

are playing by approved Land Administration committees with the aim of reducing suffering and poverty in rural areas (Rugege, 2004).

2.3.4 Land reform and rural livelihood in South Africa

Since most people in rural area are linked to agricultural activities for their livelihoods various Departments of Agriculture in South Africa have an important role to play in addressing the needs in rural areas (Ngomane, 2012). Land reform programme is seen as component of rural development which has the greatest impact on the economy (Ntsebeza & Hall, 2007). According to Kariuki (2009), land reform aims is to contribute in economic development through giving households rights to engage in productive land as well as through increasing employment opportunity and improve greatest investment. However, land reform needs factors of production namely, capital, land and labour to be a substance for structural change and economy (Kariuki, 2009). Land reform plays a key role on poverty reduction through policy making and it is shows by sustainable rural livelihood framework illustrated in Figure 2.3.

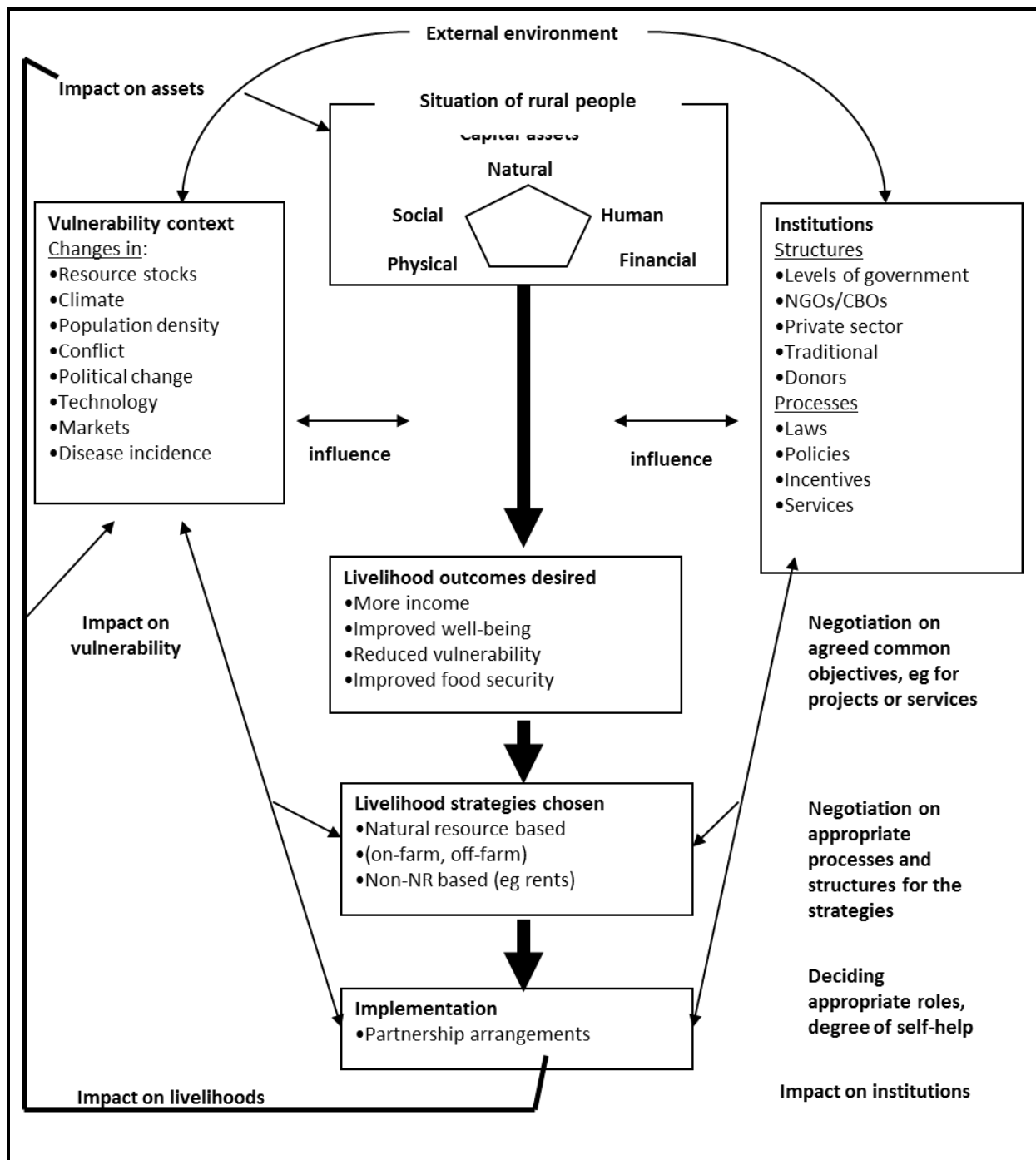


Figure 2.3 Sustainable rural livelihood framework
Source: Mahlathi V, 2004

2.3.5 Sustainable rural livelihood framework

The figure 2.3 presents the sustainable rural livelihoods framework which defined as a tool for understanding how household livelihood system interacts with the outside environment, for both natural environmental and the policy and institutional context (FAO 2005). In the middle bottom centre it shows asset-based empowerment as follows, human, social, natural, financial and physical capital. On the bottom left, it shows the vulnerability context such as resource stock, climate, population density, conflict, political change, technology, markets and diseases incident. On the bottom right it shows the institutional structures such as Non-Government Organisations (NGO's), government stakeholders, private sector, traditional and donors as well as laws, policies and services. Both the vulnerability context and institutional structures and processes impact on assets of rural people. In terms of vulnerability context of views, the World Development Report (WDR 2008) indicates that, the asset grants of rural households is continue to decline for generation in many places. Market and government failures affecting the returns on those assets are pervasive. Adverse shocks often deplete already limited assets and the inability to cope with shocks encourages households to adopt low risk, low-return activities.

However, the government success such as land reform will have the greatest impact to improve people's livelihood and lifting them out of poverty. The success land reform will include the following livelihoods outcomes namely: more income, improved well-being, reduced vulnerability and improved food security. Livelihood outcome depend on individual availability and implementation for pursuing livelihoods goals which are livelihood strategies. The greater the diversity of these strategies the higher the household resistance to shocks, trends and seasonality conditions the vulnerability context. Livelihood strategies of different categories of households are shaped by their asset base and by the policy and institutional context in which they live. Livelihood outcomes of different types of households are influenced by the vulnerability context. The Sustainable Livelihood Framework consists of five major components namely: the vulnerability context, livelihood assets, institutions (Transforming Structures and Processes), livelihood strategies and livelihood outcomes that has been identified by FAO (2005).

a. Vulnerability context

The vulnerability context is the external environment which affects livelihoods of people. These vulnerability contexts such as critical trends, shocks and seasonality which are unpredictable can affect the human assets (DFID, 1999). Shocks i.e. storms, floods, civil conflicts among others can directly destroy the human assets as well as make them to live their original home. They may have a more adverse effect on agricultural activities. Trends have important influence on rates of return/economics to chosen livelihood strategies (DFID, 1999). Seasonal shift in price, employment opportunity and food availability have the negative impact on people's livelihood in particularly in the developing countries. Seasonality is most usually associated with rural economies; however, it also occurred in urban areas especially when people spend most of their income on foodstuff due to the unstable commodities prices. Changes in global commodities prices will also have a negative effect on the producers, processors and exporters however they will be little effect on producers and traders for local markets. Furthermore, different types of conflict can have deep adverse effects on the livelihoods of the poor people in the country. People may suffer to emotional and physical damage. Conflicts caused by access of natural resources can make more suffering on livelihoods of the poor (DFID, 1999). Table 2.1 below showing the different type of vulnerability,

Table 2.1 Different types of vulnerability

Trends	Shocks	Seasonality of
Population trends	Human health shocks	Prices
Resource trends (including conflict)	Natural shocks	Production
National/Global economic trends	Economic shocks	Health
Governance trends (including politics)	Conflict	Employment opportunities
Technological trends	Crop/Livestock shocks	Food availability

Source: DFID, 1999

b. Livelihoods assets

Livelihoods assets are explained by five core assets types of capital namely, human capital, social capital, natural capital, physical capital and financial capital. These seek to gain an accurate and realistic understanding of people 'strength and how to convert them into better livelihood outcomes. People required a range of assets to achieve the greatest livelihoods outcome (DFID, 1999). In other words no single type of capital can work individual to achieve the better livelihood of people, this is means they should work hand in hand as these shows below by means of pentagon in Figure 2.4.

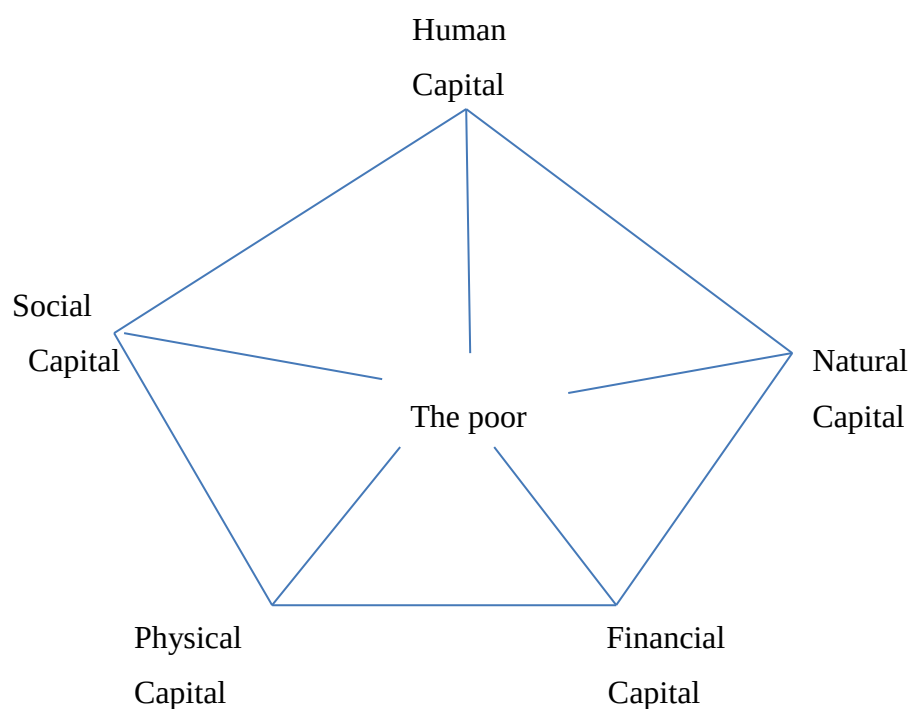


Figure 2.4 Livelihood assets

Source: Mqikela N, 2014

The shape of pentagon is used to show the schematically variation in peoples access to different assets. The physical capital, for example assesses to land resource can be well awarded with financial capital as they will use land as security for loans. Livestock/crops production can generate social capital. Livestock can also use in animal tractions as physical productive capital and remain itself as natural capital. The capital is the product of investment which yields a flow of returns over a period of time (DFID, 1999).

c. Human capital

Human capital means skills, knowledge among others that enable to pursue different livelihoods strategies to achieve their livelihood objectives. At household level, human capital represents a labour amount and quality which is available. Many people have lack of education and they are not healthier and these can be eliminated through attending training sessions or schools as well as accessing health facilities or medical services (DFID, 1999). It is also necessary to provide the educational facilities and medical services such as clinics and hospitals which will serve the farmers and their families (Li & Liu, 2009). It is well known that the quality of rural labour is related to the conditions under which the farm families live and there is no doubt that improvements in cultural, educational and medical facilities will have a positive effect on overall rural welfare (Li & Liu, 2009). Farmers with good education, knowledge can be the more efficiently productive and earlier adopters of new technologies than uneducated farmers (International Maize and Wheat Improvement Center (CIMMYT, 2000) and Padilla-Fernandez & Nuthall 2001; Ogundari & Ojoo 2005; Tjornhom 2006). As a result educated farmers will have ability to keep records, farm management as well as be more easily to adopt new market oriented technologies. Through reading they can easily access agricultural and market information needed for improved their farm business. Furthermore educated and well-trained farmers have more capabilities for operating, managing and coordinating irrigation facilities more efficiently, which can be translated into improved productivity, food security, employment and poverty reduction in rural communities (FAO, 2000).

d. Social capital

Social capital means social resources in which people draw attention to pursuit their livelihoods objectives. Social resources include the following aspects namely: networks and connectivity, mutual trust and support. Mutual trust and reciprocity work hand in hand as a result has a direct impact on other types of capital by improving economic relations such as increase people's income and rates of savings (DFID, 1999). The notion of social capital links with work different economists namely, Durkheim, Simmel, Karl Marx, & Max Weber who did a significant work on social exchange theory and contract theory within the psychological discipline (Watson & Papamarcos, 2002). Adam & Roncevic (2003) also contributed in

finding the scholarly history of the concept of social capital which they agree was already part of the work of famous theorists like Tocqueville, John Stuart Mill, Max Weber, John Locke, and others who put some emphasis on group life and community and civic participation.

Hanifan (1916), approached the concept of social capital was the coordinating mechanism in business where it is assumed to provide the essential social structure for the people participating at that sphere. A different interpretation was proffered by Woolcock & Nerayan (2000) who saw Hanifan's work as focusing on the value of community participation. Social capital can also limits the free-rider problems associated with public goods. In other words, it can be very effective in improving the management of natural capital and maintenance of physical capital i.e. public infrastructure. Lastly, social networks can facilitate innovation and also can improve the development and sharing of knowledge thus means it can work hand in hand with human capital. The social capital can be built by improving the internal functional groups (leadership and management). To extent the external links of local groups; to network information and government structures which enable to develop a reliable policy environment (good governance) (DFID, 1999).

e. Natural capital

According to DFID (1999), natural resources include the quality and quantity of natural resources such as land, water, forests, marine and wild resources, erosion and storm protection among. Natural resources plays a significant role to those their livelihoods depend on resource based activities such as farming, fishing, gathering in forestry among others. There are goods and services that relate to the natural environment such land, water and ocean where most in the world rely on them as well as food stuff (fishes, grasses, spring water among others) originate from natural capital. Prugh & Constanza, 1999 argues that many authors see land as the main basic example of natural resources. In other words, without land nothing can happen on earth (production/agricultural activities). In order to sustain the natural capital, government structures and processes should set policies that will be more secure to access and better management of natural resources. For example, with the provision of inputs for agriculture, forestry and fisheries, environmental legislation, changes

institution that manages and governs the access of natural resources. All mentioned above will have the greatest impact upon stocks of natural resources.

f. Physical capital

Physical capital consists of basic infrastructure namely: roads, building canal for irrigation purposes, telecommunication, energy and among others as well as producer goods needed to support livelihoods. In other words, it is the tools, infrastructure and equipment used to increase productivity. Infrastructure consists of changes to physical environment that help to meet the basic needs to be productive namely: affordable transport, adequate water supply and sanitation, affordable energy and access to information. Infrastructure is commonly public goods used without directly payment. Producer goods are tools and equipment used by people for more productivity. Producer good can be owned by individual or group or accessed through rental i.e. tractors, harvesters, planters among others (DFID, 1999). The availability of these mentioned above can promote the success of agriculture in rural areas (Ellis 2000).

Furthermore, high level of infrastructure can play a significant role on agricultural productivity. For example, good access to transport can make effectively distributed of inputs (seeds and fertilizers) which promote agricultural output. Market transport is very important because it links the farmers to the consumers. The availability of own market transport influences the timely delivery of produce to the markets. Moreover, construction of silos can protect agricultural produce from bad external environment (Ellis, 2000). According to Bachmann & Earles (2000), the proper post-harvest handling and storage contribute in ensuring quality maintenance for perishable agricultural produce. Agricultural commodities have to be harvested at a specific time, but are consumed year-round, thus necessitating proper storage facilities (Sasseville, 1988).

Storage has some added advantages because it increases market flexibility. Households with proper storage facilities do not need to market their produce immediately after harvest when prices are low. They can store their produce and sell when prices are higher. Furthermore, the construction and development of roads and communication networks enhances the proper and fast marketing of farm produce and also the movement of rural people for other activities,

even off-farm activities (Ellis, 2000). Poor roads limit smallholder farmers to expand their markets and most of them are located far off from the big markets. National Emergent Red Meat Producers Organization (NERPO, 2004) indicated that poor states of roads network affects farmers' ability to attract many buyers in their areas since bad road network systems are associated with very high transport costs. This means that a developed physical capital base enhances the effectiveness and efficiency of sustainable livelihood outcomes (Ellis 2000).

g. Financial capital

Financial capital is the financial resources that the community used to achieve the livelihoods goals (DFID, 1999). In other words, it is the stocks of money to which the household has access. Mostly it is usually in the form of savings from employment and access to credit in the form of loans and regular inflows of money. According to DFID (1999), the most common types of inflows are pensions, transfers from state and remittances. These flows need to be reliable in order to make a positive contribution in the country. Jacobs *et al.*, (2003) indicated that in South Africa Strauss commissioner in 1999 investigated that most of the poor people who lives in rural areas are facing more problem of accessing finance to invest on land and agricultural activities. However, after 1994, the government removed those constraints by established new developments finance institution such as Land Bank. Government passed new legislation in the operation of Bank and new corporate identity was revealed and poor community has access to bank loans which was introduced by Land bank in 1999. In addition, Land bank also has an agency agreement with Department of Land Affairs (DLA) and the Commission for the Restitution of Land Rights to make development finance available to Land Reform beneficiaries for their projects (Jacobs *et al.*, 2003). The finance capital can be indirectly access through organizational, institutional and legislative/regulatory. However, people in rural cannot alleviate poverty if they have lack of knowledge to utilise finance in properly manner. Therefore different needs of support are required such as government structures and processes to develop financial services, support to develop marketing among others (DFID, 1999).

h. Transforming structures and processes

Transforming structures and processes are institutions, organisations, policies and legislations that form the livelihoods (DFID, 1999). Transforming structures and processes (changes in policy) is the most external changes in vulnerability context. They are effectively determining the access, the terms of exchange between different type of capital and return; they are the core aim of sustainable livelihoods approach which can be achieved by supporting poor people to renew their assets (DFID, 1999). The new changes in policies set by government can help people to become very strong and able to capitalize on a positive way. For example, increasing people assets regard with financial services i.e. crop or livestock insurances can reduce vulnerability amongst poor people' assets. Moreover, the institutions and stakeholders should also have an impact on helping peoples' assets as well as improving their livelihoods in the society. A restricting policy and institutional environment may distinguish against the poor, thus making it difficult for them to get access to land, livestock, capital and information. Asset ownership influences the range of livelihood options open to different categories of people (DFID, 1999). The transforming structures and processes are illustrated with example of access to land which is represent in Table 2.2

Table 2.2 Access to land

Structures		Processes	
Public sector	Organisation that enforce legislation	Policy	National land use policies
Private commercial	Existence of credit organization and land traders	Legislation	National/district land legislation
Civil Society	Existence of local resource management organisation	Institution	Informal restriction on land ownership

Source: DFID, 1999

Access to land is one of socio-economic rights sets to Bill of right, however there is no statement that is saying that every citizen have a right to land (Jacobs *et al.*, 2003). There was

the expectation that enhanced access to productive resources such as land and technical support would translate into increased agricultural productivity for the black farmers who make up the bulk of the smallholders in the country (Obi & Pote, 2011).

2.3.6 Land reform policy

After 1994, the ANC government initiated a land redistribution programme with the aim of transferring land to black farmers for agricultural purposes (Thwala, 2003). The ANC government came up with the willing seller/ willing buyer policy (Mathekga, 2013). Basically, it is a market-led land reform based on redistribution of land through willing seller-willing buyer transactions in other word on the use of free market mechanisms (Kahn, 2007). The policy simply means that white farmers can sell their land when they wanted to it not by force. In other word, the policy of willing seller, willing buyer (WSWB) is favouring the minority of the existing landowners White commercial farmers have more power to choose the price they require as well as the buyer they are willing to sell their farms/property. As a result the process of land redistribution is taking a long process and most of the farms are unproductive and overcapitalized (Mathekga, 2013). The Commisioner of North West and Gauteng region Mr Mphela also indicated that, most of the farms where farmers are willing to sell are not productive and the beneficiaries do not benefit from them (Kahn, 2007). Before 1994, only 13% of land was owned by blacks while almost 87% of it was owned by white minority. After 1994, the government under President Thabo Mbeki targeted 30% of land by 2014 to be in the hands of black, however, currently the ANC government only transferred only 5% of land from white landowners to black farmers due to this land policy (Mathekga, 2013). The government has failed to meet the target of 30% and it has been postponed to 2020.

Accordingly to the people who benefited from the policy are males than females in particularly those who have access to income as well as the assets such as agricultural equipment's, livestock and cash. The poor people who do have none of the above pushes them far apart to have land and improve their livelihood and further undermine their position in the society. South Africa is still regarded as one of the most unequal society in the world in terms racial landownership (Mathekga, 2013). In South Africa, 4.5 million of white people are still commercial owners of huge agricultural land and resources, dominating in industry,

and mining sectors as well as in the financial sector. Only few blacks become emerging farmers and joined the middle-class rank, the poverty is still high among black society. Therefore there is need for government to initiate new policy to rectify for equal distribution of land (Mathekga, 2013). Land distributed by 2014 targeted 30% of land distributed by 2014 only 3% of agricultural land distributed to black farmers.

2.3.7 Livelihood strategies

Strategies are linked with people's objective in other words the livelihoods outcomes they are looking for (DFID, 1999). Livelihood strategies are the individual's available and implemented options for pursuing livelihood goals. In other words it looks to promote choice, opportunity and diversity. The greater the diversity of these strategies the higher the household resistance to the shocks, trends and seasonality conditions within the vulnerability context (DFID, 1999). In other words, the greater the choice that the people have in their livelihoods, the greater the ability to adapt to shocks and stresses within the vulnerability context. FAO (2005) indicated that livelihood strategies are the range and combination of activities and choices that people make in order to achieve their livelihood goals. These strategies include short term considerations namely, ways of earning a living, coping with shocks and managing risk as well as longer-term aspirations for children's future and old age. Livelihood strategies are the collection of the various activities accepted by the household to generate a living.

They are the patterns of behavior adopted by the household as a result of the intervention processes on the household assets (FAO, 2005). Livelihood strategies have been classified according to different criteria. Scoones (1998), Swift (1998) divide rural livelihood strategies into three broad types namely, agricultural intensification and extensification, livelihood diversification, and migration. The sustainable livelihoods framework below has been adopted by many researchers and development organizations as another methodological approach to alleviate poverty. It aims to reduce vulnerability by helping people to build on their own support and resources (Bryceson, 2004).

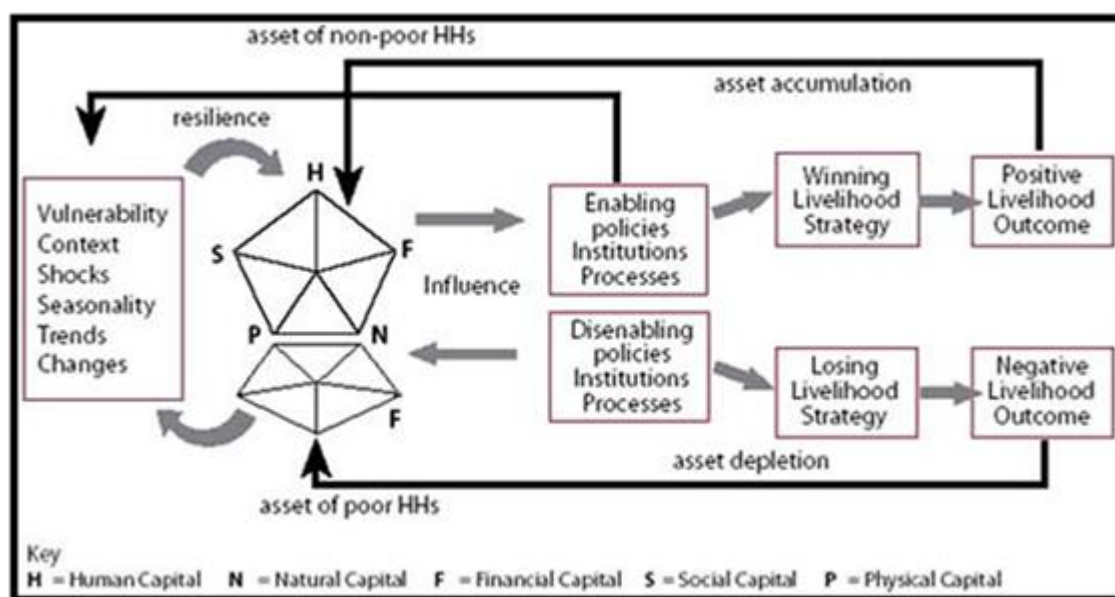


Figure 2.5 Modified Sustainable livelihoods Framework

Source: FAO (2005)

2.3.8 Land and agrarian reforms and rural development strategies

Land and agrarian reform are defined as a concept of rural development. Both are also driving agenda and the interconnectedness of rural development. These institutions are indicators and give clarity on rural development policy and relational rural-urban linkages at household, community, local, provincial and national. A household is an entry point and unit of analysis for enhancing capabilities and sustainable development (Ntsebeza & Hall, 2007). The value of the rural universe and sustainable resources use leveraging potential to sustain livelihoods, develop socio-cultural living and improve productive potential. Diverse sector strategies beyond farming are the critical sector strategy contributing to redress as a growth-oriented and development mechanism (e.g. agriculture). Rural demography and livelihood patterns are also addressing poverty and inequality. Agrarian transformation is viewed as a strategic transformative mechanism (means and method) (Ntsebeza & Hall, 2007). Furthermore, in 2000, the government launched the Integrated and Sustainable Rural Development Strategy (ISRDS) with the aim of developing organized and stable rural communities which will contribute to economic growth and development (Ntsebeza & Hall, 2007). Moreover, in 2007 the National Policy Conference of the ANC also proposed the draft resolution and identified rural development, land reform and agrarian change as important aspects of South Africa's programmes of economic transformation. These two aspects of

strategies initiated by government for rural development explained in the following paragraphs.

2.3.9 The Integrated Sustainable Rural-Development Strategy (ISRDS)

It is confirmed by cabinet as a government strategy following President Mbeki's State of the Nation Address in 1999. The ISRDS mainly draws from the Sustainable Rural Livelihoods (SRL) approach with strong emphasis on the "poverty agenda". According to a 2001 IDT Report the ISRDS was designed to realise a vision that would "attain socially cohesive and stable rural communities with viable institutions, sustainable economies and universal access to social amenities, able to attract and retain skilled and knowledgeable people who are equipped to contribute to growth and development" (Ntsebeza & Hall (2007)). The ISRDS is to transform rural South Africa into an economically viable, socially stable and harmonious sector that makes a significant contribution to the nation's GDP. The ISRDS will therefore be beneficial to agriculture and the entire rural sector. The strategic perspective that the sector plan has regarding the ISRDS is in the promotion of the following areas that are vital to agriculture:

- Local economic development in particularly on rural towns, service centres and villages.
- Strengthening the profile and role of agriculture and related industries in the Integrated Development Planning processes in particularly of rural local authorities.
- The promotion of income generation and livelihood activities will be given a special attention to women, the youth and disabled that are primarily meet the needs of poor families and local market demand.
- Rural development nodes
- Rural settlement planning to accommodate new settlement patterns since the removal of apartheid settlement laws and the dawn of the post-1994 democratic order.

A strong government support and commitment to successfully implement the Integrated and Sustainable Rural Development Strategy (ISRDS) is important to the success of this sector plan. The strategy will benefit the people who lives in rural areas especially women, youth and the disabled. The successful agricultural sector will form an important component of integrated sustainable rural development and vice versa (National Department of Agriculture (NDA), 2001).

2.3.10 The Comprehensive Rural Development Programme (CRDP)

The Comprehensive Rural Development Programme (CRDP) introduced in 2009 by President Zuma with the new Department of Rural Development and Land Reform. The key thrust of the framework is an integrated programme of rural development, land reform and agrarian change. The main purpose of CRDP was to fit and appropriate the strategy of the Department of Rural Development and Land Reform and Agrarian Transformation to represent a rapid and fundamental change in the relations systems and patterns of ownership and control of land, livestock, cropping and community (Ntsebeza & Hall, 2007). Land reform in rural areas is comprises of small, medium and large scale and each promotes equity and efficiency from both agricultural production and processing (Kariuki, 2009).

The objective of the strategy was social structure and development of rural development. On the 24 March 2010, Minister Nkwinti's 2010 Budget Speech emphasized that, the CRDP has set a new course for post-colonial reconstruction and development (Ntsebeza & Hall, 2007), and this shall be achieved through coordinated and broad based agrarian transformation which will focus on building communities through social mobilization and institution building; strategic investment in old and new social, economic, information and communication technology infrastructure (ICT) and public amenities and facilities coordinated through the rural infrastructure programme; new land reform programme implemented in the context of the reviewed Land Tenure System; version of professional and technical services as well as effective and sustainable resource management through the component of Geo-spatial services, technology development and disaster management and effective provision of cadastral and deeds registry as well as surveys and mapping services (Ntsebeza & Hall, 2007). The Department is committed to the achievement of outcome 7 of the 12 outcomes pursued by government over the medium term strategic framework (MTSF)

period which is vibrant, equitable and sustainable rural communities. The success of this Department over the MTSF period will be measured through delivery on the following outputs namely: the sustainable land reform; food security; rural development and sustainable livelihoods and lastly job creation linked to skills training (Ntsebeza & Hall, 2007). This is shown below by the rural development, land and agrarian transformation framework in Figure 2.6.

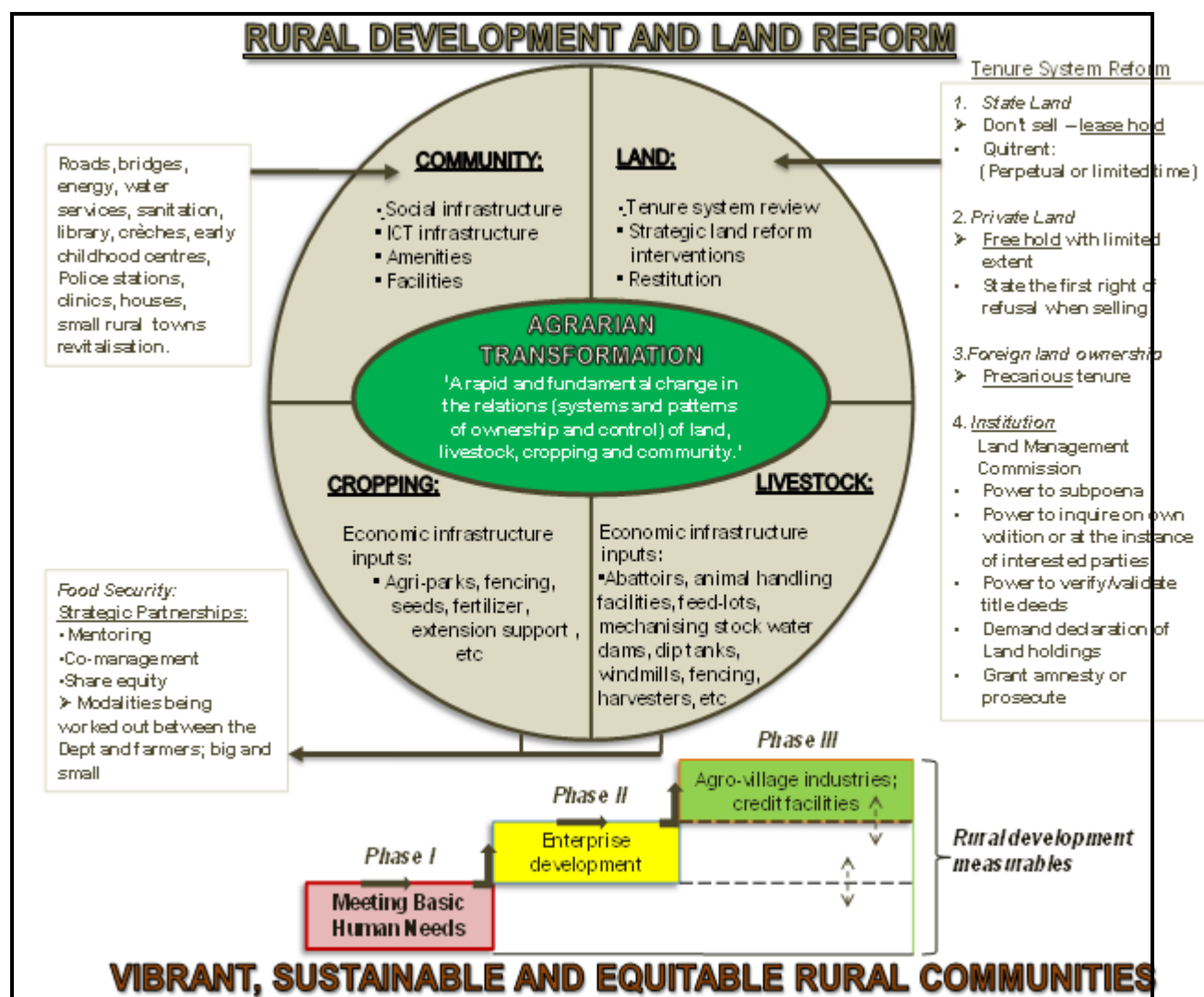


Figure 2.6 Rural development, land and agrarian transformation framework, Source: Department of Rural Development and Land Reform, 2014

Several processes have taken place to reverse discriminatory legislation and to improve participation and these include land reform, consisting of the restitution, redistribution and tenure reform programmes. These changes had major consequences leading on average to increased productivity and to a more competitive agriculture (National Department of

Agriculture (NDA), 2001). However, land reform programme to sustain rural livelihoods needs to work hand in hand with agrarian reform. The provision of land to poor is needed to be supported by various programmes of agrarian reform. These programmes include, access to inputs, restructuring of produce markets, agricultural extension services and training, provision of machinery and implements, provision of credit for development of rural infrastructure and support farmer's organisations, provision of abattoirs, animal handling facilities and feed-lots for livestock production, mechanism of stock water, dams, fencing among others (Jacobs *et al.*, 2003). These ranges of reforms will require large amount of state investment in the economy. Moreover, private sector should also intervene through direct subsidized credit to empower black emerging farmer's organisations. The small scale agricultural sector is linked with rural economy in combination on-farm and off-farm employment as well as the exchange of good and service. Therefore rural priorities are support to rural entrepreneurs to provide mechanical service; access to irrigational water and infrastructure at below markets rates; wider availability of credit and at reduced interest rate and restructuring of input and output markets to meet the needs of small scale farmers in rural areas (Jacobs *et al.*, 2003).

It is estimated that, there are 3 million farmers, mostly in the communal areas of the former homelands, who produce food primarily to meet their family's needs (NDA, 2001) as it is shows above in phase I by rural development, land and agrarian transformation framework. Agriculture provides food and fibre to meet two of the basic human needs i.e food security (NDA, 2001). In Phase II, agrarian reform develops the enterprise by provision of farming inputs and value adding for agro-village industries in Phase III. According to (NDA, 2001), in this way agriculture becomes the backbone of growth and development. In general the economies grow by shifting human and capital resources out of the primary sectors (agriculture) into the industrial sector and later into the services sector. Therefore land reform programme is the key to ensure rural stability and market certainty.

2.3.11 Livelihood outcomes

Livelihood outcomes are the outputs of livelihood strategies (DFID, 1999). Livelihood outcome achieve through livelihood strategies by the household members. These livelihoods

outcomes will improve food security, income security, health, well-being, asset accumulation and high status in the community. The unsuccessful outcomes include food and income insecurity, high vulnerability to shocks, loss of assets and impoverishment (FAO, 2005).

a. Land reform and rural people's livelihood outcomes

The impact of land reform will improve rural people's livelihood and lifting them out of poverty. The success land reform will include the following outcomes namely,

- **Improved food security:** improved nutritional status of household or increased disposable cash income and eliminate food insecurity as it is main aspect of vulnerability. According to Rugege (2004), land reform was compelled by the need to create a strategy for poverty alleviation and food security and thus improve nutrition and rural incomes. Agricultural growth has strong and impact on poverty and it is also a primary channel for achieving household's food security. In rural sector, the household engaged in agricultural activities is less poor and have better nutritional status than household who are not (Machette, 2004).
- **Increased income:** increased amounts and regularity of income from marketed produce and wage employment and more equal distribution of income. Increased income is also linked with the economic sustainability of livelihoods (DFID, 1999). Makhura & Mokoena (2003) were of the opinion that the country's poorer sections would experience increased incomes, which would contribute to poverty reduction. According to Lahiff (2008), in South Africa agriculture currently forms a small share of total incomes of rural Africans. Income is higher for Africans with access to land than for the entire rural African population. Access to land is a requirement for redistribution of income as well as for improving the living standards in rural areas.

Land reform contributes to rural incomes to a great extent; this is why it is identified as the starting point of addressing inequalities amongst individuals (Lahiff, 2008). According to the Quality of life survey (QOL) which was conducted by DLA to extent to which the objectives of land reform have been met. The survey also claims to provide an account of the impact of land reform on livelihoods of the beneficiaries (Hall, 2009). The second QOL survey was to

assess the impact of reform on livelihood. The second QOL survey at the time the beneficiaries joined the project found out more than half of project studied been distributed less than a year on the in initial stage of the survey. Land was underutilization or arable land was potentially for intensive production. The key finding for second survey indicated that most of the households (78%) were falling below expenditure poverty line of R476.30 per month and individual (Hall, 2009). This indicates that most of beneficiaries' livelihood sources and strategies and very low income on total.

The key findings on the second QOL survey on the livelihoods of land reform beneficiaries was as follows, about 63% of households beneficiaries received some form of income wages; Less than 20% of these beneficiaries received both income from agricultural production and off-farm activities; About 8% of households acknowledge transfer payment; About 38% derived income from sale of crop and livestock production while 62% were not deriving any income (Hall, undated). The overall sample for the average of household from agricultural activities was R 1 146. 00 per annum. The QOL survey found out most of production on redistributed land was considered for home consumption; however, the households were selling some of their produce to local market. This means that the land reform beneficiaries were wealthier than rural population on average (Hall, 2009).

- **Increased well-being:** improved access to clean drinking water and to sanitation, improved housing, ownership of household items and access to fuel for cooking (Hall, 2009). This also another addition on income, increased income can increase the self-esteem, physical security of household, access to services among others (DFID, 1999). According to Rugege (2004), land reform was established to empower beneficiaries in order for them to be able to improve their economic as well as social wellbeing.
- **Reduced vulnerability:** improved access to social infrastructure like education and health facilities and increased mobility (Hall, 2009). Although many farmers in South Africa became more vulnerable to international shocks, unstable weather conditions, a worsening debt situation and deteriorating terms of trade. These numbers of constraints and problem areas prevent the agricultural sector from operating at full potential (NDA, 2001). However, there are positive indications that some farmers are doing well under the current circumstances. It is also evident that there is a good base

and a positive attitude and willingness among farmers, agribusiness enterprises and government to tackle the following challenges and turn them into opportunities (NDA, 2001).

- **Improved sustainability:** more sustainable use of the natural resource base such land and water (Hall, 2009). The effective use of soil and water management practices result an increase on the effectiveness of good management in fertiliser application and maintain more sustainable resources. In other words, the farming system that uses less chemical fertiliser, pesticides and irrigation water will minimize the demand of scarce resource as well as to show the potential to meet the local need (Department for International Development (DFID), 2005). Expanding irrigation system can improve the agricultural performance, however, water is scarce resources therefore the development of small-scale irrigation and water management system must be a priority. Furthermore, government should also initiate measures to improve the equal distribution of irrigation water as well as the establishment of tradable water rights for improvement efficiently of water use (DFID), 2005). Sustainability is the fundamental to achieve future agriculture and growth. The sustainable agriculture is occurring when ecological, economic, social and political trade-off is at equilibrium level. The sustainable agriculture takes seriously the contribution of agriculture to growth and poverty and the needs of the poor people. While the agriculture that uses resource inefficiently can be unsustainable (DFID), 2005).

b. Land reform, equity and poverty alleviation in rural areas

Land reform has the potential to make a direct impact on poverty through targeted resource transfers in particularly in the rural areas. It is viewed as an instrument for redressing the inequities in access to economic opportunities and resources (Southern African Regional Poverty Framework (SARPN), 2008). Equitable security of ownership enhances the opportunity for investment in land and thus leading to agricultural growth. This also improved funding from taxation with strengthens the governance policy regards with land. Redistribution can increase equity in land assets and thus will unite land holders into larger commercial farms and encourage smallholder farmers to pursue alternative livelihood (non-

farm economy) and this will have the greatest impact on poverty reduction (Renewable Natural Resources (RNR) and Agricultural Team (AT), 2004). Indeed, land reform literature is saturated with empirical arguments arguing the case for land reform (SARPN, 2008).

These arguments relate to the economic benefits derived from tenure security, the link between equality in the distribution of assets and positive economic growth, the advantages of smallholder agriculture from an efficiency standpoint and the desirability of transferring land to more efficient users through land sales and rental markets (SARPN, 2008). Land reform can lead to some equality in land access and can be useful in preventing social and political instabilities in a country (Lahiff, 2008). Moreover, land reform in South Africa was a need to try and overcome the legacy of past inequalities. It aims at promoting equity among people especial when it comes to wealth distribution. Redistribution of agricultural land would create stronger linkages between farm and off farm income-generating activities, and therefore expand opportunities for the promising youth who reside in rural areas (Didiza, 2006). Poverty as well as inequality in resource distribution is a consequence of the implementation of racially based land policies and legislation by colonialists and apartheid.

2.4 The factors that influence beneficiary to contribute on level of production and marketing for poverty alleviation in Jourbetina

The Eastern Cape region plays a significant role in farming system; about 436 000 small-scale farmers are currently engaged in farming. This province is also the highest livestock producing region of the country because it comprises 21% of South Africa's cattle, 28% of sheep and 46% of goats. In terms of agricultural crops, the province is a major producer of chicory, pineapples, tomatoes, citrus fruit, deciduous fruit and tea (Meyer *et al.*, 2009). Therefore, an increase to all agricultural commodities mentioned above will lead to a decrease in food price and thus will be benefit to the consumers. An increase in agricultural production will generate more employment opportunities due to an increase in small and large farmers (DFID, 2005). In addition, the use of markets is also very important to the poor because they act as a mechanism for exchange and also co-ordination and allocation of goods and services (Jari & Fraser, 2009).

Market participation is important amongst smallholder farmers because people living in poor condition derive benefits such as income and employment opportunities from it. Marketing activities such as processing, transportation and selling can provide employment opportunities particularly to those who are willing to exit the farming sector (Jari & Fraser, 2009). However, all of these will need a large-scale investment potential which will contribute significantly to economic diversification and job-creation in rural areas (Meyer *et al.*, 2009). These changes will also play a significant role to determine the extent to which agricultural growth can reduce poverty. When the market price is high, the farmer will invest more with regard to the improvement in agricultural productivity. However, the farmers need to improve the level of infrastructure linkage aimed at reducing transport and market costs for potential market (DFID, 2005).

Moreover, in South Africa the issue of poverty has decreased after 1994. However, in 2005 more than half of South African people live below poverty line. South Africa is different from other countries since their agriculture sector comprises of mix large-scale commercial agri-business and small-scale agriculture. From 1995 to 2009, the structural transformation occurred in South Africa as a result 594 000 jobs were lost in agriculture sector (Grewal, 2012). Before 1994, the employment growth in South Africa agriculture was concentrated into wholesalers and retailers trade industry. These two main sectors were responsible for two-third of total employment in South Africa since 1994. The structural transformation among commercial agriculture results a decrease in South African economy (Grewal *et al.*, 2012). However, the new government of South Africa is engaging to raise agricultural production as well as to empower the black economy through land redistribution with the aim of providing the poor with land for productive purposes. The productive agriculture is taking place, however the poverty still exists due to many problems such as high transaction costs in land redistribution as result many projects have lack of infrastructure, lack of support services, lack of land ownership among others (RNR & AT, 2004). This means that, there are several issues need to be resolved namely, support emerging farmers in terms of skill development, further progress land redistribution programme, improved support and extension services and improved access to financial services (Grewal *et al.*, 2012).

2.4.1 Improved financial services

Lack of access to finance play the negative impact to many poor farmers investing and innovation. Most of them have lack of access to credit, savings to purchase the inputs of production such as fertiliser and seeds. It is difficult for them to borrow money due to the small scale of their activities. Most of the financial providers in developing countries are unwilling to assist them. Their shortage to seasonal credit in agriculture tends to be assist by informal institution, agribusiness and processors instead of formal institution. The government needs to rectify that by subsidies in order to build the capacity of rural and agricultural finance providers (DFID), 2005). Improvement in access of finance is one of the key elements in raising agricultural productivity. However, in South Africa the government established parastatal institutions with the aim of channelling credit to smallholder farmers in particularly in former homeland. Furthermore, although the Land bank and Agricultural Credit Board was established to support the commercial farmers, in 2003 annual report of Land Bank reported that, they issued about R2 billion to 15 000 black farmers (Machethe, 2004). The government also established Agricultural Credit Scheme with the purpose of addressing/ improving the credit needs to black farmers as well as to ensure the financial sustainability of the scheme (Machethe, 2004).

2.4.2 Improved support and extension services

In developing countries, the agricultural extension services are limited to reach poor farmers in rural areas. Most of their effective and credible roles are played by NGO's. The main important thing is to develop new knowledge and innovation to the farmers. For example, many small-scale farmers are unable to access good quality of seeds due to many commercial companies that closed their stall (DFID, 2005). Access to farmer support services plays a significant role to achieve smallholder agricultural growth. Adequate access to farmer support can have an influence to increase the agricultural productivity and production. In South Africa the Comprehensive Agricultural Support Programme was established to address the problem of lack of access to farmer support services for agricultural development. This approach is also contributing to the success of the land reform programmes (Machethe, 2004), however, land reform programmes has been failed in South Africa as result of willing seller and willing buyer policy (Mathekga, 2013).

2.4.3 Secure property right

Secure property right are the important aspects that encourages the farmers to invest. Secure property rights also allow farmers to borrow money from the bank and it is the advantage to smallholder farmer who usually lack of access to credit. Poor farmers can also include many approaches with their land namely, leasing their land or practice sharecropping and these systems can be both efficient and equitable. The process of economic empowerment in South African agriculture starts with improved access to land and the vesting of secure tenure rights in people and to areas where these do not exist (NDA, 2001). In South Africa, the policy of willing seller and willing buyer in redistribution programme must be effective to poor people. This is means there should be measures to help poor to purchase land as well as to encourage the landowners to sell their land to poor. These should be achieved through strengthened of the financial position of the poor and good legal and administration procedures (DFID, 2005). Access of land by the poor for production purposes is essential for them to enjoy the benefits productive purposes through SLAG and LRAD programmes. Black farmers were provided with financial assistance to purchase land from willing sellers (Machethe, 2004).

2.5 Agricultural production and poverty alleviation

The majority of people in developing countries live in rural areas and agricultural production or agriculture related activities are the most effective way to reduce poverty. The contribution of agriculture to poverty alleviation plays a significant role to non-agricultural activities namely rural non-farm enterprises and social services (Machethe, 2004). Broadly based smallholder farmers can make transformation on inappropriate agricultural production system and build policy frameworks which designed to improve the rural livelihoods. Agriculture contributes to rural and urban economy into three ways namely: reducing food prices, employment recreation, increasing real wage and improve farm income. This is means that, these aspects mentioned above are more effective than other sectors at reducing poverty and hunger in rural and urban areas (Machethe, 2004). In addition, an increase in agricultural production can also have an effect on rural economy through the farm demand for namely: processing, storage and transport of produce. An increase in yield will result and a decrease in price of food as a result the household and all purchasers of food stuff can benefit.

The strength of this effect depends on the tradable as well as associated with price elasticity of demand of farm production (Irz *et al.*, 2001). An increase in supply leading to and decrease in price and this determine the distribution of benefit between producers and consumers which depends on the elasticity of demand. The more the inelasticity of demand, the greater the fall in price and the consumer benefit more. When the demand is perfectly elastic, the producers will gain more. The world agriculture can achieve poverty reduction by supplying masses of food with lower price (Irz *et al.*, 2001).

2.6 Agricultural production on economic growth

Many studies view that agricultural growth has the greatest impact on poverty reduction in the developing countries (Grewal *et al.*, 2012). This was indicated by Datt & Ravallion in 1998 estimated a simultaneous equation model of poverty determination to explain the agricultural growth showing the world agricultural economic growth and poverty reduction is good for poor (Irz *et al.*, 2001). The analysis also shows that output is in reverse related to the changes of poverty measures. The yield contributes to poverty reduction by promoting an increase in wage rate and a decrease in food price. Ragarajan in 1982 also indicated that an addition of 1% of agricultural growth in India contributes 0.5% in industrial growth rate as well as 0.7% in national income growth rate (Irz *et al.*, 2001). Coxhead and War in 1991 established computable general equilibrium (CGE) on the case of Philippines show the technical improvement in farming such a labour using or land savings results an increase of 8% income on landless labour (Irz *et al.*, 2001). The technical improvements to crop also contribute on the economy, stimulating growth and employment as it is stated by Bolivia, de Franco & Godoy (1993). Lastly Gulup and Warner (1997) indicated that every 1% of an increase in agricultural GDP leads to 1.61% increase on income of the poorest 20% of the population. It also has a greatest impact on poverty reduction by 0.45% (Irz *et al.*, 2001).

Moreover, in South Africa, all economic activities such as the provision of farming inputs and value adding remain an important sector in country's economy despite its small direct share of the total gross domestic product (GDP). Farmworkers, farmers and their families also contribute to the economy when they spend their wages and salaries on consumer goods and services or when they buy inputs for production in the next season (NDA, 2001).The

contribution of growth is generating increased income for farmers. However, income from smallholder farming business contribute a small fraction of the total income due to many problems such as lack of access to input due to high costs as well as credit, lack of land ownership, lack of knowledge to use new technology.

Smallholder farmers are risk-averse than commercial farmers and it would be difficult for them to adopt techniques that will increase their yield (NDA, 2001). In general, agricultural growth occurred due to higher yield it also increases the demand for farm labour in other words it creates more jobs for rural people (Irz *et al.*, 2001). The other contribution within farm economy is labour market. The rural poor depend on labouring on farm business and the higher the labour, the greatest impact on poverty reduction. Moreover, primary agriculture accounts for 4, 5 % of the GDP of South Africa while the larger agro-food complex accounts 9 % (NDA, 2001). In 2000 they exported about R16 billion worth of products or nearly 10 % of South Africa's total exports (NDA, 2001). In addition, agricultural growth and development can be sustainably contribute to the overall economy of the nation through transferring of agricultural resources through supply of capital to other sectors (Irz *et al.*, 2001).

2.7 Summary of the chapter

Theoretical and conceptual issues around the question of poverty and vulnerability abound and have been reviewed. Poverty indicators such as low income, unemployment, food insecurity, poor standard of living and inequality can be reduced through government interventions. Land and agrarian transformation have a significant role to play to improve the rural condition in order to achieve outcomes such as increased income, improved food security, increased well-being, reduced vulnerability, improved sustainability and equity. There are also two strategies launched by government for rural development. Furthermore, contribution of agricultural production and marketing has also the greatest impact on poverty reduction in rural areas. However, there are many challenges that have negative impact on farm business and thus need to be resolved for growth and development.

CHAPTER 3

SELECTION AND DESCRIPTION OF THE STUDY AREA

3.1 Introduction

This chapter presents the selection and description of the study areas. Factors such as demographic indicators, socio - economic status, infrastructure, land and biological aspects are presented. The description of the study area provides sufficient information to understand the local context of the research site so that one is familiar with the key environmental issues. The key demographic indicator of population is essential because farming activities are undertaken in accordance with the demographic profile of the farmers. Within the chapter socio-economic aspects namely: employment and educational level and local economic development which include agriculture, tourism, manufacturing, markets and trade are discussed. These are key components of economic growth. The chapter further presents the state of the infrastructure such as roads, agricultural infrastructure of the study area, electricity, telecommunication, water and sanitation. These aspects play a major role in the lives of people in the rural area. The biological factors namely, climate, soils and vegetation types are also presented because they play a significant role on agricultural production as well as contribute to the economy of a region and overall economy of the nation. Lastly, land together with land ownership, Land reform programme and funding from the Department of Rural Development and Agrarian Reform are also presented as they are the main themes of the survey.

3.2 Selection of the study area

The Jay Dee Rovon Workers Trust and Mon Desire in Jourbetina were selected. The reason for selecting these sites is to identify the impact of Land and Agrarian Reform on poverty alleviation in Jay Dee Rovon farm, where government invested huge sums of money on land and agricultural infrastructure in comparison to Mon Desire subsistence farmers where there is no investment that has been made at all. The Jay Dee Rovon farm was purchased by the Department of Rural Development and Land Affairs in 2003 through LRAD grant. The project was also funded by the Department of Rural Development and Agrarian Reform through the provision of agricultural infrastructure. Funding this project by the Department was based on the results of needs analysis which was conducted in the early stages of the

project and challenges which faced the project prior to government intervention. The extent of the farm is 93.8 ha with 65 ha (arable land) under fruit production and the remaining 28.8ha (non-arable) comprised buildings, immovable infrastructure and redundant land that the beneficiaries are planning to use for planting honey bush tea. The project is 100% black economic empowerment (BEE) which is owned by 129 beneficiaries of emerging farmers. In other words, the farm is owned as well as managed by black farmers. Mon Desire farm/village is situated within the Koukamma Municipality at Louterwater area, 25 km north of Joubertina. The farm/village lies in portion 55 (being a portion of portion 51) of Klipheuwel 291. Most of the household subsistence farmers in this region are farming with deciduous fruit production such as apples due to the favourable weather condition. The present study draws up more attention with the currently debatable land issue (Department of Rural Development and Agrarian Reform (DRDAR, 2013).

3.3 Description of the study area

3.3.1 Jourbetina

Jourbetina is located in the Cacadu region which falls under Kou-Kamma Municipality. The Kou-Kamma Municipality is located in the Cacadu District Municipality which is part of the Eastern Cape. The Kou-Kamma Municipality comprises five wards which is predominantly a rural Municipality. Key features of the region are the Storms River National Park, the N2 and R62 road linkages, fruit farming in the Langkloof, forestry and dairy in the Tsitsikamma. The area is made up of a Coastal Zone (Tsitsikamma), the Kouga area and the Langkloof where Jourbetina is situated. The primary nodes in Kou-Kamma Local Municipality are Karreedouw, Storms River, Joubertina/Ravinia/Tweeriviere and Nomphumelelo/Sandrif. Figure 3.1 shows the map of Cacadu region and Kou-Kamma Municipality (Urban-Econ (UE), 2009).



Figure 3.1 Map showing the Cacadu region and Kou-Kamma Municipality
Source: EU, 2009.



Figure 3.2 Map showing the study area (Jourbetina).
Source: EU, 2009

3.3.1.1 The Jay Dee Rovon farm and Mon Desire farm

The Jay Dee Rovon farm is situated at Louterwater 20km west of Joubertina while Mon Desire is also situated at Louterwater 25km north of Joubertina in the Koukamma Municipal area. The Jay Dee Rovon farm GPS position is 33°47'37''S and 23 °38' 05''E while the Mon Desire farm is 33° 46' 51''S 23° 35' 30''E (DRDAR, 2013).



Figure 3.3 Photograph showing land reform beneficiaries Jay Dee Rovon farm
Source: DRDAR, 2013

3.4 Demographic indicators

3.4.1 Population

The Kou-Kamma is the only predominantly rural municipality in the District, with only one quarter (25.45%) of the population being urbanised. Kou-Kamma is a sparsely populated region compared to the Eastern Cape Province. The population of Kou-Kamma was estimated at approximately 40 780 in 2007. The largest portion of the Kou-Kamma LM population was Joubertina which stands at 16.6% of the municipality's population. The population density of Kou-Kamma is 11 people per km (UE, 2009).

3.5 Socio- economic status

3.5.1 Employment level

The employment rate is relatively high in the region as compared to the whole Eastern Cape however; there is a need to develop sectors that can provide skilled and diverse employment opportunities. Due to Kou-Kamma's high employment rate, the area has relatively low poverty levels and higher household income levels as compared to the rest of the Eastern Cape. The employment rate in 2007 falls to 58%(UE, 2009). These facts show that the region has a good labour force potential which could be utilized for future economic development within the region. People in this region are employed by agricultural sectors. The agricultural sector employs mainly unskilled positions which also impacts on household income. However, the agricultural sectors employment is declining and the high levels of unemployment are generally associated with poor socio-economic conditions and poverty(UE, 2009).

3.5.2 Education level

The level of education and skills within a region impacts by many factors such as the productive efficiency of investments which is health and capital, employment potential, the gender gap and productivity and income levels. Education is therefore acknowledged as being the most linked to the economic development of a region. The Kou-Kamma Local Municipality (KKLM) has relatively high levels of individuals with some schooling with higher levels of literacy and numeracy. This will make more people to be more employable. However, there is a small percentage of the population with tertiary education and this will lower the development of tertiary sectors in the region. There are no tertiary institutions to provide training in this region (UE, 2009).

3.6 Local economic development

Kou-Kamma's economy is driven by two main sectors namely, agriculture and forestry which also include trade and manufacturing. These two sectors have over the years been the LMs main formal employers and these are collectively employing 54.8% of the regions

labour force in 2007(UE, 2009).There are also signs that indicating the tertiary sector is becoming a bigger role player in the Kou-Kamma economy. The trade sector is having the highest increase in employment rate which falls at 8.7% from 1995 to 2007. The region has a low dependence on government initiatives due to positive feature of employment shows by government and the community. However, the global economic crisis has affected all sectors in the country including Kou-Kamma region (UE, 2009).

Due to the fall in global and local spending the demand for most products offered by Kou-Kamma has fallen and this is experience in particularly by the manufactures, agriculture and trade sectors. For example, in USA more than 500 000 people lose their jobs from industry look exactly like tourism in Kou-Kamma which relies heavily on foreign tourists. This means that, they will struggle to be operating at desirable business levels (UE, 2009). Furthermore, agricultural sector is also affected by increased prices of inputs production such as seeds and fertiliser among others. Currently, farmers can pay three times for one bag of fertiliser they used to pay. However, the farmers use other efficient ways of farming to keep the farms alive. Some sectors exporting their produce to foreign countries to get the highest returns. The KKLM average growth rate will remain low due to these global crises and the diminishing international demand (UE, 2009).

3.6.1 Agriculture

The agricultural sector includes all activities such as crop and livestock production, horticulture, agricultural husbandry services, hunting, game farming, forestry, ocean and coastal fishing. The agricultural sector also supports a number of related industries such as chemical manufacturers and distributors, fruit processing, packaging material suppliers, fruit storage and transportation companies (UE, 2009).

The region also play a major role in Diary production because the soils are original from the Table Mountain Sandstone series and the area receives an average of 1000ml of rain per year which make it suitable for intensive dairy farming. The dairy industry owns 32 000ha in Tsitsikamma which 9700 ha under irrigation and 21500 ha under dry land (UE, 2009).The dairy sector employs 1 500 people with an additional 800 jobs associated with dairy processing. The Kou Kamma region in particularly in Kareedouw is characterized by

livestock farming and the predominantly are goats, sheep and beef cattle farming and the livestock is sold through auctions and agents. However, the vegetation that is common in this region is not palatable for animals and therefore burning programmes are initiated to provide livestock with new grass. Furthermore, there are two game farms in the area that is operate for hunting activities (UE, 2009).

3.6.2 Tourism

The Kou-Kamma Local Municipality has two distinct tourism routes. The Tsitsikamma region situated along the N2, between the Tsitsikamma Mountain Range and the sea and the Langkloof located along the picturesque R62. The Tsitsikamma area which forms part of the Garden Route is characterized by its impressive forests, fynbos and rugged coastline. This route offers attractions to the tourists and this include Tsitsikamma National Park, Storms River Village, Storms River mouth and Eersterivier. The Langkloof is characterized by deciduous fruit orchards, rivers, mountains and the fynbos. The Langkloof area forms part of the Route 62 which is a popular tourist route in the Western Cape and Eastern Cape that cross between Cape Town, Oudtshoorn up to the Langkloof(UE, 2009).

It offers a scenic alternative route in Kou Kamma such as Misgund, Louterwater, Krakeel, Kareedouw and Joubertina. The months with the highest visitor numbers in Kou-Kamma are April and December. The tourism activities in the Tsitsikamma area are done predominately by international tourist while in the Langkloof is done predominately by local tourist. In the Langkloof there are some activities such as the Lutheran Missionary Monument, 30 demarcated hiking, mountain bike trails on Peak Formosa, Hiking trails, Water based activities around the Kouga River, San Rock Art among others while in Tsitsikamma there are some activities such as Canoeing, Hiking, Mountain bike trails, The Tsitsikamma National Park among others. This sector has good labour absorption potential and boasts great economic development opportunities. Through good environmental and economic management the sector could grow into a driver of development in the region(UE, 2009).

3.6.3 Manufacturing

The main opportunities around manufacturing opportunities in Kou-Kamma namely: manufacture of niche regional products, pack house partnerships, indigenous furniture, agro-processing and spin-offs from the forestry sector. Fruit processors in this region are located in Louterwater and they manufacture apple juice and apple extracts (UE, 2009).

3.6.4 Markets

The area is a major growing region of fruit such as apples and pears for both local and export market. From 2007 to 2008 was the very good year for fruit growers in this region with increase export revenue. The export market is comprises 40% of the area's produce and the produce is distributed to the markets namely, European Union, Middle East and Far East. From 2002 to 2007, the total market for export was R840 million per year while it was R280 million for local market. The farmers are using marketing agents such asCapespan to export their produce while they do market for themselves to supermarkets andhawkers for local markets. The First Grade fruit is packed in boxes and exported while the lower grade is distributed to local markets apples for fruit processors (UE, 2009).

3.6.5 Trade

There are local fruit trading companies and most of them are wholesalers. There are also few national chains and franchises retail businesses in Kou-Kamma these include Pep Stores, Spar and Shoprite. Furthermore, the fruit growers in this region are exporting their produce to Europe, Canada and the Far East. These firms are expected to experience less demand because of the 2008 world financial crisis but they could also benefit from South Africa's current exchange rate depreciation. However they also will face the high domestic input prices. Not many of the local trading firms are positive about local government initiatives and these firms are concerned about their employee's productivity because of the lack of sufficient and quality of basic services. These firms also believe that the current level of infrastructure to support the businesses is not up to standards. Lastly, there is only a biggest retail complex in this region which is the Petro-port gas station complex (UE, 2009).

3.7 Infrastructure

Infrastructure is one of the most vital requirements for social and economic development. The economic infrastructure available in the Kou- Kamma region are Roads, Rail, Air, Waste Management, Electricity, Telecommunications, Water and Sanitation(UE, 2009).

3.7.1 Roads

Roads are a key economic infrastructure and the goods and services cannot be transferred inadequate or absent of road infrastructure. The national road which is the N2 passes through Kou-Kamma LM and this section of the N2 forms part of the popular Garden Route that extends into the Western Cape. The Kou-Kamma has other main road linkage which is the R62 provincial road. This road runs through the centre of the municipality through Kareedouw, Joubertina, Misgund and Louterwater. The R62 is also continues into the Western Cape and links Cape Town and Oudsthorn through the Little Karoo. However, the road infrastructure has been damaged in this region due to the past heavy rainfall as well as heavy traffic (UE, 2009).

The use of heavy duty and over loaded vehicles from agriculture such as the transport of milk, fruits and timber as well as manufacturing sectors are the prime cause in damaging roads which place additional wear and tear on the roads of Kou-Kamma. The conditions of these roads have become a challenge in promoting tourism in the area. The poor state of roads within Kou-Kamma will affect business and investment as well as the mobility of the population. The agriculture, manufacturing and trade sectors which are heavily involved with logistics in Kou-Kamma have been delay in many times due to poor condition of the road network. It is only about 5% of Kou-Kamma's roads is in good condition. The 50 km of exterior road and 250 km of interior gravel road of Kou-Kamma needs to be renewed and maintained (UE, 2009).

3.5.1.1 The Jay Dee Rvon infrastructure



Figure 3.4 Photograph showing the bridge built in 2007 by Department of Rural Development and Agrarian Reform
Source: DRDAR, 2013

3.5.1.2 The Jay Dee Rvon agricultural infrastructure



Figure 3.5 Photograph showing machinery (tractor and sprayer) bought in 2007/2008,
Source: DRDAR, 2013



Figure 3.6 Photograph showing fork lift, electric pump for irrigation, filters for irrigation system and irrigation pipes bought 2008/09 and 2011/12 respectively
Source: DRDAR, 2013



Figure 3.7 Photograph showing trenches for new irrigation system and the dam, built 2011/12 and 2010/11 respectively (Source: DRDAR, 2013)



Figure 3.8 Photograph showing new storage shed built on 2013 and harvesting bins bought on 2011

Source: DRDAR, 2013

Table 3.1 Agricultural Infrastructure of Jay Dee Rovon farm

Year	Type of funding	Funding value	Funding Source/Programme
2007/08	Tractor	R 297000.00	Food Security
2008/09	Bridge and Access road to the farm	R 26133.00	Flood Disaster Relief Scheme
2008/09	Fork lift	R 130 000.00	Food Security
2008/09	Spraying Chemical	R 500 000.00	Food Security
2010/11	Harvesting Bins	R250 000.00	Food Security / Marketing Infrastructure Grant
2010/11	Dam scooping	R 250 000.00	Land Care
2010/11	Soil preparation	R 100 000.00	Land Care
2011/12	Irrigation System	R 300 000.00	CASP
2011/12	Diesel and fertilizers	R 47 000.00	Food Security
2012/13	Irrigation System & borehole	R 500 000.00	CASP
2012/13	Storage Shed	R 300 000.00	CASP
2012/13	Mist blower	R 139000.00	Food Security
Total		R 2839133.00	

Source: DRDAR, 2013

The funding of the project was based on the results of needs analysis which was conducted in the early stages of the project and challenges faced the project prior to government intervention.

3.7.2 Electricity

The electricity service is providing by Eskom and Kou-Kamma Local Municipality. The Eskom provides 80% of the electricity while Kou-Kamma Local Municipality provides the remaining 20% of electricity (UE, 2009). There are areas in the Kou-Kamma Local Municipality such as Griekwa Rust, Ravinia, Eersteriver and Coldstream are the most urgent areas needs electricity attention which is already identified by IDP. These areas require the electricity supply lines, installation of prepaid electricity meters, the installation of streetlights and the energizing of new house connections. In 2007 and 2008, these areas were affected by Eskom's national power outages and as a result all sectors of economy lose in productivity due to unreliable supply of electricity. Without any electricity both businesses and individuals will not be able to operate efficiently (UE, 2009).

3.7.3 Telecommunication

The mobile communications and the internet play a critical role in the modern business environment. Well establishment of telecommunication network in Kou-Kamma LM will improve both the competitiveness and efficiency of local business while at the same time encouraging the introduction of new business ventures. In Kou-Kamma the telecommunication infrastructure is well developed. A large number of people in this region rely on cell phones to communicate (UE, 2009).

3.7.4 Water and sanitation

The 52 water and sanitation plants in the Kou-Kamma LM require maintenance and rehabilitation. The poor maintenance and upgrade of water and sanitation infrastructure has resulted many conditions such as many problems related with colour of the water,

inconsistent water pressure, intermittent water supply among others. The bulk sewerage infrastructure is needed in all of Kou-Kamma's primary, secondary and rural nodes which are Louterwater, Coldstream, Clarkson, Plankies Lotter and Blikkiesdorp. Furthermore, the majority of the housing developments in Kou-Kamma are faced with insufficient bulk water and sanitation services. The increased population growth rate and seasonal immigration is putting this Municipality into a big trouble in provision of water and sanitation water and sanitation service to the local community (UE, 2009).

The water and sanitation issues in Kou-Kamma will have the negative impact on businesses both directly and indirectly. In the tourism sector where establishments rely on suitable water and an approve services. In farming, most of the farmers are also require water for irrigation purposes and they also demand more bulk of water storage facilities to meet their irrigation demands. Lacks of water and sanitation which are basic service have a direct and immediate effect on the quality of the lives of the people in a community. For example, if the water quality is poor this will result to unhealthy and unsafe living environments. Poor service delivery can also make difficult to attract some business or industries to invest and this will result lack of employment to the poor community. Basic services infrastructure in the region is relatively high; however this infrastructure is outdated and collapsing due to lack maintenance (UE, 2009).

3.8 Biological aspects

The biological aspects include climate, soil and vegetation's of a region.

3.8.1 Climate

The Kou-Kamma region is classified as a subtropical climatic zone. The area is characterized with warm summers and cool winters and fairly evenly distributed rainfall throughout the year. The region receives 60 mm of rain throughout the year with the mean monthly temperature falling between 10°C - 22°C(UE, 2009).The annual rainfall specifically in the Joubertina is 400 mm. Generally the Kou-Kamma region has widespread westerly winds in the Langkloof while onshore easterly winds are common during the summer season with the calmest period during March to June in autumn. Fog is highest occurs during November,

December, February and March, in particularly along the coast. Humidity is highest during the summer but the sea breezes help to keep the coastal area cool. The climate in the area is ideal for all year round agriculture production and tourism activities (UE, 2009).

3.8.2 Soils

The soils found in the Kou-Kamma area are deep leached acid loamy sands. In valley positions soils are common restricted by drainage system. The soil in this region supports a diversity of land uses such as indigenous forest, timber plantations, agriculture and human settlements. The fertile soils and reasonable availability of good quality water makes Kou-Kamma one of the best agricultural and timber growing areas in the Eastern Cape. However, future cultivation land use options in the region could decrease because of decreasing availability of arable land (UE, 2009).

3.8.3 Vegetation types

There are three major veld types occur within the Kou-Kamma region namely, Forest in Coastal Plains, Fynbos throughout Kou-Kamma and Coastal Thicket on the mouth of the Tsitsikamma River. The Fynbos veld types occur in Kou Kamma is also divided into three veld types namely, Mountain Fynbos, Grassy Fynbos and Coastal Renosterveld. The majority of the land cover in Kou- Kamma region with stands for 54.39% is Shrubland and Fynbos (UE, 2009). There are also 16 vegetation that are found in this region namely, Alexandria Indian Ocean Forest , Algoa Dune Thicket, Baviaanskloof Mountain Fynbos Complex, Baviaanskloof Spekboom, Floodplain/Estuarine Vegetation, Gamtoos Valley Thicket, Humansdorp Grassy Fynbos, Knysna Afromontane Forest, Kouga Fynbos Thicket, Kouga Mountain Fynbos Complex, Kromme Fynbos/Renosterveld Mosaic, Langkloof Fynbos/Renosterveld Mosaic, South Coastal Vegetation, St Francis Dune Thicket and Tsitsikamma Mountain Fynbos Complex Tsitsikamma Plateau Fynbos (UE, 2009).

3.9 Land

Kou-Kamma is characterized by agriculture, forestry and human settlements competing for limited land. The area provides productive agricultural land for fruit and dairy farming, forestry, tourism and residential developments. The unavailability of land for emerging farmers, education facilities, food gardens and housing developments is due to urban settlements being surrounded by commercial farm land, state forests and nature reserves. The Langkloof area where Joubertina is situated experiencing the land scarcity which create many challenges for development (UE, 2009).

3.9.1 Land ownership

The Kou-Kamma region is characterized by low levels of black ownership of land. The main land owners of available land are private land owners, the state which is Kou-Kamma Local Municipality and SANParks. The value of land has be increase due to the competition for land. The average land price per hectare for Kou-Kamma is the second highest as compared to other district of Municipality and this is means that, the agricultural land in Kou-Kamma region is very expensive (UE, 2009).

3.9.2 The Kou-Kamma Land Reform

The two biggest owners of vacant land are private and state owners which owning 85% and 13% of Kou-Kamma total land respectively (UE, 2009). Land in Kou-Kamma has become a debatable topic more specifically around the land use. The availability of arable land has been decreasing and thus intensifying competition for land. The approximately about 56 650 ha of land is not yet redistributed to the beneficiaries in the region. The land reform should first prioritise their implantation to the key focus areas which are primary and secondary nodes. This is means that, land reform should be target in areas that provide opportunities for sustainable agricultural development. High potential agricultural land is situated along both sides of the N2 from the eastern and western boundaries of the KKLM (UE, 2009).

Furthermore, about 12 000 ha is supposed to be distributed before 2014 and approximately an average of 2000 ha per annum is supposed to be distributed between 2008 and 2014. Lastly, approximately about 6237 ha per annum supposed to be redistributed between 2015 and 2025. To date, the land reform process in Kou-Kamma created for 1769 beneficiaries with 9609 ha of land (UE, 2009). This represents 11.41% of the total hectares land which is available for land reform in the Cacadu District. This has resulted in grant spending of over R54 million at an average land price of R8477 per ha. Although the land reform process is considered to be slow it has been a qualified success in Kou-Kamma with regards to reaching targets (UE, 2009).

3.9.2.1 The Jourbetina Land Reform

The study area the Jay Dee Rovon farm was purchased by the Department of Rural Development and Land Affairs in 2003 through LRAD grant. The extent of the farm is 93.8 ha with 65 ha (arable land) are under orchards and the remaining 28.8ha (non-arable) is comprised of buildings, immovable infrastructure and redundant land that, the beneficiaries are planning to use for planting honey bush tea. The project is 100% BEE which comprises of 129 beneficiaries of emerging farmer's. The farm is owned as well as managed by black farmers. The main activity on both farms is deciduous fruit production (DRDAR, 2013).

3.10 Summary of the chapter

In summary Jourbetina is located in the Cacadu region which falls under Kou-Kamma Municipality. The Kou-Kamma region is characterized with warm summers and cool winters. The soils are deep leached acid loamy sands original from the Table Mountain Sandstone series and the area has highest levels of rainfall which make it suitable for intensive dairy farming. Key features of the region are the Storms River National Park, mountains, forestry, fynbos and coastal thicket, ocean and coastal fishing. These aspects mentioned above can attract more tourists and boost the economy of the region eventually overall economy of the nation. The area has relatively low poverty level and higher household income levels due to high rate of employment in agriculture and forestry sectors. The main activity in the region is fruit production such apples, pears among others. Furthermore, the major infrastructure such

as road is available; however there are some parts need maintenance. The Department of Rural Development and Agrarian Reform also funded the study area namely, Jay Dee Rovon farm with good level of agricultural infrastructure such as machinery, irrigation system, storage facilities and harvesting bin among others. Lastly, the land reform process which is taking a long process is a success in Kou-Kamma Municipality region.

CHAPTER 4

RESEARCH METHODOLOGY

4.1 Introduction

This chapter describes the research methodology employed for the study. The section is intended to show how the study was conducted using research tools. It focuses on the primary and secondary data regarding extent of poverty, the contribution of agricultural production and marketing as well as the needed interventions to enhance the impact of Land and Agrarian reforms on poverty alleviation in the study areas. It describes the sampling method employed, data collection and research design. The section on data collection methods explains the tools that were used for collecting data and the variables that were collected. The analytical framework follows, outlining descriptive statistic and the binary logistic regression model for data analysis processing and giving reasons why the model has been chosen together with the justification of the means of data analysis.

4.2 Sampling method

Bless *et.al* (2006), defines sampling as a process of selecting representatives from a population that can portray the overall characteristics of the population being studied. Possible sampling methods are classified into probability and non-probability sampling methods. The probability sampling occurs when the probability of including each element of the population can be determined and when the population list is available whereas the non-probability sampling method refers to cases where the probability of including each element of the population in a sample is unknown (Bless *et al.*, 2006). When a complete population list is available probability sampling is preferable but when it is not available non-probability sampling is more suitable. In this study, purposive sampling method (non-probability sampling) was carried out mainly from two groups of people. They were involved in the scheme where government invested a large capital on land resource and agricultural infrastructure compared to the household subsistence farmers where there is no investment has been made by government. The main reason to choose this method was that, it is suitable to select a sample on the basis of knowledge of the population and purpose of the study

(Onyang, 2010). The survey carried out to these two study areas was to investigate the impact of land and agrarian reforms to poverty alleviation in Jourbetina and subsequently the rest of South Africa.

4.2.1 Sample size

It is important to deal with an adequate sample size the process of sampling is taking place, in order to collect accurate information about a group (Bless & Higson, 1995). A large sample is more representative but it is very costly while a small sample is less accurate but more convenient (Singh & Chaudhary, 1986). Leedy and Ormrod (2004) mentioned that sampling is not necessary when the respondents are less than a number of hundred (100). However, stratified random sampling method was also applied in order to choose a sample of 60 land reform beneficiaries (commercial orientation) from 129 in Jay Dee Rovon farm while simple random sampling was carried out to a sample of 60 household subsistence farmers at Mon Desire farm village. According to Fellegi (2010), simple random sampling is a one-step selection method that ensures that every possible sample of size n has an equal chance of being selected. In the absence of the head, the spouse or any family member who was directly involved in the farming activities will interviewed. The research will incorporate both commercialise and subsistence deciduous growers/farmers in Jourbetina.

4.3 Questionnaire Design

A questionnaire is a sequence of questions designed to obtain information on a subject from a respondents. Questionnaires play a central role in the data collection process since they have a major impact on data quality and influence the image that the statistical agency projects to the public (Fellegi, 2010). Data will be obtained through interviews using structured questionnaires. Questionnaires that were administered to land reform beneficiaries in Jay Dee Rovon farm and non-beneficiaries (household subsistence farmers) in Mon Desire at Jourbetina were in paper format and this is means printed questionnaires were issued to the farmers. Problems that were faced during questionnaire design include, decided the questions that were asked and the arrangement of the questions to yield the information required.

According to Fellegi (2010), the goal is to obtain information in such a way that survey respondents understand the questions and can provide the correct answers easily in a form

that is suitable for subsequent processing and analysis of the data. If the data requirements are not properly transformed into a structured data collection instrument of high quality, a good sample can yield bad results. This means that, the question wording must be clear and sequenced logically for the respondent. The questions must be designed so that they are easily understood and can be accurately answered by respondents. The questions posed must conform to the survey's statement of objectives and provide information that is useful for data analysis (Fellegi, 2010). In other words, the use of interviewer-administered questionnaires in paper work ensures minimal loss of data as compared to the other methods.

Both qualitative and quantitative data on demographic indicators, farming activities (agricultural production and marketing) and intervention of Land and Agrarian reforms to poverty alleviation were collected. According to Dwyer & Limb (2001), qualitative methodology presumes the world to be an assemblage of competing social constructions, representations and performances. It provides information about the often contradictory behaviours, beliefs, opinions, emotions and relationships of individuals. Qualitative methodology is effective in identifying intangible factors such as gender roles, social norms, socioeconomic status, ethnicity and religion. The role of these intangible factors may not be readily apparent (Creswell, 2003). Quantitative and qualitative data were compared with each other to make an accurate interpretation and reach confirmed conclusions. Consequently, quantitative techniques such the use of questionnaires on demographic indicators, farming activities (agricultural production and marketing) and intervention of Land and Agrarian reforms to poverty alleviation were used to capture information. Furthermore, both Secondary and Primary data will be used in the study.

4.4 Data collection

Data collection is a systematic process in which the researcher collects relevant information to achieve the research purpose and objectives (Hox & Boeijs, 2006). The information was collected by means of questionnaires (see questionnaires in Appendix) however questionnaires can be administered by different techniques such as interviews by telephones, sent by post, handed out personally, email attachments among others (Alzheimer Europe (AE), 2012). This stage involves the collection of both primary and secondary qualitative and quantitative data. In this study, the data collection process was carried through direct visits to land reform beneficiaries and non-beneficiaries (household subsistence farmers) for both Jay

Dee Rovon farm and Mon Desire respectively. According to Fellegi (2010), data collection is the process of gathering the required information for each selected unit in the survey. The basic methods of data collection are self-enumeration, where the respondent completes the questionnaire. Data collection from these study areas was paper based. With paper-based methods, answers were recorded on printed questionnaires. The questionnaires were administered and the answers were recorded. A questionnaire administered to the sample of farmers in the Jay Dee Rovon farm and Mon Desire farm/village at Jourbetina through face-to-face interviews. The questions regard with demographic data, agricultural production and marketing as well as the Land and Agrarian interventions to alleviate the poverty were answered by the farmers those who were involve in the scheme in the Jay Dee Rovon farm and those who were not involve in the scheme at Mon Desire farm/village. In this study, 60 numbers of land reform beneficiaries in Jay Dee Rovon selected for the interviews, this includes the member of the steering committee of the study area. For this reason, it is significant that, the people involved in the survey should be a representative sample of the large group. Furthermore, 60 sample of smallholder farmers from Mon Desire farm/village were selected for interviews.

The questionnaire administered to the study areas were comprised of least open ended and numerous closed ended questions (see questionnaires in Appendix). According to Fellegi (2010), open-ended questions are those questions that do not provide predetermined set of answers to the respondent. The respondent answers the question in his or her own words. Open questions allow the respondent to express an answer without being influenced by the response categories that would be provided by a closed question (Fellegi, 2010). This is important when examining an issue that is not well understood or is very broad. However, this allows the question to be interpreted in different ways. An open question therefore generally expands the scope of the question while the closed version gives the respondent clues about how the question is to be interpreted.

Closed questions are those where response categories are listed against the questions. Closed questions are answered by checking a box or circling the proper response from those provided (Fellegi, 2010). The respondents from the study area answered closed encoded questions by ticking in boxes provided as well as ticking 'yes' or 'no' against relevant questions. The possible responses listed for a question are called response categories. However, closed questions also restrict the respondent to a predetermined set of responses but

on the other hand it is easy to analyse data with close questions. It also makes the coding of responses easier so as to get as much information as possible from the respondents without taking too much of their time. Moreover, the open-ended questions play an important role in encouraging the respondent to participate in the survey at the same time it is difficult to analyse data with opening question (Fellegi, 2010).

4.4.1 Primary Data Collection

Primary data involve field data collection. The survey method was selected as one of the techniques to collect primary data. In survey method research, participants answer questions administered through interviews or questionnaires. The survey method took a conversational or dialogue fluid form, with each interview varying according to the interests, experiences and views of the interviewee (Robson, 2002; Valentine, 2005). This conversation or dialogue offers the researcher and the interviewee a chance to have far more wide-ranging discussion. Robson (2002) and Valentine (2005) argued that one-on-one interviews produce rich, detailed, multi-layered and highly illuminating material.

4.4.1.1 Interviewing procedure

Interviews were carried out by the researcher with the assistance of the Extension officers as enumerators due to the fact that, they understand the study areas together with the beneficiaries very well. They worked together with the land reform beneficiaries in Jay Dee Rovon since the handover of the farm by the Department of Land Reform. They are more open to them as they work hand in hand on daily basis.

The purpose of the study was explained to the Extension officers and the questionnaires were clear. The required information by the researcher for the study was shared amongst the Extension officers on how to approach the land reform beneficiaries in Jay Dee Rovon farm as well as non-beneficiaries (household subsistence farmers) in Mon Desire. The study objectives and questionnaire were first discussed and explained to the Extension farmers in order to convince the representative sample of emerging farmers of Jay Dee Rovon farm and household subsistence farmers in Mon Desire. These efforts were done in order for enumerators to encourage respondents to cooperate and hopefully give honest and unbiased answers.

4.4.2 Secondary Data Collection

Secondary data entails information drawn from the following sources namely: published and unpublished documents. Sources of information include journal articles, text books, relevant studies and research articles, the internet and magazines will be used to gather the information and will be supplemented with government policy documents, annual reports, statistical abstracts and newspaper reports. Furthermore, library based research was conducted in order to explore what other researchers have done in the same field.

4.5 Data analysis tools and interpretation

The sample had 120 respondents which comprised 60 land reform beneficiaries from Jay Dee Rovon farm and 60 non-beneficiaries (household subsistence farmers) from Mon Desire. After the data were collected, it was captured and encoded in the form of spreadsheets in Microsoft Excel and then transferred to Statistical Package for Social Scientists (SPSS, (21), 2001) to run the data. According to Statistical Package for Social Scientists (SPSS), 1995), SPSS products and services are used worldwide in survey research, marketing, quality improvement, scientific research, reporting and education. SPSS software delivers data management, statistical analysis and reporting and presentation capabilities. SPSS gives the researcher the most problem solving capabilities with statistical and graphical. To analyse relevant data, descriptive statistics were used together with binary logistic regression model. According to Fellegi (2010), data analysis involves summarising the data and interpreting their meaning in a way that provides clear answers to questions that initiated the survey.

Data analysis should relate the survey results to the questions and issues identified by the statement of objectives. It is one of the most crucial steps of a survey since the quality of the analysis can substantially affect the usefulness of the whole survey. The main descriptive indicators that were employed are tables, frequency, mean values, percentage and bar graph for all the independent variables. According to Fellegi (2010), processing transforms survey responses obtained during collection into a form that is suitable for tabulation and data analysis. It includes all data handling activities after collection and prior to estimation. In order to streamline processing, some activities namely, data capture, editing and coding, it can be done during data collection with a computer-assisted application (Fellegi, 2010). Most

of the questions that appeared in the study area were closed ended and open ended questions (see Appendix). Lastly, considerations were given to data captured when decided on the layout of a paper questionnaire (Fellegi, 2010).

4.6 Binary logistic regression Model

The Binary logistic regression model (BLR) was used to determine the factors that influence beneficiary (commercialise orientation) to contribute on level of production and marketing. Binary logistic regression can be used to predict a dependent variable, based on continuous and/or categorical independent variables, where the dependent variable takes zero or one (Jari, 2009). Binomial logistic regression does not make any assumptions of normality, linearity, and homogeneity of variance for the independent variables but requires that the independent variables be metric or dichotomous. The BLR model represents choices between two mutually exclusive options. In other words it has two sided outcomes. In this case, it is beneficiary determine factors influence on level of production or not. In the BLR model, land reform beneficiary is a function of the probability that a particular subject was in one of the categories. Decisions are dichotomous criterion variables and their socio-economic characteristics are predictor variables. In equation 1, B_i represents the probability of beneficiary on level of production and $(1 - B_i)$ represents the probability of non-beneficiary. A typical logistic regression model is of the following form:

$$\text{Logit}(B_i) = \ln(B_i / 1 - B_i) = \alpha + \beta_1 X_1 + \dots + \beta_n X_n + U_t \dots \dots \dots (1)$$

Where: $\ln(B_i / 1 - B_i)$ = logit for beneficiary choices

B_i = Beneficiary on level of production

$1 - B_i$ = Non-beneficiary

β = coefficient to be estimated

X represents covariates

U_t = error term

In this study, the dependent variable (beneficiary on level of production) is a logit, which is the natural log of the odds, that is,

$$\text{Where (ODDS)} = \ln (B_i/1 - B_i) = \alpha + b(x_1 \dots x_{11}) = \text{Logit} (B_i) \dots \dots \dots (2)$$

This equation can be expanded as follows:

$$\text{Logit} (B_i) = \alpha + \beta_1 x_1 + \beta_2 x_2 + \beta_3 x_3 \dots \dots \dots \beta_n x_n \dots \dots \dots (3)$$

Where B_i is the predicted probability of the event recurring which is coded with 0 (beneficiary or commercialise orientation) rather than with 1 (non-beneficiary or subsistence orientation), $1 - B_i$ is the predicted probability of the other decision and X represents predictor variables. α is the constant term which represents beneficiary without the effect of any constraints all other things held constant.

Table 4.1 Table of variables

Independent/dependent variables	Unit	Type of variables	Expected sign (+/-)
Gender	Actual in sex	Continuous	+/-
Age	Actual in years	Continuous	-
Highest educational level	Attended farmers school	Categorical	+
Household size	Actual number	Continuous	+
Access to credit	Had or did not have access	Categorical	+
Production loan	Received or did not	Continuous	+
Non-farm income	Had or did not have	Continuous	+
Extension assistance	Whether or not received	Categorical	+
Extension visits	Whether or not visited	Categorical	+
Farmer training	Whether or not received	Categorical	+
Land and Agrarian interventions	Whether or not intervene	Categorical	+
Access to market	Had or did not have market	Categorical	+
Distance to market	Actual distance travelled	Continuous	-
Crop income	Actual value in rand	Continuous	+
Land size	Actual size in ha	Continuous	+/-
Production inputs	Had or did not have	Categorical	+
Farming experience	Actual experience in years	Continuous	+
Household income	Actual value	Continuous	+
Beneficiary	Yes/No	Categorical	+

Explanation of variables

Gender: gender refers to the personal sexual identity of an individual, in other words it is the variable of stating of being male or female in relation to society or culture. According to Machingura (2007), female-headed households have less labour available for farm work than male-headed households. Males are physically capable of coping with the manual demands of farming practices while expected to perform domestic chores in the household. Gender specific labour requirements also mean that women farmers cannot farm as productively as men. This depends on cultural norms because some farming activities such as ploughing and spraying rely on access to male labour because women farmers will show some delays that may lead to losses in output.

Age: age is a variable that play an important role in determining the engagement of the household members in agricultural activities. This is continuous variable which is measured in years. Young people turn to show less interest in farming activities than older people. Most of the young between 18-35 years of age are in big cities looking for better employment to improve the standard of living. Older people are households head taking care of their grandchildren while youth are often absentees (Perret, 2002). The older people also seem to show some interest in farming business. Hofferth (2003) argues that older people can be more adaptive to new technologies because they have relatively richer experiences of the social and physical environments as well as greater experience of farming activities

Educational level: the variable measure farmers level of education. Education has the possibility of influencing household's livelihoods strategies and also determines the income derived from the activities undertaken by the household. The highest educational level attained can determine the ability to interpret information and also its influence on adoption as noted by Bembridge (1988). The farmer had high level of education; he/she will be more successful on farming activities (Machingura, 2007).

Household size: household size is the number of family members residing in one household. According to Machingura (2007), the larger the family size, the more likely the farmer is to become successful as the household has more labour to work on the farm. However, farmers with bigger families are less successful than those with smaller family sizes. This situation is explained by the fact that, the family income will be spent mostly on food, clothes and

education of the larger number of children and thus leading to limited funds for meeting farming expenditures because of the high household expenditures.

Access to credit: the variable measures the farmer whether s/he had access on credit. Improvement in access of finance is one of the key elements in raising agricultural productivity (Machethe, 2004). Farmers who received financial support are able to produce high quality produce eventually can meet the standard required by the markets. Lack of access to finance play the negative impact to many poor farmers investing and innovation. Most of them have lack of access to credit, savings to purchase the inputs of production such as fertiliser and seeds (DFID, 2005).

Production loans: this variable measures the farmer whether s/he had access of loan for production. Most of small holder farmers do not have access to bank loans because they are engaged in farming activities that are sold on local markets in order for them to obtain cash for the simplest commodities like buying soap. It is difficult for them to borrow money due to the small scale of their activities (DFID, 2005). The low level of cash income means that families do not have ability to save money in bank accounts meaning that, they do not have access to the bank loans for production. In other word, the larger income generated from the produce saved in the bank accounts to have more access to bank loans for production.

Non-farm income: non-farm income is the income derived from outside the farm activities. Non-farm activities have an important role on the distribution of income in rural areas. The money that contributes by non-farm employment in rural areas has the greatest impact on poverty reduction. The rural areas without non-farm employment would be much in higher of income inequality, food insecurity, and poverty. Participation in non-farm income has greatest impact on household farm production (de Janvry *et al.*, 2005)

Extension assistance and visits: these variables measure the farmer whether s/he received assistance and visited by extension workers. The agricultural extension services are limited to reach poor farmers in rural areas. Most of their effective and credible roles are played by NGO's. The main important thing is to develop new knowledge and innovation to the farmers (DFID, 2005). Access to farmer support services plays a significant role to achieve smallholder agricultural growth. Adequate access to farmer support can have an influence to increase the agricultural productivity and production (Machethe, 2004). In terms of extension visits, most extension officers are criticised for not doing enough, not monitoring the

implementation of the advice given. It should be emphasised that farmers can best be reached by well-trained and knowledgeable extension officers within a well-managed extension service using a participatory approach. Suggestions from smallholder farmers should be taken into account in planning and executing extension services aimed at addressing their challenges. Smallholder farmers are able to identify and prioritise their problems, and they possess some knowledge that is relevant to finding solutions.

Farmer training: this variable measures the farmer whether s/he received training from extension advisors. The extension workers transferred technical knowledge to the farmers. It is important to distribute information about new technologies so that the farmer is able to make use of the latest agricultural developments. The agriculture department conducts extension and farmers training with the aim of acquainting farmers with improved farming techniques. Farmers should form farmers association in every village with innovative farmers, progressive farmers and farmer's interest groups in order to receive with the aim of acquainting farmers with improved farming techniques.

Land and agrarian interventions: according to Ntsebeza & Hall (2007), land and agrarian reform are defined as a concept of rural development. Both are also driving agenda and the interconnectedness of rural development. These institutions are indicators and give clarity on rural development policy and relational rural -urban linkages at household, community, local, provincial and national. However, the impact of land and agrarian reforms on rural people's livelihood and the local economy are criticized as one of the major restrictions of land reform. Land reform programme in most countries of the world is failing due to lack government intervention to stimulate agrarian transformation (NDA, 2001). However, in South Africa, former President of South Africa Honourable Thabo Mbeki requested the different role-players to identify a mutual strategy that would provide enough focus to unite and grow the agriculture sector (NDA, 2001).

Access to market: this variable measures the accessibility of market outlet around the area. Access to market may positively influence market participation choice. The use of markets is also very important to the poor because they act as a mechanism for exchange and also co-ordination and allocation of goods and services. Market participation is important amongst smallholder farmers because people living in poor condition derive benefits such as income and employment opportunities from them (Jari & Fraser, 2009).

Distance to the market: the distance between regions, interacting and connecting the national market at low cost to other countries and regions (Puerto Rico Public-Private Partnerships Authority (PRPPPA, 2011). The shorter the distance from farm to market the lower the cost. According to African Development Bank (ADB, 2011), local roads and tracks are often impassable making it difficult or impossible for rural families to access the rural economy. Lack of rural road connectivity seriously constrains agricultural production. The cost of moving produce can be as high.

Crop income: the variable measures the income derived from crop enterprise. Crop selection in home gardens tends to be associated with garden size. Large gardens are typically used for the production of staple food crops such as maize, dry beans, pumpkins among others while small gardens are often used for vegetables such as potatoes and sweet potatoes, onion, carrots cabbage, spinach etc (Wenhold *et al.*, 2007). Home gardening is primarily aimed at producing crops for home consumption while crop production in large gardens is for sale.

Land size: this variable refers to the total arable land in hectares, a household own and uses for crop production. Larger land has the greatest impact on level of the yield. Land is arguably the most important asset in primary agrarian rural societies especially in the rural areas of South Africa but is lacking in both ownership and size. Land size in rural areas is a big issue because of the laws and the institution of the government that was ruling before 1994, favoured large farms and discriminated against smaller black labour intensive farming systems (Perret, 2002). There are various constraints that impede the growth of smallholder farmers including lack of access to (Machingura, 2007).

Production inputs: the variable measure the farmer had input of production such as seeds and fertiliser. The production input is also measure the output of production. According to Randrianarison & Minten (2005), an improvement in the productivity of staple food crops could be a powerful way to alleviate poverty. Getting the inputs can improved agricultural productivity, in other words the higher the inputs the higher the good quality of produce.

Farming experience: the variable measures the experience that the farmer had in farming activities. The farming experience work hand in hand with age and in other words the older the farmer the more the experience s/he had in farming activities. (Muller, 2005), argue that, the age is a vital aspect in agricultural production and productivity as it determines farming experience. Hofferth (2003) argues that older people can be more adaptive to new

technologies because they have relatively richer experiences of the social and physical environments as well as greater experience of farming activities. However, young people are more likely to adopt new methods or techniques while older people usually resist change and new ideas and not easily adopt techniques (Kekana, 2006).

Household income: the variable measures the overall income contributed by all member of the family. Most of the people in South Africa in particularly in rural areas relied on social welfare grants. Brembridge (1998) argue that, smallholder farmers supplement their low farm incomes with wages, off farm income pensions and remittances. The important sources of income can increase the chances of success of household agricultural production. These households can make better use of all existing factors of production while households have insufficient or under-utilized some of their factors of production due to inadequate operating capital (Ziervogel *et al*, 2006).

Land reform beneficiary: the variable measures the farmer is involved the scheme/project. Land reform programme is to the transfer land to recipients who were not necessarily original owners, but were nonetheless dispossessed of land under apartheid law (Jacobs *et al.*, 2003). Land reform purchased land and transferred to black farmers for agricultural purposes. These beneficiaries were also subsidised by the government with Recapitalisation to maintain the farm infrastructure as well as for agricultural practises. Most of these beneficiaries are poor and they have lack knowledge in marketing. The government also employed white commercial monitors to assist them with basic farm management and accounting. They practise farming business and the income generated from crop/livestock sale usually spread amongst them equally.

4.7 Chapter summary

Purposive sampling method was applied to 60 emerging farmers of Jay Dee Rovon farm and 60 household subsistence farmers of Mon Desire. Data collection from these study areas was paper based method with printed questionnaire. The paper questionnaire comprised of open and close ended questions. Both qualitative and quantitative were used to gather information on demographics indicators, farming activities and land and agrarian interventions programme were collected. After the data were collected, it captured and encoded in the form of spread sheets in Microsoft Excel and then transferred to SPSS (21, 2014) to run the data.

The descriptive statistics together with binary logistic regression model were used to analyse the data.

CHAPTER 5

RESULTS OF DESCRIPTIVE ANALYSIS

5.1 Introduction

A broad objective for this study is to investigate the impact of Land and Agrarian reform on poverty alleviation in Joubertina. The chapter presents the results and subsequent discussions of the survey that was conducted in Jay Dee Rovon (JDR) and Mon Desire (MD). The data under analysis were collected from 60 land reform beneficiaries in JDR and 60 non-beneficiaries (household subsistence farmers) in MD. The chapter focuses mainly on the key findings that are important such as type of farming, funding/support from DRDLR and DRDAR, size of the produce and realises. The chapter starts with brief explanations of the demographic characteristics of the sampled farmers of the two study areas. Within the chapter, descriptive statistics such as mean values, frequencies, percentages, pie charts and bar graphs which were used for the descriptive analysis are presented and discussed.

5.2 Descriptive analysis

The characteristics of the sampled households were analysed by means of descriptive statistics. In this section, the aspects such as gender, age, household size, highest educational levels and farming experience are discussed. These aspects are important because the household activities are coordinated by the household or member of the household and the decisions are most likely to be influenced by such demographic aspects (Bembridge, 1988). Moreover, household size and occupation of respondents are analysed. Demographic characteristics of households play a major role when analysing the economic data because such factors influence the households' economic behaviour. These characteristics are important in influencing a household's livelihood strategies (Matlosa, 1993; Pirouz, 2005; Nargis & Hossain, 2006). It then follows that household demographic attributes are relevant in analysing the farming system of land reform beneficiaries and household subsistence farmers, impact of the government stakeholders and their involvement on farming business as well as the factors that influence beneficiary to contribute on level of production and marketing for poverty alleviation.

5.2.1 Gender

Figure 5.1 presents the gender distribution of interviewed beneficiaries in JDR and non-beneficiaries in MD. Males constituted 61.7% of the population while females were 48.3%. According to Mihiretu (2008) both males and females are likely to play different roles in farming business. However, Perret (2002) stated that, women generally face many gender specific constraints as agricultural labourers as a result they tend to cultivate plots and achieve lower yield hence both study areas has shown that. Moreover, women are often time-constrained by unpaid household duties such as care-giving and collecting firewood and water. Women are also expected to perform domestic chores in the household (Machingura, 2007). In addition, female-headed households have less labour available for farm work than male-headed households. Males are physically capable of coping with the manual demands of farming practices (Machingura, 2007). Gender specific labour requirements also mean that women farmers cannot farm as productively as men.

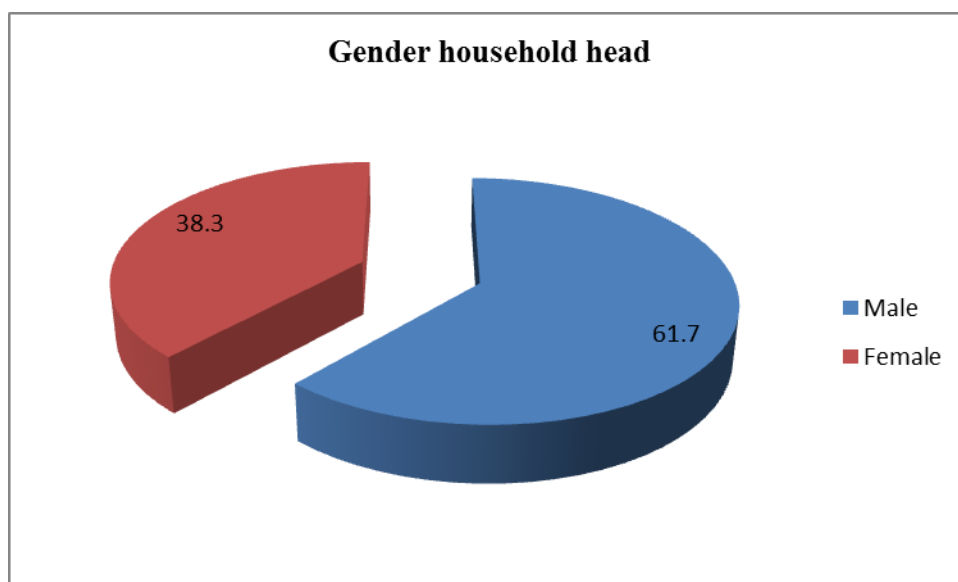


Figure 5.1The gender distribution for both beneficiaries and non-beneficiaries
Source: Field Data 2013

5.2.2 Age

Table 5.1 presents that most farmers from both areas their age ranged from 39-57 years comprises of 45.9% follows by farmers ranged from 19-38 years were stands at 30.8% and most of the pensioner's ranged from 58-80 years were stands at 23.3%. Farming in the study areas seems to be performed mostly by relatively medium age people followed by younger people and lastly by the older people. This is surprising because most of the young i.e. from 18-35 years of age are not interested in farming business and most of them are moved to big cities and looking for better forms of employment which may offer better income to improve the standard of living. This is probably because there is lack of employment in cities unlike in the olden days and most of these farmers have lack of literacy. The older people also seem to show some interest in farming business. Hofferth (2003) argues that older people can be more adaptive to new technologies because they have relatively richer experiences of the social and physical environments as well as greater experience of farming activities. For these reasons, this study examined the age of the household head to determine the distribution of the sample by age of the household head as well as determine the extent to which age differences explain differences in production and productivity among the farmers. However, Dereje (2006) suggested that as a farmer's age increases s/he becomes more traditional. Therefore, as the farmer's age increases, the probability of adopting new technology decreases. However, the results show the balanced situation as this will have the greatest impact on production and productivity.

Table 5.1 Age distribution for both beneficiaries and non-beneficiaries

Factor/Variable	Both beneficiaries and non -beneficiaries involved in scheme	
	No.	%
Age range		
19-38	37	30.8
39-57	55	45.9
58-80	28	23.3
Total	120	100

Source: Field Data 2013

5.2.3 Household size

Table 5.2 presents the distribution of the sample according to the household sizes for both beneficiaries and non-beneficiaries of the sampled farmers. The data revealed that the average household size ranges from 1-3 were 36.7% of the population follows by household size ranges from 4-6 which stands at 55.8% and the last group was household size ranges from 7-9 which stands at 7.5% of the population. According to Perret (2002), the households are headed by a couple of adults who live with their children (7.5 members on average). Surprisingly, this was not the case in JDR and MD; it was only few families reach the average mentioned above, the dominant average were made up of members ranges from 4-6 members of the family. According to Machingura (2007), the larger the family size, the more likely the farmer is to become successful as the household has more labour to work on the farm. However, farmers with bigger families are less successful than those with smaller family sizes. This situation is explained by the fact that, the family income will be spent mostly on food, clothes and education of the larger number of children and thus leading to limited funds for meeting farming expenditures because of the high household expenditures (Machingura, 2007).

Table 5.2 Household size for both beneficiaries and non-beneficiaries

Factor/Variable	Both beneficiaries and non -beneficiaries involved in scheme	
	No.	%
Household size ranges		
1-3	44	36.7
4-6	67	55.8
7-9	9	7.5
Total	120	100

Source: Field Data 2013

5.2.4 Education

Figure 5.2 represents the combined data of household educational level for both land reform beneficiaries and non-beneficiaries. The study revealed that 4.2% of household heads never went to school, 41.7% had primary education and 54.2% completed secondary education. The attainment of education in JDR and MD appeared to be quite reasonable as it shows few respondents that never went to school, probably these are older people and they never had a chance to attend the school due to past colonial situation. According to Massachusetts Institute of Technology (MIT), Undated), many farmers in rural areas do not have access to up-to-date information on how to grow food efficiently and economically due to lack of education.

But surprisingly, according to the results this was not the case in JDR and MD, generally the majority of the respondents had attained some formal education. Education has the possibility of influencing household's livelihoods strategies and also determines the income derived from the activities undertaken by the household. Yunez-Naude & Taylor (2001) suggest that education is crucial to raising economic productivity and competitiveness and to combating poverty. In addition, the highest educational level attained can determine the ability to interpret information and also its influence on adoption as noted by Bembridge (1988). The smallholder farmers must be familiarized with the principles of business economics, record keeping and they should become proficient in managerial skills. It is found that, if the farmer had high level of education, he/she will be more successful on farming activities (Machingura, 2007).

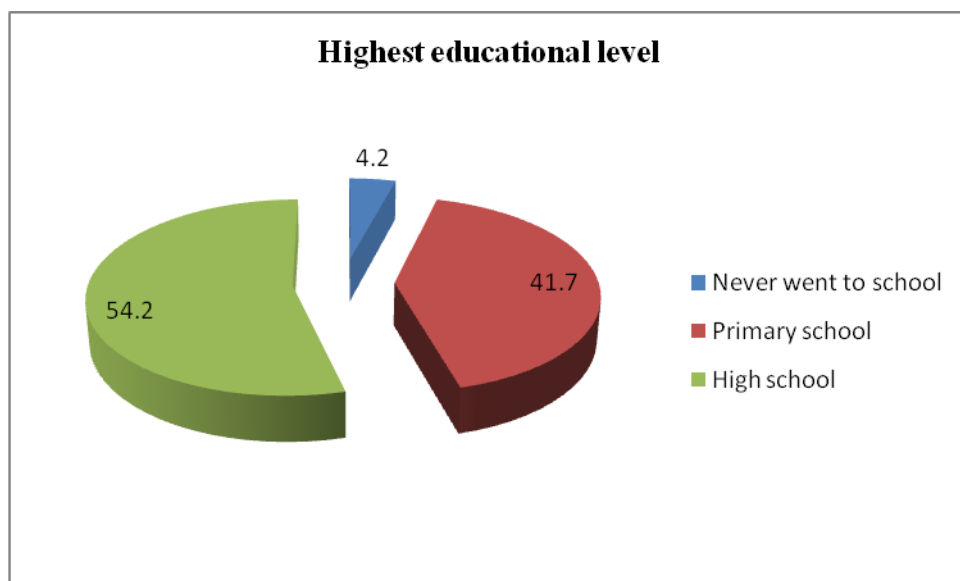


Figure 5. 2 Highest educational level distributions for both beneficiaries and non-beneficiaries

Source: Field Data 2013

5.2.5 Farming Experience

The farming experience work hand in hand with age and in other words the older the farmer the more the experience s/he had in farming activities. (Muller, 2005), argue that, the age is a vital aspect in agricultural production and productivity as it determines farming experience. The older farmers had more time to accumulate both human and financial capital and would thus be in a better financial position to afford equipment that will cause improvements in production (Brown, 2000). Muller (2005) has suggested that age has important implications on livelihood experience. It also determines the knowledge of the social and physical environments. Hofferth (2003) argues that older people can be more adaptive to new technologies because they have relatively richer experiences of the social and physical environments as well as greater experience of farming activities. However, young people are more likely to adopt new methods or techniques while older people usually resist change and new ideas and not easily adopt techniques (Kekana, 2006).

Referring to the results in figure 5.3, about 45.8% the farmers in both study areas ranged from 2-12 farming experience. Most these farmers were young and the had little knowledge on farming activities but on the other hand they are more capable of carrying out physical activities. Furthermore, about 34.2% farmers their farming experience ranged from 13-25 years. Most of these farmers fall in medium aged group and they have more experience than

younger farmers and less experience than older farmers. Lastly, the farmers ranged from 26-58 farming experience were stands at 20%. These farmers had more experience in farming activities than two groups mentioned above. Their experience will have the greatest impact on agricultural production and productivity due to farming experience they had. They were exposed in farming business for period of long time.

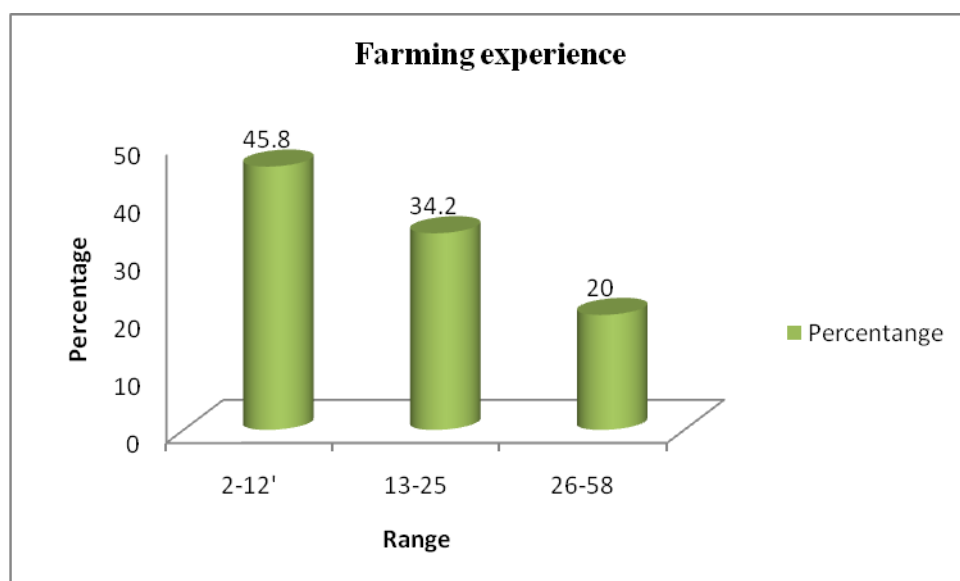


Figure 5.3 Farming experience for both beneficiaries and non-beneficiaries
Source: Field Data 2013

5.3 Farming and marketing activities

These section overviews the farming practises by both farmers in JDR and MD. Under farming activities, aspects such as type of farming, different type of fruit were analysed and in marketing section aspects such as channels used for marketing, type of value adding and exportation were analysed. According to Wenhold *et al.*, (2007), agricultural activities become the most important alternative means of supplementing family income in rural areas of South Africa. This means that, farming is the most important source of income for poor rural households it also contributes more too household income than all individual non-farm sources of income (Machethe, 2004). Moreover, the use of markets is also very important to the poor because they act as a mechanism for exchange and also co-ordination and allocation of goods and services. Market participation is important amongst smallholder farmers because people living in poor condition derive benefits such as income and employment opportunities from them (Jari & Fraser, 2009).

5.3.1 Type of farming

Both 100% of interviewed beneficiaries in JDR and non-beneficiaries in MD were practicing fruit enterprises due to favourable weather condition in this region. The favourable weather condition favours the Mon Desire household subsistence farmers as they have lack of inputs for production. The favourable weather condition will have the additional impact in Jay Dee Rovon farm due to the support they received from land and agrarian reforms. According to Dzivakwi & Jacobs (2010), most farmers in the Eastern Cape region practice mixed farming, which involves the production of both crops and livestock for livelihood strategies among poor rural households. They regard livestock as their source of high income and as a mitigation strategy against economic shocks or risks. According to the results, this was not the case in JDR and MD; all of farmers were practices fruit production.

5.3.2 Type of fruit produce

Both 100% of interviewed beneficiaries from JDR and non-beneficiaries in MD at Jourbetina were producing apple enterprises due to favourable weather condition in this region. According to (UE, 2009), the main enterprise in this region is deciduous fruit production such as pears, apples and peaches. The Eastern Cape Province accounts about 8% of total area planted with deciduous fruit produce. Langkloof valley in the Eastern Cape, South Africa is the main producer of apple accounts about 19% and pear stand at 12% hectares (Greeff & Kotze, undated). However, the study did not include the least pears produce; it focuses only on apple enterprise due to large bulk of produce.

5.3.3 Change in yield

Funding with good quality of agricultural infrastructure from DRDAR as well as recapitalisation from DRDLR leads to a change in level of production at JDR. According to the results, about 50% of land reform beneficiaries in JDR their yield level before land and agrarian reform interventions were stand at 1460000 kg (1460 tonnes) while after, their yield level were stand at 255550000 kg (25550 tonnes). The change in level of production in JDR was stand at 254090000 kg (254090 tonnes). This huge change was caused by the intervention of these government stakeholders mentioned above and an increase on yield will

lead to an increase on labours wages. Furthermore, about 30% of non-beneficiaries from MD, their yield were stands at 100-250kg while 20% of non-beneficiaries their yield production were stands at 300-400 kg. There was no change on level of production due to the lack of support from government. As a result, productivity of their crops was very low in rural subsistence production, most of what is produced is used for home consumption and only a small proportion is aimed at sale.

Figure 5.4 presents the channel (s) for marketing used by both respondents in JDR and MD areas. The study revealed that, 50% of land reform beneficiaries were selling their produce in supermarkets, fruit and vegetables as well as exporting their produce to countries like U.S.A, European and Asian countries while 50% of household subsistence farmers were selling their produce to local community as well as for home consumption. According to Dzivakwi & Jacobs (2010), South Africa has less developed rural economies and the majority of smallholder farmers are scattered and operate individually. This is means that, these farmers will find difficulties to participate in commercial markets and also affect their competitiveness to the markets (Jari & Fraser, 2009).

Smallholder farmers face difficulties in finding reliable markets for selling their perishable produce. Smallholder farmers have little knowledge in marketing, selling skills and little recognition of opportunities for product diversification, market research and product development and this was the case faced by subsistence household farmers in MD farm/village. While in JDR area, fruit growers were exporting their fresh produce for both local and export market. According to EU (2009), from 2007 to 2008 was very good year for fruit growers in this region with increase export revenue. The export market was comprises 40% of the area's produce. The produce is distributed to the markets namely, European Union, Middle East and Far East. In the study Jay Dee Rovon has secured a market with DC Fruit Packers which is exporting the produce to Central America, Asia the European markets (DRDAR, 2013). Moreover, from 2002 to 2007, the total market for export was R840 million per year while it was R280 million for local market. The farmers are using marketing agents such as Capespan to export their produce while they market for themselves to supermarkets and hawkers for local markets. The First Grade fruit is packed in boxes and exported while the lower grade is distributed to local markets for fruit processors (UE, 2009).

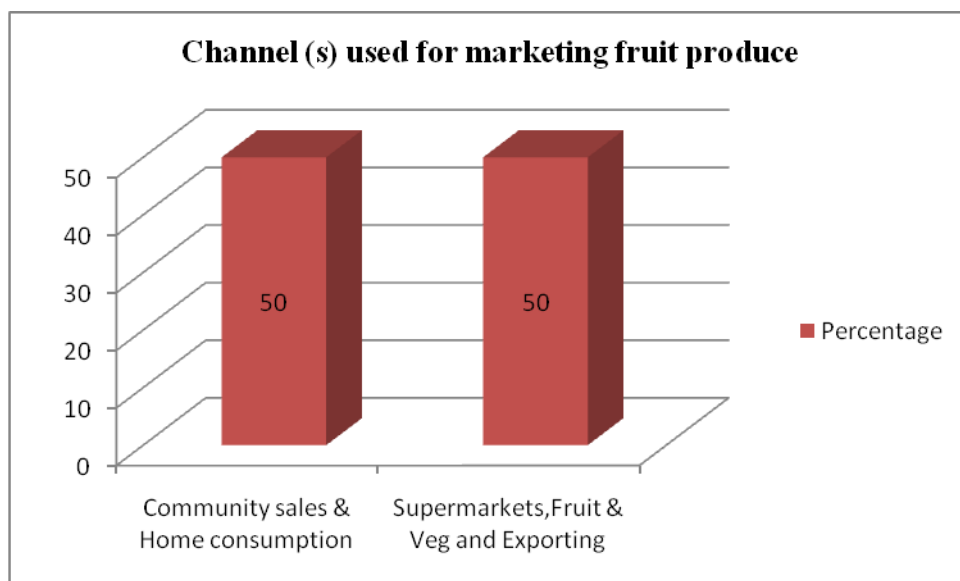


Figure 5.4 Channel (s) used for marketing by both beneficiaries and non-beneficiaries
Source: Field Data 2013

5.4 Land and agrarian reforms intervention and their impact on poverty alleviation

This section overviews the impact of land and agrarian reforms intervention and their impact on poverty alleviation. Under land and agrarian reform intervention, aspects such as name of government stakeholders involved in the project, their roles played by them to black farmers were analysed. Under poverty reduction, aspects such as gross earning per month, assets score from both beneficiaries and non-beneficiaries, before and after land and agrarian reforms involved in the scheme were analysed. Lastly, other important sources of income were also discussed. Land reform programme have the greatest impact on rural and agrarian development for poverty reduction and employment creation.

Figure 5.5 represent 50% of land reform beneficiaries in JDR project were supported by the government stakeholders namely, DRDLR and DRDAR while 50% of non-beneficiaries were not supported by any government stakeholders. According to Ntsebeza & Hall (2007), land and agrarian reform are defined as a concept of rural development. Both are also driving agenda and the interconnectedness of rural development. These institutions are indicators and give clarity on rural development policy and relational rural -urban linkages at household, community, local, provincial and national.

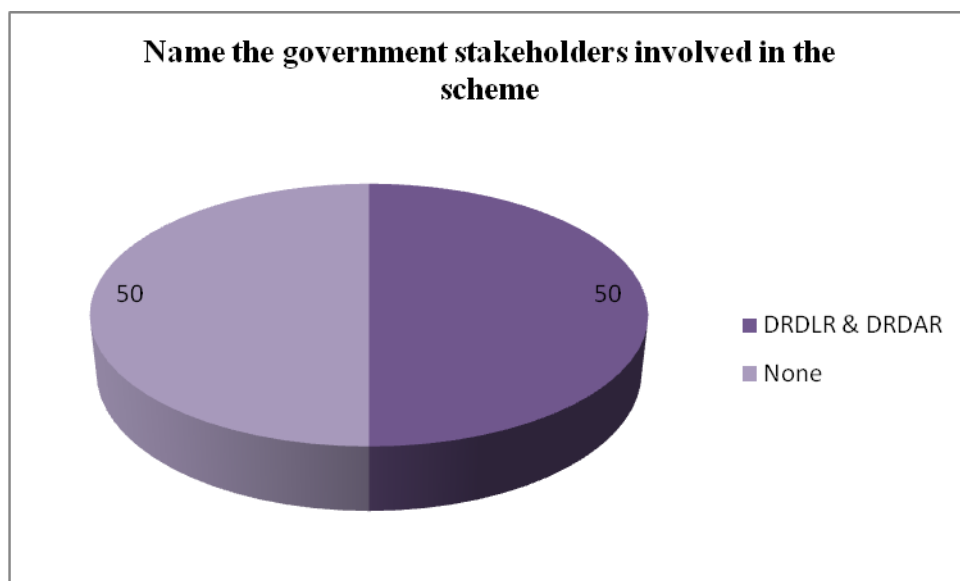


Figure 5.5 The government stakeholders involved in the scheme
Source: Field Data 2013

Figure 5.6 show that, 50% of beneficiaries were assistance by DRDLR and in terms of land and agricultural infrastructure respectively. Land redistribution policy was set out by White paper on South Africa Land Policy in 1997 with the aim of assisting the poor to purchase land with land acquisition grants, in order to improve their life and income. Land redistribution is also specifically aimed at transforming the racial pattern of land ownership (Jacobs *et al.*, 2003). Land redistribution is a very important component of agrarian reform, as it involves the redistribution of wealth in rural areas (Mathekga, 2013). The redistribution of land is widely seen as important aspect of improving the livelihood of poor people in rural areas as well as to contribute towards the economic growth (Jacobs *et al.*, undated) and that was the case for JDR beneficiaries. JDR farm was purchased by the Department of Rural Development and Land Affairs in 2003 through LRAD grant. The project is comprises of 129 beneficiaries however the study selected and interviewed a sample of 60 land reform beneficiaries. In addition, from 2007- 2013, the DRDAR funded this project with agricultural infrastructure in order for them to produce best quality of deciduous fruit for marketing as well as to establish a sustainable farming.

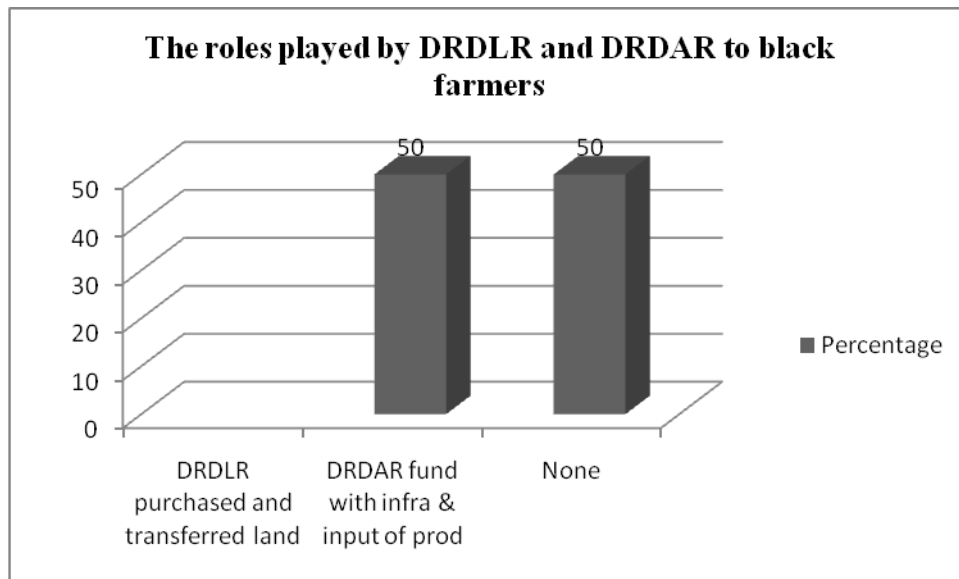


Figure 5.6 The roles played by DRDLR and DRDAR
Source: Field Data 2013

The results of the research in figure 5.7 show that about 38, 3% and 11,7% of the subsistence farmers interviewed in MD had the proportion of the land of 0, 5 and 1 hectare (s) respectively. Land is arguably the most important asset in primary agrarian rural societies especially in the rural areas of South Africa but is lacking in both ownership and size (Machingura, 2007). Land in these areas remains mostly state-owned and granted to users through traditional authorities and regulations (Perret, 2002). This was the case according to the research results were found in MD farmers. The laws and the institution of the government that was ruling before 1994, favoured large farms and discriminated against smaller black labour intensive farming systems (Perret, 2002). According to the results, most of land proportion about 93.8 hectares were transferred to 50% of black farmers by DRDLR.

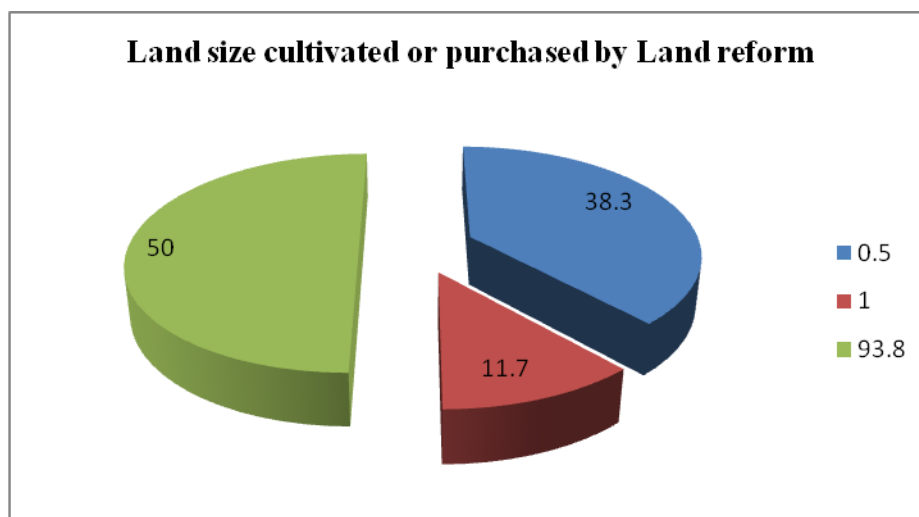


Figure 5.7 Land size cultivated or purchased
Source: Field Data 2013

Figure 5.8 presents 50% of land reform beneficiaries in JDR also received another additional type of funding (recapitalisation). While about 50% of respondents from MD farm village received none in terms of additional funds. The available of funding in JDR is probably because the farm was purchased by Department of Land reform. The type of support (Recap) is transferred by Land reform after the handing over of the farm/land to the beneficiaries to fix the farm infrastructure as well as to start farming business. Farm business is a long run process and it takes a long process to generate the return/capital. Most of the land reform beneficiaries are poor and they have lack of access to bank loans in order to start their farm business as results the government assisted these farmers with recapitalisation.

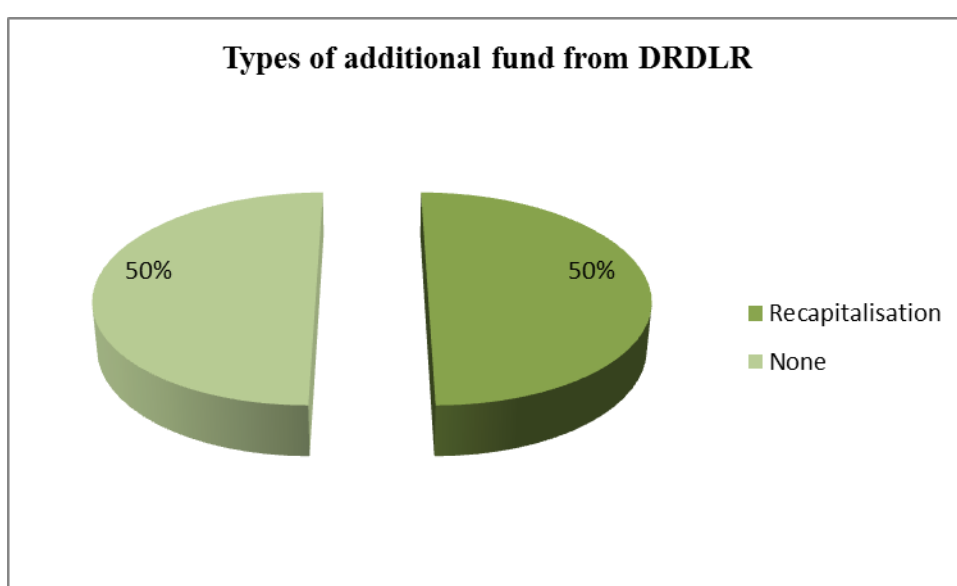


Figure 5.8 Other type of funding from DRDLR
Source: Field Data 2013

Figure 5.9 presents 50% of land reform beneficiaries in JDR were funded by the Department of Rural Development and Agrarian Reform with agricultural infrastructure such as road maintenance, machinery (tractor, fork lift and mist blower), dam scooping, boreholes and irrigation system, harvesting bin and storage facility and input of production (spraying chemicals, seeds and fertilisers). While about 50% of non-beneficiaries in MD received none of the above from DRDAR. During the olden days, farmers relied on hand tools and animal traction for cultivation. Tractors were only used by relatively few people. According to the research results this was not the case in JDR; farmers were using modern tractors together with implements to cultivate land. As a result they were generating large capital due to the good quality of infrastructure they used.

In addition, good proper post-harvest handling and storage contributes in ensuring quality maintenance for perishable agricultural produce. Storage has some added advantages because it increases market flexibility. Households with proper storage facilities can store their produce and sell when prices are higher (Bachmann & Earles, 2000). The maintenance of road in JDR will have the greatest impact on agricultural development. Furthermore, Low accessibility to modern inputs is among the main factors affecting inducement to intensify farming. Such problems tend to be more serious in more far-off rural areas that are dominated by subsistence production (Diao *et al.*, 2007). This was the case in MD because all substance farmers were not using chemical spraying and fertiliser in the production whilst the productivity of the farmers can be improved by increasing access to inputs of production (Baiphethi & Jacob, 2009).

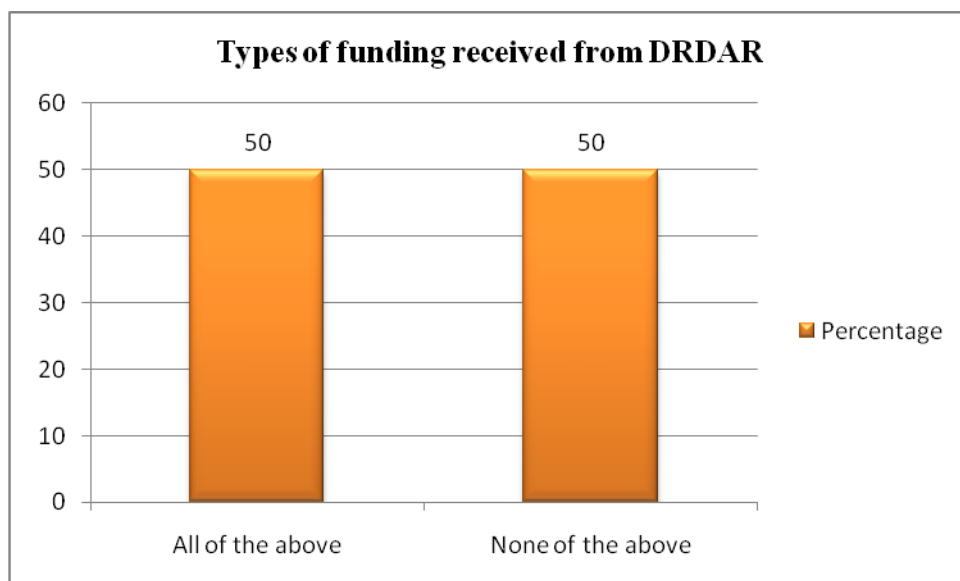


Figure 5.9 Types of funding from DRDAR
Source: Field Data 2013

Figure 5.10 presents 50% land reform beneficiaries from JDR were also receiving additional assistance from DRDAR such as technical skill and basic farm knowledge. While about 50% of non-beneficiaries in MD were receiving none from the DRDAR. Extension services are considered as the most crucial source of information among farmers. If this holds true, interaction with them is of great benefit to the farmers. It has been noted that smallholder farmers who have access to extension services rely more on the government extension services. However, this was not case in MD, most of them grew their apple enterprise on residential land as results they did not receive any support from extension service. In case of JDR, extension workers were doing enough in offering relevant technical advice. These farmers were receiving a range of support service to expand their production and productivity. However, the extension support service in Eastern Cape Province is not effective due to poor public research system, lack of technical expertise and limited resources (Baiphethi & Jacob, 2009).

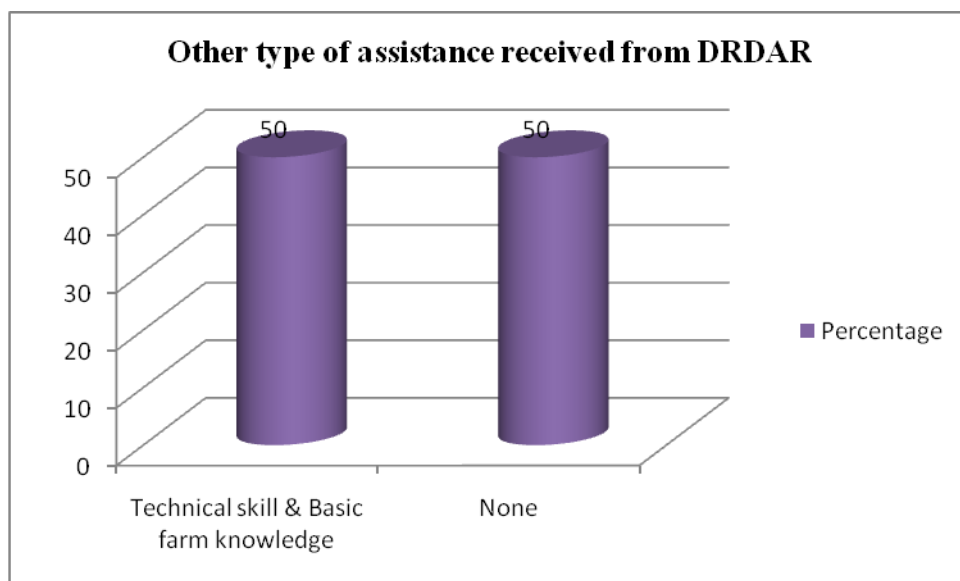


Figure 5.10 Other assistance from DRDAR
Source: Field Data 2013

Simbi & Aliber (2000) argue that agriculture has an important role of providing employment and income in rural households. It is noted by Bembridge (1988) that about 10% of income received by smallholder farmers original from farm produce sale. Household income and expenditure has an important influence on family food security, acquisition of basic needs and livelihood assets. Rural household income is one of the most important indicators of socio-economic status.

Referring to the results in table 5.3 indicated that about 55% of farmers for both areas before land and agrarian involve in the scheme did not have farm income and 5% are land reform beneficiaries. These farmers were not involved in farming activities during the time land reform was not involved in the scheme. Furthermore, 50% of farmers belong to non-beneficiaries in MD and most of them were farming for home consumption. Even after land reform, about 50% of them still were not receiving any income from farm produce. Moreover, about 20.8% land reform beneficiaries (before) received monthly income ranging from R1200-R1340 and about 25% of them their income increased and ranging from R 2100-R2200. About 17.5% land reform beneficiaries (before) received monthly income ranging from R1400-R1800 and their income increased (after) to a ranged between R2240-R2440. Lastly, about 6.7% of land reform beneficiaries (before), they received monthly income ranging from R2100-R3000 and still 6.7% respondents their monthly income increased to a range between R3000-R400. The last groups are in management and other workers are drivers. Furthermore, education is another factor that distinguishes the different income level

in other words; if you are educated you received more paying employment than uneducated one. The households with more income will benefit more on farming and other practises than household earning less. According to the calculations showed in Excel, about 50% of non-beneficiaries in MD indicated no change in income while 25.8% of land reform beneficiaries in JDR, their change in income ranged from R780-R900 and the last group about 24.2% of them, their ranged income was between R1000-R2100. Changes in income can also alter the quantity of foods consumed by a household (Jacobs, 2008). The amount of money a household has can determine the quantity of food and the type of food a household consumes. In other words, adequate income goes hand in hand with sufficient access to foodstuff (Ziervogel, *et al.*, 2006).

Table 5.3 Gross earning per month (Income) for both beneficiaries and non-beneficiaries

Factor/Variable		Both beneficiaries and non -beneficiaries involved in scheme			
Gross earning per month ranges (Before &After)		No.		%	
0	0	66	60	55	50
1200-1340	2100-2200	25	30	20.8	25
1400-1800	2240-2440	21	22	17.5	18.3
2100-3000	3000-4000	8	8	6.7	6.7
Total		120	120	100	100

Source: Field Data 2013

The other important sources of income such as off farm income, remittances can increase the chances of success of household agricultural production. These households make better use of all existing factors of production while households have insufficient of under-utilized some of their factors of production due to inadequate operating capital (Ziervogel *et al*, 2006). The

households with low income can results household to be unable to engage in high-input agricultural activities (Aliber & Hart, 2009).

Referring to figure 5.11 shows that about 70% for both beneficiaries in JDR and non-beneficiaries in MD relied on social welfare grants in the form of old-age and/ or childhood allowance. Most of the people in South Africa in particularly in rural areas relied on social welfare grants (Pauw & Mncube, 2005). Only 0.8% respondent relied on pension from permanent job. About 4.2% of respondents relied on income from remittances which is the income transferred by family members that were employed in cities/mines. Brembridge (1998) argue that, smallholder farmers supplement their low farm incomes with wages, pensions and remittances. Moreover about 15% of farmers relied on off-farm income; they generated income through selling agricultural commodities such as drinking juice and meat. About 10% of respondents did not receive any additional source of income, they had no side of income at all some relied on farm income.

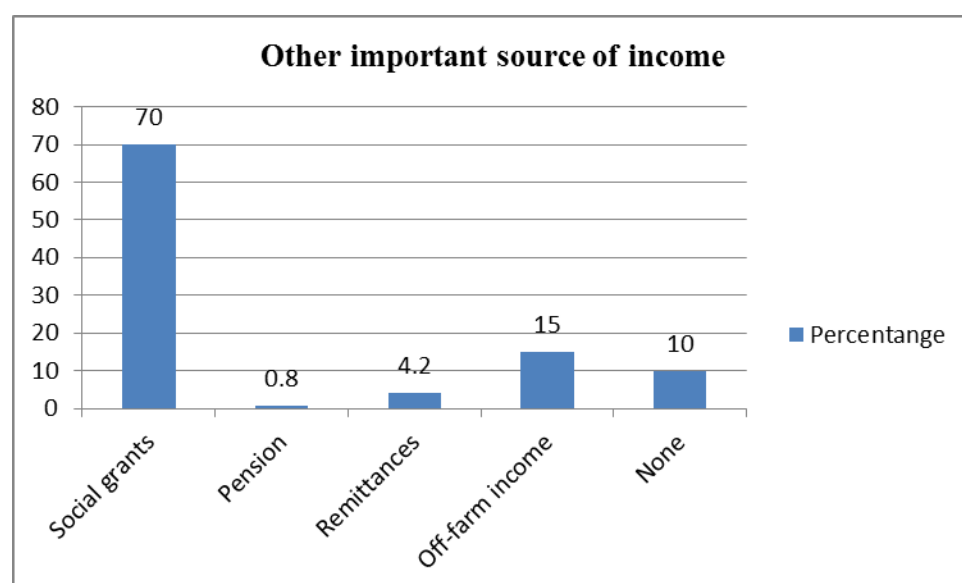


Figure 5.11: Other important source of income
Source, Field Data 2013

Assets score is the type of durable assets owned by the household. Different types of assets work hand in hand with different classes of income; it also implies the state of poverty of household. Household with high income usually have high assets score. Durable assets usually weighted to their value i.e. if the scale ranging from one to ten. The durable assets such as car have high value and it will set at ten on the scale while a cell phone have low

value will set at one on the scale. Currently, most of the people do have access to cell phone and the availability of telecommunication results no increase in one's wealth index score compared to a respondent who do not have cell phone at all.

Referring to the results on figure 5. 12 presents about 61.7% of non-beneficiaries in MD had assets score ranged from 3-7 while about 38.8 % of them had a range from 7-12 assets score. There was no different on assets score before and after (shows same percentage) due to lack of support from government stakeholders. There was 0% change between before and after, the percentages were at equilibrium point. Probably, it is because most of the subsistence farmers are engaged in farming activities for home consumption. Small shares of household farm production are sold on local markets in order for them to obtain cash for the simplest commodities like buying soap. They also relied on social grants to be able to purchased basic machinery such as radios and cell phones they had.

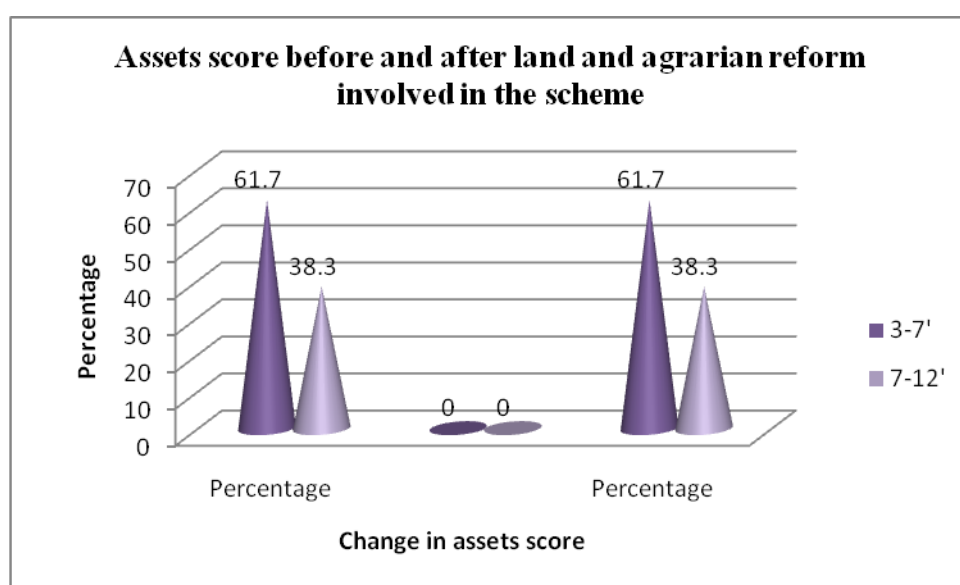


Figure 5.12 Assets score for non-beneficiaries in MD
Source: Field Data 2013

Figure 5.13 present that about 80% of beneficiaries in JDR were having assets score ranged from 0-7 while others about 20% of respondents had assets score range from 8-12. There is no huge different between land reform beneficiaries and non-beneficiaries before land and agrarian reform involved in the scheme. In addition, most of them relied on social grants to purchase basic low value assets such as radios and cell phones. Approximately 3 were not having those commodities. Most of them were having low assets score. Furthermore, about 78.3% of beneficiaries in JDR were having assets score that ranged from 9-21 while about

21.7% of respondents had 22-43 assets score. There is a huge different between before and after and this change is caused by intervention of land and agrarian reform leading to an increase on their income. In addition, according to the calculations about 81.7% of land reform beneficiaries in JDR, their change in assets score were ranged from 7-8 while about 8.3% respondents were ranged from 16-26 assets score. The last group earned more income than all groups. According to Setboonsarng (2008), change in income status can also results a change in ownership of household's assets by selecting durable assets such as cars, bicycle, television, refrigerator among others. This was the case in JDR farmers; they showed the important increases in ownership of the selected durable assets.

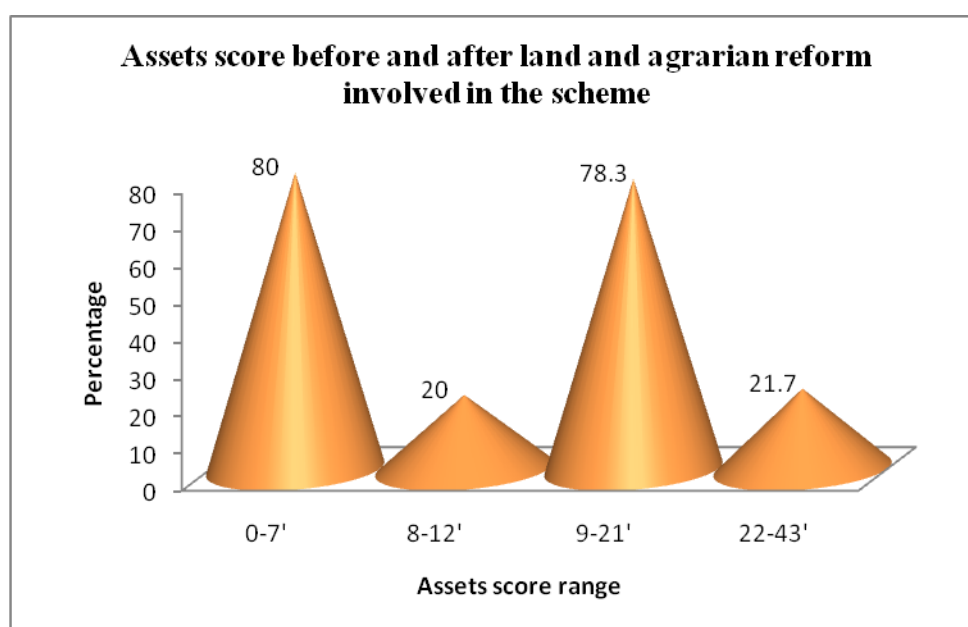


Figure 5.13: Assets score after for land reform beneficiaries in JDR
Source: Field Data 2013

5.5 Chapter summary

In summary, male farmers with medium age group seems to be dominant in farming business. Most of the farmers attained secondary education in terms of literacy. Most of the farmers practised apple enterprise probably due to favourable weather conditions. Farmers in JDR owned more land (93.8ha) compared to farmers in MD. The land was purchased by DRDLR through land reform programme. As a result of this, the farms in JDR delivered higher output on average than those of non-beneficiaries in MD was producing for home consumption and little for sale. Land reform beneficiaries also received more support from DRDAR in terms

agricultural infrastructure and technical advisor. Land reform beneficiaries received high income as results they owned more durable assets compared to non-beneficiaries.

CHAPTER 6

EMPIRICAL RESULTS

6.1 Introduction

The previous chapter presented the descriptive results of the data analysis. It laid a foundation for the analysis chapters by giving an overview of conditions under which land reform beneficiaries and non-beneficiaries in JDR and MD respectively operate. This chapter focuses on the distinction between commercialized and subsistence orientations in JDR and MD respectively for purposes of predicting the behaviour of farmers under similar circumstances. After collecting data from two groups mentioned above as result of land reform beneficiaries (commercialize orientation) their level of production was high and producing for marketing while non-beneficiaries (subsistence orientation) level of production was too low and producing for home consumption as well as little for sale. This is where the binary logistic model comes in which because there are two categories based on the production level (yield) reported by commercialized and subsistence orientations (farmers). This means that binary logistic model have two sided outcomes. This chapter however focuses on the factors affecting land reform beneficiary (commercialise orientation) in JDR. It also aims at presenting inferential results where independent variables are tested for their significance and the variable factors affecting land reform beneficiaries were discussed in detail. The conclusions are drawn according to the results that were found to be significant.

6.2 Model empirical results

This section presents the binary logistic regression model. All the variables that were analysed by descriptive in previous section were considered for the model and tested for their significance. Least variable that was found significant to affect land reform beneficiary to influence the level of production (yield) as a result a change in their livelihood were presented. The Table 6.1 presents the binary logistic results for possible significant variables of land reform beneficiaries and non-beneficiaries.

Table 6.1 Binary logistic result for beneficiaries and non-beneficiaries of land reform (JDR and MD)

Variables	Coefficient	S.E	Significance	Odd ratio
Age	-0.184	0.035	0.000*	0.832
Household size	0.137	0.159	0.387	1.147
Farming Experience	0.104	0.029	0.000*	1.109
Highest Educational level	-1.040	0.572	0.069	0.353
Assets score before	-0.102	0.077	0.184	0.903
Overall predicted		73.3%		
-2 log likelihood ratio		110.939		
Cox and Snell R ²		0.370		
Nagelkerke R ²		0.493		
Hosmer and Lesmeshow (df=8)		11.556	P= 0.172	

*Statistically significant at 1% significance level

Table 6.1 presents the estimated coefficients (β values), standard error, significant values and odds ratio of the predictor or independent variables in the model. The coefficient values measure the expected change in the logit for a unit change in each independent variable, all other independent variables being equal (Gujarati, 2004). The positive and negative sign of the coefficient shows the direction of influence of the variable on the logit. The positive value indicates an increase in the likelihood of land reform beneficiaries' performance while a negative value shows that is less likely that a household of land reform beneficiaries will perform. Therefore, in the study a positive value implies an increase in the likelihood of land reform beneficiaries.

The standard error (S.E) measures the standard deviation of the error in the value of a given variable (Gujarati, 2004). The significant values (p values) whether or not change in the independent variables significantly influences the logit at a given level. In this study, the variables were tested at 1% (0.001) significant level. If the value of significance is greater than 0.05 it shows that there is lacking of evident to support that the independent variable influence a change not be land reform beneficiaries or produce at commercial level for marketing. While, if the value of significance is equal to or less than 0.05, then it show that there is enough evidence to support a claim presented by the coefficient value.

The odds ratio indicates the extent of the effect on the independent variable caused by the predictor variables. The value is obtained by calculating the anti-logarithm of each slope coefficient of predictor variables. A value greater than one indicates greater or more probability of the variable influence on the logit while a value less than one implies less likely of the variable to influence on the logit (Gujarati, 2004). Table 6.1 present that out of five predictor independent variables that were used in the binary logistic model only two variables was most statistically significant at the 1% significance level, namely age and farming experience. Empirical results of the model show that the model was statistically significant with Chi-square X^2 (5, N=120) =55.417, $p < 0.0001$ indicating that the model was able to distinguish between the respondents who were beneficiary and non-beneficiary. Cox and Snell R square = 0.370 and Nagelkerke R square = 0.493 suggesting that between 37% and 49.3% of the variability is explained by this set of variable. Moreover, any decision with 0 = beneficiary (commercialize orientation) and 1= non-beneficiary (subsistence orientation).

The influence of age of the farmer to produce at commercialise level has a negative coefficient value. This is means that the older the farmer the less likelihood to produce at commercial level for marketing. Descriptive statistics revealed that most farmers from both areas their age ranged from 39-57 years comprises of 45.9% follows by farmers ranged from 19-38 years were stands at 30.8% and most of the pensioner's ranged from 58-80 years were stands at 23.3%. This proven has to be the case because farming activities in the study areas seems to be performed mostly by relatively medium age people followed by younger people and lastly by the older people. Medium-age and young people tend to be more active than older people. These results are expected because the older people get the less energy to perform farming activities than young people. Therefore, there is an increased likelihood to

produce at commercialize level for marketing. The odds ratio ($1 < 0.832$) also reveals less influence for the beneficiary to produce at high level.

Farming experience is another variable found to be significant by binary logistic model. The coefficient value (0.104) reveals that it is highly likely to influence the beneficiary to produce high yield for marketing. The farming experience works hand in hand with age. In other words the older the farmer the more the experience s/he had in farming activities. This has not proven to be the case in Jourbetina. Younger people with less experience seem to have high performance followed by medium age group and lastly older people. The descriptive analysis reveals that the farmers who ranged from 2-12 farming experience stands were at 45.8%. Most of these farmers are young and they have little knowledge on farming activities but on the other hand they are more capable of carrying out physical activities. Furthermore, farmers ranged from 13-25 farming experience were stands at 34.2%. Most of these farmers fall in medium aged group and they have more experience than younger farmers and less experienced than older farmers. Lastly, the farmers ranged from 26-58 farming experience were stands at 20%. These farmers had more experienced in farming activities than two groups mentioned above. Their experience will have the greatest impact on agricultural production and productivity due to farming experience they had. They were exposed in farming business for period of long time. The older farmers had more time to accumulate both human and financial capital and would thus be in a better financial position to afford equipment that will cause improvements in production (Brown, 2000). However, young people are more likely to adopt new methods or techniques while older people usually resist change and new ideas and not easily adopt techniques (Kekana, 2006). The odds ratio ($1.109 > 1$) reveals the high likelihood for the beneficiary to produce high level yield for marketing.

6.3 Chapter summary

Binary logistic regression model was used to test the factors that influenced land reform beneficiary (commercial orientation) and non-beneficiary (subsistence orientation) on level of production (yield). The variables that were found to play a significant role in contributing to level of production were age and farming experience. The influence of age of the farmer to produce at commercial level has a negative coefficient value. This means that, older people were less performing on farming activity than younger people. In the study, it was proven

that farming activities performed mostly by relatively medium aged people followed by younger people and lastly by the older people. Furthermore, the influence of farming experience was found to be significant with positive coefficient. This means that, it is highly likely to influence the beneficiary to produce high yield for marketing. However, younger people with less experience followed by medium aged farmers seemed to have high performance than older people. Young people are more likely to adopt new methods or techniques while older people had more time to accumulate both human and financial capital. The odds ratio was greater than one, suggesting that there is higher likelihood of the beneficiary producing high level of production for marketing.

CHAPTER 7

SUMMARY, CONCLUSIONS AND RECOMMENDATIONS

7.1 Introduction

The research results of the study had central purpose of investigating the impact of land and agrarian reforms in poverty alleviation in Jourbetina, Eastern Cape-South Africa. Land reform in South Africa was established after democratic election in 1994. Government of South Africa initiated new policies of land reform with the aim of correcting injustice made by colonial government. Currently, the country is facing many challenges on this subject matter as it evidenced by many researchers. The study went on to conduct empirical assessment and fit the relevant model based on relationship of significant variable. The next sections will summarize the important section of dissertation.

7.2 Summary

The main body of the dissertation is divided into six chapters which covered the introduction and the background of the study, the review of poverty in Jourbetina. Furthermore, the dissertation addressed the subject matter of the research the impact of Land and Agrarian reforms as well as the factors that influence beneficiary to contribute on level of production and marketing for poverty alleviation in Jourbetina. The description and research methodology of the study area were also discussed. The next chapter presented of descriptive statistics and then the model was fitted in the final chapter.

In the dissertation, it was important firstly overview the extent of poverty in Jourbetina. It was important because this province is caught up in economic and social problems with poor living standards, inequality, unemployment, low income and food insecurity. Poverty is especially high among black agricultural households living in rural areas (Pauw, 2005). Therefore, in the context of the subject matter of the study, it was important threw more light on needed interventions to enhance the impact of Land and Agrarian reforms on poverty alleviation. Since the issue of land in South Africa is currently the challenge that the country has. The government of South Africa regards with land issues has been failed. Therefore, the research was also review the land reform policies because land reform means a lot to rural

incomes and it is the starting point to address the huge inequalities existed for many years in South Africa. Rural and agrarian development through land reform programme can play a significant role in poverty alleviation.

7.2.1 Summary of results

The descriptive results provided information related to demographic indicators, farming and marketing activities and land and agrarian reforms intervention and their impact on poverty alleviation. The results revealed that 50% of land reform beneficiaries interviewed in JDR compare to 50% of non-beneficiaries in MD. The results revealed that majority of farmers in both areas were headed by males (61.7%). This implies that, female-headed households had less labour available for farm work than male-headed households. Males were physically capable of coping with the manual demands of farming practices. Farming in both study areas appear to be performed mostly by relatively medium age people (45.9%) with ranged from 39-57 years together and dominated by household size (55.8%) of family members' ranges from 4-6 members. According to educational level the majority of respondents (54%) in both areas completed secondary education. The farmers with highest education level were more successful on farming activities and thus leading to greatest impact on production and productivity.

Looking at farming activities, 100% of respondents in both areas practised apple enterprise due to favourable weather conditions. According to level of production the findings have established that 50% of land reform beneficiaries in JDR were producing at commercial level for marketing (exporting and importing). The change in level of production in JDR was stand at 254090000 kg. In MD, 50% of subsistence farmers were producing at low level for home consumption and little for sale in local market. According to government interventions and their impact on poverty reduction, DRDLR purchased 93.8ha of land under cultivation for 50% of land reform beneficiaries in JDR while about 38.3% and 11.7% of subsistence farmers in MD were using 1ha and 0.5ha respectively under cultivation. In addition, DRDLR also assisted 50% of respondents in JDR with recapitalisation to run farm business while there was no assisted have been made for 50% of subsistence farmers in MD. On the other hand, DRDAR also assisted 50% of land reform beneficiaries with agricultural infrastructure to produce at commercial level as well as technical skill and basic farm management while in

MD, 50% of respondents received none from the government stakeholders mentioned above. All of these government interventions mentioned above will have the greatest impact on level of production thus leading to an increase on farm labours wages. As results 25.8% and 24.2% of land reform beneficiaries in JDR, their change in income were ranged from R780-R900 and R1000-R2100 respectively. The availability of income will results the sufficient access to foodstuff (food security).Change in income status can also results a change in ownership of household's assets by selecting durable assets such as cars, bicycle, television, refrigerator among others. According to the calculations about 81.7% and 8.3% of land reform beneficiaries in JDR, their change in assets score were ranged from 7-8 and 16-26 respectively.

Furthermore, the model was used to analyse factors that influence beneficiary on level of production. Least of the variables that were found to be significant were age and farming experience. The study revealed that, age had negative coefficient value. This meant that older farmers were less likelihood to influence level of production than younger farmers. However, descriptive showed that farming activity in the study area was performed by medium age people followed by younger age and lastly by older age. However, farming experience was another variable found to be significant. The coefficient value (0.104) reveals that it is highly likely to influence the beneficiaries to produce high yield for marketing. The older the farmer the more the experience s/he had in farming activities. But it was not the case in Joubertina, younger people with less experience appear to have high performance followed by medium age group and lastly older people. The younger the higher activities on farming business thus results an increase on production and productivity.

7.3 Conclusion

The broad objective of the study was to investigate the impact of land and agrarian reforms on poverty alleviation in Joubertina. One of the specific objectives was to determine the needed interventions to enhance the impact of Land and Agrarian reforms on poverty alleviation in Joubertina and subsequently the rest of South Africa. The study focused on land reform beneficiaries in JDR where government invested large capital on land and agriculture infrastructure compare to non-beneficiaries (household subsistence farmers) where there is no

investment has been made at all. The results revealed that out of 120 total sampled respondents, 60 farmers were land reform beneficiaries and involved in scheme while 60 households subsistence were non-beneficiaries not involve in scheme. Furthermore, a conclusion can be drawn in respect to the impact of Land and Agrarian reforms on poverty alleviation in the study areas. The results revealed that land reform beneficiaries were likely to influence the level of production for marketing while non-beneficiaries produced for home consumption and little for sale in local market. An increase in yield resulted in a decrease on food price thus leading to a household to purchase more food. High level of yield will also have the greatest impact on employment recreation, increasing real wage and improve farm income thus leading to poverty reduction in JDR as compared to MD.

The overall conclusion in the study areas including Land reform in South Africa which is considered to be among the key national development strategies, aimed at reducing rural inequality, improving food security and livelihoods and overall welfare of rural population. Government of South Africa implemented many strategies regard with land reform however according to many research results some of the strategies had failed. Most of the Land reform projects failed due to poor services of Land reform programmes. Most of these projects have lack of Recapitalisation and land reform beneficiaries ended up in huge debt because involve themselves in joint venture partnership with white commercial farmers. Most of these farmers are poor, illiteracy and lack of knowledge. The white commercial farmer usually indicated the black farmers to sign the document they even do not understand.

The only thing black farmers understand is basic/primary farm activities such as planting, harvesting and among others; however in terms of book keeping, marketing, accounting and basic farm management they lack with knowledge. White commercial farmers will always take advantage of them. In addition, government also implemented a programme and employed more commercial farmers with the aim of them to transfer the knowledge to black farmers. Instead of transferring the knowledge to black farmers, they grab the government money and left black farmers still with no knowledge. According to my research results, there is a little improvement of income received by land reform beneficiaries as compared to the level of production. The beneficiaries indicated that, there is strategic partner involved in their project, thus is proved by their gross income. More things need to be done by South African government because most people are still live in poor condition. Land reform programme that was seen as tool to reduce poverty have been failed in South Africa.

7.4 Recommendations

Land and agrarian reforms showed potential as a method of alleviating poverty in rural areas. The results showed that, land reform beneficiaries produce, income and assets score have been changed after the government stakeholders mentioned above involve in the scheme. However, the change of income was lower as compared to return of income yield. There was no change for non-beneficiaries. The government should also assist the household subsistence farmers with the inputs of production whether they are involved in the scheme or not. The results revealed most of these farmers dependent on government welfare grants. The government need to improve their level of production through supporting them with agricultural infrastructure to improve their food security at household level. The government should also introduce programmes namely, Siyazondla, Food security, Ploughing crop programme among others. There is also need of external support from both private and non-governmental organizations to support household subsistence farmers.

Mentorship programmes should also be encouraged so that household subsistence farmers practise farm business viably at commercial level. Government should employ the entire graduates who sitting at home doing nothing to transfer most of the knowledge they learned from institution to black farmers. They need to educate black farmers, especially young farmers with marketing, bookkeeping, accounting, basic farm management and the important of farming business. Farmers will produce more food for home consumption as well as for marketing thus leading to an increase on income eventually for poverty alleviation. Government should also review the policy of willing seller and willing buyer and eliminate it because this policy favoured the white minority of this country. Literature reveals that, currently only 7% of land already transferred to black farmers, the process of land redistribution is taking long. Therefore government should come up with new/better policies and strategies for rural development in South Africa.

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APPENDIX

QUESTIONNAIRE

UNIVERSITY OF FORT HARE

FACULTY OF SCIENCE AND AGRICULTURE

DEPARTMENT OF AGRICULTURAL ECONOMICS AND EXTENSION



**THE IMPACT OF LAND AND AGRARIAN REFORMS ON POVERTY
ALLEVIATION: LESSONS FROM THE JAY DEE ROVON WORKERS TRUST
AND MON DESIRE HOUSEHOLD IN JOUBERTINA, EASTERN CAPE-SOUTH
AFRICA**

(HOUSEHOLD SURVEY QUESTIONNAIRE)

Name of the Farm.....

Name of the Interviewer.....Date.....

A: HOUSEHOLD DEMOGRAPHIC INFORMATION

A.1. Name of respondent (*Optional*)

.....

A.2. Gender household head	Male	0
	Female	1

A.3. Age

A.4. Household size

A.5. Highest Educational level

Never went to school	1	Primary school	2	High school	3	Tertiary level.....	4
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A.6. Farming experience

SECTION B: INTRODUCTORY QUESTIONS

B.1. Do you know about the government stakeholders involved in projects/scheme?

Yes	1	No	0
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B.2. Are you involved in the project/scheme?

B.3. How long have you been involved in the project/scheme?.....

B.4. Which of the under-mentioned stakeholders is/are involved in the project/scheme?

DRDLR	DRDAR	DAFF	Both mentioned in block one and two	None of the above
1	2	3	4	5

C. FARMING ACTIVITIES

C.1. Type of farming

Fruit	1
Vegetables	2
Livestock's	3

C.2. What types of fruit trees have you planted?

Pears	1
Apples	2
Oranges	3
Others(Specify)	4

C.3. In which seasons do you harvest the fruit?

Summer	1
Autumn	2
Winter	3
Spring	4

C.4. Why do you prefer the fruit trees mentioned above?

Favourable weather conditions	High market opportunity	Low production costs	All of the above
1	2	3	4

D. MARKETING**D.1. Which channel(s) do you use for marketing your produce?**

Community sales and home consumption	Supermarkets	Fruits and vegetables	Supermarkets, Fruit & Vegetables and Exporting	Other (Specify)
1	2	3	4	5

D.2. Do you practise value-adding to the produce mentioned above?

Yes	1	No	2
-----	---	----	---

D.3. If yes, what type of value adding do you practise?

Packaging	Grading	Both mentioned in block one and two	Processing	None of the above
1	2	3	4	5

D.4. Do you export the produce mentioned above?

Yes	1	No	0
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D.5 Where do you export your produce?

U.S.A	ASIA	EUROPE	All of the above	None of the above
1	2	3	4	5

D.6 How much do you produced (kg, tonnes, boxes) or before and after these government stakeholders mentioned above involved in the project/scheme?

Produce (kg, tonnes, boxes)	Before	After

E. LAND AND AGRARIAN REFORM INTERVENTION**E. 1. Do you know about these government stakeholders mentioned above?**

Yes	1	No	0
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E.2. If yes, what are the roles played by them to the black farmers?

DRDLR purchased and transferred land to black farmers	DRDAR funding black farmers with agricultural infrastructure and input of production	Both roles mentioned in block one and two	None of the above
1	2	3	4

E.3. How much lands you planted fruit trees or was purchased by land reform?

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E.4. What is the total value of the land?

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E.5. Do you receive additional funding from DRDLR?

Yes	1	No	0

E.6. If yes, what types of funding do you received?

Recapitalization	Ploughing crop programme	Other (Specify)	None of the above
1	2	3	4

E.7. What type of funding/support do you received from DRDAR?

Road maintenance	1
Machinery (Tractor, Fork lift and Mist blower)	2
Dam scooping, Boreholes and Irrigation system	3
Harvesting Bin and Storage Shed	4
Inputs of production (Spraying chemicals, seeds and fertilisers)	5
All of the above	6
None of the above	7

E.8. What is the total value of the funding/support mentioned above?

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E.9. Which programmes in DRDAR support the type of infrastructure mentioned above?

Land Care	CASP	Food security	Siyazondla	None of the above
1	2	3	4	5

E. 10. What other type of assistance do you received from DRDAR?

Technical skill	Basic farm knowledge	Both assistance mentioned in block one and two	None of the above
1	2	3	4

F. LAND AND AGRARIAN REFORM IMPACT ON POVERTY ALLEVIATION

F.1. Do you think these stakeholders mentioned above reduced poverty?

Yes	1	No	0
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F.2. If yes, how did they reduce poverty?

Food security, Job creation and Increase income	None of the above
1	2

F.3In terms of income from fruit, what was (is) your gross earning per month before and after land and agrarian reforms involved in the project/scheme?

Gross earning per month	Before	After

F.4 What is/are different types of fruit do you produce and how much do you realise from them?

Different type of fruit	Their realises
Pears	
Apples	
Oranges	
Mangos	
Other (Specify)	

F. 5 In terms of durable assets, what do you own (s) before and after land and agrarian reforms involved in the scheme/project?

Durable assets	Before	After
Radio		
Television		
Refrigerator		
Bicycle		
Car		
Lounge suit		
Bedroom suit		
Oven stove		
Washing machine		
Cell phone		
None of the above		

F. 6. What other sources of income are important?

Social grants	1
Pension	2
Remittances	3
Off-farm income	4
None of the above	5

THANK YOU VERY MUCH FOR YOUR COOPERATION.....