THE CONTRIBUTIONS OF RURAL LIVELIHOOD DIVERSIFICATION TOWARDS HOUSEHOLD INCOME-POVERTY ALLEVIATION IN MADUMELENG VILLAGE, LIMPOPO PROVINCE

By

Shadrack Manala Maake

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Supervisor: Prof. J.P. Tsheola

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DECLARATION

I declare that the dissertation hereby submitted to the University of Limpopo, for the degree of Masters of Degree in Development Planning and Management is my own work and has not been previously submitted by me for a degree at this or any other University. Furthermore, all sources which are used or cited have been indicated and acknowledged by means of complete references.

Initials & Surname (Title):

Date: _____

Student Number:_____

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DEDICATION

This Dissertation is dedicated to my beloved parents Mr. Maake and Mrs. Maake who contributed immensely to my success into accessing tertiary education and support they depicted from my first year of undergraduate degree up to this far in honors level. The study is also dedicated to my five siblings namely: Thandy, Prince, Motsatsi, Mapula and Mohlago who motivated me throughout academic project. Subsequently, the study is dedicated to all my relatives and friends who provided steering support in academic activities in particular.

ABSTRACT

Although motivations vary across households, livelihood diversification is commonly adopted as a coping strategy against income-poverty and food insecurity in Africa. Income-poverty is disproportionately the main integral dimension of poverty in relative countries across Sub-Saharan Africa. This study investigated the extent to which rural livelihood diversification contribute to income-poverty alleviation in Madumeleng Village, South Africa. This exploratory research has adopted the methodological triangulation through qualitative and quantitative approaches. Additionally, these approaches were convenient for specific analysis of textual, factual, observation and conceptual data as well as to ensure credibility of the results. Moreover, normative design was applied to observe the relationship of livelihood diversification and income-poverty alleviation as the measurable variables of the study.

Primary data was collected in Madumeleng Village through questionnaire survey which was administered to 144 respondents of the households. The households were selected through simple-random sampling and, purposively sampled traditional leader through interview schedule. The study argued that an increase in number of diverse livelihood activities strengthens ability and potential of the household to alleviate income-poverty. Notwithstanding poverty is multidimensional, findings of the study ascertained that most people embrace livelihood diversification as ideal route out of poverty. However, non-farm activities has been acknowledged as an important pathway out of income-poverty albeit prevalent barriers such as inadequate education, inaccessible formal credit facilities and fragmented infrastructure. The study recommended measures such as provision of quality rural infrastructure development and establishment of skills acquisition training programmes by local government authority, to widen access of the poor into non-farm activities and grant poor people an opportunity to eradicate entry barriers of high return livelihoods.

ACRONYMS

BNA:	Basic Needs Approach
CSR:	Corporate Social Responsibility
GDP:	Gross Domestic Product
GEAR:	Growth Employment And Redistribution
GNP:	Gross National Product
MDG:	Millennium Development Goals
NDP:	National Development Plan
LDAD:	Land Redistribution of Agricultural Development
LFA:	Livelihood Framework Analysis
LRAD:	Land Redistribution of Agricultural Development
RSA:	Republic of South Africa
SEDA:	Small Enterprise Development Agency
SEF:	Small Enterprise Foundation
UN:	United Nations
USA:	United States of America

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INTRODUCTORY PERSPECTIVE OF THE STUDY

1.1 Introduction and Background

Recent rural poverty studies demonstrated that the best optimum route for alleviate income-poverty is through regeneration of poor people's livelihoods and construction of multiplying their livelihoods (Alemu, 2012; Toindepi, 2016). Conversely, Akudugu (2016) demonstrated that relative African countries, with external interventions from international institutions have erstwhile invested resources into poverty alleviation, albeit with marginal success. Despite increasing attention within the literature, rural livelihood strategies are not well understood and there is limited potential for developing economies to ascertain righteous trajectory out of poverty persistence (Marthin & Lorenzen, 2016). Additionally, agriculture remains the main source of living and income-generating strategy for rural people in Sub-Saharan Africa (Ambimbola & Oluwakemi, 2013; Akudugu, 2016). Although agricultural predominates amongst most rural communities, according to Marthin & Lorenzen (2016), livelihoods are complex and rural households are often engaged into diversification predetermined by varies motives. Further, most rural people maintain diverse portfolio of activities among which crop and livestock production feature alongside any other contributions to household well-being.

Furthermore, while rural households are involved in agricultural activities such as livestock, crop and fish production as their main source of livelihood, they also engage in other income generating activities in order to augment their main source of income (Toindepi, 2016). Considerable rural producers have historically diversified their prolific activities to encompass a range of other productive areas. In other words, very few of them collect all their income from only one source, hold all their wealth in the form of any single asset, or mobilize their resources thereof (Barrett, Reardon & Webb, 2001; Ambimbola & Oluwakemi, 2013). In countries such Australia, South Korea, Nigeria,

Zimbabwe and South Africa, agriculture is plagued with considerable problems which include soil infertility, infrastructural inadequacy, risk and seasonality (Ambimbola & Oluwakemi, 2013). Thus, rural households resort to search for alternative strategies to cope against increasing vulnerability associated with agricultural production through diversification (Ellis, 2000). However, several livelihood studies revealed there are various motivations behind the practice of livelihood diversification with income generation being the main reason why people adopt occupational multiplicity (Barret *et al.*, 2001; Akudugu, 2016; Marthin & Lorenzen, 2016).

Given unabated state of income-poverty in most developing countries, growing interest in research on rural off-farm and on-farm within rural economies is increasingly indicating livelihood diversification as the ideal route for socio-economic transformation particularly in the household (Stifel, 2010). This could be owing to the fact that many rural households across the world construct diverse portfolio of income sources through supplementing farm activities with external non-agricultural opportunities (Babatunde & Qaim, 2009; Senadza, 2014). Livelihood diversification did not only gain momentum and universality, but also broadens the ability and potential of households to cope with the universal issues of income-poverty, unemployment and food security (Barrett *et al.*, 2001). Theoretically, decision of a household to diversify depends on the incentives, endowments and capacity (Reardon, Berdegue, Barret & Stamoulis, 2006; Senadza, 2014). Some rural households have multiple sources of income and are able to generate sufficient output which is believed to hold the potential and capability to overcome income-poverty (Rahut & Scharf, 2012).

There are different motives and reasons to adopt livelihood diversification across rural households (Marthin & Lorenzen, 2016). The reasons for the prevalence of livelihood diversification include the diminishing level of agricultural output and desire to ensure against market risks. Studies demonstrate that most rural communities diversify their livelihoods for food security and additional income (Barret *et al.*, 2001; Toindepi, 2016. Among other strategies, self-generated rural livelihood activities and pluriactivity have been identified through literature as the emerging constituencies of livelihood

diversification and are deemed necessary for the alleviation of household income-poverty in rural areas (Perz, 2005; Chianu & Anjani, 2008; Stifel, 2010). To a large extent, livelihood diversification has continuously renowned the means of household income generation in developing countries (Kepe, 2008). The practice of livelihood diversification entails assets and resource management which are pivotal in terms of alleviating incomepoverty (Abdulai & Croles, 2001; Saunders, 2014).

The literature has had affirmed that livelihood diversification is moderately contributing to the sustainability of rural household's welfare (Vilks, 2014). This owes to the fact that it improves its long run resilience in the face of adverse trends or sudden shock (Ellis, 1998; Vilks, 2014). An understanding of the significance as well as the nature of non-farm and on-farm, especially its contribution to rural household income or resilience, is of outmost importance for policy makers in the design of potent agricultural and rural development policies (Ambimbola & Oluwakemi, 2013). However, despite agriculture being regarded as the main source of income in the rural population, it is controversially deemed insufficient vehicle for income augmentation and solving household-level malnutrition and food insecurity (Owusu, Abdulai & Rahman, 2010). In Africa, low performance of agricultural sector is commonly attributed to less rainfall, soil infertility and inadequate infrastructure to support local agricultural development (Ambimbola & Oluwakemi, 2013)

Farming alone is not an adequate source of revenue for rural households; therefore, promoting non-farm employment could be deemed necessary and an optimum strategy for supplementing income and sustaining equitable rural growth especially for rural farmers (Ambimbola & Oluwakemi, 2013). Diminishing level of agricultural output has spurred rural households to construct diverse portfolio of activities from both on-farm and off farm sources in the precision of income escalation in order to improve the standard of living. On-farm and non-farm income source constitute a portfolio, whereby the number of sources and distribution of income among those sources describes the diversity of a household's livelihood (Perz, 2005; Chianu & Anjani, 2008). Indeed, the motives of livelihood diversity varies among households, and can be as straightforward as raising income, or might involve risk minimization as well as income stabilization. The process

whereby households practice livelihood diversification has gained popularity even in developed and less developed countries (Owusu *et al.*, 2010).

Across the world, particularly in developing countries, livelihood diversification has been embraced as effective strategy for income diversification within rural dwellers (Toidepi, 2016). However, the literature has revealed that livelihood diversification carried out by affluent households tend to surpass those of the poor (Abdulai & Croles, 2001; Babatunde & Qaim, 2009; Senadza, 2014). Moreover, Owusu et al., (2010) have avowed that relative majority of rural households in Ghana adopt various livelihood strategies concurrently in order to widen the access to income and improve the standard of living. Across South Africa; particularly Limpopo Province, households construct diverse portfolio of livelihood activities from both on-farm and off-farm sources stimulated by the extensive land and better infrastructural development. However, it is still questionable whether the land is arable enough to yield sustainable agricultural productions and whether or not rural households have the potential to market their enterprises in a competitive environment? The conceptual framework ascertained there are variety of livelihood activities which are carried out concurrently by South African rural households in attempt to alleviate income poverty and socio-economic imbalances (Makhato & Kepe, 2006; Jacobs & Makaudze, 2012).

There is universal acceptance that a community, household or individual which is not income poor has sustainable access to purchasing power, often in form of monetary value to gain access to basic needs and foods that live up to the minimum nutritional requirement (Cinner & Bodin, 2010; Vilks, 2014). In other words, income-poverty should never be ignored as it compromises of the ability of most rural dwellers as they are still trapped in absolute-poverty living standard which is still the focal point in developmental discourse (Vilks, 2014). Livelihood diversification is believed to be a prospective vehicle towards the generation of household income in developing countries (Senadza, 2014). South African rural households have the potential to diverse their livelihood activities within agricultural realm but also taking suffice cognizance into off-farm sources in order to generate income (Makhato & Kepe, 2006). Besides being agriculturally potential,

Limpopo Province is believed to be a clear testimony in relation to the practice of more than one livelihood activities across the country (Stats SA, 2014).

Notwithstanding low-living standard, rural households are tenaciously spurred by the yields to construct varied livelihood portfolios concurrently. (Jacobs & Makaudze, 2012). Madumeleng Village is one of the rural areas in Limpopo Province wherein households hold the potential to practice diversity of livelihoods from both on-farm and off-farm sources. Relative majority of households in the province are prone to unemployment, insufficient food and income sources, educational attainment and climatic aberrations of less rainfall and drought in particular (Kyei & Gyekye, 2011; Makaudze & Jacobs, 2012). Although rural households diversify their livelihoods, not all manage to move out of income-poverty trap. Commonly, this situation of income-poverty trap is a resultant of factors such as less rainfall, unequal distribution of productive resources, soil infertility, household endowment, locational disadvantage and income inequality (Akudugu, 2016). The study investigated contributions of rural livelihood diversification towards household income-poverty, Madumeleng Village. This study remains significant as none of studies was conducted about livelihood diversification and its contributions towards alleviation of unabated income-poverty in the village.

1.2 Statement of the Research Problem

Income-poverty continues to be one of the major challenges faced by rural dwellers in developing countries and consequently, are perpetually opting to carry out livelihood diversification as means to obliterate income deprivation (Saunders, 2014; Senadza, 2014). This has been exhorted by numerous issues which agricultural sector is plagued with; and these entails noticeable declination of agricultural output. In many developing countries, livelihood diversification has been embraced as a potential strategy for improving socio-economic status, not only in the household but also at a national level (Babatunde & Qaim, 2009; Senadza, 2014). In spite of income generation, households have stirred by numerous reasons to construct diverse portfolio of livelihood activities. There are multiple motives which prompt households and individuals to diversify assets, incomes, and activities (Barrett, Bezuneh, Clay, Reardon, 2005). These entail income-

poverty alleviation, risk reduction and response to diminishing factor returns in any given use, such as family labour supply in the presence of land constraints driven by population pressure and fragmented landholdings (Barrett *et al.*, 2005; Senadza, 2014).

Despite the slow pace of land reform and redistribution in most developing economies, access to arable land has been identified through literature as one of the aspects which exhort households to exercise on-farm activities particularly in rural areas (Niehof, 2004). Ellis (1998) revealed that differential access rights to land are often the key determinants of distinct livelihood activities pursued by poor compared to affluent rural households. In developing countries; particularly Southern Africa, the practice of livelihood diversification has been stimulated by their geographical location and erratic increase in income-poverty. Household income-poverty is widely viewed as one of the major problems facing less developed countries (Shemelis & Bogale, 2007). Livelihood diversity involving non-agricultural activities may improve household welfare through additional income sources and raise incomes from existing agricultural sources (Perz, 2005; Ellis, 2011).

Although relative majority depend on government interventions, livelihood diversification is commonly recognized for its ability to augment income and food production while further deemed an optimum route out of income-poverty in South Africa (Makhato & Kepe, 2006; Kyei & Gyekye, 2011). Limpopo Province is characterised by rurality, with most households hinging upon crop and livestock production as their primary sources of living (Khumalo, 2013). However, rural households have continued to experience issues of less rainfall, increasing unemployment and poverty within the Limpopo Province. Consequently, both the government and rural communities such Madumeleng Village are plagued with frustrations and concerns to counter this situations.

There is noticeable increase and attention on the importance of non-farm activities in rural areas across the country. According to Greater Letaba Municipality (2012), 70% of people in their jurisdiction are found to be poor as a result of inadequate educational attainment, high dependence on crop and livestock farming, unemployment and ignorance of non-farm sources of income. Therefore, these findings suggest that rural households with the

potential to diversify their income sources into non-farm activities are relatively better-off than those that hinges upon on-farming activities alone. In addition, findings suggest a positive relationship between household's welfare and their involvement in non-farm activities (Alemu, 2012). Therefore, unknown component in livelihood diversification is the disproportionate role of non-farming activities towards household income-poverty alleviation in rural areas. Generally, the study investigated contributions which rural livelihood diversification make towards the alleviation of household income-poverty in Madumeleng Village.

1.3 Research Questions

The study set general research questions as: how does rural livelihood diversification contribute towards household income-poverty alleviation? In respect of the general research question, five specific research questions were outlined as follows:

- What are the types and characteristics of rural livelihoods?
- What are the modes and processes of rural livelihood diversification?
- What are the conditions and status of rural income-poverty?
- What are the determinants of rural income-poverty alleviation?
- What are the contributions of rural livelihood diversification towards incomepoverty alleviation?

1.4 Research Aim and Objectives

The aim of this study is to investigate contributions of rural livelihood diversification towards household income-poverty alleviation. In accordance with the aim, this study was guided by the following objectives:

- To identify and analyse the types and characteristics of rural livelihoods;
- To discover the modes and processes of rural livelihood diversification;
- To examine the conditions and statuses of rural household income-poverty;

- To uncover the contributions of rural livelihood diversification towards household income-poverty alleviation; and
- To recommend measures that will enhance the contributions of rural livelihood diversification towards household income-poverty alleviation in rural areas.

1.5 Definition of Concepts

The following terms are clearly defined as they constitute to the basis of the study and may be used too often:

Livelihood Diversification "is defined as the process by which rural families construct diverse portfolio of activities and social support capabilities in their struggle for survival and to improve their standards of living" (Ellis, 1998: 4). Livelihood diversification may refer to strategy within which individual and households raise their income and reduce vulnerability against different livelihood shocks (Oyinbo & Olaleye, 2016). In relation to these varied definitions, the study refer livelihood diversification as the process through which rural households construct agricultural and non-agricultural activities concurrently to generate sufficient income and improve the living standard.

Income-poverty is defined as a situation whereby an individual and/or household lives below a minimum acceptable way of life and is highly experienced through low income (Jacobs & Makaudze, 2012; Rogan, 2013). For the purpose of study, income-poverty refers to the condition wherein a household is living below the poverty line determined by low level of income thereof.

1.6 Research Design & Methodology

Research design and methodology could be defined as plan, strategy, procedures and guidelines that are observed by researcher of a particular study to attain information pertinent to research topic and subject for investigation (Dane, 1990; Babbie & Mouton, 2001, Babbie, 2010). This section focuses on the research design and methodologies applied in the study. The section begins with a detailed discussion of research design

and, rationale behind adoption of qualitative and quantitative methods. Furthermore, the section provides discussion about the kinds of data required in the study from its target population and demonstrate sampling designs that were applied to selected households and key informant. In addition, the section depicts techniques that were used to collect both primary and secondary data, analysis procedures as well as validity and reliability of the data.

1.6.1 Research design

The study adopted normative design to establish the relationship between measurable variables, and namely livelihood diversification and income-poverty (Mwaniki & Mue, 2015). Additionally, methodological triangulation through mixed-methods (Qualitative and quantitative) as exploratory research, constitute the study to enhance credibility as well as validity of results. According to Mwaniki & Mue (2015), triangulation is a method of check-listing data from multiple sources to produce accurate results for certainty in data collection. Mixed-methods embraces interaction of questionnaire and interviews, and helps discover the deviant or off-quadrant dimension of a phenomenon since different viewpoints are likely to produce some elements which do commensurate theory or model (Babbie, 2010; Mwaniki & Mue, 2015). According to Babbie (2010), Quantitative method is essential for quantifying answers which require numbers and results are expressed numerically through percentages.

Furthermore, quantitative method is discerned indispensable for determining multiple livelihood activities which are diversified by respective households. Qualitative method helps to gather in-depth information regarding modes and processes of household livelihood diversification, the conditions and statuses of income-poverty as well as determinants of income-poverty alleviation within respective household. Degree of conceptual levels on intensity such as "Low, Moderate and High" were created in this study in relation to the modes and conditions of livelihood diversification among other categories. Moreover, households remain the unit of analysis within the study albeit livelihoods may be carried out by more than one individual in the household.

1.6.2 Kinds of data required & unit of analysis

The study applied both primary and secondary data to increase credibility and validity of results (Mwaniki & Mue, 2015). Secondary data is used in textual method of literature from accredited journals, books, articles and government documents pertinent to the study. These conceptual sources are deemed convenient in respect of literature review regarding information about activities within rural areas at typologies and characteristics of livelihood activities and nexus with income-poverty alleviation across varied settings. In addition, there are illustrations of visuals depicting household agricultural livelihoods and impacts of less rainfall within the study area. On the other hand, primary data encompasses the perceptions of household's respondents selected to determine the demographic profiles and socio-economic conditions of the households. Specifically, primary data entails motives underpinning adoption of livelihood diversification and statuses of income-poverty and determinants of income-poverty alleviation within the household. In addition, Key informants such as traditional leader provided practical data based on observations and opinions about available resources and different livelihoods carried out by the households in the vicinity.

1.6.3 Target population

Target population refers to set of elements, objects or people which relate to the study (Babbie, 2010). Thus, the target population for the study were specifically households in Madumeleng Village as well as the key informant. Madumeleng Village has got an estimated number of 240 households. These households were convenient towards study as the village is typical to other areas that mainly practice multiple livelihoods. In addition, the key informant, Chief M.A Modjadji, was very important for this study in providing a broader practical context and experiences about livelihoods in the village.

1.6.4 Sampling design

According to Mwaniki & Mue (2015), sampling design is a method or techniques of selecting relevant unit of individuals, household and community within target population. Given that the whole population cannot be studied at once, the study adopted disparate

sampling methods from probability and non-probability. In addition, sampling was used at different levels select units to represent the entire population, which is, household, respondents within the household and key informant. The study has adopted simplerandom sampling to select households for the purpose of questionnaire survey.

Arbitrarily, simple-random sampling was appropriate in selecting households in the village as relative majority of households diversify their livelihoods on daily basis and "share similar characteristics" (Babbie, 2010). The design has granted each household an equitable opportunity to be selected for study (Mwaniki & Mue, 2015). The village has got estimated number of 240 households, 60% (144) of the households were randomly selected to represent other households who are engaged into livelihood diversification. Within the household, purposive sampling was further used to select individuals to represent their household practices. Further, purposive sampling was also adopted to sample the village traditional leader, Chief M.A Modjadji, for the purpose of interview schedule as the key informant who is closely linked with the community of the study.

1.6.5 Data collection techniques

The study has used different data collection techniques to collect both qualitative and quantitative data. Firstly, literature was gathered and reviewed from journal articles and books that contain theories, principles and modalities about rural livelihoods and their nexus with poverty alleviation. In addition, literature review was a technique used to collect international, national and provincial debates as well as experiences about the conditions of income-poverty, its measurements, multi-dimensions of poverty as well as nexus of livelihood diversification and income-poverty alleviation. Moreover, various poverty alleviation strategies that are implemented by South African government were reviewed in order to understand manifold measures and commitment towards the alleviation of poverty.

Secondly, closed and open-ended questionnaires were used to collect quantitative and qualitative data. The questionnaires were distributed to each household's respondents

selected and, assistance vernacular translation and those who could read and write were also assisted to answer questions objectively. Questionnaires were convenient in the provision of demographic and socio-economic characteristics of households, to identify characteristics of household's livelihoods, discover the modes and process of livelihoods and uncover contributions of rural livelihood diversification towards household incomepoverty alleviation. In addition, interview schedule was significantly applied to probe information regarding perceptions over unabated income-poverty in the community and necessary support to sustain varied livelihoods as well as recommendations to enhance the contributions of rural livelihood diversification towards household income-poverty alleviation. Lastly, observation and photographing technique were used to gather practical data on the types of household livelihoods and impacts of less rainfall in the village.

1.6.6 Data analysis procedures

Ordinarily, relevant literatures were reviewed, analysed, assimilated and synthesised in order to evaluate discourses on similar field of study and subject interest. With regard to qualitative approach, the study created descriptions about the types of livelihood strategies which are carried out by households when diversifying. In addition, the study formulated classification about the conditions and statuses of income-poverty emanated from the systems of ideas in the pertaining literature in order to be systematic on data analysis. Subsequently, livelihoods that are practiced in Madumeleng Village were categorised according to their types (on-farm, off-farm and non-farm activities), in order to determine their contributions towards alleviation of income-poverty.

From the questionnaire, responses were codified as nominal, and as a result, numbers were used to represent different categories (Cassim, 2015). In addition, conceptual categories about demographic profile, different livelihoods, conditions and determinants of income-poverty were used to capture the results into IBM Statistical Package for Social Science (SPSS) version 23. The IBM-SPSS was significant in production of numerical outcomes and summary of statistics through percentages. These outcomes were presented in the form of graphs and pie charts developed through Excel software.

Furthermore, the interpretation of the output from individual household's respondents and key informant were significant in augmenting inferences on the extent to whether or not livelihood diversification contributes to income-poverty alleviation in the household (Mwaniki & Mue, 2015).

1. 6.7 Validity & reliability

Validity refers to the research component which generally refers to an extent in which a measurement gives results that are consistent and empirical measurements reflect the same meaning of the subject under investigation. Reliability refers to the extent in which different studies ascertained similar phenomena whenever a technique is repeated to conduct same study (Babbie, 2010). Thus, validity and reliability refer to mechanisms which ensures that the concepts under study, research design and techniques applied produce valid, dependable and reliable results (Kyei & Gyekye, 2011; Mwaniki & Mue, 2015). In the study, comprehensive literature review were thoroughly analysed to bring about concise and correlated results about the two variables of this dissertation and namely are: livelihood diversification and income-poverty alleviation. Considerable livelihood scholars and proponents which include Ellis (1998); Abdulai & CrolesRees (2001); Liwenga (2009); Jacobs & Makaudze (2012); Saunders (2014); Senadza (2014); Marthin & Lorenzen (2016) engaged immensely about the nexus of livelihood diversification and poverty with application of normative design and nominal regression. Their publications and results of their studies offered imperative guidelines to the quality of this study.

Specifically, the study has employed convergent validity to measure the aforementioned two variables which are theoretically and practically inferred to correlate each other (Cassim, 2015). Seemingly, research proponents such as Ellis, 1999; 2000; 2011, Ambimbola & Oluwakemi, 2013, Akudugu, 2016 who used similar data collection and methods have been acknowledged successful in their respective livelihoods and poverty studies. Thus, successfulness and sustainability of such methods validates this study. In

addition, literature review further enhanced validity and reliability of the study through offering insight on the subject.

1.7 Structure of the Dissertation

The dissertation is well structured into five chapters and each chapter constitutes the following:

Chapter 1 provides introductory aspect of research project. In addition, encompasses motives of research, justifications and methodology adopted in the study. Subsequently, it encapsulates significance of the study and ethical considerations.

Chapter 2 provides a literature review on the types and conditions of livelihoods in rural areas. These include framework analysis of the livelihoods on international perspective.

Chapter 3 provides an overview background and description of the study area and this entails; national context, demographic profile and livelihood diversification in South Africa, provincial context, demographic profile, livelihood diversification and income-poverty alleviation in Limpopo province, diversity of livelihood strategies, local context, household demographic profile as well as livelihood diversification and conditions of income-poverty in Madumeleng village.

Chapter 4 focuses on data analysis and interpretation of the findings of the study. The analysis is based on the household's respondent about the contribution of livelihood diversification towards income-poverty alleviation within the study area. In addition, it includes visual data as well as observations.

Chapter 5 concludes the study by discussing and presenting a summary of the findings of study in relation to reviewed literature. It entails conclusive report and recommended measures to enhance contributions of rural livelihood diversification towards household food security.

1.8 Significance of the Study

Theoretically, the study is indispensable in complimenting other research areas which shows interest in the field of livelihood diversification and demonstrate the contribution towards household income-poverty alleviation. Therefore, the study spurs the practice of livelihood diversification and helps in the formulation and improvement of government policies in relation to ever-increasing issue of income-poverty particularly in developing countries. Pragmatically, government and Non-Governmental Organizations may also use the findings study as guiding principle towards analysing different dimensions of poverty and rural assets regeneration. Findings of the study will be shared among the community in Madumeleng Village, with a hope that it will enable them identify better income-generating livelihoods to counter persistent income poverty in their households.

1.9 Ethical Considerations

Besides acknowledging other researchers work and publications, findings of the study were precisely and accurately reported with confidentiality. Thus, researcher ensured that rights and confidentiality of respondents/ participants were protected particularly on the household monthly income in order evade reporting which will transparently unveil the participant's identity. According to Mwaniki & Mue (2015), the concepts of voluntary participation and informed consent are integral components of social science research. Prospective respondents in the households of Madumeleng Village were not forced to partake in data collection process. In addition, it was reflected on the questionnaires that prospective participants partake on a voluntary basis and their participation is highly appreciated (Appendix: A). In addition, questions both on questionnaire and interview schedule were not, in anyhow meant to harm emotions of the selected respondents (Kyei & Gyekye, 2011). Furthermore, a researcher disclosed that the subject study is conducted sorely for academic purposes. The researcher was granted permission by the traditional authority of Madumeleng Village to conduct the study and, households were notified about the study in the village (Appendix: E). Therefore, the ethics in the study were taken into consideration.

1.10 Conclusion

Given the noticeable decline of agricultural productivity, most rural people in developing countries start to acknowledge livelihood diversification as optimum route out of income-poverty. Combination of farm and non-farm activities has now discerned a norm and ideal approach for responding to sudden shocks. There are different motives behind decision to adopt diverse of livelihood activities. In developing countries including South Africa, erratic climatic aberrations such as less rainfall and floods, lack of arable land and crop failure are some of the issues that compel people to consider alternative sources of income outside agricultural realm. The chapter herein demonstrated detailed background regarding livelihood diversification and income-poverty on varied contexts. It has further depicted systems of idea pertinent to rational of the study. In addition, methodological procedures to be applied in determining the contributions of livelihood diversification towards income-poverty alleviation at household level. In the forthcoming chapter, the conceptual framework will provide theoretical incision about nexus of rural livelihood diversification from global perspective.

CONCEPTUAL FRAMEWORK AND THEORETICA REVIEW OF RURAL LIVELIHOOD DIVERSIFICATION AND INCOME-POVERTY ALLEVIATION ON GLOBAL PERSPECTIVE

2.1 Introduction

Considerable number of rural development proponents have reiterated that relative majority of rural households across developing countries are tenaciously depending on agricultural activities such as livestock, crop and fish production as their main livelihood and income sources (Barret *et al.*, 2001; Akudugu, 2016; Toindepi, 2016; Marthin & Lorenzen, 2016). Undeniably, agriculture remains one of the main sources of living for most rural households across Sub-Saharan Africa and it is acknowledged for its potential to offer ideal option for growth, income-poverty alleviation and food security (Ambimbola & Oluwakemi, 2013; Marthin & Lorenzen, 2016; Olaleye & Oyinbo, 2016). Theoretically, there are many risks associated with agriculture, and numerous rural farm households may be unable to meet basic needs. Consequently, rural households are often compelled to search for alternative means of livelihoods to cope against unabated income-poverty (Marthin & Lorenzen, 2016; Ambimbola & Oluwakemi, 2013; Ambimbola & Oluwakemi, 2013).

Prevalently, rural households resort to combine livelihoods activities from agricultural and non-agricultural activities in order to transform their living conditions. Diversification of livelihoods by rural dwellers is now discerned as a norm and literature revealed that only few households collect all their income from only one source and hold entire wealth in the form of single assets (Barret *et al.*, 2001; Ambimbola & Oluwakemi, 2013). These livelihoods are widely embraced in developing regions largely because of their ability and potentiality to reduce extreme income poverty particularly in farming households (Jacobs & Makaudze, 2012). Seemingly, livelihoods form integral part of living amongst rural communities. There are various reasons and motivations why rural households diversify their livelihoods amongst rural households (Schwarze & Zeller, 2005; Senadza, 2014).

Consequently, most rural households depend on combination of agricultural and nonagricultural activities and divergent income sources amongst which crop and livestock production feature alongside many other contributions to income and wellbeing (Ellis, 2000; Ellis, 2011). According to Jacobs & Makaudze (2012), livelihood diversity has both economic and social dimensions which must be approached in an interdisciplinary way. Given previous chapter demonstrated the methodological dimensions of the study, this chapter demonstrates different types of rural livelihood activities and underlying implications towards socio-economic transformation on a global context. In addition, it discovers modes and process underpinning rural livelihood diversification. Moreover, the discussion examines the conditions and statuses of income-poverty determinants of income-poverty alleviation. The chapter herein concludes with extent to which rural livelihood diversification contribute towards household income-poverty alleviation nexus.

2.2 The Typologies and Conditions of Rural Livelihoods

Despite increasing attention in the literature, rural livelihood activities are still not well understood and limit the understanding of resources-user and endowment (Marthin & Lorenzen, 2016). There are different livelihood activities which are adopted by rural people in the form of agriculture or non-agricultural activities. Ellis (1998; 2011) synthesized farming activities refers to agricultural production, on-farm post harvesting and processing activities while off-farm activities are related to those associated with permanent, seasonal or casual jobs and wages. In addition, non-farming activities basically regard to local trades, food processing and local services such as crafting, repairs and traditional healing (Alemu, 2012). Lastly, non-income activities which are largely associated with fetching firewood, caring for children/relatives (Ellis, 2011).

Rural households construct different livelihood strategies in order to improve their living standard and such activities enable them to realize their full potential in surviving within the income-poverty trap (Stifel, 2010; Marthin & Lorenzen, 2016). In addition, individuals and families are likely to have different potential access to different income sources, and therefore, participation in these sources would possibly have different impacts on poverty

and income distribution (Ellis, 2011). Prevalently, livelihood activities are mainly carried out for both income generation and household food consumption in rural areas (Schwarze & Zeller, 2005). Despite, it is common that livelihood practices are confined to rural areas, various poverty studies have revealed that even urban areas plague with poverty and, therefore urban dwellers are cajoled to construct diverse livelihood activities as well (Park, Howden & Crimp, 2012). Unlike urban areas, large proportion of rural households tends to carry out different livelihoods which are emanating from agriculture.

In Africa, the poorer households are being recognised to have fewer opportunities in noncropping activities such as livestock rearing and other non-farm work, while having less diversified incomes (Barrett, *et al.*, 2001; Senadza, 2014). Consequently, such appears to reflect relative lack of capital, which makes it intricate to diversify away from subsistence agriculture (Abdulai & CrolesRees, 2001). Theoretically, social grants and local beer brewing tends to be some of the most important income generating activities particularly within rural areas (Alemu, 2012; Liwenga, 2009). Although it is common to combine farm and non-farm activities, some members of the household generally decide to migrate into urban areas for economic transformation. In addition, such individuals contribute immensely to the well-being of the household members (Wouterse & Taylor, 2006; Park *et al*, 2012).

Labour migrants provide some essential means of rural household income generation through remittances. Certainly, rural-urban migration could be seen as an indispensable strategy to generate household income and ensure food security (Ellis, 2011; Senadza, 2014). Therefore, multi-spatial livelihoods and non-resident family member's role in contributing towards the well-being and income accumulation of resident group requires immense recognition (Ellis, 2011). Migration enables rural households to overcome imperfect credit and insurance markets (Wouterse & Taylor, 2006). In addition, urban migrants prevalently continue to maintain strong rural family relation and connection (Wouterse & Taylor, 2006; Ellis, 2011). According to Meso, Manamela & Maake (2016), realisation of rural-urban migration receive immense attention in development literature given the increasing influence on divergent livelihoods and income-poverty persistence.

Most rural households across the developing world have diversified income portfolios (Senadza, 2009).

Thus, rural households do not earn income sorely from farm sources but combine their arming activities with at least one non-farm activities (Barret *et al.*, 2001; Babatunde & Qaim, 2009). Awotide *et al.* (2010) corroborated that livelihood diversification implies the process-broadening of income and livelihood strategies away from purely crop and livestock production towards both farm and non-farm activities that are undertaken to generate additional income via the production of other agricultural and non-agricultural goods and services, the sale of waged labour or self-employment in small enterprises. Moreover, Barret *et al.* (2001) demonstrated that decisions on livelihood strategies may invoke natural- resources, non-natural resource based, off-farm activities, migration, pensions and grants, intensification versus diversification entail dynamic process in which people combine diverse activities to meet their needs at different times predetermined by varied geographical contexts and endowment (Jacobs & Makaudze, 2012).

Subsistence farming is an important component of rural livelihoods in many parts of the world, including Sub-Saharan Africa (Makhado & Kepe, 2006; Mwambi, Oduol, Msenga & Saidi, 2016). There are variety of livelihoods activities which are carried out by men and women respectively (Rogan, 2013). Seemingly, there are gendered roles related to the types of livelihoods carried out within rural areas particularly in developing countries (Senadza, 2014). Most livelihood studies emphasize that women and poor people in rural areas are associated with livelihoods which are prone to produce inadequate income and remunerate less as compared to their counterparts (Meso *et al.*, 2016). According to Cooke & Downie (2010), gender inequality becomes integral and inseparable part of livelihoods in most developing countries where men are in particular favoured. Furthermore, Makhado & Kepe (2006) stated men and women have different assets, opportunities and women rarely own land. Literature demonstrated that rural people engage into disparate livelihoods which range from farm, off-farm and non-farm activities.

The contributions of these activities hinges upon varied household access to resources, endowment and geographical location (Stifel, 2010; Marthin & Lorenzen, 2016).

2.2.1 Farming activities

Farming activities refer to agricultural productions such as crop farming, livestock farming, on-farm small scale post harvesting and the processing of activities (Ellis, 1998; 2011; Akudugu, 2016). Although on a smaller scale, farming is prevalent and predominant in rural households in Africa and it is deemed as the sole engine for improving the living standard in Nigeria (Ambimbola & Oluwakemi, 2013). The poor world is largely a rural world and, in terms of livelihoods, this rural world is an agricultural one where farming predominates and land discerned a critical resource (Rigg, 2006; Jacobs & Makaudze, 2012). "With most of the world's rural poor engaging in agriculture, encouraging smallholders' access to global export markets for high-value products is vital in increasing incomes and hence alleviating poverty in Sub-Saharan Africa" (Mwambi *et al*, 2016:16).

Agriculture widens opportunities and contributes positively into rural household largely because it alleviates income-poverty and food insecurity (Ambimbola & Oluwakemi, 2013). Conversely, agriculture deplorably leads to the withdrawals of critical labour inputs from family farms. On-farm activities may be practiced on any piece of empty space within rural areas; in people's compound, river banks and under power lines (Ellis, 2011). Crops are mainly associated with basic food like cabbages, maize, spinach and are primarily meant for self-consumption. However, in cases wherein a household produce adequately, some proportion of crops are sold to other members of the community as a strategy to generate income in the household (Ellis, 1998; 2011; Senadza, 2014). Specifically, Ellis (1999) avowed that in crop production, there are numerous processes which include cultivation and tillage methods that are applied.

Those particular methods are deemed easy and realistic; however the productivity is low. In most developing countries such as Nigeria, livestock farming is prevalent and predominant for most rural household (Onyinbo & Olaleye, 2016). This owes to the fact that livestock has the ability to dynamically energize household members through production of milk, eggs and meat. Goats, cattle, pigs, sheep and some smaller animals such as chickens are well kept and reared. Through selling the livestock products, households creates a trajectory to generate income (Ellis, 2000; Ambimbola & Oluwakemi, 2013). Notwithstanding its importance on livelihoods, agriculture is plagued with divergent issues which include soil infertility, infrastructural inadequacy, risk and seasonality in rural regions (Ambimbola & Oluwakemi, 2013).

There is a near-consensus that the degree of agricultural output is gradually diminishing in most developing countries (Jacobs & Makaudze, 2012). The waning is arguably motivated by various reasons which may include but not limited to; growing role of nonfarm activities, agricultural incompetence and unfair distribution of resources such as land. Most research synergies interested in rural development revealed that land plays an imperative role in the augmentation of the living standard in developing countries (Ellis, 1998; 2011; Senadza, 2014). Ironically, rural areas are found to have extensive land and other natural resources albeit poverty deplorably affecting relative majority of inhabitants (Rigg, 2006). This could owe to the fact that most rural dwellers possess land which is not arable and hold unfavourable social perceptions about land usage. In addition, Rigg (2006) corroborated distribution of land to incompetent holders is actually trivial; however suggested people empowerment could be a special ingredient for land valorisation.

The current improved socio-economic conditions require more than having access to land for agricultural practices in most developing countries including South Africa (Jacobs & Makaudze, 2012). Rural development policies and strategies have to spur rural dwellers to search for alternatives outside agricultural realm (Ambimbola & Oluwakemi, 2013; Marthin & Lorenzen, 2016). There is an assumption that more households are engaged in farming, the greater inclination of majority of on-farm employment. For some it may be full time and permanent jobs, others find work as labourers while others are rewarded with in-kind (Ellis, 2000; Kepe, 1997). For rural poor households, farming makes up the major source for food and income while for better it is an income supplementation (Kepe 1997; 2002).

2.2.2 Off-farm activities

Off-farm livelihood activities have been realised to be an income generating approach and is an important factor which drives poverty reduction. One could infer that is a clear indicator of livelihood enhancement (Kepe, 2008). It is mainly associated with permanent, seasonal or casual jobs, wages, and work in neighbouring commercial farms. Senadza (2014) revealed that contribution of income from off-farm activities in rural households of Ghana has risen immensely from 16% in 2010 to 48% in 2014. Furthermore, rural labour force involved in non-agricultural sector has increased from 6% in 2008 to 405 in 2012. Undoubtedly, non-agricultural sector provide an increase in rural income and reduce poverty. Thus, it is clear that off-farm activities are considered one of the major most income generating sources within developing regions such Nigeria (Ambimbola & Oluwakemi, 2013).

Controversially, agriculture alone does not provide sufficient opportunities to generate income in a household. Rural off-farm employment can play a prodigiously important role in alleviating income-poverty (Reardon, 1997; Barret et al., 2001; Ellis, 2011). Reardon (1997) specifically revealed that small enterprises are important in terms of achieving sustainable livelihoods diversification. Thus, rural households are not confined to one type of livelihood but consider other off-farm employment opportunities in order to attain sustainable economic development. Literature demonstrated that relative majority of rural households in Africa have at least one member employed in an off-farm enterprise and opportunity (Ellis, 2000; 2011; Senadza, 2014; Vilks, 2014). Livelihood diversification is driven by two processes and factors: distress push, wherein the poor are compelled by circumstances to seek off-farm employment in order for them to accomplish adequate onfarm opportunities; and demand pull, within which rural people optimize new chances of living (Marthin & Lorenzen, 2016). Thus, considerable households might be poorly remunerated and engaged into low entry barrier activities, whilst the latter are more likely to offer a route to improved livelihoods (Reardon, 1997; Ellis, 1999; 2000; 2011; Alemu, 2012).

2.2.3 Non-farming activities

Non-farm livelihood activities refer to food processing, local services such as traditional healing, repairs, hand-crafting, self-employment in trades and small scale businesses (Ellis, 2011). Non-farming activities include earning and unearning income which is received by rural people from the local economy (Ellis, 1998; 2011). Literature revealed that non-farm activities on its own cannot sustain a household; it cannot reduce income poverty in a long term basis (Barret *et al.*, 2001; Senadza, 2014). to Barret *et al.*, (2001) stated that through non-farm activities, households generate income which provide them with adequate cash that enable, particularly a farm household to purchase food during drought or after a harvest shortfall. In other words, non-farm income is also a source of farm household savings, used for household purchases especially in difficult times.

Notwithstanding potential of agricultural activities, rural non-farm is seldom perceived significant route to poverty alleviation (Stifel, 2010). Barret et al. (2001) corroborated that indeed, empirical regularity emerging from non-farm economy studies in developing countries is that a positive correlation of non-farm activity and welfare on average exists. This owes to fact that non-farm employment have potential to reduce income-poverty, inequality, absorb a growing rural labour force, slow rural-urban migration and further contribute towards the growth of national income (Lanjouw, Quizon & Sparrow, 2001). Controversially, for most African countries such as Libya and Burundi, farming on its own does not actually provide enough means of survival in rural areas (Senadza, 2014). Consequently, most rural households exercise combination of livelihoods from on-farm and off-farm activities (Ellis, 2000, Marthin & Lorenzen, 2016). Therefore, it is clear that farming on its own is not a solution to the enhancement of the rural living standard. The realization that rural households in developing countries rely mostly on agriculture for their livelihoods has come slowly. From one point of view, this has to do with massive policy focus on agriculture, at the expense of other livelihood activities (Ellis, 2000; Hajdu, Ansell, Robson, Van Blerk & Chipeta, 2011).

There is an assumption that rural families would be able to support themselves largely from agriculture only if their farming techniques are to be improved (Hajdu *et al.,* 2011).

However, taking into consideration the status guo of agricultural sector in most developing countries, farming households are still in a conundrum and embark on the engagement of non-farm livelihood activities in pursuit of better income accumulation. There are divergent non-farm livelihood sources and such include business enterprises and labour migration, and are deemed beneficial to the improvement of living standard. In corroboration, Jacobs & Makaudze (2012) avowed that even though household head selfidentifies as farmer, the household unit could also rely on wage employment, remittances and social grants to sustain its self. Furthermore, the literature revealed that non-farm rural households and farm workers in some instances earn incomes from the sale of farm output despite their limited access to land (Jacobs & Makaudze, 2012). Non-agricultural livelihoods appear to be the best optimum for augmenting household income especially in rural communities. Controversially, it is found that a worker in a non-farm rural employment could accumulate almost five times more than what is paid in the agricultural labour market within Laos, United States of America (USA) (Jacobs & Makaudze, Marthin & Lorenzen, 2016). Therefore, non-farming livelihood activities are perceived to be significant in supplementing household income and albeit recognized mutual relationship with on-farm activities.

2.2.4 Income-generating livelihoods

Despite many studies emphasis that livelihoods are conventional in rural areas, the study herein does not ignore the fact that even urban dwellers are plagued with income-poverty. Some livelihood studies depicted experiences of urban poverty coax with many people to establish various income-generating livelihoods (Park, Howden & Crimp, 2012). Labour migration, businesses, social welfare grants, repairs, traditional healing and petty cash commodity are some of the common income-generating activities carried out by rural and urban people respectively (Bhandari & Grant, 2007; Winters *et al.*, 2009). Prevalently predetermined by socio-economic factors, these activities vary in terms of contributions towards alleviation of household income-poverty (Park *et al.*, 2012).

Labour migration has been noted as the essential means of income for most rural people in Sub-Saharan Africa (Marthin & Lorenzen, 2016; Meso *et al.*, 2016). Dynamic adult

people are liable to resort to migrate into urban cities for better economic opportunities and entrusted to send back remittances to their family members based in rural areas (Ellis, 2000; Shimelis & Bogale, 2007). Seemingly, labour migration has been a renowned income-generating activity from erstwhile of apartheid thenceforth. Moreover, social welfare grants are significantly noted as most optimum strategy for generating income particularly for households that are unable to establish income for themselves in Southern Africa (Alemu, 2012). According to Zezza & Tasciotti (2010), income-generating activities may further encapsulate street hawking, livestock and crop selling and their variance in contributions widen income disparity.

2.2.5 Food-producing livelihoods

In Africa, most households view agriculture as their main source of livelihoods in rural areas. Notwithstanding climatic aberrations, many people in rural areas hinges upon food producing livelihoods such as crop production, livestock and horticulture for household consumption and income (Ambimbola & Oluwakemi, 2013). Literature acknowledge that crop production and horticulture have the potential to curb food insecurity albeit not marketable (Alvi, Ashraf, Ch, Iftikhar & Ashraf, 2015). In Ghana, Namibia and South Africa specifically, there are perpetual political discourses over distribution of natural resources such as land, to spur agricultural practices for food security and economic development (Rigg, 2006; Jacobs & Makaudze, 2012; Senadza, 2014). Literature demonstrated crop production has disparate categories which ranges from food grain legumes, fibre crops, seed crops, vegetables, root and tuber crops, sugar crops, forage and nut crops (Rigg, 2006; Zezza & Tasciotti, 2010).

Seemingly, relative majority of poor people in developing countries cultivate their crops for consumption and rarely income. However, access to arable land and productive assets was identified as one of the main challenges affecting the poor in developing countries (Jacobs & Makaudze, 2012). Furthermore, better off households are able to access remunerative livelihoods while the poor are obstructed by key entry barriers such as formal education and information access (Alemu, 2012; Marthin & Lorenzen, 2016). In addition, lack of access to market and seasonality are some of the push factors compelling farm households resort to non-agricultural livelihoods (Marthin & Lorenzen, 2016).

Food producing livelihoods further entails livestock farming such as cattle, sheeps, chickens, goats and pigs (Rigg, 2006). Livestock farming holds the potential to combat poverty, hunger and food insecurity through provision of quality food and income generating sources across developing economies (Alvi *et al.*, 2015). In addition, some livestock are enclosed in the household and fed with food provided by people while others are disclosed. The disclosured livestock have access to natural foods and have liberty to breed (Rigg, 2006; Alvi *et al.*, 2015). According to Alvi *et al.* (2015), crop farming is one of the major sources of food and income in many countries such as Pakistan, India and Bangladesh. However, erratic climatic changes, cost of production, low productivity and reduced net grains are limited to support people's livelihoods (Alvi *et al.*, 2015). The literature suggest that persistent food insecurities and under nutrition implies livestock sector needs considerable transformation and improvement to cope against micro and macro challenges in developing countries (Rigg, 2006; Marthin & Lorenzen, 2016).

Horticulture is further regarded as food producing livelihoods particularly in developing countries. Basically, horticulture entails cultivation of gardening of fruits and flowers (Zezza & Tasciotti, 2010). In addition, horticulture has varied sectors which include propagation, plant breeding and cultivation (Zezza & Tasciotti, 2010; Alvi *et al.*, 2015). Ordinarily, local fruits gardening and flower gardening are practiced in rural and urban areas respectively. Mainly, rural people adopt cultivation of fruits for consumption and sell other products to fellow villagers in event of enough production (Stifel, 2010). Although food producing livelihoods play significant role in the alleviation of food insecurity and income-poverty, many people in developing countries resort to diversify their livelihoods to supplement their farm income and respond to challenges associated with agriculture (Ambimbola & Oluwakemi, 2013; Marthin & Lorenzen, 2016).

2.2.6 Overview of the Livelihood Framework Analysis (LFA)

Several studies adopt Livelihood Framework Analysis (LFA) as a methodology and approach to measure access of respective households. The framework demonstrates trends to accomplish sustainable livelihoods in different contexts. In addition, the framework facilitates the attainment of sustainable livelihoods through creating access to range of mixed assets in pursuit of income generation (Barret *el al.*, 2001; Gautam & Andersen, 2016). Rural households requires adequate access to range of assets and productive resources in order to realise significance of livelihood diversification (Marthin & Lorenzen, 2016). According to Winters *et al.* (2009), realization that rural households are engaged into range of economic activities has led to a greater emphasis within the rural development literature on the meaning of livelihoods framework. Rural development identifies strategies and approaches to alleviate multidimensional poverty across developing economies (Jacobs & Makaudze, 2012). However, the capability and expertise of a household to manage and sustain livelihoods receive a scant attention (Rigg, 2006; D'Hease & Kirsten, 2006).

The literature inferred that there is disproportionate little attention paid to accessibility and availability of resources across rural households (Winters *et al.*, 2009). Given the significance of farming land, literature poses questions towards land-focused vision of rural development in developing countries (Winters *et al.*, 2009). Rigg (2006) begged the question of which asset or set of assets is best promoted as part of a strategy to improve the welfare of rural households. Recent studies suggest the best means of promoting propoor growth in the country side through endowing rural households with skills for sustaining the livelihoods. Ordinarily, relationship between certain assets and capacity of rural households to generate income from manifold activities might be country specific and largely hinges upon certain cultural, political and historical context (Winters *et al.*, 2009; Asongu & Tchamyou, 2016).

LFA incorporates components which are required from household and are; capabilities, tangible and intangible assets (Barret *et al.* 2001). The capability generally refers to the

skills and ability of individual in terms of education, training and experience. Basically, tangible refers to the availability of resources which include land, water credit schemes and savings; these entails the combination of human, physical, financial, natural and social assets. Intangible assets are regarded as the claims and access, claims include all social grants and other practical support, access to resources refers opportunities to use productive resources such as information, social networks, and technology (D'Hease & Kirsten, 2006). However, there are considerable studies which critically compared strengths and weaknesses of livelihood analysis framework with neoclassical approaches in order to understand the drivers and dynamics of human well-being (Ellis, 2000; Winters *et al.*, 2009; Khatun & Roy, 2012; Vilks, 2014). This owes the fact that the framework is constituted by livelihood components which are, at some point, used interchangeably because they form the strength upon which people construct their livelihoods and attain livelihood objectives (Barret *et al.*, 2001; D'Hease & Kirsten, 2006).

Given the rural context, livelihood assets in developing countries tend to be ordinarily possessed by households which are better-off households while the relatively poor ones diversify less (Ellis, 2000). Assets ownership has been realised to be one of the key issues within rural areas especially against poor households, and thus the latter become exposed to vulnerability to poverty (Saunders, 2014; Vilks, 2014). Asset deprivation is one of the fundamental drivers of the household's long-term vulnerability to becoming trapped in poverty. The livelihood status of households and their ability to withstand shocks and stresses are largely dictated by their access and control over assets (Ellis, 2000). Livelihood analysis framework is not a direct solution to the outcomes but rather seeks to provide a way of thinking about the livelihoods of the poor people within which identifies effective ways to support livelihoods and reduce income-poverty (Ellis, 2000; Vilks, 2014).

2.2.7 Disparate rural livelihood assets

The livelihood framework analysis is well grounded on the basis that people, particularly rural dwellers, require a wide range of assets in an attempt to procure positive livelihood outcomes and sustainability (Winters *et al.*, 2009; Asongu & Tchamyou, 2016).

Conceptual framework regards these assets as livelihood monomers or building blocks (Ellis, 2011). Winters *et al.* (2009) added that the value and use of an asset depend not only on the quantity owned but further on the ownership status and fungibility thereof. There are livelihood assets within which rural poor have to make trade-offs and changes. These livelihood assets may include natural, physical, human, financial and social capital and they influence each other (Winters *et al.*, 2009). The significance of assets does not necessarily rely on quantity but further encompass the process of ownership which is vital in the realm of livelihood diversification (Marthin & Lorenzen, 2016). For example, land that has a clear and transferable title may be sold while human capital, although clearly owned, cannot be transferred.

Based on access to a set of assets, households allocate labour to different activities to produce outcomes such as income, food security and investment spending (Winters *et al.*, 2009). In other words, it is always significant to consider issues around access before emphasizing immensely on the household endowment and livelihood assets. The allocation of labour to particular labour activity may be short-run response to make-up income deficits due to an economic shock or to obtain liquidity for investment, may be an active attempt to manage risk though livelihood diversification (Winters *et al.*, 2009). Consequently, at given point in time households may have a diverse portfolio of economic activities. In most developing countries, rural households have diverse assets which offer significant contribution to their well-being and income (Martin & Lorenzen, 2016).

2.2.7.1 Natural assets

Natural assets refers to natural resources such as land, water and aquatic resources, trees and forest products, wildlife, biodiversity and environmental services (Ellis & Freeman, 2005; Liwenga, 2009). Natural assets are significant especially to households who derive all or part of their livelihoods from resource-based activities, for example, farming and wood collection. Accomplishing sustainable development has become the centre stage in the study of assets and livelihoods. Understanding the available natural resources and preserving them for current and future use is thus important in achieving

sustainable livelihood outcomes (Vilks, 2014). Natural resources such land and water enable households to practice food producing livelihoods to alleviate food security or generate income through trading. Therefore, the availability of these natural assets helps rural household in diversifying their livelihood activities which result in positive outcomes (Senadza, 2014).

2.2.7.2 Physical assets

Physical assets basically refer to assets which have been brought into existence normally through economic production processes which include infrastructure. The infrastructure entails transport, roads, vehicles, secure shelter, buildings, water supply, sanitation, energy, seed, fertilizer, pesticides and traditional technology (Liwenga, 2009). Physical assets are deemed fundamental especially in creating an enabling environment for livelihood diversification to take place. This owes to the fact that remote areas with fragmented and little infrastructure have been plagued with problems related to the construction of different livelihoods in most developing countries such as Zambia and Ghana (Vilks, 2014). Having access to physical resources is, at all times, significant in encouraging the practice of livelihood diversification into rural areas (Ellis, 2011). Clearly, livelihood diversification cannot be sustainable without support of various physical assets (Marthin & Lorenzen, 2016). For example, if there is no transport infrastructure, it becomes difficult for poor household in particular, to transport their products into the market and effective fertilizers cannot be distributed effectively.

2.2.7.3 Social assets

Social assets refer to the networks which people participate and derive support that contributes to their livelihood activities. It encourages a collaborative participation which widens likelihood to attain sustainable development in absence of disputes (Ambimbola & Oluwakemi, 2013). Moreover, it places emphasis on people and way in which they interact with one another within the society. Hilson (2000) stated that social assets represent resources upon which people draw on to achieve their livelihood outcomes and sustainability. Examples include: relations of trust and mutual understanding, formal and

informal cooperative with shared values and behaviours, collective representation, mechanisms for participation in decision-making and leadership (Cinner & Bodin; 2010; Hilson, 2016). Additionally, Social networks are significant to establish group livelihood strategies such as stockvels and self-help projects which helps the household to alleviate income poverty seasonally (Ellis, 2011).

2.2.7.4 Financial assets

Financial capital refers to the stock of cash which could be accessed to purchase either production or consumption goods. Two main sources of financial capital are available stock in the form of cash, savings, credit or even debt, and regular inflows of money such as labour income, remittances or pensions. Financial capital can be converted into other types of assets that provide people with livelihood options and enable them to adopt different livelihood strategies (Cattermoul *et al.*, 2008). In addition, availability of cash enables sustainability of livelihoods and copes with uncertain economic, political and environmental shocks (Barret *et al.*, 2001).

2.2.7.5 Human assets

Human assets represent the educational level (skills and knowledge) that people possess to pursue certain livelihood strategies (Winters *et al.*, 2009). It is this context that human assets refers to the expertise that a household has to practise different livelihood activities concurrently and able to alleviate income-poverty thereof. Human asset is the most important component which household has to possess to widen opportunities for income generation (Alemu, 2012; Senadza, 2014). Ambimbola & Oluwakemi (2013) refer to human capital basically as an aspect such as health, nutrition, education, knowledge and skills, capacity to work and adapt (Ambimbola & Oluwakemi, 2013). Numerous livelihoods are defunct and function for a shorter period due to lack of skills and knowledge to manage their livelihood activities effectively and efficiently. Therefore, knowledge and skills are important particularly for exercising livelihood diversification within the household for accomplishing livelihood sustainability. Clearly, when a household have

adequate skills and knowledge is able to produce expected outcomes such as income and food (Ellis, 2011; Senadza, 2014).

2.2.8 Rural household vulnerability and livelihoods

Vulnerability implies the likelihood of an individual, household and community to fall uncertainty associated with poverty such as hunger, diseases and limited choices. It is a great threat and lead to income poverty as most rural households are prone towards natural disasters and economic shocks (Khumalo, 2013). In Nigeria, rural households, particularly the poor in villages, are feeble and unable to cope against shocks and often lack access to natural and social resources (Jacobs & Makaudze, 2012; Oyinbo & Olaleye, 2016). Poor people who are relying heavily on agriculture as their main source of income and food for subsistence are unpleasantly affected by climate variability (Khumalo, 2013).

Erratic climatic conditions such as less rainfall exert negative impact on agricultural output and productivity; and this lead to the persistence of income poverty in rural areas (Mwambi *et al.*, 2016). People's lives are dynamic and from time to time move in and out of poverty as consequent of the changes and influences exerted by the environment they live in. This environment is regarded as vulnerability context which forms the external environment in which people exist and gain importance through direct impacts upon people's asset status. It further covers trends such as demographic trends; resource trends and governance trends as well as shocks like human, livestock or crop shocks; natural hazards (floods or earth quake), economic shocks and seasonality of prices (Babatunde & Qaim, 2009).

In corroboration, Khumalo (2013) found that vulnerability depends upon the assets that a household has and the extent to which the assets holders can adopt. Recent literature revealed that not all trends and seasonality are negative. Trends in new technologies and seasonality of prices could be used as opportunities in securing livelihoods within rural areas (Babatunde & Qaim, 2009; Vilks, 2014). In other words, vulnerability context posits

that these trends are directly or indirectly responsible for hardships faced by people, however it could not always be the case (Saunders, 2014).

2.3 Modes and Processes of Livelihood Diversification

Given the persistence of rural income-poverty, it is undoubtedly clear that households have intense continuity in the practice of different livelihood activities concurrently in an attempt to improve the standard of living (Babulo *et al.*, 2008, Ellis, 2011). The literature revealed various motives which encourage practice of livelihood diversification; these include push and pull factors, lack of access to important requisites and locational advantage (Ellis, 2000; Barret *et al.*, 2001; Wouterse & Taylor, 2006; Alemu, 2012). Literature further affirmed there are different ways to practise livelihood diversification; and these include, but not limited to agricultural production, multi-spatial means of survival and grants (Rogan, 2013). For example, a household can generate an income through street vending while on the other hand depending on grants to supplement their income (Ellis, 2011; Khatun & Roy, 2012; Saunders, 2014).

Theoretically, rural livelihood diversification has been acknowledged as a convenient and potential strategy to alleviate income-poverty and food insecurity in developing countries. Albeit decline of agricultural output in most developing countries, agriculture plays an important role in generating income and ensuring food security within rural areas (Ambimbola & Oluwakemi, 2013). Prevalently, livelihood diversification has been an ideal strategy to combat an ever-increasing issue of income-poverty especially amongst rural people with the potential and capability to combine on-farm and off-farm activities (Jacobs & Makaudze, 2012). In addition, only few rural households currently rely only upon natural resources such as land to improve the standard of living but explore alternative strategies to overcome income constraints (Barret *et al.*, 2001; Stifel, 2010; Jacobs & Makaudze, 2012).

Non-farm activities are positively correlated with income and wealth in the form of land and livestock particularly in rural Africa, and thus seems to offer a pathway out of poverty if non-farm opportunities can be seized by the rural poor (Jacobs & Makaudze, 2012). However, some rural development proponents have reiterated that individuals and households carry out livelihood diversification through local resource mobilization and taking advantage by making use of resources within their vicinity (Barret et al., 2001; Khatun & Roy, 2012). Moreover, some other family member take a collective decision to migrate into urban areas in an attempt to bring back remittances which also contribute to income poverty alleviation within the household and such households are regarded as "split families" (Ellis, 2000; Babulo et al., 2008). Some rural households have the ability to alleviate income-poverty through combining other livelihoods with migration decision and the remittances are perceived to be essential towards improving rural household economic development. Wouterse & Taylor (2006) attested that household members who migrate to areas with economic potential tend to facilitate investments in new activities by providing rural households with liquidity, in the form of remittances, as well as income security, in the form of remittance during events of adverse income shock. Furthermore, migration enables rural households to overcome imperfect credit and insurance markets (Saunders, 2014; Senadza, 2014).

Generally, agricultural and non-agricultural income sources constitute a portfolio, where a distribution of income among various sources describes the diversity of a household's livelihood (Niehof, 2004; Ellis, 2011). In addition, the pursuit of additional enterprises in a diversified livelihood strategy constitutes the burden which is only worthwhile if those enterprises help a household to accomplish a desired goal (Perz, 2005). Despite, food producing livelihoods are mainly practised by large number of households in rural areas, relative people reckon that off-farm activities widen and enhance their choices to move out of poverty trap (Ellis, 2011).

2.3.1 The nature of rural livelihood diversification

Diversification of livelihoods is a process which requires adequate access to assets in the household (Marthin & Lorenzen, 2016). There are various methods of diversification adopted by households in rural areas. Rural households are primarily dependent upon agriculture as a source of food and income (Mwambi *et al.*, 2016). However, it is common

that rural households diversify from on-farm, off-farm and non-farm activities for manifold reasons which may include a desire to generate income, alleviating food insecurity, seasonality and intuitive response to poverty (Mwambi *et al.*, 2016). Literature demonstrated that the both poor and non-poor adopt different processes of diversifying their activities.

In addition, their livelihoods have different returns and output. While the poor are mainly agricultural labourers and unskilled non-farm workers, the better-off are involved in skilled labour and small-enterprise self-employment which generates adequate income in the household (Rahut & Scharf, 2012). It is important to focus on the systems and mechanisms involved when rural people diversify their livelihoods (Winters *et al.*, 2009). Niehof (2004) added that households should have the potential and capability to evade vulnerability. Rural households should have ability to transform their assets into income, food and basic necessities. Given the economic shocks and social stress determined by the most rural household, assets should be used while adopting optimum strategies (Meso *et al.*, 2016). There are numerous routes and strategies which are adopted by rural households to diversify livelihoods; and these may include intensification of existing strategies, development of new or diversified strategies, illegitimate activities and unpaid domestic labour (Niehof, 2004; Ellis, 2011).

In accordance with the process of intensifying existing livelihoods, households retain, resuscitate and expand their existing livelihood strategies (Bryceson, 2002). Due to the fact that poor households do not have ready access to pertinent assets, resource and equipment; they experience difficulties in mobilizing available resources in order to achieve realistic and viable livelihood diversification (Bryceson, 2002). In developing countries such as Zimbabwe and South Africa, it is suggested non-agricultural activities are likely to provide an alternative to economic livelihoods for the poor with limited or no access to land (Bryceson, 2002; Jacobs & Makaudze, 2012). Bryceson (2002) reiterated that non-agricultural activities provide the "road to rural wealth".

On the other hand, development of new or diversified strategies has been realised to be one of the ways for livelihood development (Ellis, 2011). There are number of activities in which the rural households trying to alleviate income-poverty. Households may opt to use different activities as alternatives for livelihood diversification. For example, South Africa has a well-functioning initiative of social grants that has a high coverage among the elderly and children. The grants are thoroughly important onto the household incomes particularly in rural areas. Social grants and remittances are theoretically found to be some of the main livelihood activities which are able to, though at a slower pace, alleviate income-poverty in rural areas (Cinner & Bodin, 2010; Vilks, 2014). Agriculture as the main source of livelihood in most developing countries, particularly in rural areas, is plagued with considerable number of problems. Consequently, most poor households are embarking to diversify their livelihoods into off-farm activities as pertaining source of income (Ambimbola & Oluwakemi, 2013). This has led to the prevalence and intensive practice of livelihood diversification in rural areas especially in developing countries. Livelihood diversification is commonly defined as the process whereby rural families construct a diverse portfolio of on-farm and off-farm activities as well as social support capabilities in their struggle for survival and improving the standard of living (Ellis, 2000; 2011).

Various studies have shown that while most rural households are involved in agricultural activities such as livestock, crop or fish production as their main source of livelihood, they further engage in other income generating activities in an endeavour to supplement main sources of income (Ellis, 2011; Ambimbola & Oluwakemi, 2013). A considerable number of rural producers have historically diversified their productive activities to encompass a range of other productive areas. In other words, very few of them collect all their income from any one source, hold all their wealth in the form of any single asset, or use their assets in just one activity (Barrett *et al.,* 2001).

Furthermore, livelihood diversification can be seen as an attempt by individuals and households to find new ways to raise incomes and reduce environmental risk (Hussein & Routray, 2012). Therefore, household may wish to diversify to cope with an unexpected shock by engaging in a number of activities that generate other livelihood resources.

In some developing countries, the agricultural sector is plagued with challenges such as soil infertility, infrastructural inadequacy, risk and uncertainty as well as seasonality among others (Ellis, 2000; 2011). Therefore, rural households are surreptitiously compelled to develop strategies to cope against increasing vulnerability associated with agricultural production through diversification, intensification and migration. Situation in the rural areas has negative welfare implications and predisposes the rural populace to various risks which threaten their livelihoods and their existence. Households may diversify through the production of other agricultural and non-agricultural goods and services, sale of waged labour, or self-employment in addition to other strategies which are undertaken to spread risk (Barret *et al.*, 2001; Ambimbola & Oluwakemi, 2013).

Income derived from farm livelihoods comprise both consumption-in-kind of own farm output and cash income from output sold. Off-farm income refers to wage or exchange labour on other farms within agriculture. It also includes labour payments in kind, such as harvest share systems and other non-wage labour (Ellis, 2000). Non-farm income refers to non-agricultural income sources such as non-farm rural wage employment, non-farm rural self-employment, property income, urban-to-rural remittances arising from within national boundaries, and international remittances arising from cross-border and overseas migration (Barrett *et al.*, 2001:1-3). From the definition by Ellis (2011) of rural livelihood diversification, it can be implied that prompted by survival or the need to improve their standard of living, households construct a diverse portfolio of activities and social support capabilities. Households can combine number of livelihood activities which include agricultural crop production, livestock production, wage work, cottage industry among others in order to supplement income. The mix of activities will depend on household's ability to access different livelihood opportunities (Ellis, 1997; Bryceson, 2002:731).

Migration is a livelihood strategy which is increasingly pursued by rural households outside agriculture (Wouterse & Taylor, 2006; Meso et al., 2016). It may be seasonal, circular, rural-urban or international mediated by capital endowment of migrants and their

households (Senadza, 2014). Wouterse & Taylor (2006) demonstrated that household members who migrate can facilitate investments in new activities by providing liquidity, in the form of remittances, as well as income security, in the form of a promise to remit to their household in the event of an adverse income shock. Clearly, this indicate migrant remittances could be significant to relieve rural credit constraints which may be viewed as a livelihood diversification strategy, as they are sources of income not related to household income from agriculture (Wouterse & Taylor, 2006).

In a situation whereby formal insurance services and credit markets are not existent, migration can provide income that enable households cope with adverse income shocks and to overcome liquidity constraints (Senadza, 2014). Despite little consensus on the degree to which remittances is used significantly for rural investment, migration is widely agreed as the focal point in rural people's risk mitigation strategies. Thus, migration though often ignored and blocked by policy and institutions, is indispensable factor for diversifying rural livelihoods which lead to the improved rural livelihoods (Taylor & Wouterse, 2006; Ambimbola & Oluwakemi, 2013).

2.3.2 Motivations for multiple livelihood adoption

Livelihood diversification is widespread and found in different settings, and the decision to diversify is largely influenced by social, economic and environmental factors (Marthin & Lorenzen, 2016). Literature affirmed livelihood diversification contribute immensely to household incomes in rural communities (Ambimbola & Oluwakemi, 2013; Ambimbola, Adepoju, Olaniyi & Oyewole, 2014). Livelihood diversification has equitable impact on rural incomes and wealth mainly because different mechanisms are involved; but what basically drives diversification of livelihoods? (Ellis, 2000; Barret *et al.*, 2001). There are various factors and incentives which spur rural households to diversify their livelihoods. Practice of livelihood diversification is largely influenced by the push and pulls factors within the household (Senadza 2014). Push factors seasonality, limited risk-bearing capacity in event of incomplete or weak financial systems as well as the constraints in labour and land markets (Ellis, 2011; Senadza, 2014). Furthermore, "climatic uncertainty creates strong incentives to select a portfolio of activities in order to stabilize income flows

and consumption" (Barrett *et al.*, 2001:316, Rogan, 2013). Pull factors entails "realization of strategic complementarities between activities such as crop-livestock integration" or "local engines of growth such as commercial agriculture and/or proximity to an urban area which create opportunities for livelihood diversification in productivity and expenditure-linkage activities" (Barrett *et al.*, 2001:316).

Literature has further highlighted considerable reasons why many people diversify their livelihoods. According to Ellis (2000; 2011) rural people practice livelihood diversification in order to raise household income, spread risk, coping with insufficiency, compensating for failures in credit markets, building on complementarities and seasonality. The process of spreading activities across several sectors helps spread risk and manage uncertainty. For example, farmers may decide to practice crop-livestock integration system to produce a range of crops rather than specializing in one type of income generating activity (Ellis, 2011). According to Marthin & Lorenzen (2016), reasons for livelihood diversification are varied, ranging from an attractive choice for accumulation purposes, enabled by asset wealth and the diversify of those assets, to distress induced strategy brought on by those assets. Theoretically, livelihood could be employed either on progress-pulled and distress pushed diversification. In other words, decision to practice livelihood diversification could be by choice (progress-pulled) and compelled by circumstances (distress-pushed) within the household (Ellis, 2000; Marthin & Lorenzen, 2016).

Notwithstanding varying context, diversification should not only been seen from a survival perspective but also as evidence of improving household wellbeing. It should be noted that, many rural people in Africa do not normally specialise in livestock, crop or fish production to the total exclusion of other income generating activities, but rather, diversify their productive activities to encompass a range of other productive areas (Hussein & Routray, 2012). Moreover, Amini & Bianco (2016) pointed out that a large amount of literature has examined whether household income diversification is a means of survival or a means of accumulation, which have so far remained inconclusive. Therefore, it is impossible to say whether or not rural people's engagement in livelihood diversification strategies is either a sign of failing livelihoods, or a sign of improving prospects for rural

communities without considering the context. Hussein & Routray (2012) revealed that there is multitude of reasons to help explain why rural people diversify which are context dependent, and that livelihood diversification can lead to both positive and negative outcomes. Motivations further include a desire to accumulate and invest a need to spread risk, generate incomes, to require adaptation to survive in eroding circumstances, or some combination thereof (Vilks, 2014; Amini & Bianco, 2016).

2.3.3 Determinants of livelihood diversification

In accordance with the poverty conditions in Europe and Africa, the studies conducted by Ellis (2000) corroborated that livelihood diversification can be an alternative to improve living conditions of the poorer in these areas. Therefore, rural development can no longer be based on typical agricultural activities due to motives such as income augmentation. However, it is significant to heed cognisance on the arduous effort of non-farm activities (Alemu, 2012). Diversification among rural households is mainly influenced by differences in resource endowments like land, labour, capital including access to markets and institutions (Barrett et al., 2001; Akudugu, 2016). In addition, diversification varies among households with asset portfolios determining whether returns are positive or negative. Conceptual literature revealed that households might have similar endowments and opportunities but do not always select the same portfolio of activities (Alemu, 2012; Hussein & Routray, 2012). Differences occur in preferences for income, consumption, wealth and status. However, the ability of a household to adopt more profitable diversification strategies is also determined by having the skills, location, capital and social connections to pursue other activities (Senadza, 2014). Access to education, social network and formal credit institutions are some of the determinants identified in the literature (Schwarze & Zeller, 2005; Scot, 2015)

Notwithstanding lack of infrastructure, household endowment and other necessary prerequisites, rural household are incredibly stimulated to practice livelihood diversification with specific cognizance to its potential towards income-poverty reduction (Ellis, 2011). Diversification may be a discerned risk management and survival strategy in instances where absence of markets compels self-provision of some goods and services by households (Ellis, 2000; Akudugu, 2016). Furthermore, diversification of labour activities and income is largely determined by the absence of markets. It is therefore important to pay immense attention on access to market as a determinant of livelihood diversification (Saunders, 2014). Besides income augmentation, numerous studies have indicated that where physical access to markets is deemed costly and causes product markets failures, households construct livelihood diversification in order to satisfy own demand for diversity in consumption (Barret *et al.*, 2001; Vilks, 2014).

Moreover, earnings from diversification where access to credit is non-existent could overwhelm relative capital impediments, purchasing power, equipment improvements on one's farm (Barrett *et al.*, 2001:321). Locational advantage facilitates ways of diversifying particularly for rural households who are geographically adjacent to the active urban market (Davies, 2004; Akudugu, 2016). However, it should not be disregarded that in some cases, closeness to urban areas further incites high competition from factory-made substitutes sold in rural market centres. In addition, his may lessen the extent to which rural households can diversify (Davies, 2004; Marthin & Lorenzen, 2016).

Moreover, climate aberrations impact negatively upon farm production particularly for smallholder farmers. Continuous decline of agricultural productivity and returns prompt rural households resort to diversify their livelihoods (Vilks, 2014; Mwambi *et al.*, 2016; Oyinbo & Olaleye, 2016). Thus, erratic rainfall and environmental degradation are some of the noticeable factors towards a decision to diversify livelihoods from on-farm and non-farm activities (Oyinbo & Olaleye, 2016). This basically implies that the decision to diversify may also be driven by the need to cope with climatic variability or extreme weather patterns such as drought. Diversification is therefore discerned as a natural response to climatic risk and transactions costs in lower potential agricultural areas (Barret *et al.*, 2001; Haggblade, Hazell & Reardon, 2007). In instances where crops fail or livestock die, households respond by reallocating labour to other pursuits such as formal employment off-farm and informal employment off-farm. Ellis (2011), revealed that

off-farm employment provides cash income in labour earnings and grant those with rural non-farm incomes superior coping capacity.

Notwithstanding the aforementioned, diversification is a natural response to climatic risk non-farm activity is relatively high in areas of better-than-average evidence and agricultural productivity, which underscores importance of taking into consideration intersectoral linkages (Ellis, 2000; 2011). Depending on context, this implies that non-farm livelihood diversification maybe exercised to complement farming activities instead of replacing thereof (Ellis, 2011). Climate variability has dual impacts on the process of diversifying. This means that the variation may drive households towards conducting diversification or rather precludes from it (Ellis, 2011). The availability of assets such as savings, land, labour, education, access to market or employment opportunities and other public goods can be seen as primary factor in determining a household's capability to diversify (Cinner & Bodin, 2010). Furthermore, opportunities to diversity vary among households with differences in resource endowments such as land, labour, capital and access to markets and institutions playing a central role in the extent to which diversification occurs (Barrett et al., 2001). The extent of livelihood diversification is largely determined not only by asset portfolios but also having the necessary skills, location, capital, credit and social connections for pursuing other activities (Hussein & Routray, 2012; Vilks, 2014).

Diversification may also be carried out as a coping response to the loss of capital assets needed for undertaking conventional on-farm production. Due to inadequate arable land, increased producer ratio, credit delinquency and environmental deterioration, diversification could be an immediate response (Warren, 2002:5). Consequently, the choices that people employ regarding the use of their asset portfolio in pursuing income, security, wellbeing or other productive and reproductive goals define their livelihoods. The level of assets owned such as livestock ownership is positively associated with income diversification, even controlling for level of income in developing countries. Assets are not only an essential factor of production representing the capacity of the household to

diversify but indicators of improved household income (Webb & Block, 2001; Saunders, 2014).

The conceptual framework affirmed that households surviving the famine with higher than average income and food consumption levels also had a more diversified income base and more valuable assets in hand with specific reference to livestock (Rogan, 2013; Toindepi, 2016). In addition, greater income diversification was positively associated with per capita income level, higher dependency ratio, location in the highlands as well as ownership of non-farm assets (Winters *et al.*, 2009). Warren (2002) pointed out that diversification could be undertaken with specific aim of strengthening the household asset base through accumulating savings needed to expand land holding, offer education opportunities to the young generation, or insure themselves against illness and aging. This includes diversification which occurs as a way to boost environmental sustainability of a particular livelihood strategy. However, one of the key questions facing researchers concerned with understanding livelihoods is about how diversification contributes to survival, asset accumulation, and the relative proportions of diversification income which are used for consumption versus investment (Hussein & Routray, 2012).

Educational attainment has been identified through conceptual framework as one of the most important determinant of non-farm earnings (Alemu, 2012). Skilled and educated may be self-employed or can secure stable long-term employment at relatively high salaries, while the unskilled and uneducated depend on more erratic, lower paying casual wage labour in the farm sector (Alemu, 2012). Therefore, educational attainment can therefore serve as entry barrier to better paying nonfarm employment or self-employment in rural Africa (Barrett *et al.*, 2001; Alemu, 2012). That is, education is critical since the better-paid local jobs require formal schooling and that there is a correlation between education with rural non-farm business success (Davies, 2004). With the necessary education, migration is more likely to be successful. Owusu *et al.*, (2011) pointed out that schooling was an important determinant of participation in non-farm work. In particular, education in non-farm work. However, the same authors note that it is not clear how

schooling beyond primary level and the achievement of literacy and numeracy, provides skills that matter in the majority of rural non-farm activities (Vilks, 2014).

Since access to education and low wealth status limits opportunities to diversify for poor households, diversification can also take the form of investing in human resources in the present in order to diversify the future resource-base of the (parental) household. Several studies have shown investment in children's education can be a long-term livelihood strategy aimed at creating a source of income transfers for the parents when they reach old age (Niehof, 2004:333; Ellis, 2011). Constrained access to credit and financial savings hinders acquisition of assets which are necessary to diversify out of crop agriculture to non-farm activities. Restricted access to capital serves as a major obstacle to investment and entrepreneurship (Davies, 2004). Poor people are consequently left with less diversified asset and income portfolios, forcing them to bear both lower returns and higher variability in earnings (Davies, 2004; Vilks, 2014). Ellis (2000) attributed that low rural credit availability to high costs of setting up banking operations in rural areas, difficulty and cost of securing adequate information on potential borrowers, the risk of default on loans, and the absence of collateral to put up against loans. Therefore, credit market failures can also provide another motivation for diversifying livelihoods. In the absence of lending facilities, households engage into activities that generate income (Ellis 2000; 2011; Toindepi, 2016). Smith, Gordon, Meadows & Zwick (2001) identified lack of financial services and credit as constraints towards potential diversification into non-farm economic activities.

Despite the number of institutions engaged in this activity, lack of knowledge about credit providers, tight repayment schedules, high initial capital requirements, and the lack of loans for agricultural purposes represent barriers to access (Smith *et al.*, 2001). Diversification of livelihoods is being reckoned to shape by gender relationships. Women have potential to undertake similarly wide range of diversification activities as men. However in various contexts, men are able to avail themselves of diversification opportunities which are exclusive to women (Hussein & Routray, 2012). Gender relationships can constrain or promote access to some household assets or the mobility

of certain gender and age groups (Kepe, 2008; Liwenga, 2009). Therefore, degree of involvement in diversification activities and the unequal distribution of their benefits vary between genders (Ellis, 2000:295). The study by Smith *et al.*, (2001) revealed upon determinants and patterns of livelihood diversification that men have greater degree of occupational livelihood diversification as compared to women. Within the 'poor' and 'average' well-being groupings, women were mainly engaged in agriculturally-related activities, crop and small livestock production, cottage industries and some farm labouring (Ambimbola *et al.*, 2014).

Men within these groupings were identified as the most active diversifiers, both in the range of livelihood activities, and number practiced by individuals. Historically African women are known to have been active in combining farm and non-farm income-earning activities as an adaptive strategy during periods of chronic or transitory food insecurity (Haggblade *et al.*, 2007). Impediments to effective diversification by women are deeply ingrained in cultural and socio economic set up in many societies where perceptions that cash crops and income-earning activities are part of male domain; while production of subsistence food crops consumed in the household are confined to female domain (Haggblade *et al.*, 2007).

Furthermore, seasonality as an inherent feature of rural livelihoods is evident through varying returns to labour time. This refers to "income that can be earned during the year in both on-farm and off-farm labour markets" (Ellis, 2000: 293). Furthermore, Niehof (2004) revealed rural communities' need for and possibilities of livelihood diversification depend on seasonal time. Seasonality causes changes in occupation to occur as labour time is switched from lower to higher return activities (Ambimbola & Oluwakemi, 2013). Seemingly, important motive for livelihood diversification associated with seasonality is to reduce income variability. Livelihood options for households that are influenced by seasonality include seasonal migration to other agricultural zones, circular or permanent migration to non-farm occupations (Perz, 2005).

One rationale for diversification is to create a portfolio of livelihoods with different risk attributes (Barret *et al.*, 2001; Shemelis & Bogale, 2007). This implies that diversification may mean that households accept lower economic returns as long as there is greater security and lesser risk. Experience of crop or market failure can provoke diversification as a means of spreading perceived risk and reducing the impact of total or partial failure on household consumption (Warren, 2002:5). "In situations where there are decreasing or seasonally varying returns to labour or land; imperfect markets for assets, finance and commodities, diversification can be immediate response" (Barrett *et al.*, 2001:323). With diversification, risk adverse households may choose the second best income-generating alternative which entails giving up a certain amount of income by diversifying rather than face total failure hazard (Warren, 2002:5). Diversification maybe a response to income shocks of crop failure or livestock losses which may force households to reallocate labour to other pursuits, such as wage labour, informal employment off-farm or non-agricultural activities on-farm such as beer brewing (Makhato & Kepe, 2006).

2.3.4 The impediments associated with diversification of livelihoods

The process of livelihood diversification generally contributes to sustainability of a rural livelihood because it improves its long-run resilience in the face of adverse trends or sudden shocks (Ellis, 2000; 2011). It is important to consider that securing livelihoods is closely connected to substitution of capabilities amongst assets as well as activities. Additionally, low potential for substitution makes livelihood more vulnerable, especially to shocks, since sudden change in single asset or activity cannot be compensated by redeployment or switches between them (Ellis, 2000). In addition, it is indispensable to take into consideration the fact that households vary not only in the profile of assets that they hold, but also in their capability to substitute between assets when confronted by change. As a result of increasing dependence of agriculture, livelihood diversification ordinarily, process of change in weather patterns has negative impact towards on-farm livelihoods in rural areas. Agriculture remains the central asset base, with production of food crops, the core of almost all livelihood strategies of rural dwellers (Ambimbola & Oluwakemi, 2013).

Ellis (2000) demonstrated that rural women are poorer on average, than rural man. Therefore, female-headed households are poorer for variety of reasons than maleheaded households. Additionally, inequality in the distribution of consumption within the household makes women in general, poorer than male irrespective of the headships of the households (Das, 2014). In essence, diversification deemed to improve household livelihood security while at the same time trapping women in customary roles (Das, 2014). Ellis (2000) revealed gender is integral and inseparable part of rural livelihoods whereby men and women have different assets, access to resources, and opportunities. In addition, women rarely own productive assets such as land and are associated with low education (Liwenga, 2009; Das, 2014)

2.4 The Conditions and Statuses of Rural Household Income-Poverty

The persistence of income-poverty has been identified to be an increasing and universal issue in most developing countries (Vilks, 2014). Consequently, households are inclined to come up with alternative strategies for the purpose of income diversification (Ellis, 2011). From one point of view, rural people has considerable tendency of experiencing income poverty largely because they depend upon subsistence agriculture for improving their living standard. Theoretically, a rural household's decision to pursue an income strategy other than a purely farm income has been considered to be depended upon the incentive and the capacity to diversify (Senadza, 2014). Recent rural economic studies have undoubtedly depicted that agricultural income productivity has greatly surpassed by non-farm income and this has been a consequent of fluctuating socio-economic status across developing countries (Owusu et al., 2010; Ellis, 2011; Padilha & Hoff, 2011). To minimize income variability, literature inferred off-farm income opportunities should form basis in supplementing on-farm income as well as to create sufficient access towards income sources (Owusu et al., 2010; Jacobs & Makaudze, 2012; Senadza, 2014). The adoption of livelihood diversification as an income generating strategy acknowledge that traditional view which rural economies are purely agricultural is obsolete (Reardon et al.,2006; Jacobs & Makaudze, 2012; Senadza, 2014).

Recent rural development studies have demonstrated that livelihood diversification has now embraced by rural dwellers wherein most households construct variety of livelihood activities which are believed to be the catalysts towards improving the living standard (Ellis, 2011; Jacobs & Makaudze, 2012; Senadza, 2014). In addition, Babatunde & Qaim (2009) attested that many rural households across the developing world has diversified income portfolios whereby they do not earn income solely from farm sources but rather combine their farming activities with at least one off farm activities. The process of combining on farm and off farm sources as a way to alleviate income-poverty indicate that; in spite of decrease in reliance, agriculture has continuously served as a basis for household income condition and thus should not be considered as triviality especially in developing countries. Although rural households pursue different livelihood strategies to maximise income, some households depend entirely on their own farm for income maximization, while others are able to secure income from a combination of income earning opportunities (Barrett, Bezuneh, Clay & Reardon, 2005; Senadza, 2014).

In addition to household income diversification, most rural dwellers tend to make a decision whereby some prospective household members migrate to areas with economic potential and opportunities such as urban areas in order to improve the living standard (Ellis, 1998; Ellis, 2011; Jacobs & Makaudze, 2012). Recent research suggests that household members who migrate to urban areas have the ability to facilitate investments in the new activities by providing rural households with liquidity, in the form of remittances, as well as income security (Jacobs & Makaudze, 2012). Furthermore, migration is embraced for its potential and capability through enabling rural households to overcome imperfect credit and insurance markets (Ellis, 2011; Meso et al., 2016). Rural households are often encouraged to cope with both poverty and income variability (Wouterse & Taylor, 2008). There is gradual advancement of explanations in terms of why people take a decision to migrate, and each has its own implications for predicting migration's impacts on sending households, including on income diversification (Barrett et al., 2005; Wouterse & Taylor, 2008). There is a mutual understanding and consensus in the literature that despite, household income-poverty is still viewed as one of the major problems, rural people have arduously constructing variety of livelihoods activities as a prosperous

strategy to generate sufficient income for improving the standard of living (Babulo *et al.,* 2008; Kantor, 2009; Cinner & Bodin, 2010; Senadza, 2014). Unlike in the past few decades, rural dwellers have increasingly embraced the contemporary approach of combining on-farm and off-farm sources of income (Vilks, 2014).

2.4.1 Multi-dimensions of rural poverty

The United Nations (UN) has adopted millennium declaration by announcing Millennium Development Goals (MDGs) in September 2000. The declaration provides a decent livelihood through measurable standards to millions of poor people around the world (loakimidis & Heijke, 2016). Underpinning the MDGs, the eradication of poverty became one of the main goal within which countries of different socio-economic standard has committed to combat in 2015. Ioakimidis & Heijke (2016) attested that alleviation of poverty remain one of pressing challenges across developing countries. Literature concur there is no universal definition of poverty. However, plethora of poverty studies acknowledges poverty is multidimensional and affects people differently (Kepe, 2008). According to Owolabi, Nasim, Shiraz & Ghani (2016), poverty is multidimensional and considered in terms of economic, social indicators such income, education, health care, access to food, social status, self-esteem and self- actualization.

Although poverty could be exposed to different settings across the country, rural people in low income countries are intensively exposed to different dimensions of poverty, particularly income-poverty (Owolabi *et al.*, 2016). In addition, rural people are conventionally characterised by low level of income, less education, food insecurity, and poor infrastructure while exposed towards inadequate access to productive assets (Narayanan, 2015). The alleviation of income poverty is a major concern owing to the fact that most rural households depend largely on farming and inadequate social welfare grant, particularly in developing economies (Narayanan, 2015). Literature demonstrated that agricultural sector is faced with number of challenges such as climate aberrations and unproductive land (Ambimbola & Oluwakemi, 2013). Consequently, rural people resort to venture into disparate livelihoods which have the potential to generate reasonable income in their households (Marthin & Lorenzen, 2016).

The dimensions of poverty are often interconnected and exert influence on each other. These dimensions are noted as material and non-material across different settings (Zezza & Tasciotti, 2010). According to Niehof (2004), combination of both material and non-material poverty dimensions enmesh most rural people into the poverty cycle. In Africa, most people do not have adequate access to basic amenities such as food, shelter, clothing and income. In addition, these people lack key elements such as specialised skills for remunerative employment, access to economic assets and high self-esteem (Owolabi *et al.*, 2016).

As a result, relative majority of people in Sub-Saharan Africa fail to escape the poverty trap and subsequently get exposed to absolute poverty (Narayanan, 2015). Generally, the literature demonstrated that there are different dimensions of poverty across the globe. Multi-dimensions of poverty consist of issues such as income-poverty, food insecurity, inadequate infrastructure, illiteracy, powerlessness, vulnerability as well as inadequate access to market (Ioakimidis & Heijke, 2016). In addition, the analysis of multi-dimensions of poverty encapsulates the rigorous scrutiny upon economic, social, cultural, political environments to underpin process of poverty reduction (Chowdhury & Mukhopadhaya, 2014)

2.4.1.1 Income-poverty

Erstwhile, measurement of poverty has been a prime interest for most researchers in poverty studies and policy development across various countries. However, income dimension has always been central in determining poverty status in the households; accompanied by different variables such as food consumption, educational attainment and endowment (Chowdhury & Mukhopadhaya, 2014). The literature revealed that most rural households are commonly reliant upon agricultural activities for subsistence and trading amongst themselves. Farmers in low-income countries sell some of the crops at harvest to supplement their income and alleviate food insecurity (Akudugu, 2016).

However, in event of climatic aberrations and seasonality, most households are prone to income-poverty. This is common to households who have scant attention towards non-farm agricultural activities and those who are entirely relying on farming (Marthin & Lorenzen, 2016). In addition, the persistence of income-poverty in developing countries is effectuated by inadequate infrastructure, geographical disadvantage and low level of education in respective households (Rigg, 2006; Owolabi *et al.*, 2016). According to Veldeld, Juman, Wapalila & Songorwa (2012), the country's overall wealth and potential or lack thereof, exert immense influence on socio-economic development of intended beneficiaries. Therefore, the performance of a Gross Domestic Product (GDP) and Gross National Product (GNP) directly determine the socio-economic transformation in the country (Veldeld *et al*, 2012; Narayanan, 2015).

Notwithstanding a decrease of agricultural productivity and its significance, the literature demonstrated that inadequate non-farm employment opportunities and insufficient governmental support are some of the major factors underpinning income-poverty persistence in Sub-Saharan Africa (Veldeld *et al.*, 2012; Owolabi *et al.*, 2016). In addition, a household could be regarded income-poor when it does not have sufficient income to purchase basic necessities such as food, clothes, decent shelter and access to health and educational facilities (Park *et al.*, 2012). The literature concurred that poverty is multidimensional and vary across households, communities and countries. However, the multidimensionality is often neglected at the policy formulation stage in most relative developing countries (Chowdhury & Mukhopadhaya, 2014). Despite decline of agricultural practices, inadequate infrastructure and lack of job opportunities, rural households resort to diversify their livelihoods from farm and non-farm sources albeit most are informal (Zezza & Tasciotti, 2010, Marthin & Lorenzen, 2016).

Measuring income-poverty requires the identification of two major factors which are; income and income poverty line (Narayanan, 2015). According to Rogan (2013), all individuals living in the household which per capita income (or per adult equivalent) income or rather expenditure is below designated poverty line are identified as poor. However, in cases wherein households do not report income from either employment or

grant, total household expenditure is used as proxy for income (Rogan, 2013). It is universally accepted that a community, household or individual that is not income poverty stricken has sustainable access to purchasing power, often in the form of monetary value to gain access to basic needs and food with minimum nutritional requirement (Scot, 2015, 2013).

2.4.1.2 Food insecurity

Poverty and food insecurity are the most severe and persistent problems faced by almost all countries globally (Shimelis & Bogale, 2007). Agriculture remains one of the main sources of livelihoods for rural people in particular (Mwambi *et al.*, 2016). Conversely, agricultural sector is plagued with considerable challenges such as climatic aberrations, soil infertility and seasonality. As a result, the significance of agricultural activities is declining especially at household level. Concurrently, non-farm activities are receiving tremendous significance due to its potential to generate desirable income in the households (Ambimbola & Oluwakemi, 2013; Marthin & Lorenzen, 2016). Rural people are prone towards food insecurity as relative majority depend on agriculture for consumption and income (Akudugu, 2016). According to Gautam & Andersen (2016), subsistence producers and small farm wage labourers in the rural areas of low-income countries constitute the majority of the global poor and food insecure populations.

Despite the significance of agriculture, Ethiopia has been food-deficit country for several decades. Food insecurity in Ethiopia was mainly effectuated by challenges such as inadequate growth food production, high population growth, inappropriate government intervention in the economy and prolonged civil war (Shimelis & Bogale, 2007). Although they do not produce enough, rural households are prone to food insecurity largely because they hold little in reverse and have scant savings while practicing less income-generating livelihoods (Shimelis & Bogale, 2007; Khan, Azid & Toseef, 2012). With most of the world's rural poor engaging in agriculture, encouraging smallholder's access to global export markets for high value products is essential in increasing incomes and hence alleviating income-poverty, which is predominant in Sub-Saharan Africa (Mwambi *et al.*, 2016).

2.4.1.3 Voicelessness, marginalization, powerlessness and gender disparity

Voicelessness, marginalization, powerlessness and gender disparity are some of the major dimensions of poverty which are inextricably perpetuating the low level standard of poor people, women and children in the society (World Bank, 2016). In addition, lack of accountability and transparency by the state are some of the factors which affect economic progress in most developing countries (Veldeld *et al.*, 2016; World Bank, 2016). According to Kepe (2008), these dimensions are interlocked and linked with social exclusion and inadequate access towards productive assets. Voicelessness and powerlessness are associated with blue print approach and centralised decision making at national, community and household level (World Bank, 2016). Seemingly, their lack thereof, limits the influence upon decision making over social interventions by intended beneficiaries. Rural areas are often marginalized and deprived from exerting influence essential developments which might offer socio-economic transformation.

Gender disparity is common in most rural communities wherein cultural values deprive women to actively participate into high yielding economic activities (Kepe, 2008). Thus, the state of gender disparity and marginalization incite income-poverty, vulnerability and food insecurity particularly on female-headed households (Kepe, 2008; Veldeld *et al.*, 2012). Literature suggested women empowerment as an optimum strategy where the powerless people become conscious of their situation, gain skills and develop selfreliance while granting women an opportunity to take control of their lives (Das, 2014). In addition, gaining more access to steady income and economic power security applies to economic empowerment as one of the defining dimensions of women empowerment. According to Das (2014), female economic empowerment is usually about increased access of women to income-generating assets, financial resources, savings, increased financial decision-making power and more economic independence.

2.5 The Determinants of Rural income-Poverty Alleviation

The process of measuring, assessing and analysing poverty is traditionally linked to a single dimension which in most cases entails income or consumption. Income-poverty has been acknowledged through literature as one of the major challenge facing rural dwellings in developing countries (Ataguba, Ichoku & Fonta, 2014; Senadza, 2014). "Money is a universally convertible asset that can be translated into satisfying all other needs" (Ataguba *et al.*, 2014:332). In other words, income remains a crucial economic development component which requires immense attention particularly for poverty reduction in rural areas. However, it is undeniably clear that poverty is multi-dimensional in a sense that goes beyond monetary aspect in rural development context.

In response to wide spread income poverty, Saunders (2014) revealed the abundant of poverty alleviation measures engulfed within public works program as well as the establishment of micro-finance in rural setting. Social enterprise has been discovered through literature as one of emerging determinant of income poverty alleviation in developing economies (Jacobs & Makaudze, 2012; Saunders, 2014; Senadza, 2014). The literature revealed that social enterprise, through the prevalent of micro-finance; has now emerged as a newer poverty reduction model which is swiftly receiving tremendous attention within developing countries (Cinner & Bodin, 2010; Jacobs & Makaudze, 2012; Saunders, 2014).

The provision of credit facilities to rural dwellers has gained universality as it provides an enabling environment for socio-economic transformation. Rahut & Scarf (2012) further attested that local economic development proponents promote the start of micro business especially by rural poor in attempt to fight against income-poverty. Micro-finance program offer financial services to poor by typically providing a blend of capital, business training and other business development services in support of micro-finance start-ups (Jacobs & Makaudze, 2012; Saunders, 2014). Moreover, despite noticeable impediments and unsuccessfulness towards attainment of Millennium Development Goals (MDGs), the conceptual framework posited that it is advisable to pay immense attention on the ever-increasing contributions of private businesses towards alleviation of income-poverty in

rural areas (Vilks, 2014). Conspicuously, enforcement of Corporate Social Responsibility (CSR) can play an indispensable role towards improving the living standard in rural areas. To further explore CSR strategies of transnational corporations has been discerned to be a beneficial approach peculiarly regarding their impact upon income-poverty alleviation (Liwenga, 2009; Cinner & Bodin, 2010; Senadza, 2014; Vilks, 2014).

2.5.1 Key components of income-poverty alleviation

Income-poverty alleviation and its eventual elimination still occupy a central position in developing countries, particularly in Africa, where poverty remains a pervasive issue (Jansen *et al.*, 2015). It is for this reason that various strategies have been implemented by different countries with varying degrees of success. People-centred development emphasizes the notion that good development is not to develop objects, but ensuring that people become focal point of development. Unlike in the past, poverty alleviation should be central, and local people should be given the opportunity to define and solve their common problems by creating conducive environment to enable socio-economic transformation (Akudugu, 2016). Literature demonstrated developmental interventions and income-poverty alleviation embraces concepts such as economic growth; human development; environmental conservation; income-poverty alleviation, elimination f dependency syndrome and other social ills (Das, 2014; Toindepi, 2016).

2.5.1.1 Employment opportunities

Employment amongst other things is largely seen as one of major determinants of income poverty reduction (Scot, 2015). Access to employment presents people with opportunity to secure a fixed amount of income that they receive on a weekly or monthly basis. Employment can therefore demonstrate the potential to diminish income-poverty provided access to basic needs and essential requirement to maintain a minimum level of essential goods is guaranteed (Statistics South Africa, 2011). Furthermore, employed individuals receive a variety of work oriented benefits and allowances that assist in reducing income poverty (Klasen & Woolard, 2008). However, careful attention should be given to other

factors that might hinder the potential of employment to contribute significantly to the reduction of income poverty. These can be household size and number of individuals employed per household (Klasen & Woolard, 2008). However, apart from employment, venturing into business is an ideal route towards improving the economic status of the rural people.

2.5.1.2 Business ventures

Businesses ventures are largely seen to have the potential of improving the economic prospects of the owners/managers provided it becomes a profitable enterprise (Scot, 2015). Business ventures are globally considered to be entities that are born out of a need to generate a profit. Furthermore, these entities illustrate the capacity to greatly improve the economic prospects of the owners and staff (Rogan, 2013). This can be solidified by fact that these entities enter into business industry with clearly defined market/or niche that will eventually yield positive returns provided that these enterprises are not faced by impediments along the way (Rogan, 2013). However, it is crucial to be conscious of the risks and hurdles associated with the business environment because establishing a business requires hard work, patience and persistence to eventually gain a profit and reduce income-poverty (Scot, 2013; Asongu & Tchamyou, 2016).

2.5.1.3 Financial literacy

Financial literacy refers to significant way of acquiring knowledge that will contribute meaningfully to the likelihood of income-poverty reduction (Scot, 2015). It is universally accepted and acknowledged that access to education and knowledge that will change an individual's perspective on how they utilize their income is important to financial freedom and security. An individual that is financially literate is considered to have an edge over one that is financially illiterate (Klasen & Woolard, 2008). This can be justified by the fact that financial literacy provides one with relevant saving and investments insights that are crucial to financial freedom and sustainability especially in the midst of the current uncertain and fluctuating micro and macroeconomic climate. Rogan (2013) indicated

strategies and methodologies of financial literacy can be attained from various available commercial banks as well as taking a financial literacy courses at the nearest accredited learning institution.

2.5.2 Assets and income-generating activities in rural areas

The context within which rural households operates differ from one country to the other. However, there are noticeable assets and factors which play a significant role in the economic development of individuals and households (Toindepi, 2016). According to Winters *et al.* (2009), access to land, quality education and adequate infrastructure development facilitates economic development of rural households across developing countries. Seemingly, these assets appear at the focal point of policy formulations which seek to promote local development. Despite economic instabilities, it is abundantly apparent that developing countries direct their investments towards these key assets at local areas in to enhance rural livelihood systems and income generation (Asongu & Tchamyou, 2016).

2.5.2.1 Access to land

Land remains a critical asset for development of households in developing countries. However, most people, particularly in Sub-Saharan countries do not have adequate access to land. In South-Korea, Namibia and South Africa, spatial distortions by colonial regimes created imbalance in terms of ownership of land amongst respective citizens (Gumede, 2014). Land access inextricably associated with agricultural practices which include both crop and livestock production. Therefore, widening access to land facilitate the struggle against poverty among rural communities with vested interest in farming. According to Winters *et al.* (2009), land is an asset which is not fungible across range of activities and has a direct value only in agricultural production despite can be used for different agricultural activities. Jacobs & Makaudze (2012) concurred that the level of dependence on land and natural assets to work is disproportionately low as compared to the past. In addition, growing interest on rural off-farm and non-farm income shows that rural people's livelihoods are derived from disparate sources and thus, are not dependent on agriculture as previously assumed (Onyimbo & Olaleye, 2016).

Despite the renowned research discoveries that few people depend largely on land, access to land remain an important factor in combating poverty in rural areas. Most studies interested in rural livelihoods demonstrate that better-off households are mainly engaged in livelihood systems with high returns as compared to the poor (Alemu, 2012; Ambimbola & Oluwakemi, 2013; Senadza, 2014; Marthin & Lorenzin, 2016). Relatively, most poor households rely upon agricultural productions for food security and income generation due to entry barriers towards non-farm activities (Senadza, 2014; Onyimbo & Olaleye, 2016). Seemingly, access to land dictates whether the household remain in agriculture or shift to off-farm activities. Thus, there is a relationship between land size and non-agricultural occupation which differs primarily on socio-economic status of the country (Winters et al., 2009). The decision to optimize non-agricultural activities could intensify in countries where land scarcity is a greater issue and such as in parts of Asia. However, the relationship may get weaker as development occurs and agriculture becomes trivial when non-agricultural activities increase in importance (Winters et al., 2009; Gautam & Andersen, 2016). Therefore, access to land in developing countries may play substantial role in alleviating different dimensions of poverty.

2.5.2.2 Education attainment

Plethora of livelihood studies suggests access and attainment of education as practical solution to socio-economic challenges faced by rural people across global perspective. The human capital of a household is measured by the level of schooling with vested interest on attainment of household head's education (Winters *et al.*, 2009; Akudugu, 2016). Distribution of land-focused rural development is trivial in the absence of skills and expertise to generate income while combating poverty. The promotion of pro-poor growth in the respective country shall be accompanied by endowing rural households with skills, presumably through quality education (Rigg, 2006; Winters *et al.*, 2009).

Level of education in a household is associated with better income-generating activities particularly from non-agricultural activities. However, this does not mean there are no returns to education from agricultural activities. Households with better education, on average, generate most of their income from non-agricultural sources (Winters *et al.*, 2009; Alemu, 2012). According to Barret *et al.* (2001), the higher levels of education amongst members of the household offer a positive effect on the magnitude of income diversification in non-farm activities. Apart from educational perspective, poor household encounter entry barriers into high-return non-farm activities due to demographic factors such as age and gender of a household head. Education is seen as a key determinant of diversification and, is hypothesised to be associated to a shift away from agricultural and non-agricultural activities (Winters *et al.*, 2009; Stifel, 2010; Akudugu, 2016).

2.6 Nexus of Income-Poverty Alleviation and Livelihood Diversification

Most African households, especially in rural areas, are found to be stricken by incomepoverty. This challenge varies from one country to another and respective societies (Niehof, 2004; Senadza, 2014). Literature revealed that a large number of households suffering from income-poverty are heavily dependent upon agricultural activities as their main source of income (Senadza, 2014; Vilks, 2014). Agricultural production does not provide sufficient household income. Consequently, rural households tend to practice multiple livelihoods strategies (Ellis, 2011). The multiple livelihoods strategies of poor rural households include food processing, petty trading and engagement in informal labour markets (Ellis, 2011). Ordinarily, in attempting to alleviate income-poverty, rural households in developing countries go extra mile to engage into non-farm and off-farm activities. The process of constructing diverse portfolio of livelihood activities has now perceived as a coping strategy and a way to mobilize local resource in disposal (Ellis, 1999; 2011; Ambimbola & Oluwakemi, 2012).

Ever-increasing interest in research on off-farm and on-farm income in rural economies is essentially showing that rural people's livelihoods are derived from diverse sources and are not as overwhelmingly as dependent upon agriculture as previously assumed (Ambimbola & Oluwakemi, 2013). This has been corroborated further by the findings of Reardon *et al.* (2006) that traditional rural economies are purely agricultural is obsolete and outmoded. Evidently, the literature depicted that most rural households in Southern Sudan as well as Kenya have largely adopted livelihood diversification as an optimum strategy for household income-poverty alleviation particularly in developing countries (Babulo *et al.*, 2008; Rahut & Scharf, 2012). This could be owing to the fact that a diversified livelihood, which is an indispensable feature of rural survival and closely allied to flexibility, resilience and stability, is less vulnerable than undiversified one (Rahut & Scharf, 2012).

In Southern Africa, rural households are regarded as multiple livelihood seekers who pursue valuable opportunities in and outside agriculture to alleviate income-poverty whilst improving their quality of life (Ellis, 2011). For example, a certain household could practice livelihood diversification through producing potatoes and tomatoes while on the other hand managing a small business such as a tuck shop within the community and as a consequent of a combined income generating strategies, the level of household incomepoverty would gradually diminish (Hussein & Routray, 2012; Rahut & Scharf, 2012). Several studies have reported a substantial and increasing share of off-farm income in total household income (Haggblade et al., 2007, Ellis, 2011; Senadza, 2014). There are conspicuous motives to this income diversification and entails the declination of farm income, market and agricultural production risks (Ambimbola & Oluwakemi, 2013). Moreover, while some households are compelled into off-farm activities, owing to less gains and increased uncertainties associated with farming, others would take up off-farm employment when off-farm employment returns are higher than farm based (Budlender, 2005). Generally, the significance and collaboration of on-farm and off-farm activities on rural household income standard could not be perceived as trivial.

Despite diversification of agricultural sources is common, non-agricultural activities offer a significant role out of income-poverty in most rural areas (Alemu, 2012). Furthermore, the practice of livelihood diversification is not merely confined to alleviate income-poverty in rural households but it is also spurred by various motivations and theses vary according to context: form a desire to accumulate, invest and need to spread risk and to requirement to adapt to survive in eroding circumstances or some combination thereof (Matsumoto 2006; Ambimbola & Oluwakemi, 2013). Although livelihood diversification is commonly viewed as a pivotal rural household strategy for income-poverty alleviation in particular, the literature has greatly depicted that most poor households fail to engage in high yielding livelihood system (Jacobs & Makaudze, 2012; Ellis, 2011).

The character of livelihood diversification is dependent upon the context within which it occurring and that is; differential access to diversification activities and the distribution of the benefits thereof. Ambimbola & Oluwakemi (2013) revealed that the poorest rural groups have little opportunities to diversify in a way that will lead to accumulation for investment purposes. In spite of the fact that farming remains the dominant income source for the poorest in particular, off-farm occupation especially self-employed activities are the main source of income for relatively richer households (Babatunde & Quaim, 2009). Due to diversity in household's socio-economic status, rural people are seemingly having the capability to access more remunerative strategies than others (Senadza, 2014). According to Cooke & Downie (2010), the paradox faced by poor households is that; while they would most need livelihood diversification, are less able to engage in higher remunerated livelihood strategies due to entry barriers and difficulty of financing initial investments. Effectually, livelihood diversification is heavily characterized as 'desperation-led' and limited to unskilled wage labor in rural areas (Ellis, 2011; Saunders, 2014). In corroborating the results, Ellis (2000), through the use of regression models, depicted that households have unequal abilities to diversify their income sources and that education, assets, endowment, access to credit and good infrastructure conditions increase household diversification. Therefore, resource poor households especially in remote areas are constrained in diversifying their income sources (Ellis, 2000). This further reveals that income-poverty is actually prone to such resource-poor households.

Conspicuously, livelihood diversification favours households who are better-off and affluent enough to concurrently construct diverse portfolio of activities but leaving the poverty stricken behind. According to Ellis (2000), having alternatives for income generation establishes the difference between minimally viable livelihoods and

destitution. However, diversification does not have an equalizing effect on rural incomes overall. Furthermore, better-off families are typically able to diversify in more favourable labour markets than the rural poor families. Apart from household socio-economic imbalances, the literature has demonstrated that diverse income portfolio creates more income and distributes income more evenly. Thus, it is easier to construct a combined livelihood strategies than actually switching full-time between either of them (Ellis, 2000; Babulo *et al.*, 2008). Pithily, recent studies edifies that non-farm income plays a fundamental role in augmenting farm-income in most developing economies. This is an indication that farming alone is inadequate for raising revenue within rural households. Therefore, the promotion of non-farm employment is acknowledged as an optimum strategy for supplementing the income of farmers as well as sustaining equitable rural growth (Marthin & Lorenzen, 2016).

2.7 Conclusion

The decline in agricultural dependence and failure of poverty alleviation strategies as well as interventions that formulated in most developing countries has compelled rural people to resort to continue explore alternative measures to alleviate income poverty faced by the households. This has led to the realisation of farm and non-farm activities as a measure to escape income-poverty trap in the household. In developing countries, livelihood diversification has been acknowledged as an optimum strategy for generating income in the households. Apart from income aspect, rural households are experiencing varying dimensions of poverty; thus, they implement and practice different livelihood strategies predetermined by political, institutional, environmental and economic contexts as well as the availability of productive assets.

In this chapter, the literature has shown that rural households adopt various livelihood strategies for primarily income generation and food production. In addition, the literature affirmed that only few households manage to alleviate income-poverty holistically. The household's ability to alleviate poverty hinges upon multifaceted factors such as access to productive resources, geographical location and economic status. The literature has acknowledged poor households are forced to stick to low-return activities because of

entry barriers they face to high return strategies. In addition, literature argues in support of the conventional wisdom that households allocate asset endowment in a manner that equates marginal returns across activities accessible to them. On international scale, livelihood framework analysis is largely adopted in most developing countries as tool to identify the availability and access to resources and assets especially on a household level.

The identification of components such as capabilities, tangible and intangible assets guarantees the accomplishment of income poverty alleviation at household level. The chapter has further demonstrated relationship between livelihood diversification and income-poverty on international scale. Basically, there is no fixed universal consensus on what constitutes criterion for measuring income-poverty. The literature demonstrated different ways of measuring income-poverty are being adopted by varying countries. Income-poverty is mainly measured in terms of income and food consumption in the household through income and food poverty line. Income-poverty is prevalently incited various factors such as large household size, lack of productive assets and household engagements in non-income producing livelihoods. In the subsequent chapter, specific criterion will be discussed clearly within the context of South Africa; demonstrating its economic and environmental status of income-poverty as well as different livelihood activities adopted by rural people as way to transform their standard of living.

CHAPTER 3

SOUTH AFRICAN CONTEXTS OF LIVELIHOOD DIVERSIFICATION AND INCOME-POVERTY NEXUS

3.1 Introduction

There is a growing interest and attention which is paid towards livelihood diversification in South Africa. Concurrently, research seeking synergies regarding the income-poverty reduction, economic development, and environmental sustainability have tentatively identified livelihood diversification as potential approach towards addressing challenges faced by citizens particularly at household level (Ellis, 2000; Perz, 2005). Combination of agricultural and non-agricultural income sources constitutes portfolio, wherein numerous sources and distribution of income among those sources describes the diversity of a household's livelihood. Ordinarily, the reasons to engage into livelihood diversification differ among households, and can be as straightforward as raising income and /or involving risk minimization (Perz, 2005). Livelihood diversification is widely carried out and has gained a great impetus, particularly in developing countries including South Africa (Jacobs & Makaudze, 2012). Despite, livelihood diversification is common and relative majority of households are still suffering from poverty persistence largely because there are few individuals with formal employment.

Moreover, fair distribution of resources such as land is still a generic problem in developing countries especially in South Africa mainly due to the prevalence of social norms and beliefs. Livelihood diversification is widely practiced by affluent and elites in the communities while relative majority still rely on agriculture for their survival (Alemu, 2012; Senadza, 2014). Moreover, diversification is merely carried out by the poor in situation wherein they are working as farm labourers whilst practicing other divergent livelihood activities to alleviate income-poverty (Owolabi *et al.*, 2016). The previous chapter demonstrated theoretical incision about the nature of livelihood diversification and experiences of multi-dimensional poverty from international perspective.

The chapter herein deliberates on experiences of rural poverty and livelihood systems in South Africa, Limpopo Province, Greater Letaba Municipality and Madumeleng Village, with specific reference of global context. In addition, the chapter will demonstrate the nature of livelihood diversification and its contributions towards alleviation of multidimensional poverty, particularly income-poverty. Furthermore, the chapter demonstrate different measurements of poverty from international perspective and South Africa respectively. Therefore, these measurements offer justifiable inferences of the study regarding the contributions of livelihood diversification towards alleviation among rural households.

3.2 National Context, South Africa

South Africa is situated on the southern side of Africa and encircled by the South Atlantic and Indian Oceans. It is bordered by Namibia, Botswana and Zimbabwe while on the east, it is bordered by Mozambique and Swaziland. In addition, Lesotho is an enclave of South African territory. South Africa is currently recorded as the 25th-largest country in the world especially by land area. The country has nine provinces namely: Limpopo, Gauteng, North West, Free State, KwaZulu-Natal, Mpumalanga, Northern Cape, Eastern Cape and Western Cape. Socio-economically, there are vast differences amongst the provinces which result in various issues such as income-poverty, unemployment, food insecurity, asset poverty and income inequality (Stats SA, 2011).

3.2.1 Demographic profile

South Africa is a home to about 51, 8 million people distributed across nine provinces (Stats SA, 2011). There is a salient and noticeable increase of South African population size from 40, 6 million in 2006 to 51, 8 million in 2011 (Stats SA, 2014). Its status is attributed to fast economic enhancement and migration from foreigner nationals. An increase in population creates a rampant completion over livelihood choices and conversely influences prospectus of democracy which is believed to have an impact into socio-economic transformation.

South Africa is ranked as an upper-middle income economy by the World Bank, and is considered to be a newly industrialized country. As a result of minerals and agricultural potential, its economy is regarded as the largest and most developed in Africa and the 28th-largest in the world. In terms of purchasing power parity, South Africa has the fifth-highest per capita income in Africa, although poverty and inequality remain widespread, with about quarter of the population unemployed and living on less than US\$1.25 a day (World Bank, 2016). Nevertheless, South Africa has been identified as a middle power in international affairs, and maintains significant regional influence. Furthermore, in post-apartheid South Africa, unemployment has been extremely high as the country has struggled with many changes. In addition, the current government has struggled to achieve the monetary and fiscal discipline to ensure both redistribution of wealth and economic growth (Stats SA, 2011).

Indispensably, South Africa is recorded to have large proportion of agricultural sector in the continent and has been further considered to be net exporter of farming products. There are various cooperatives and agri-businesses across the country and agricultural exports are also estimated to contribute about 9% of the South African total exports (World Bank, 2016). The statistics further depicted that the South African agricultural industry constitute around 10% of the formal employment, however, this is low as compared to the other parts of African continent. The country is further realized to provide work for casual labour which deemed necessary for alleviating income poverty in peculiar. South Africa is estimated to be using a large part of the land for agriculture and around 15% of the potential land is cultivated (Stats SA, 2011).

Agriculturally, South Africa is deemed to have a large sector on the continent and is further regarded the net exporter of farming products. There are numerous agricultural cooperatives and agri-business throughout the country and the agricultural exports are estimated to constitute about 8% of the South African total exports. The agricultural industry affirmed to account about 10% of the formal employment in the country. However, this is low compared to other parts of the African continent. South Africa also provides work for casual labourers and contributes around 2.6 of the country's GDP. The

country is estimated to be using a large part of the land for agriculture and around 12% of potential land is cultivated whilst about 86% is for natural fields (Stats SA, 2011).

South African ecosystem has been modified or transformed by human activities. These transformation and modification include areas placed under cultivation for commercial crops or subsistence agriculture (Cinner & Bodin, 2010). Agriculture holds potential growth for South Africa, albeit most limiting natural resource to support these is water. Major rivers have been dammed or have water abstracted schemes in order to supply industries and domestic users. Furthermore, the issue of soil is a concern in the country; and many locations in South Africa have thin and moderately fertile soil. Therefore, contributing to marginalized agricultural development, environmental degradation and also soil erosion on both agricultural development and agricultural marginalization are reinforced by fluctuating climatic conditions which exist in the country (Stats SA, 2011).

The declaration of Millennium Development Goals (MDGs) was a clear commitment by countries to alleviate the multidimensional poverty. Income-poverty, food security and inequality are some of the prevalent challenges facing developing countries including South Africa (Jacobs & Makaudze, 2012). South Africa extended its effort to strengthen fight against common challenges of poverty and facilitate development by introducing National Development Plan (NDP) for 2030. NDP is a plan aimed to alleviate-poverty; diminish level of inequality through ensuring cohesion amongst South African citizens, ensuring capacity building, and fostering inclusive economy (Stats SA, 2014). Widespread income-poverty poses a serious challenge to the state and suggests swift intervention of further policy development and programmes for socio-economic transformation of the poor (Todaro & Smith, 2009). Literature confirmed that most of the poor are relatively located in rural areas, and participate actively in agriculture.

Nationally, more than three-quarters (77, 5%) of households engage into agricultural activities in attempt to secure additional source food and income (Stats SA, 2014). Despite agriculture being the major occupation, non-agricultural activities also play a significant role into the alleviation of income-poverty (Oyinbo & Olaleye, 2016). However,

literature demonstrated that better-off households diversify disproportionately more than the poorer households. As a result of low endowment, asset poverty, the poorer households have fewer livelihood opportunities to derive adequate income from nonagricultural activities (Akudugu, 2016; Oyinbo & Olaleye, 2016). In spite of low income generation from non-agricultural activities, it is now common for rural households to practice more than one livelihood activities concurrently in an attempt to improve the living standard (Marthin & Lorenzen, 2016). There is a near consensus in the literature that income-poverty remains one of the most disturbing socio-economic challenges facing South Africa. The discourse on the causes of poverty, its realistic measurement, alternative route to be taken by the rural communities, promotion of livelihood diversification and classifications of livelihood systems is in progress (Senadza, 2014; Akudugu, 2016; Marthin & Lorenzen, 2016).

3.2.2 Conceptualisation and background of poverty in South Africa

Poverty remains one of the worst human calamities in the world particularly in Africa. Despite its status as Africa's biggest economy, South Africa battles high levels of poverty like its poorer neighbours (Khumalo, 2013). The challenge of conceptualising poverty is not new in South Africa, the multiplicity of theories on the subject and its multi-dimensional nature makes it difficult to have a universal definition. There is no universal consensus in the literature regarding specific definition of poverty. However, most proponents, even in South Africa, concur that poverty is multidimensional and can be expressed in relative and absolute terms (Kyei & Gyekye, 2011; Jacobs & Makaudze, 2012; Khumalo, 2013; Akudugu, 2016). Absolute refers to the inability of the poor to afford basic or minimal necessities of life such as food or shelter while relative poverty is based on a more explicit socially constructed belief about the universality of a certain level of standard of living for every member in the society (Khumalo, 2013).

In South African context, some of the programs and strategies initiated have capacity to alleviate varied dimensions of poverty, relative or absolute terms. However, poverty is unlikely to be eradicated as a result of socioeconomic conditions such as inadequate infrastructure, inaccessible service delivery, lack of necessary skills, lack of financial

access (Akudugu, 2016). In South Africa, poverty is associated with racial gender, spatial and age dimensions. According to Toidepi (2016), the concentration lies predominantly with black African, woman, rural areas and black youth. Furthermore, poor people tend to live in large households (with many dependents), and in most cases have poor access to basic amenities (Niehof, 2004; Das, 2014).

Poverty alleviation has been the long term aim in South Africa, noting to efforts after the democratic elections in 1994. Following first racially inclusive democratic elections in 1994, the South African government's efforts to alleviate multi-dimensions of poverty have been frustrated by continued shedding of jobs from formal economy (Khumalo, 2013). In addition, the effort to eliminate poverty is negatively influenced by the fact that successful poverty alleviation measures are relying upon government and civil society's capacity, which still being built up (Jacobs & Makaudze, 2012). Similar to other countries in the world, South Africa is faced with multidimensional poverty from national, provincial and local level.

However, it is evident from policy utterances of government that tackling poverty has been top of the agenda item since assumption of power in 1994 (Khumalo, 2013). This is explicit through promulgation of Reconstruction and Development Programme (RDP) where the new regime identifies fight against poverty and deprivation as the first priority of the democratic government. Generally, the effort by the government and other development partners to deal with the challenge of poverty is expressed in a number of policies and strategies, however, the question of that stands out is whether these efforts have been effective in tackling the root causes of poverty or much effort has been applied in alleviating the symptoms of income-poverty amongst the rural people (Khumalo, 2013; Das, 2014).

3.2.3 Classification of rural livelihood systems in South Africa

Literature concurs that there is broad classification of livelihood system that is carried out by households on a global perspective (Barret *et al.*, 2001; Narayanan, 2015). In South

Africa, livelihood systems are classified as farm (Crop production, livestock and fishing), off-farm (wage employment in farms, seasonal or casual jobs), and non-farm (remittances, social grants, property income, repairs, local trades and traditional healing) (Ellis, 2011; Alemu, 2012). Most rural households carry out disparate livelihoods which are agricultural and non-agricultural concurrently (Ellis, 2011; Marthin & Lorenzen, 2016). Most rural households rely on social grant, remittances, informal employment and subsistence farming to transform their standard of living.

Farming activities such as crop farming and livestock rearing constitute the main sources of agricultural activities adopted by local people in South Africa (Jacobs & Makaudze, 2012; Oyinbo & Olaleye, 2016). According to Ellis (2000), livelihood status of households and their ability to withstand shocks and stresses are directly and indirectly dictated by their access to control over resources. Agricultural livelihood activities are widely embraced for its potential to augment national economic growth and enhance food security (Narayanan, 2015). However, most rural households engage into informal activities, lack adequate education as well as asset ownership (Winters *et al.*, 2009; Jacobs & Makaudze, 2012).

Agricultural sector is plagued with problems which include soil infertility, seasonality and infrastructural inadequacy among others. This implies that households are spurred to construct different strategies in order to cope against vulnerability associated with the production of agriculture (Ellis, 2000; Ambimbola & Oluwakemi, 2013). As a result of problems plagued by agricultural sector, households in South Africa tend to come up with supplementary sources for divergent motives of income-poverty and ensuring food security (Oyinbo & Olaleye, 2016). Rural households establish common strategies of diversification, intensification and migration or rather moving out of farming (Ellis, 2000; 2011). In addition, Gautam & Andersen (2016), revealed diversification of livelihoods is a commonly applied strategy for coping with economic and environmental shocks and instrumental in poverty alleviation. Therefore, diversification of livelihood systems becomes a norm in South Africa with only few rural households relying on agriculture as the only means of survival (Barret *et al.*, 2001; Jacobs & Makaudze, 2012).

Although on a slow pace, literature demonstrated there is salient decline in farm-based livelihoods in Africa, Asia and Latin America (Jacobs & Makaudze, 2012). The decline in agricultural importance suggests immense attention on non-farming sources particularly farm-based households. Literature revealed that households switch to non-farm sources in order to augment their farm income in South Africa. Ellis (2000) revealed that is easier to adopt the combined livelihood strategies than switching full-time between either of them. This may owe to the fact that non-farm activities give higher returns especially in terms of income (Babatunde & Qaim, 2009; Ambimbola & Oluwakemi, 2013). In South Africa, agriculture sector provides leading source of employment for people with less education and is believed to contribute large fractions of national income. This is a clear indication agricultural sector, particularly in rural vicinity provide wide opportunities for the unskilled to be absorbed and employable (Rogan, 2013; Narayanan, 2015).

3.2.4 Agricultural legislatives in South Africa

Erstwhile, South African agricultural sector has been shaped by policy of segregation popularly known as the apartheid which developed discriminatory policies which limited access of black majority to agricultural land, financial and other government services (Oyinbo & Olaleye, 2016). These policies have created a rampant gap and disparities between the rich and the poor especially in rural areas. The apartheid policies has led to most of black farmers into labourers with subsidies that channelled only white farmers and also closing down markets to black farmers (Khumalo, 2013; Oyinbo & Olaleye, 2016). However, annihilation of apartheid and the dispensation of the new democratic state in 1994 have exhorted the country to adopt manifold agricultural policies aimed at addressing the inequalities and legacies of the apartheid. Since then, the agricultural sector in the country has been subjected to greater policy reforms with the deregulation of domestic markets, liberalization of foreign trade, lowering of agricultural support and the land reform (Gumede, 2014).

Considerable number of policies exerts influence on the development of smallholder subsistence agriculture to become more commercial through farm inputs such as advanced technology with the aim of producing for market sale (Gumede, 2014). This is largely believed to augment income within the household for manifold usage including diminishing the increasing level of income poverty. These policies include, among others agricultural white paper, land policies and agricultural labour market reform (Khumalo, 2013).

3.2.4.1 White Paper on Agriculture (1995)

Agricultural White Paper was enacted in 1995 as a guiding principle which administers development in the sector as a traditional policy. Its principles generally emanates from the Reconstruction and Development Programme (Viljoen, 2005; Mwambi *et al.* 2016). White Paper on Agriculture is considered a monomer and building block within the agricultural sector. It is deemed fundamental in terms of building a strong economy and restoring the past injustices through increased incomes and employment opportunities for the poor in South Africa (Viljoen, 2005). The White Paper identifies manifold agricultural policy goals which seek to enhance the agricultural sector. This policy seeks to support the emergence of a more diverse structural production with a large increase in the numbers of successful smallholder subsistence agricultural sector on international level. Notwithstanding accomplishment of equitable access and global competitiveness, the study seeks to conserve agricultural natural resources and establish policies as well as institutions for sustainable resources (loakimidis & Heijke, 2016).

3.2.4.2 Land Policies (1997)

In addressing the inequalities and injustices in the allocation of land effectuated by the apartheid government, Land Reform and Redistribution policies were enacted in the democratic South Africa. Land Reform policies were promulgated in order to redress the disparities and provide more land to previously disadvantaged smallholders subsistence farmers peculiarly blacks who constitutes the majority in the former homelands (Asongu & Tchamyou, 2016). The Land Redistribution of Agricultural Development programme (LRAD) serves as major component in facilitating the redistribution of land to the

previously disadvantaged groups. The main aim of LRAD programme is to provide accessibility of land grants as well as agricultural land mainly to the previously disadvantaged communities in the country. LRAD could be viewed as an income poverty alleviation strategy as some of its objectives entail the improvement of nutrition and incomes of rural poor and overcoming the legacy of the past racial discrimination in the farmland ownership as well as stimulating growth from agriculture (Khumalo, 2013). Moreover, some of the objectives underlying this programme include the creation of a stronger linkage between farm and off-farm income generating activities as well as facilitating the structural change over long run by assisting formerly disadvantaged people who want to establish small and medium-sized farms among others (Stats SA, 2011; Akthar *et al*, 2015)

3.2.4.3 Agriculture Black Economic Empowerment (AgriBEE) (2007)

In the erstwhile, South Africa has been faced with colossal challenges related to market access, infrastructure, financing, access to land, training, marketing and expertise. Consequently, AgriBEE policy has been adopted in 2007 as a measure to the problems which are predominant within the agricultural sector (Scot, 2015). Notwithstanding the adoption, these problems still persists in spite of the prevailing democratic dispensation characterized by racial equality and stability especially in the black communities. AgriBEE has been embraced as a panacea and corrective measure in respect of addressing problems associated to market access in the country. This policy accentuate that 50% of the total agricultural produce sold by retailers in the country must be procured from the previously disadvantaged farmers and producers by 2017 as means of improving market access (Mukumbi, 2008).

The AgriBEE policy further aimed at setting up guidelines for the promotion of enabling environment which is conducive enough for spurring participation and inclusion of the previously disadvantaged black farmers in the mainstream of agricultural economy (Hilson, 2016). In other words, the policy can be viewed as a catalyst towards redistribution of agricultural economy among the farmers in South Africa. Furthermore, the policy aimed at linking and incorporating the two agricultural sectors, namely commercial and smallholder subsistence into one common sector through increased number of people who are managing, facilitating and managing agricultural enterprises by workers cooperatives as well as accomplishing equitable representation in all occupational categories. AgriBEE policy is not confined to affirmative action which provides special preference to previously disadvantaged farmers but also a significant approach towards reengineering the socio-economic disparities of the apartheid epoch (Mukumbi, 2008).

3.2.5 Socio-economic interventions in South Africa

In terms of purchasing power parity, South Africa has the fifth-highest per capita income in Africa, although poverty and inequality remain widespread, with about a quarter of the population remain unemployed. Since 1994, one of the main challenges for rural development has been marginalization of the poor. Combating this required changes in access to resources such as land, water, education and skills as well as to improve rural infrastructure. In corroboration, conceptual framework has revealed that the poor world is greatly rural world whereby, in respect of livelihoods, this rural world is an agricultural wherein farming is the predominant (Rigg, 2006). Ordinarily, agriculture was a livelihood asset for the rural poor especially when other sources of income fell away. Despite the scant status of poverty in South Africa, agriculture is still regarded as one of the major catalyst towards sustainability of livelihoods (Scot, 2015; Akudugu, 2016).

Rural households are practicing subsistence farming in order to ensure that food is available at all times (Mwambi *et al.*, 2016). Rural households are practicing variety of livelihoods in order to support food security or generating income to mitigating risk and managing social claims from others. Despite democracy in South Africa, it is still a major change to effectively ensure that there is fair redistribution and restitution of land (Jacobs & Makaudze, 2012). In rural areas, livelihood activities are most confined to agriculture through farming whereby subsistence still remain the major strategy to ensure that food is available at all times. Akudugu (2016) attested that African farmers are predominantly resource poor and operate at subsistence level for household consumption in particular.

Farming and livestock stand out for their contribution to virtually all household needs and direct production of food and cash ordinarily inadequate. However, their value for plough, transport, and as reserves, cultural assets is deemed significant. In addition, households without livestock have lower crop production, greater dependence on off-farm cash income, and generally greater economic insecurity (Makhato & Kepe, 2006). In essence, rural livelihood activities range from on-farm activities to off-farm activities. Migrants maintain a flow of remittances to their families and, and such ensures enough food is available at all times though in some cases such migrants exert influence on the decision-making within the household (Wouterse & Taylor, 2006; Stats SA, 2014).

South Africa is one of the seventh countries which have the highest capita income on African continent (Kyei & Gyekye, 2011). This owes to the fact that most households; especially in rural areas, practice variety of livelihood activities with the ability to augment income and improve living standard thereof. The country is mainly constituted by rural households which seek to transform their socio-economic standard. According to Alemu (2012), rural areas are renowned as the socio-economic backbone of most developing countries. Furthermore, literature has revealed that most rural livelihoods are contingent upon environmental resources which include but not limited to land. Notwithstanding the slow pace of land reform in South Africa, land is regarded as an engine and imperative factor towards socio-economic transformation (Jacobs & Makaudze, 2012). Therefore, it is undoubtedly clear that farming activities constitute major livelihood activities in rural areas (Marthin & Lorenzen, 2016).

The trajectory undertaken by South African economy has undeniably shown that is not adequate to accommodate its labour force. As a result, relative majority of skilled and unskilled people opt to engage themselves into diverse livelihood activities especially in informal businesses for manifold reasons which include income-generation and combat poverty (Marthin & Lorenzen, 2016). According to Kyei & Gyekye (2011) unemployment is the significant determinant in the welfare of any nation and yields devastating effects erosion of human capital, social exclusion and social instability. Unemployment rate is recorded 26% in South Africa particularly on young people such as university graduates

possessing skills and knowledge (Stats SA, 2014). Considering the inability of South African economy to cope and adapt during world economic recession, large number of people get retrenched. Therefore, increases in income-poverty will continue as major socio-economic issues affecting the country. Unemployment and income-poverty are disproportionately experienced in the provinces that are predominantly rural and have less economic opportunities like Limpopo Province and Eastern Cape (Stats SA, 2014). Literature revealed that women are most unemployed and disadvantaged group as compared to men even in the labour market (Rogan, 2013; Das, 2014).

In addition, women are likely to be unemployed as well as to be in poorly remunerated work. However, recent literature partially affirmed and revealed that that there is general trend reflecting that contemporary environment allows women to recuperate better through engaging into various livelihood activities which helps them to escape from being enmeshed by the poverty circle (Senadza, 2014; Oyinbo & Olaleye, 2016). Furthermore, unemployment is severe among women and youth, especially those in rural areas. Equivalently, unemployment has been perceived to be high for people with disabilities. The formal sector is becoming less labour-intensive and can only provide employment for half of the labour force (May & Meth, 2007). South African economy has not been able to supply sufficient employment opportunities or its population and moreover, income-poverty has increased the vulnerability of many rural households. In addition, the market is nearly failing to provide for those with special needs, such as people with disabilities (Department of Social Development, 2009). The economic status and inability of the country to accommodate its labour force continue to be earnest issue in the accomplishment of socio-economic transformation.

3.2.5.1 Local Economic Development

Local Economic Development (LED) is a socio-economic strategy implemented at the local municipality for the purpose of job creation through micro and small enterprise development, support of social dialogue, development planning income-poverty reduction (Greater Letaba Municipality, 2012). It recognizes that people, business and government

have the whole discretion in bringing about socio-economic transformation which is enabling towards the creation job opportunities and alleviation of income-poverty alleviation in South Africa. Further, local governments are spurred to achieve developmental state, and are designed to improve social and economic conditions which are conducive enough for business development and promotion (Malefane, 2008). Thus, LED is inextricably linked to the developmental state of local government in South Africa.

LED is a product based on local initiatives and further motivated by local stakeholders. Some of its aims are to create employment in the local government sphere, alleviate income poverty and redistribute resources and opportunities which are deemed beneficial to all members (Phago & Tsoabisi, 2010). LED involves identification of and mobilization of local resources, skills and ideas to promote economic growth and development. The focus of LED includes transforming the socio-economic standard in the local sphere through mobilization of resources. According to Hilson (2016), the quality of life within LED framework is well informed by poverty reduction, employment, and income as well as literacy improvement. Furthermost, the focus of LED should be on the needs of communities and creating an environment for private sector investment though public sector investment and by supporting the retention, growth and development enterprises (Malefane, 2008). Local Economic Development has been formulated to achieve the following key principles in South Africa:

- Employment creation and poverty reduction
- Target previously disadvantaged people, marginalized communities and locations, black economic empowerment enterprises and SMMEs to allow them to participate fully in the economic life of the country.
- Promote local ownership, community involvement, local leadership and joint decision making.
- Local economic development involves local, national, and international partnerships between community, businesses and government to solve problems, create joint business ventures and build local areas.
- o Use local resources and skills to maximize opportunities for local development

 Integration of diverse economic activities in all-inclusive approach to local development.

3.2.5.2 Social welfare strategy

Released in August 1997 and adopted by the first elected government of South Africa, the White Paper for Social Welfare provides principles, guidelines, recommendations, proposed policies, and programs for developmental social welfare in South Africa (Khumalo, 2013). The document recognizes that the primary challenge facing the welfare system is to devise appropriate and integrated strategies to address alienation and the economic and social marginalization of vast sectors of the population who are living in the poverty, are vulnerable, and have special needs (Alemu, 2012). Social welfare program aimed at providing social safety nets and target programmes of the poor and vulnerable children as well as culturally underprivileged groups so as to quickly benefit (Hilson, 2016). However, this program is largely misused in the rural households differently while deviating from its initial focus which is alleviating income-poverty of vulnerable children in particular. Income transfers, direct provision of free or subsidized goods and service programmes are recommended. Further, these programmes are also needed through short-term stress (Hilson, 2016). Undoubtedly, social welfare programs further pay attention on several aspects of development and income poverty alleviation which include raising people's living standard through consumption level of food, medical services and education as well (Department of Social Development, 2015).

Despite, the program entail implementation of relevant economic growth process, establishment of social, political, economic systems and institutions that promote human dignity, respect and increasing people particularly the poor in terms of freedom to choose through enlarging the range of choice variables. These choices include the process of increasing varieties of consumer goods and services which are very important for income-poverty alleviation (Hilson, 2016). Thus, it offers various social grants in its fight against poverty such as: old age grant; disability grant, war veteran's grant, care dependency grant; foster grant; child support grant and social relief of distress for applicants who meet

the department's criteria for recipients in good standing (Department of Social Development, 2015).

3.2.6 The nature of livelihood diversification in South Africa.

Gradually, rural people tend to move away from natural-resource based occupations. South Africa makes no exception and such trajectory leads to diversification of rural livelihood systems. Although 70% of rural households carry out some form of farming activity, and only 2.7% of rural households are relying heavily on this source of income. Actually, livelihood diversification appears to be a strategy determined by necessity or choice in order get out of poverty and resilience as well as sustainability (Perret *et al.*, 2005). Historically, farming has been considered the principal economic activity of rural households, especially poor rural households, and the dominant view of development has been upon the small-farm first paradigm which exerts influence on the promotion of agriculture among smallholders (Ellis, 2000).

The emphasis was also based on land as one of the main assets in rural communities exhorted by argument that land ownership and access are closely linked to agricultural production and income poverty-alleviation (Winters *et al.*, 2009). However, there is an argument which asserts that owning land alone is insufficient to the accomplishment of rural development unless exerting the emphasis on people empowerment which is meant for capacity building. The optimum means of promoting pro-poor growth in South Africa is through enduring rural households with skills, presumably increased education as well (Rigg, 2006; Senadza, 2014). However, rural people have now started to be interested in practice disparate livelihood activities while paying immense attention on non-agricultural activities which are discerned have ability to alleviate the persistence of income poverty.

Apart from land ownership, livelihood diversification is widely carried out by numerous households as part of rural development strategies in South Africa. There are manifold motives which prompt households and individuals to diversify their assets, incomes, and activities. The conceptual framework revealed that the first set of motives comprise what are traditionally termed "push factors"; reduction of risk, response to diminishing factor

returns in any given use such as labour supply in the presence of land constraints driven by population pressure and fragmented land holdings. The other set of motives comprise "pull factors"; realization of strategic complementarities which exist between activities such as crop-livestock integration and specialization according to comparative advantage accorded by superior technologies and skills (Barret *et al.*, 2001:315). In respect of these motives, livelihood diversification could be seen as a household and individual decision to optimally make use of available resources and prospectus. This further entails push factors which indecisively households ought to counter to sudden shock and uncertainty (Ellis, 2011).

In South Africa, agricultural sector is plagued with numerous issues like infrastructural inadequacy and soil fertility among others. Notwithstanding problems plagued by agricultural sector, farming activities still constitute livelihoods in rural South Africa. Agricultural challenges are stimulating the rural dwellers to take into cognizance the imperativeness of off-farm activities. Pithily, as a consequent to struggle in surviving and improving their welfare, off-farm activities have become an important component of livelihood strategies among rural households in South Africa (Ambimbola & Oluwakemi, 2013). Furthermore, the literature depicted that non-farm plays an indispensable role especially with regard to augmenting of farm income within developing countries. This is a clear indication that farming alone is not an adequate source of revenue for rural households. Thus, the promotion non-farm employment may be a good strategy for supplementing the income of farmers as well as sustaining equable rural growth. Ambimbola & Oluwakemi (2013) argued that engagement in non-farm activities, apart from reducing income uncertainties and providing a source of liquidity in areas where credit is constrained, could increase agricultural productivity as it provides the resources necessary for investment in advanced agricultural technologies.

3.2.7 The determinants of income-poverty alleviation in South Africa

Statistics South Africa released the results of its Census in 2011 which is the third official census since the advent of democracy taking into consideration the erstwhile of 1996 and 2001 respectively. It has been released that between the first and most recent post-

apartheid census, the population increased by just over 11 million to 51.7 million, and the average household income more doubled from R48 385 to R103 204 (Stats SA, 2011). Relative number of black households earns only 16% of the average compared to white household's income. Despite, this is an improvement of 5.0% points from 2001 census and the degree of inequality still remains unacceptably high (Stats SA, 2011). Relative majority of households consider salaries/wages/commission as their main source of income followed by grants and remittances.

Imperatively, it should be noted that Western Cape and Gauteng Province are the only two provinces in which more than two-thirds of households reported salaries as their main sources of income. This serves as a clear testimony that employment status determines the alleviation of income poverty within the household (Khumalo, 2013). In addition, better off household generate adequate income as compared to less developed households especially in rural areas. By comparison, a large dependence on social grants was noticed in provinces constituted mainly by rural settings and among others includes Limpopo Province and Eastern Cape Province. About 16% of Limpopo households listed remittances as their main sources of income (Stats SA, 2015). Thus, multi-spatial livelihoods also play a significant role in the alleviation of income-poverty within the household especially those residing in rural areas (Stats SA, 2014).

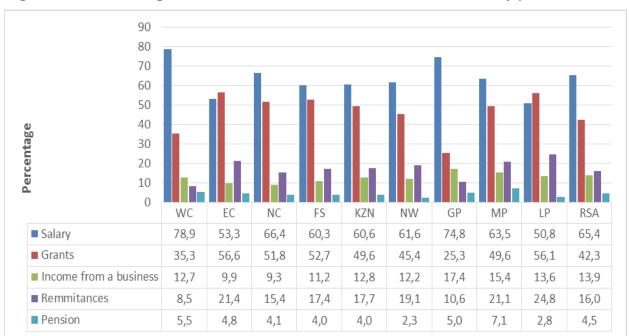


Figure 3.1: Percentage distribution of household income sources by province, 2014

Source: Stats SA, 2014

3.2.8 Measurement of poverty in South Africa

Despite there being no universal definition, poverty is a diverse and multifaceted concept across the globe including South Africa and encapsulate deprivations suffered through monetary or non-monetary terms. South Africa depicted salient commitment and effort to combat poverty on various legislative framework and policies such as Reconstruction and Development programme (RDP), Growth, Employment and Redistribution (GEAR) and National Development Plan (NDP) (Jansen, Moses, Mujuta & Yu, 2015). The most telling aspects of poverty are its multidimensionality and continuous evolution. Literature concurs that indicators of poverty vary across countries as well as within regions of the same territory (Chowdhury & Mukhopadhaya, 2014). Discourse on the constituencies of poverty, its measurement and alternative solution is an ongoing one. According to Jansen *et al.*, (2015), poverty on monetary terms can be expressed as inadequate income to purchase essential items for survival, while non-monetary poverty associated with low educational attainment, inadequate access to public services, poor health, vulnerability to crime and social exclusion.

Individuals living within the household within which per capita income (or per adult equivalent) income or rather expenditure is below designated poverty line are identified as poor. However, in cases wherein households do not report income from either employment or grant, total household expenditure is used as proxy for income (Rogan, 2013). Furthermore, there are several poverty lines which are utilized, namely; the national poverty lines (the food poverty line, lower- bound and upper- bound poverty lines which include food and non-food items) (World Bank, 2015). International poverty lines are also widely utilized which are (\$ 1.25 & \$ 2.50) corrected for purchasing power parity (PPP). The food poverty line refers to the amount of money that an individual will need to consume the required energy intake which is R305. The lower bound poverty line is R416 which refers to the food poverty line (R305) plus the average amount derived from non-food items of households whose total food expenditure is equal to the food poverty line (Stats SA, 2015). Lastly, the upper bound poverty line is R577 which refers to the food poverty line (Stats SA, 2015) plus the average amount of households whose food expenditure is equal to the food poverty line (Stats SA, 2015).

Given its multidimensional nature, there are various approaches to measuring poverty which include absolute and relative terms. Absolute poverty refers to situation whereby people do not afford basic baskets of goods deemed for material survival while relative poverty draws distinction between poor and non-poor through income relative to the overall distribution of income or median and average value (World Bank, 2015). In addition, poverty is measured objectively and subjectively. Objective income poverty could be measured either through absolute or relative approaches. Ordinarily, objective income-poverty is based on measurement of minimum income required for survival. In South African context, proposed absolute poverty lines are R436, R665 and R1225 in 2013 prices.

Subjectively, individuals make self-assessment on whether or not they feel poor. Therefore, subjective poverty measurement does not necessarily involve a poverty line (Jansen *et al.*, 2015). In other words, an individual can make a cognitive judgement of

their income relative to others. According to Jansen *et al.* (2015) plethora of studies on poverty adopted either the absolute or relative income approach in South Africa (Jacobs & Makaudze, 2012; Rogan, 2013; Jansen *et al.*, 2015). Consistently, poverty should be measured from one year to next particularly when the components of poverty line agree upon taking cognisance to adjustments in the prices (Rogan, 2013; Toindepi, 2016).

3.3 Background Information of Limpopo Province

Limpopo Province is located in the northern part of South Africa sharing international boarders Botswana, Zimbabwe and Mozambique. From the southern flank from east to west, Limpopo Province shares borders with Mpumalanga, Gauteng, and North West. Moreover, Limpopo Province is divided into 5 Districts Municipalities and 25 Local Municipalities. Relative majority of the population is situated in rural areas as juxtaposed from the average of 50% at national level (Kyei & Gyekye, 2011). In addition, the province is dominated by black people who are still depending on agriculture for their livelihoods. Typically, Limpopo Province is a developing area with agricultural potential. In addition, it exports primary products and importing manufactured goods and services. However, due to rural make-up, conditions are substandard compared to its counterpart with exception of Eastern Cape (Kyei & Gyekye, 2011).

Agriculture constitutes the most practiced livelihood strategy in Limpopo Province. This include both commercial and subsistence agriculture. There are large commercial farms which are managed by non-black citizens and, these farms provide wage employment opportunities to the rural people. In addition, Limpopo Province covers a land size of 123910 km2 accounting for 11% of South Africa's grand land area (Stats SA, 2011). Despite the slow pace of land redistribution, most rural households deem subsistence farming as an ideal route out of poverty and income-generating strategy (Jacobs & Makaudze, 2012). However, literature revealed that farming households plagued with various challenges. In Limpopo Province, farming households are fraught with climatic aberrations such as drought and floods, crop failure and soil infertility (Perret *et al.*, 2005; Kyei & Gyekye, 2011). Consequently, rural households are compelled to bring about strategies in an attempt to transform their socio-economic conditions. Livelihood

diversification is becoming popular wherein they engage into diverse livelihood portfolio of activities motivated by different ambitions including income accumulation and food security. Livelihood diversification is widely embraced for its ability and potentiality to challenge poverty persistence within rural settings. In Limpopo Province, livelihood diversification is prevalently carried out in both on-farm and off-farm activities and its implications are largely conspicuous especially in better-off households (Perret *et al.*, 2005).

Labour migration in Limpopo is applied as one of the livelihood strategy among poor households. The majority of households have one or two people who have migrated to areas of economic potential to search for decent employment opportunities (Meso *et al.*, 2016). Consequently, labour migrants send remittances back home to augment local income in the household (Winters *et al.*, 2009). Migration strategy is predominant in Limpopo Province and is viewed as one of the component for livelihood diversification (Perret *et al.*, 2005; Khumalo, 2013). Limited access to fertile land to the rural communities is the main concern of the provincial government. Moreover, the strategy of giving back land to righteous people who were previously disadvantaged by the apartheid regime has been implemented in South Africa, and has served as an ideal pathway out of income-poverty and food security particularly in Limpopo Province through land redistribution, restitution and reform programs (Perret *et al.*, 2005). The income gap is too high in provinces leading to most households being vulnerable to high income and food insecurity (Stats SA, 2011).

3.3.1 Rural livelihoods and income-poverty in the province

In Limpopo Province, a considerable number of informal enterprises in the rural areas make a diverse range of products, both food and non-food, that are mainly used by the people in their vicinity (Bhandari & Grant, 2007). In corroboration, Perret *et al.* (2005) argued that the rural poor spend a high proportion of their income on locally produced goods and services. Non-agricultural livelihoods are widely practiced by relatively most rural dwellers in order to generate household income. Income-poverty is prevalent and renowned within rural communities largely because most households headed by female

and illiterates who are inclined to be employed in less income generating activities (Perret *et al*, 2005). Lack of education is believed to be one of the challenges facing the province in particular.

Ultimately, rural people have now shifted the focus towards the practice of no-farm livelihoods in an attempt to improve their standard of living. Copious number of poor people practice non-agricultural livelihoods as a means to generate hefty income. The types of income-generating livelihoods that are carried out by rural people are: self-employment, labour migration, social welfare grants, spaza shop, beer brewing and street hawking (Bhandari & Grant, 2007; Ellis, 2011). Due to lack of job opportunities in the province, self-employment, and small businesses are believed to be contributing towards income-poverty alleviation (Akudugu, 2016). Large number of informal enterprises in the rural areas of Limpopo Province make a diverse range of products, both food and non-food, that are mainly used by people in the vicinity (Perret *et al.*, 2005; Akudugu, 2016). Prevalently, enterprises found in rural areas of the province are commercial and trading enterprise which includes general dealers, cafes, spaza shops, bottle stores and butcheries among others (Perret *et al.*, 2005).

Despite the limited economic opportunities in the province, these income-generating sources contribute to rural household's income-poverty alleviation (Owolabi *et al.*, 2016). According to Ellis (2011), these income-generating livelihoods contribute to alleviation of poverty differently; it is yet predetermined by economic circumstances in the respective areas. Therefore, it is therefore clear that, despite exercising livelihood diversification, some households may struggle to get out of the poverty trap. In other words, it cannot be concluded with assumption that any household practicing this type of livelihood will escape from the trap. Department of Social Development (2015), revealed that labour migrant remittances and social grants are deemed as crucial sources of income for rural households particularly those that are headed by females and experiencing income-poverty. Even though social grant is reproached for not being enough, it is considered to be playing a significant role in the alleviation of household income poverty (Ellis, 2011). Additionally, social welfare grants play a more significant role amongst relative majority

of rural households as livelihood, however, it needs to be combined with other sources of income from non-farm activities in particular (Kyei & Gyekye, 2011).

3.3.2 Prospects and challenges of rural livelihood activities

Given that Limpopo Province is extensively engulfed by rural areas, agriculture remains some of the major livelihood sources for improving the living standard. Consequently, households in the province are inclined to different challenges related to agriculture. In other words, albeit the slow pace of land reform, small-scale farming has been identified to be an engine and one of the feasible livelihood strategies in Limpopo Province (Owulabi et al, 2016). As corroborated by Mpadeli & Maponya, (2014), macro-and micro-structural constraints, including those linked to and exacerbated by historical, natural and financial factors are some of the major challenges and stressors plagued by small-scale farmers in Limpopo Province. In most cases, challenges faced with small-scale farming households in the Limpopo Province have been those linked to financial, assets, land ownership and biophysical factors. Specific constraints further include market information and access, price inputs, availability of inputs, cost of transport among other challenges. In respect of fragmented rural infrastructure, market access and information are identified to be the catalyst and enormous factors affecting small-scale farmers especially those that are interested in marketing their surplus for income accumulation (Hilson, 2016; Stats SA, 2014).

Lack of market access is viewed as one the main problems constraining production in rural areas. Controversially, albeit rural farmers could be successful producers, they would still run at loss largely because their products will perish in their store rooms for as long as there is no formal market. Relative majority of rural farmers are still resource-poor and struggle to get access towards market access and information thereof. If farmers fail to get market access, it is not easy for them to participate in formal market activities because of transport deficiency, lack of formal education by majority of farmers and extreme climatic change (Hilson, 2016). As one of the main objectives of democratic government in South Africa, accomplishing rural development involves the process of

opening market access for emerging agricultural proponents and adversaries of livelihood diversification (Hilson, 2016).

A diverse portfolio of livelihood activities is believed to contribute to the sustainability of rural livelihood necessarily because it improves its long-run resilience in the face of adverse trends or sudden shocks. In Limpopo Province, seasonality has been identified to be one of the challenges facing rural population. Seasonality causes peaks and troughs in labour utilization on the farm and such has been recognized to create food insecurity as a consequent of mismatch between uneven farm income streams as well as continuous consumption requirement. It is indispensable to take into consideration the fact that households vary not only in the profile of assets that they hold, but also in their capability to substitute between assets when confronted by change. Limpopo Province is widely known for its agricultural potential; however, income-poverty has been viewed as one of the challenge faced by rural households (Stats SA, 2011).

Ironically, South Africa has the seventh highest per capita income on the continent but the country and its provinces especially Limpopo suffer immensely from colossal income gaps as well as dual economy. Limpopo Province is renowned to be one the provinces with highest rate of income inequality. Relative majority of rural households are inclined and probe to social exclusion, unemployment, corruption and HIV/AIDS (Rogan, 2013). These issues are highly conspicuous in rural areas than urban areas necessarily because services are biased and channelled to areas with economic potential (Khumalo, 2015). Further, one of the major challenges confronting rural population in the province is the pervading of a HIV/AIDS which most affect the poor females. It is estimated that roughly 1.5 million people live the pandemic disease in Limpopo Province. Considering the prevalence of these challenges in the province, it is deemed significant to devise some strategies and measures as a counter to annihilate income-poverty (Kyei & Gyekye, 2011).

3.3.3 The conditions of income-poverty in Limpopo Province

The concentration on income-poverty as an enormous measure of progress in the fight for poverty eradication fails to consider the poverty dimensions which remain hidden from the income perspective (Hammill, 2009). Therefore, in the process of alleviating incomepoverty, immense attention should be paid to other dimensions of poverty such as income perspective. Measuring income-poverty in Limpopo Province and South Africa at large requires the identification of two major factors and namely are; income and poverty line. Literature has shown that a dominant approach to measuring income-poverty involves all individuals living in the household in which per capita income or expenditure is below designated poverty line and such are regarded as poor (Rogan, 2013).

Unabated state of income-poverty remains core developmental problems encountered within developing countries. The relative income shares of individuals and households within a given population provide the best information on poverty for policy formulation (Rogan, 2013). Undoubtedly, poverty remains one of the most pressing economic and social issues in South Africa. However, the debate on what really constitutes poverty and how many poor people there are in the country at large, is still an on-going process (Khumalo, 2013). Although there are improvements in electricity and water provision, many rural women are still economically disadvantaged in Limpopo Province. This is largely because services are unaffordable especially in rural villages. Furthermore, despite that South Africa is a developing country; it has a large social system that caters for more than 20 percent of the total population by means of state grants. This has a significant distribution of income and on the alleviation of poverty in the villages of Limpopo Province.

In accordance with the conditions of income-poverty in South Africa, the level of poverty has dropped since 2006 and 2011, reaching a low level of 20.2% for extreme poverty and of 45% for moderate poverty. There are three renowned measures of poverty, with extreme poverty defined in terms of a "food poverty line" below which people are unable to purchase enough food for an adequate diet. Moreover, less extreme poverty is defined

in terms of a "lower-bound poverty line", below which people can afford an adequate diet but would have to sacrifice food to purchase non-food items (Stats SA, 2011).

In a nutshell, there is a vivid decline with respect to the level of poverty in South Africa, not ignoring the multidimensional nature thereof. This is clear testimony to the imperativeness of livelihood diversification and continuous provision of social security to improve the well-being of the South African citizens. Furthermore, the drop in poverty within the country, according to the report, translates to roughly 10.2-million South Africans living in extreme poverty in 2011 as compared to 12.6-million in 2006; and 23 million living in moderate poverty as compared to 27.1-million in 2006. The report ascertained the dramatic impact in terms of the financial crisis of 2008/09 had on the livelihoods of South Africa's poorest, which the number of people living below the food line jumping to 15.8-million in 2009 before dropping below 2006 levels again by 2011 (Stats SA, 2011).

3.3.4 Unemployment status in the province

The level of unemployment in Limpopo Province is found low especially when compared to other provinces. As result, majority of skilled and unskilled people tend to engage into informal businesses with an intention to generate income for better living standard (Hammill, 2009; Stats SA, 2014). Conversely, recent statistics revealed unemployment is very high within the province and consequently, some households take a cognitive decision to allow members to migrate to other provinces such as Gauteng Province in search of decent opportunities and adequate remittances (Stats SA, 2014). Economic status of province is gradually diminishing largely because skilled personnel migrate to other areas abandoning their local economic development (Stats SA, 2014). Further, it has been noted some university graduates are heavily affected by high level in province and tend to exacerbate the burden of the government (Ellis, 2000; 2011).

With the economy which is unable to cope and adapt against economic regression, copious people have been retrenched and this lead to rampant increase on the

unemployment statistics in the country (Kyei & Gyekye, 2011). Unemployment is most experienced in the provinces which are predominately rural and less economic opportunities such as Limpopo Province and North-West Province (Stats SA, 2011). In addition, most rural areas are located in the mountainous landscape and far from growth points associated with better economic opportunities (Khumalo, 2013). Ordinarily, majority of rural areas in Limpopo Province are considered to be falling under informal economy as they engage into survivalist livelihoods (Kyei & Gyekye, 2011). Additionally, literacy seems to be the key causes of income-poverty and unemployment in the province since relative majority of rural dwellers does not have adequate skills and knowledge that could grant them decent employment opportunities (Perret *et al.*, 2005). The government of the province is implementing various strategies to improve the economic conditions, however, little has been accomplished as the unemployment rate is still high (Stats SA, 2015). According to Kyei & Gyekye (2011), irrespective of how much Limpopo Province's economy grows, it will not be able to turn around the unemployment situation which is already worrying.

3.4 Mopani District Municipality

The Mopani District Municipality is situated in the North-eastern part of the Limpopo Province, 70km and 50km from Polokwane (main City of the Limpopo Province), along provincial roads R81 and R71 respectively. Mopani is one of the 5 districts of Limpopo province of South Africa namely; Greater Letaba, Greater Giyani, Greater Tzaneen, Maruleng and Ba-Phalaborwa. The district has a fertile soil which makes them agriculturally competitive and potential. Therefore, its environmental setting spur households to carry out livelihood diversification considering that farming gradually start to lose its value as a result of the renowned off-farm sources. Generally, diversification of livelihoods is now discerned the possible pathway out of income-poverty in rural households (Mopani IDP, 2008/2009).

3.4.1 Demographic and livelihood profile, district context

Mopani district has accommodated about 964 195 whereby most people speak Tsonga or Northern Sotho. The local municipalities are further demarcated in terms of wards, with about 118 wards in whole district area, with 15 urban areas (towns and townships) and 348 villages (rural settlements). Mopani district municipality has the agricultural potential due to the availability of extensive and spacious land. Consequently, this encourages people to start small scale farming and consider other off-farm activities in order to augment income and hence; eradicate poverty as one of major concern even on international base with respect to MDGs. Despite lack of basic service delivery such as water supply, households within the district municipality are able to sustain their farms with river water due to the fact that areas within the jurisdiction occasionally experience enough rain for agricultural practices. Concurrently, households are able to construct diverse portfolio of activities mainly because large proportion of the population within the district are rural dwellers in remote areas from the nearby towns. Consequently, the establishment of small-scale business becomes predominant in serving local communities with their necessities (Mopani IDP, 2008/ 2009).

3.4.2 An Overview of Greater Letaba Municipality

The Greater Letaba Municipality (GLM) is situated in the north-eastern quadrant of the Limpopo Province within the Mopani District Municipality Area. The population resident in the Greater Letaba Municipality area is estimated at 247 736. The household size in Greater Letaba Municipality has grown from 4.1 in 2001 to 4.2 in 2008 with the district household being stagnant. This scenario however, does not mean that the population in the district has not increased but that there has been a parallel growth between the population and household sizes. Almost 94.2% of households earned less than R3200 per month in 2001. This has reduced to 80.8% in 2008 showing an improvement in income per household (GLM IDP, 2012/2017). This probably effectuated as a result, an increase in proportion of people practicing livelihood diversification in order to enhance their household income. Greater Letaba Municipal area is characterized by contrasts such as varied topography, population densities, prolific vegetation in the south (timber) and

sparse in the north (bushveld). The availability of natural resources such as dams, tourism attractions, nature reserves and proximity to intensive economic activities are pivotal in terms of creating opportunities for economic spin-offs (GLM IDP, 2012/2017).

Majority of the households with no income are headed by women in the jurisdictional body due to male absenteeism. These households are therefore more reliant on social grants and are more dependent on the delivery of free basic services. To a large extent, it has been established that some households are headed by children. Clearly, these households are evidently worse than female headed households in terms of income poverty and level of illiteracy. In 2001, approximately 88.4% of households had an income of less than R1 600 per month. This was in line with the UN Report which sated 64% of households in Limpopo Province subsisted "below the breadline" (household income of less than R1 200 per month). This depicts a decrease from 84.4% to 80.8% in 2008. In other words, these figures clearly indicate that the rate of job creation has been relatively lower than demand. This is usually as a consequent of more people becoming to be economically active (GLM IDP, 2012/2017). The example to be used in this study is to investigate the contributions exhorted by constructing diverse portfolio of activities in alleviating income poverty in Madumeleng village, located within ward 2 of Greater Letaba Municipality.

3.4.3 Description of Madumeleng Village

The study was conducted within Madumeleng Village and is found in ward 2 of Greater Letaba Municipality within Mopani District Municipality, Limpopo Province. The village is about 19 kilometres north of Tzaneen Town and 12 kilometres away from "Rain Queen" Modjadji Kraal. Madumeleng Village is under the chieftaincy of Modjadji and has got an estimated population of 550 with approximately 240 households. Practice of livelihood diversification is clearly carried out by numerous households in the village. Constructing diverse portfolio of livelihood activities is consequently persuaded by the availability of extensive land and shopping complex which create an enabling environment for the practice of on-farm and off-farm activities in an attempt to annihilate income-poverty within respective homesteads. Furthermore, the village is adjacent to Modjadji dam which on

the other hand exhort the practice of livelihood diversification in various forms which include fishing and farming (GLM IDP, 2012/2017).

The village is purely rural with some characteristics of the dual South African economy and extensive land which encourages agricultural practices. The village is built on a fragile, richly fertile and donga-ridden soil land scape. This kind of environment normally supports green vegetation at a large extent especially during summer. Indispensably, the village has great agricultural potential and opportunities spurred by availability of the dam in vicinity. Despite the dam is drying up, some of households are fishing as part of their livelihoods. Approximately 80% of the households in Madumeleng Village are deemed poor with less education. Consequently, such households opt to consider other non-farm livelihood sources of income wherein social welfare and small enterprises predominates (GLM IDP, 2012/2017).

There are varieties of livelihood strategies practiced by individuals within households in the village which among others entail vending, beer brewing and crop farming. These livelihood strategies consist of survivalists who trade fruits, snacks and homemade food stuffs at the local school and shopping complex as well as the pension pay points while on the other side practicing agriculture to ensure income diversification. Households in Madumeleng Village are wide and spacious allowing them to consider the practice of agricultural livelihoods through gardening. Households which engage in agriculture plant fruits and vegetables crops such as mangoes, bananas, maize and sorghum in their yards. Households are not confined to subsistence farming but also take advantage of other non-agricultural livelihoods as a means to augment their income predominantly remittances, social welfare and formal employment. Through practicing livelihood diversification, level of poverty decreases, hence the work load of government in terms of food security diminish thereof (GLM IDP, 2012/2017).

Livelihood diversification is possible in the village. Due to that, the environment in which they are compels them to construct diverse portfolio of activities as there is extensive land for agricultural practices and shopping complex which attract people from nearby villages. The village may also draw spatial opportunities from tourism in the vicinity which serves as a greater economic prospectus and potential for the community. To mention few, the availability of the Rain Queen Kraal which may influence tourism related development along Ga-kgapane and Mokwakwaila development corridor, availability of the biggest Baobab tree in Africa with a bar inside located on the nearby areas which may enhance tourism facilities such as sale of indigenous crafts, accommodation facilities and convenience centres in the vicinity and lastly, Modjadji Nature Reserve plays an important role in bringing about socio-economic transformation in the village (GLM IDP, 2012/2017).

3.5 Conclusion

Despite erratic climate aberrations, South Africa is gaining its economic growth through agriculture and mining sector. In essence, South Africa, as one of developing countries in the African continent, with enabling environment for agricultural practices and minerals which ensure that economic development is enhanced. Although majority of the population suffer from poverty persistence, households are constructing diverse portfolio of activities to improve their standard of living through on-farm and off-farm activities. Limpopo Province, as an example, is one of the provinces in the country with agricultural opportunities and mineral production. However, it is mainly constituted by rural areas with majority of poor people whereby some do not have access to natural resources such as land to practice farming in order to ensure that food is available at all times.

Despite that service delivery is impeded by physical infrastructure development such as roads and bridges, rural households take an effort to farm and sell their products among themselves to improve their standard of living. Madumeleng village as the setting of the research serve as an example towards livelihood diversification and its significant towards ensuring that nutritious food is available at all times. Some of the households in the village generate their income through remittances sent by labour migrants and this is predominant in most South African provinces, hence leads to income diversification and effaces the persistence of poverty within the household.

CHAPTER 4

EVIDENCE OF RURAL LIVELIHOOD DIVERSIFICATION AND HOUSEHOLD INCOME-POVERTY ALLEVIATION FROM MADUMELENG VILLAGE

4.1 Introduction

Erstwhile, the global economy has gone down into turmoil as financial crisis even in the USA intensified and pervaded throughout other economies around the world. However, such crisis does not discourage some developing countries from devising alternatives to maintain the economic standard (Rogan, 2013). As the world experience a gradual decline in socio-economic issues, rural people formulate various livelihood strategies to alleviate the prevalent challenges of income-poverty and food security in developing countries. Formulation of livelihood strategies effectuated by failures and unsustainable initiatives of rural development like Basic Needs Approach (BNA) and inadequate social relief. In addition, decline of agricultural output persuade rural households search for alternative non-farm activities within developing countries (Akudugu, 2016). Poverty, employment and inequality are some of the major challenges discerned prevalent in the global context, particularly in Southern Africa. Practically, areas such as Madumeleng Village in South Africa, are plagued with unabated income-poverty, unemployment and food insecurity. Conversely, construction of different livelihood portfolios has been renowned potential solution to socio-economic challenges across the globe (Gumede, 2014).

This chapter analyses, interprets and discusses the findings of data which has been collected from households in Madumeleng Village. The village is typically rural with numerous households diversifying their livelihoods. The households practice livelihood diversification for disparate reasons which among others include alleviation of income-poverty and food security. The chapter is divided into six sections; first section covers the demographic profile which establishes the nature of households and determinants of poverty within Madumeleng Village. The second section depicts different types and characteristics of livelihood activities which are adopted by households in the village. With graphical illustrations, the section demonstrate total percentages of the types of on-farm,

off-farm, and non-farm activities. Furthermore, reliability and productivity of these activities are revealed. In the third section, the chapter uncovers methods and processes of livelihood diversification within households. Furthermore, the section specifically reveals motivations of household's decision to diversify. That is, ascertain whether households decide to diversify their livelihoods as voluntary strategy or proactive response to sudden shock. Moreover, section four demonstrate the conditions and levels of income-poverty in Madumeleng Village. In fifth section, determinants of income-poverty alleviation which include employment status and level of support received by households within the village are encapsulated. Subsequently, the sixth section demonstrate relationship of livelihood diversification and household income-poverty alleviation in Madumeleng Village. The findings herein shows the extent to which livelihood diversification of income-poverty in rural households.

4.2 Demographic profile of households in Madumeleng Village

Ordinarily, demographic profile generally determines the socio-economic conditions of rural households. Thus, this section basically demonstrate the demographic profile of 144 households sampled in Madumeleng Village to find out number of household members as well as to determine the household headship in the village. Significantly, the education status of the household head and number of members who directly and indirectly are contributing to household members should be considered in determining socio-economic standard in the village (Jansen *et al.*, 2015).

4.2.1 Household size in Madumeleng Village

Theoretically, there is a common consensus that household size and or total number of household members affect the living conditions and economic status of the household (Ambimbola & Oluwakemi, 2013). That is, the more increase in household size, the greater likelihood to face multidimensional poverty. In addition, socio-economic status is determined by household endowment, assets and ability to diversify. Therefore, better off households are inclined to diversify livelihoods with high returns adequately than households whom are poverty stricken. In Madumeleng Village, the study has found that,

out of 144 households randomly selected, relative majority (45%) of households are constituted by household size of 6 to 10 members (see figure 4.2. below). Therefore, most of the households in the village are likely to be faced with poverty as predetermined by their household size. According to Senadza (2014), the more household number increase, the greater chances for poverty and income inequality to predominate. However, there are households which have the ability to escape the experiences of poverty, in spite of their large proportion of household members. Chowdhury & Mukhopadhaya (2014; 14) discovered that, to some extent, increased household size indirectly offers a pragmatic contribution the living standard of the household given effective adoption of sustainable "occupational multiplicity" and diversified livelihood activities. In contrary, a prospective respondent revealed that "most of the household members are school learners and dependents". Consequently, majority of households are ought to resort into the practice of livelihood diversification as a strategy to their livelihood choices. Interestingly, literature has further demonstrated that the size of household is prevalently effectuated by societal values and norms which particularly encourage women to exercise roles of reproduction, production as well as community engagement (Ambimbola & Oluwakemi, 2013; Senadza, 2014). Few prospective respondents revealed that the increase of household size is largely persuaded by social security offered by South African government. The study infers that social relief (social grants) in South Africa incites population increase, poverty and dependency syndrome within the country.

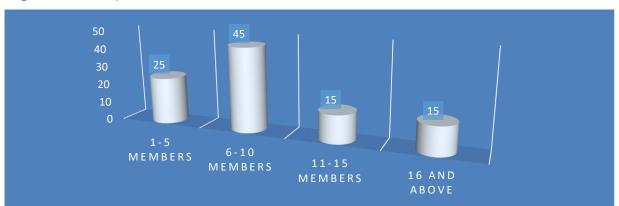




Figure 4.2. further reveal that only convenient (25%) are between 1 to 5 members as compared to households of 11 to 15 (15%) as well as 16 and above (15%). The study further found that households with 1 to 5 household members are better off and able to optimally diversify better yielding livelihood activities. This finding corroborates the literature that there is an increasing role of non-farm activities which are mobilised significantly by the better-off households in the rural communities. Additionally, these activities produce better returns to augment agricultural output as the primary source of livelihoods in most developing countries including South Africa (Rigg, 2006; Alemu, 2012). Households with members from 11 to 15, as well as 16 and above were ordinarily constituted by members who are engaged in "multi-spatial livelihoods" which commonly effective socio-economic support (Liwenga, 2009). Notwithstanding the migration decision by other members in the household, the household economy of affection inevitably bind all household members and determine their living conditions (Meso *et al.*, 2016). Thus, alleviation of income-poverty is determined by the size and number of individuals in the household.

4.2.2 Gender of household's headship

In developing countries, income-poverty has been inclined to households headed by women (Alemu, 2012). In other words, female-headed households are realised sceptical to poverty and underdevelopment. Research seeking synergies regarding development and alleviation has tentatively identified gender as an integral phenomenon of poverty in developing countries (Kantor, 2009). In Madumeleng Village, the study ascertained that households headed by male are predominant (62%) as compared against the female-headed ones (see figure 4.2 below). However, the study has found that these male persons are disproportionately old aged and relatively passive economically. "Most of the jobs are exclusively available to women; for instance, collection of tomatoes at ZZ2" said one of the respondent. Another respondent added that "majority of men are old and only participate in non-income generating activities such as digging holes for bereavements". These articulations confirms the literature which depicted that younger men with sufficient aptitude and social networks engage into newer form of income generation strategies, whereas older and less well connected men remain involved in more traditional, non-

manufacturing and less producing livelihood activities (Smith *et al.*, 2001; Martin & Lorenzen, 2016). Generally, such household's incomes considerably emanates from pension grants. Predetermined by the rural nature, there are less and defunct socioeconomic opportunities in the village. Consequently, men who are economically active have taken an initiative to migrate into urban areas for better opportunities and facilities. This concurs with the literature that rural areas remain with few young cohort and elderly individuals who are unable to actively partake and exert influence within development programmes and projects (Meso *et al.*, 2016).

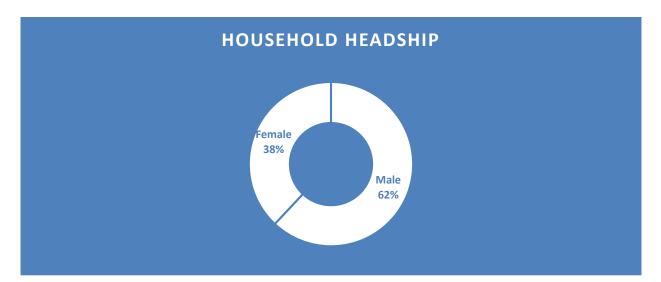


Figure 4.2: Proportion of household headship

Figure 4.2 further depicts that at least 38% of households sampled are headed by females. A prospective respondent pointed out that most of these women are sceptical to inadequate remittances from household members who migrated into other economic areas and cities. According to Jacobs & Makaudze (2012: 585), "fairly large proportion of households headed by women are trapped in asset poverty. The literature further elucidated that most female-headed households have lowest levels of education and lack the human capital they need to secure decent resilient living standard especially through the non-farm rural economy (Rigg, 2006; Jacobs & Makaudze, 2012; Senadza, 2014). In the event wherein members, particularly male figures fail to remit, households get prone to income-poverty and food insecurity extensively. Moreover, women ought to take responsibility to fend their household in event where migrants fail to secure jobs in urban

areas. When corroborating the literature, the study discovered that female-headed household are mainly vulnerable and easily get exposed to poverty in Madumeleng Village.

4.2.3 Educational status of the household's head

Literature has clearly revealed that education and human development remain central towards socio-economic standard of rural households. That is, household with better educational standard and level has greater likelihood to be economically active and diversify livelihood sources with high returns as compared to households with less or no education. Figure 4.3 below has four different status of education with underlying percentages in each phase. The study found that relative majority (42%) of household head procure secondary status of education in Madumeleng Village. Theoretically, there is controversial assumption that education dilate opportunities and choices for rural people in order to secure decent occupations. Furthermore, poor people are manly characterised by lack of better educational standard and remain contingent upon social security for their survival (Hajdu *et al*, 2011; Toidepi, 2016). Some prospective respondents demonstrated that lack of financial support for their education and societal beliefs in their erstwhile, discerned to be some of the factors which cajoled the elderlies to drop out of school and resort to search employment in urban areas. In other words, these factors contributed negatively towards living conditions in respective households.

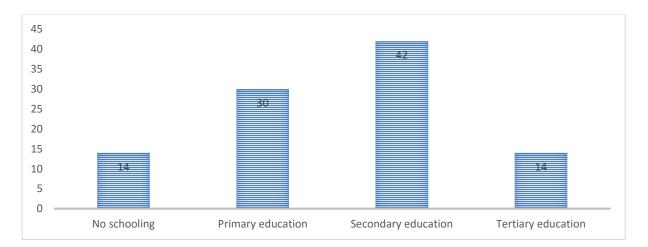


Figure 4.3: Proportion of household educational statuses

Figure 4.2.3 further demonstrated that households who possess educational status of primary education are conveniently (30%) as compared against prevalent status of no schooling (14%) and tertiary education (14%). The findings herein imply there is appalling low level of education in the study area which may be a barrier that impedes access to better yielding livelihood activities. According to Alemu (2012), lack of education and asset endowments are some of the major barriers which deprive poor households to carry out livelihoods with better returns. These livelihoods are mainly accessed by better off households which are largely characterised by tertiary education. Chief Modjadji of Madumeleng Village reckon that some of the reasons why households are headed by individuals with less or no education include; during apartheid epoch women were discouraged from going to school. In addition, men went to school for merely knowing how read and write. These circumstances were exacerbated by cultural dynamics as well as lack of educational support in terms of financial aid.

4.3 Types and Characteristics of Household Livelihoods in Rural areas

There are diverse portfolio of livelihood activities which are carried out by respective households in rural areas (Alemu, 2012). These rural livelihood activities are either farm-related or non-farm based. There is noticeable trend in literature that significance of non-farm activities tend to surpass farm-based livelihood sources particularly in terms of returns and income generation. Livelihood studies affirmed rural households resort to practice of livelihood diversification for various reasons such as income generation, alleviation of food insecurity and unemployment (Akudugu, 2016). In addition, rural development studies categorize livelihood activities as on-farm, off-farm, non-farm and non-income related activities. Categorization of livelihoods would facilitate comparison regarding significance and reliability of these activities in respective rural households (Ellis, 2000; Akudugu, 2016).

4.3.1 Categorization of household's livelihood activities in Madumeleng Village

The practice of disparate livelihood activities has been increasingly acknowledged by literature as an attempt to alleviate poverty (Veldeld *et al.*, 2012). However, there is

paucity of literature regarding solutions towards households who regularly plagued with income-poverty albeit multiple livelihoods practices. Although literature classify livelihoods into four categories, the study herein categorised livelihoods into on-farm, offfarm and non-farm activities. These livelihood activities are common and discovered in Madumeleng Village as respondents identified specific types of livelihoods in their respective households. In respect of on-farm activities, the study discovered that relative majority (38% and 33%) respondents practice livestock farming and fishing respectively (see figure 4.4 below). Seemingly, the village has "locational advantage" of Modjadji Dam their vicinity which occasionally persuade fishing and livestock keeping (Makhato & Kepe, 2006). Despite being adjacent to dam, some prospective respondents revealed erratic climatic conditions affect water capacity and certainly; sustainability of their livelihoods (see figure 4.5 below). In other words, less rainfall and water percolation directly affect their livestock and fishing activity. According to Jagger et al. (2012), livestock farming is imperative for most rural poor and often effectuate livelihood objectives and has potential to regular supply of nutrient-rich food that render significant supplement and diversity to staple plant-based diets.

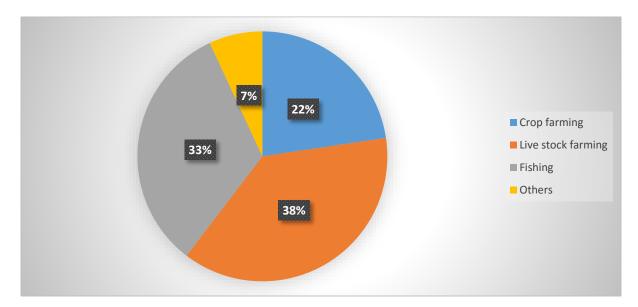


Figure 4.4: Types of household on-farm activities

Ordinarily, Madumeleng Village is vulnerable to less rainfall which has negative impact on the agricultural outputs of the households. Besides, figure 4.4 depicts that about 22% households tenaciously practice crop farming. Seemingly, numerous households practice crop farming for the purpose of consumption and income generation. Theoretically, income generation and food production are identified key major motives for livelihood practice. Thus, income-generating and food-producing livelihoods are significant and could be deemed ideal route out of poverty for rural areas (Sovacool, 2012; Amini & Bianco, 2016). Although on-farming activities are benefiting majority of households in Madumeleng Village, the percolation and drying up of Modjadji Dam raises immense concern towards farm households who are entirely hinged upon crop farming and fishing. One respondent articulated that "since there is little support from government, the drying up of the dam is the major problem which frustrates us as small scale farmers. Therefore, the situation herein suggests that households in the village should resort to exercise diversification and search for alternative either in off-farm and non-farm sources in order to supplement income within their proximity.

Figure 4.5: Illustrations of drying up Modjadji Dam



Evidently, less rainfall in the vicinity concurs with literature that agricultural sector is plagued with detrimental challenges which persuade almost all rural households to consider non-farm activities in order to transform their living conditions (Ambimbola & Oluwakemi, 2013). About 7% of respondents in the village identified other on-farming related activities which they engage on daily business. A prospective respondent revealed that they are able to improve and generate their income from other activities which include digging up traditional herbs in the mountain and mainly sell them to the traditional healers in the community. Notwithstanding the decline of agricultural productivity, some households depend on agriculture for socio-economic transformation and poverty escape in Madumeleng Village.

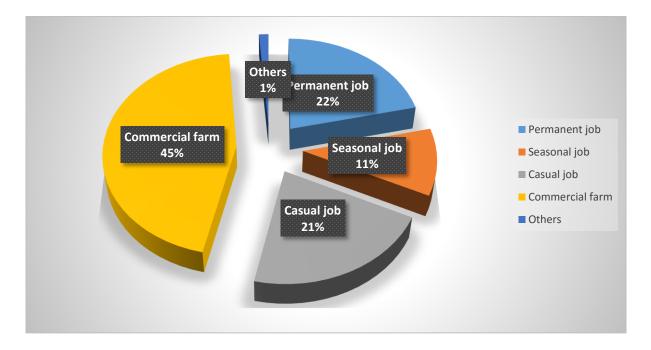


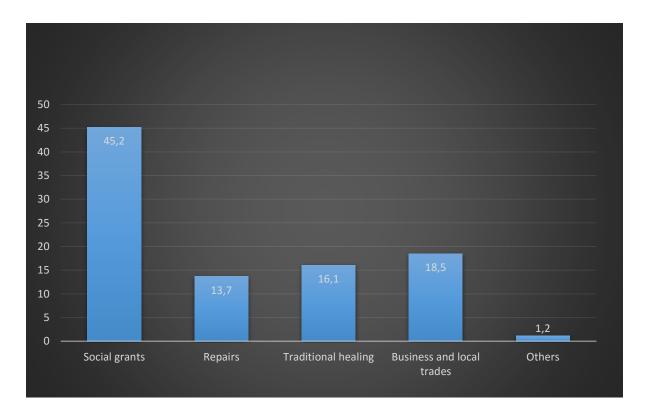
Figure 4.6: Types of household off-farm activities

Predetermined by access to productive assets, rural households engage into various types of job opportunities. Literature has demonstrated that rural households adopt livelihoods which have diverse returns and income (Alemu, 2012; Marthin & Lorenzen, 2016). Their returns and productivity are determined by environmental, economic, political and social contexts. Regarding off-farm activities within Madumeleng Village, relative majority (45%) of households are mainly employed by large commercial farms within the proximity. Some prospective respondents have revealed that commercial farms

especially ZZ2 and Westfalia are absorbing most of their members albeit low wage. Occasionally, these commercial farms provide temporary accommodation for some workers and revert back to their respective households towards the end of the month. Consequently, income-poverty perpetuates particularly in the households which are headed by minors and passive elderlies (Amini & Bianco, 2016).

Average of (22% and 21%) households are constituted by members who are employed on permanent and casual jobs respectively. Permanent employment is associated with better educational standard and social networks (Smith et al., 2001). Seemingly, households which are employed on permanent basis possess better educational status in the village. In addition, some households depend on casual jobs in Madumeleng Village. In other words, households which are contingent upon casual jobs discerned prone to plague with seasonality. Consequently, rural households resort to search for alternative route particularly in non-farm activities. Indeed, the literature already demonstrated that non-farm activities are superior in rural areas (Alemu, 2012, Jansen et al., 2015). However, various livelihood studies have discovered relative better off households have the potential to diversify into non-farm activities as compared against those who depend entirely on farm-based activities (Alemu, 2012; Senadza, 2014; Toindepi, 2016). Figure 4.5 further demonstrate that about 11% of households are engaged into seasonal jobs in the village. Lastly, negligible (1%) of households engage into other off-farm related activities due to manifold reasons such as daily gardening services. Generally, off-farm activities are ordinarily combined with on-farm activities for various reasons mainly for income supplement and generation (Marthin & Lorenzen, 2016).

Figure 4.7: Types of household non-farm activities



Agriculture is plagued with a number of challenges such as less rainfall, soil infertility and seasonality in Africa (Ambimbola & Oluwakemi, 2013). Consequently, rural households start to look for alternatives in order to supplement their farm income. Non-farm activities are currently renowned optimum strategy for combating income-poverty in most rural communities. Although non-farm activities are central, literature concur that better off households engage into more remunerative sources of income as compared to the poor households. However, according to Rahut & Scharf (2012), most rural households in Africa hinges upon non-farm sector to generate their income, albeit different living standard in respective households. The situation is common even in Madumeleng Village as relative majority (45.2%) of households consider social grants their main source of income. Indeed, some prospective respondents revealed that respective Child support grant and Old age grant are deemed common and significant towards household economic development and income security.

An average of 18.5% and 16.1% households further rely upon local businesses and traditional healing for income augmentation in the village. Geographical advantage of having shopping complex has spurred numerous households venture into enterprises and

resources trading. In addition, it has been discovered that the village comprises of considerable traditional healers which ordinarily require traditional herbs for healing processes. Consequently, about 1.2% of respondents added herb collection as other non-farm related activity. Commonly, some members of the households resort to herb collection in the mountain in order to supplement inadequate income from farm-based activities.

4.3.2 The level of livelihood activities' reliability in the households

In developing countries, most households adopt multiple sources of income in rural areas. As indicated recently, the multiple sources may include on-farm, off-farm, and non-farm activities predetermined by the specific environment (Akudugu, 2016). In Madumeleng Village, the study categorizes these prevalent livelihood activities to determine reliability and productivity towards socio-economic transformation in respective households. Clearly, it is deemed convenient and necessary to investigate level of reliability in order to determine their contributions towards alleviation of ever-increasing issue of incomepoverty within the village. An investigation of livelihoods reliability discern significant for proactive response and recommendations towards enhancement of household's living standard. Figure 4.8 below, demonstrate relative majority (40%) of households reckon that on-farm activities are reliable particularly on food production. In contrary, Jacobs & Makaudze (2012) emphasised that there is a noticeable decline in farm-based livelihoods practiced by households within the developing countries of Africa, Asia and Latin America, despite at a slower pace. Although literature reiterated that significance of farming activities is declining, respondents in the village counter that on-farming activities are increasingly reliable (Ellis, 2011). Conversely, negligible (7%) of respondents depicted that on-farm activities are very reliable. Thus, the findings herein suggest that only few households are cocksure about the reliability of on-farm activities. In other words, the perception is that on-farm activities is not tenaciously held by a large number in the community. Moreover, an average of (26% and 11%) households in Madumeleng Village believe on-farm activities are unreliable and very unreliable respectively. Most respondents reiterated that the village is prone to less rainfall which enormously affect products. In addition, agriculture is certainly seasonal in nature; therefore, households are ought to search for alternative in event of such conditions.

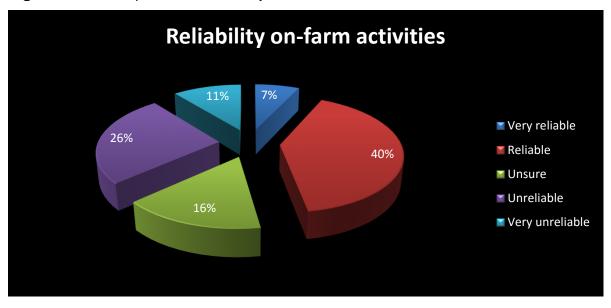


Figure 4.8: Perceptions on reliability of on-farm activities

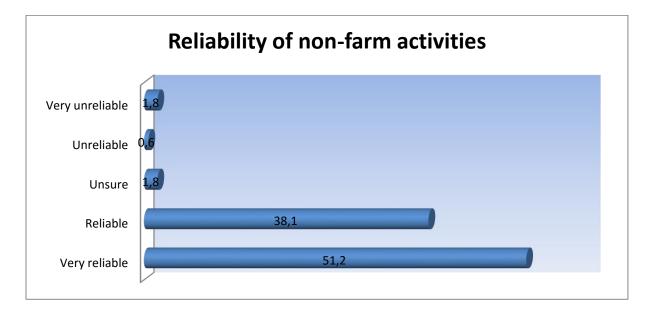
Furthermore, about 16% of respondents are unsure about reliability of on-farm activities. Apparently, erratic climatic condition is one of the major factors towards uncertainty of on-farm activities' reliability. Generally, it is inferred that reliability of on-farm activities is determined by geographical, economic, political and social factors within jurisdictional area (Toindepi, 2016).



Figure 4.9: Perceptions on reliability of off-farm activities

Theoretically, the reliability of off-farm activities is informed by household educational standard, endowment and access to information (Ellis, 2011). In other words, the nature of one's occupation may basically determine the reliability and security of income generation in the household. According to figure 4.9 above, relative half (50%) of the respondents discern that off-farm activities are very reliable. In addition, about 38% of respondents concur that off-farm activities are reliable particularly on income generation and food security. The study discovered that most households who reckon reliability of off-farm activities have better educational status, headed by active male personnel and are further employed on a permanent basis. Therefore, the findings corroborates the literature that the educational standard, asset endowments and accessibility of the head and individuals in the households predetermines the ability to thrive economically and socially (Ellis, 2011; Toindepi, 2016).

Moreover, figure 4.9 demonstrate that few (9%) of households are unsure about reliability of off-farm activities. Most unsure respondents are employed within seasonal and casual jobs which produce inconsistent wages and salaries. In addition, negligible (1% and 2%) of respondents perceive off-farm activities are very unreliable and unreliable respectively. Seemingly, most households who perceive unreliability of these activities are farm workers. Overtly, farm workers are controversially receive inadequate wages and salary. **Figure 4.10:** Perceptions on reliability of off-farm activities



Literature demonstrate that it is difficult for rural households to enter better remunerative types of non-farm activities due to specific prerequisites such as lack of capital for investment, poor access to information and social networks which condition entry into market niches or limitations related to location (Barret *et al.*, 2005; Rahut & Scharf, 2012). However, the study herein seeks to determine the reliability of non-farm activities in Madumeleng Village. It has been discovered that relative majority (51.2% and 38.1%) perceive that non-farm activities are very reliable and reliable respectively (figure 4.10). the findings hereby imply that most households in the village realise the potential of non-farming activities towards combating unabated income-poverty. Theoretically, most rural communities resort to non-farming activities in event of seasonality and less rainfall in developing countries (Rahut & Scharf, 2012). These conditions are common in Madumeleng village and farm-based households are obliged to diverse portfolio of farming and non-farm activities concurrently.

Notwithstanding competition, geographical description of Madumeleng Village overtly persuade number of households to venture into small businesses into the complex in order to augment farm income. Figure 4.10 further reveal that negligible (1.8% and 0.6%) perceive that non-farm activities are very unreliable and unreliable respectively. Evidently, only few respondents denounce the reliability of non-farming activities. In addition, about 1.8% of respondents are unsure about the reliability of these activities. The findings herein mean that non-farming activities acknowledge by relative majority of households as an ideal route out of income-poverty.

4.4 Modes and processes of livelihood diversification

On a global context, households may decide to depend on one type of livelihood or resort to search for alternative livelihood activities. Predetermined by circumstances, livelihood studies have demonstrated that diversification of livelihoods occur both as deliberate household strategy and as an involuntary response to crises. There are pull and push factors persuading households to diversify their livelihood activities. The process of constructing diverse livelihood portfolio is widely accepted in the literature as possible path out of multi-dimensions of poverty. Literature has acknowledged that most households practice most of their livelihoods for merely consumption. However, there is increasing trend of rural households which practice disparate livelihood activities concurrently as a method to generate income (Rahut & Scharf, 2012). In addition, practice of more than one livelihood activities is currently discerned norm in developing countries. The study herein demonstrate methods and strategies which are adopted by respective households when diversifying livelihood activities.

4.4.1 Modalities and nature of livelihood diversification in Madumeleng Village

The practice of livelihood diversification is common in Madumeleng Village wherein most households optimize existing geographical advantage in their disposal in order to augment household income in particular. In respect of figure 4.11 below, relative majority (83%) of households engage into multiple livelihood activities concurrently. Some respondents revealed it is easy to practice different livelihoods at the same time because of the shopping complex and Modjadji dam in their vicinity. In vernacular, one respondent articulated that "le ge rele ba bantshi, re rekisa dibjalwa tja rena ka pateng". In other words, relative majority of households sell their products at the shopping complex, despite the continuous competition. Seemingly, most households share the same sentiment that the shopping complex plays a major role in their businesses development and attraction. The study herein discovered that some households in the village venture into micro businesses and attain sustainable practice of agriculture in their proximity. In addition, some households trade local products and sell within the hectic shopping complex which attract numbers of rural dwellers in the jurisdictional area. The respondents acknowledge social grant as their major start up approach to their livelihoods in the households. Researchers demonstrated that a decline in agricultural productivity and lack of infrastructural development are some of factors which persuade rural households to opt for livelihood diversification as strategy to augment income in developing countries.

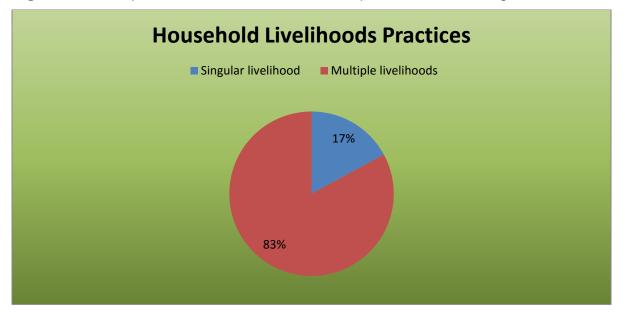


Figure 4.11: Proportion of household livelihoods practices in the village

Figure 4.11 further demonstrate that at least 17% of the households practice singular livelihoods in Madumeleng Village. In other words, these households do not perceive the necessity to diversify livelihoods or fail to obtain other activities determined by lack of access to better opportunities or household endowment among other factors.

Figure 4.12: Products which households trade and sell in the vicinity



The study found that most households do not deem necessity to diversify livelihoods as they reckon that they are content with their current livelihood. Chief Modjadji revealed that some better-off households are economically active and possesses better educational status which gives them option whether to diversify or not. Generally, the adoption of livelihood diversification as strategy for generating income in the household and food security is renowned in developing countries. Some prospective respondents stated that their decision for resorting to practice multiple livelihoods influenced by erratic climatic conditions, infrastructural inadequacy and soil infertility in Madumeleng Village. Therefore, it was necessary to search for alternatives both in on-farm and non-farm activities concurrently.

4.4.2 Strategies which yield greatest benefits in the household

Theoretically, geographical location and access to information are recorded most factors which spur most rural households to engage into different types of livelihood strategies persuaded by various contexts such as environmental background and level of returns. As a consequent of multifaceted dynamics and nature such as economic, social, institutional and political realms, livelihood strategies may vary in terms of their returns and productivity. Figure 4.13 below summarises different strategies adopted by households in Madumeleng Village. However, it is in this context that the study sought to analyse the greatest benefits which various strategies yield in respective households. Relative majority (57%) of households are realised to hinge upon grants as a strategy providing greatest benefits to the income in the village.

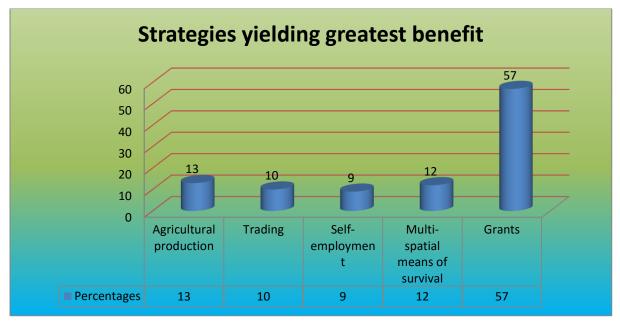


Figure 4.13: Proportion of high yielding strategies

As indicated recently, Madumeleng Village is relatively constituted by elderly people and women who receives various grants such as pension and social grants. Some responds view these grants as reliable sources with great benefits to the household income. Figure 4.13 demonstrated average 13% of households tenaciously holding belief that agriculture provide great income in Madumeleng Village. Although Ambimbola & Oluwakemi (2013) stated that agriculture, as one of the main sources of income particularly in rural areas is plagued with considerable problems which affect its productivity in developing countries. One could argue that agricultural issues such as unpredictable rainfall may not be an obstacle in Madumeleng Village largely because the area is intimately adjacent to Modjadji dam which provide water to almost all the villages within Greater Letaba Municipality.



Figure 4.14: Illustrations of household agricultural production

Evidently, households in the village are able to produce crops albeit less and erratic rainfall. Moreover, figure 4.10 depicts that at least minority perceive trading (10%) and multi spatial livelihoods (12%) as well as self-employment (9%) are some of the strategies which provide greatest benefits within the household in the village. A certain female respondent shared that their household adopt multi spatial livelihoods as one of strategies to improve the living conditions and income-poverty alleviation. Multi spatial livelihoods realised to yield greatest benefits through remittances send back fellow household members residing in other areas. Seemingly, the male figures in most households decided to migrate in other provinces particularly Gauteng Province in search of better economic opportunities. The study revealed that some households resort to trading as one of the strategies for generating income. Few prospective respondents revealed that trading is mainly practiced by better-off households in the village as a strategy to augment their income. Furthermore, self-employment plays an important role in the generation of household income.

As indicated recently, Madumeleng Village is characterised by a shopping complex which encourage households to take advantage by venturing into micro enterprises. This corroborate study by Ellis (1998; 2011), asserts that diversification of livelihoods may occur as a means for accumulation by rural rich or a safety valve for the rural poor. With lack of employment in South Africa, rural people venture into different levels of enterprises and businesses wherein some are able to employ fellow dwellers as a way to fight against poverty. Thus, self-employment may be considered to have the potential to reduce government's load of halving and alleviating poverty in South Africa. Generally, rural households use different strategies to diversify the livelihood activities and hold tightly perception that the strategies yield greatest benefits in respective households.

4.5 Conditions and Status of income-poverty

There is an overt consensus within the literature that poverty is multidimensional and remains one of the noticeable issue facing developing countries including South Africa. Establishment of Millennium Development Goals (MDGs) and National Development Plan (NDP) shows intense commitment by South African government to alleviate multidimensional poverty. It is against the background that the study seeks to ascertain extent to which livelihood diversification contribute towards alleviation of household income-poverty. This owes to fact that income-poverty is increasingly plaguing relative majority of rural people in developing countries. The study herein investigate the conditions and statuses of income-poverty within the village. Measuring and analysis conditions and level of income-poverty entail scrutinizing household monthly income. Income-poverty analysis at a household level helps in determining arduous effort and commitment in the alleviation of unabated income-poverty. In addition, analysis would be imperative in determining impact of household livelihood choices towards income-poverty alleviation in Madumeleng Village.

4.5.1 Major sources of income in the household

An income growth in household contributes immensely towards the combating poverty within the households. Income and consumption are largely perceived as the key criterions for measuring money-matric poverty in developing countries (Stats SA, 2014). However, it is imperative to identify major sources of household income in order to realise

and determine sustainability of the predetermined status of income-poverty. Figure 4.15 below, discovered relative majority (24%) of households identify that social grant is the main source of income in their respective households. This finding corroborates the literature that Child support grant, old-age grant and disability grant are the most accessible and received grants in most South African communities (Jacobs & Makaudze, 2012). Stats SA (2014) corroborated that although initially seen as short-term measure to address poverty, social grants have increasingly become one of the main sources of livelihood in South Africa. Moreover, these manifold social grants play significant role in combating multidimensional poverty. Considerable households receive social grant, particularly child support grant and old age grant in Madumeleng Village. Therefore, livelihood activities in the study are ordinarily unstainable. For this reason, there is a need for financial management, enhancement of livelihood activities and establishment of sustainable assets in the households. Some respondents reveal controversial articulation about the sufficiency of social grant towards the alleviation of income-poverty. Relative respondents demonstrated that social grant helps them to diversify livelihoods and plays important role out of poverty. In addition, sustainability of this income source is still questionable, albeit its significance.

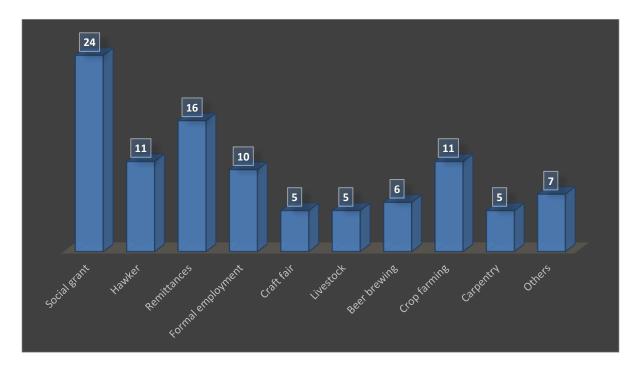


Figure 4.15: Proportion of major sources of household income

Figure 4. 15 discovered that average (16%) of household in Madumeleng Village have identified remittances as their major source of income. Due to lack of job opportunities in rural areas, some household members resort to adopt rural-urban migration strategy or multi-spatial livelihoods as a way to generate additional income for their households. This is common in Madumeleng Village were migrant labours send back remittances on a monthly basis to their respective households. Occasionally, economic decisions which are taken by rural households directly bind their fellow household migrant workers.

Livelihood studies asserted that multi-spatial livelihoods remain an alternative strategy for income-poverty alleviation (Meso *et al*, 2016). Furthermore, figure 4.15 demonstrate negligible (11%) households have identified hawker as their major source of income within the village. seemingly, decision to adopt hawk as strategy is positively influenced by shopping complex within the vicinity. In addition, at least (10%) households identified formal employment as their major source of income in the household. The study found that some households have secured formal employment and generate enough income for the household.

The literature has affirmed complexity which some rural households face in entering better remunerating types of non-farm employment which include the need of special skills, lack of capital for investments and social network (Barnet *et al.*, 2005; Rahut & Scharf, 2012). In addition, education plays an indispensable role across low-return and high-return non-farm activities. Similarly, negligible (11%) households perceive crop farming as their major source of income. Despite the renowned focus on non-farm activities, number of households in Madumeleng Village still realise importance of non-farm activities for generating income. Moreover, figure 4.15 discovered that negligible (7%) households identified "others" as their main source of income. It was discovered that some households generate income from other sources such as traditional activities (healing and initiation school), loan shacks and repairs.

These type of livelihood activities were classified as "Others" in this context. In addition, the study found that 6% of households discern beer brewing as their major source of

income. Being constituted by large proportion of elders, some households adopted to take traditional beer brewing as a source of income. Figure 4.15 further reveal that minority of (5%) households identified craft fair livestock and carpentry as their major source of income. Generally, the study deduce relative households mobilise available resources persuaded by different motives which may include improving their wellbeing and income in Madumeleng Village. The village is realised conducive and enabling for encouraging households to establish income generating activities and opportunities as an approach to combat the multidimensional phenomenon of poverty.

4.5.2 Household monthly income

Considerable number of rural development studies prefer to use income as a criterion for measuring poverty at a household level. Therefore, it is in this context that income will be sorely used as a criterion to determine the status and condition income-poverty at a household. In other words, it is significant for any poverty related study to consider income as phenomenon to determine whether individuals, households, communities and nations are classified below the relative poverty line. Despite, the literature has revealed that there are numerous poor households who do not live below the poverty line yet plagued with income-poverty. This owes that poverty is multi-dimensional and strike on a relative or absolute element (Owolabi *et al.*, 2016).

Figure 4.16 below demonstrate varying categories of income which ranges from no income up to above R4001. The purpose relating to assessment of income was to determine level of income-poverty and number of people living below the poverty line. The study depicted that relative majority (31%) respondents receive a monthly income between R1001 and R2000. As indicated earlier, most households in Madumeleng Village hinges upon grants as their source of income. It is now apparent that grants, especially social grants are proportionally received by more than one recipient in the households. Niehof (2008) demonstrated the process of alleviating household income-poverty should be more than determining quantity but usage of money, and number of people depending on that amount. Therefore, one could inference that household in Madumeleng Village

pay immense attention on the quantity of income quantity yet paying scant attention on the number of dependents in the household.

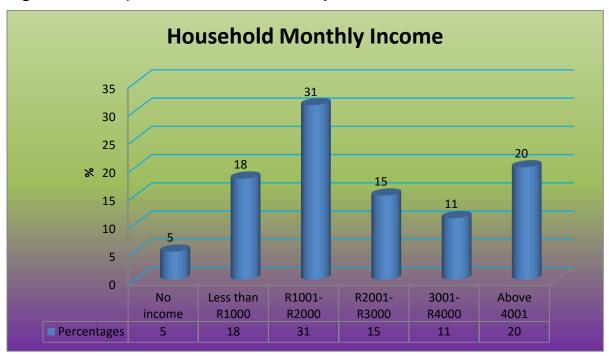


Figure 4.16: Proportion of household monthly income

Although relative majority of households receive a monthly income between R1001-R2000, the study ascertained that a significant (18%) of households receives an income which is less than R1000 and at least (5%) receiving no income. These households are categorised under the poverty line on an international and national level. Figure 4.16 shows that average (20%) number of households receive a monthly income of above R4000. Furthermore, Chief Modjadji concurred that better-off households accumulate satisfying income monthly largely because are able to diversify on a number of livelihoods with high returns. Conversely, the study has found that poor households are inclined to practice livelihood activities which are non-income related or less income generating activities.

The findings further shows that 11% of households generate monthly income of between R3001- R4000 within the village. Seemingly, relative majority of households in Madumeleng Village does not live below the poverty line. This is believed to be the

consequences of adopting multiple types of livelihoods to augment household income. Therefore, an inference could be determined that the status of income-poverty is extremely low since only few (5%) receive no income and at least 18% of households fall below the national poverty line of South Africa. Albeit relative majority for households live above the poverty line, figure 4.16 confirmed that income-poverty is still one of the major concerns, particularly within households who are still contingent upon single livelihood for survival and improving income condition in Madumeleng Village.

4.5.1 Household spending

Research demonstrated that rural dwellers have livelihood choices which produce different returns and outputs. The diversity of returns is effectuated by number of factors and components like economic barriers, access to resources and educational status (Alemu, 2012; Oyinbo & Olaleye, 2016). According to Rahut & Scharf (2012), it is almost impossible for rural people to better remunerative sources due to prerequisites of special skills, poor access to information, social networks that condition entry to market niches and lack of capital for investment. Although diverse household produce different results and productivity, it is advisable to identify and analyse household spending from the income generated. Analysis in this regard helps to determine status of income-poverty and ensure economic sustainability for socio-economic transformation in the household.

The study found that relative majority (42%) of households spend large of their income on food purchase. Besides income-poverty, the adoption of livelihood diversification have the potential to overcome number of challenges plagued by rural people such as food insecurity (figure 4.17). Food insecurity has been identified by the literature as one of the pressing challenges which affect most rural people in developing countries including South Africa (Shimelis & Bogale, 2008; Phago & Tsoabisi, 2010). Therefore, household in Madumeleng Village augment their income to ensure availability of nutritious and sufficient food at all times. The literature revealed livelihood diversification does not alleviate income-poverty but address considerable challenges which are faced by direct and indirect household individuals on daily basis (Marthin & Lorenzen, 2016). Therefore, the income generated by the households plays a pivotal role in combating holistic challenges in rural areas. Figure 4.17 further discovered that 24% of households use their income to maintain means of survival. That is, some households in the village generate income which allows them to fend for their livelihood sources. Indispensably, livelihood sources should be maintained and supported at all times in order to ensure sustainability and static productivity.

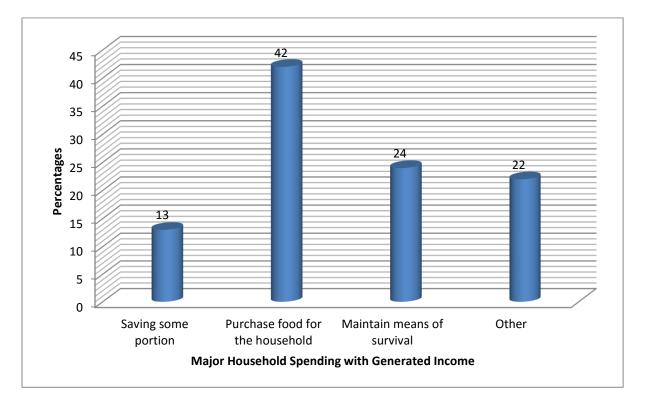


Figure 4.17: Proportion of major household spending from generated income

In addition, the study found that average (22%) households spend income on "Other" activities which encompasses paying social schemes and related co-operatives. This corroborates that income generated within the household deemed beneficial towards manifold day to day activities. Some prospective respondents shared that in spite of diverse livelihood activities which one adopt, are able to satisfy their basic amenities. Lastly, figure 4.17 found that 13% households do not entirely exhaust their income but exercise saving an approach to sustainability. Thus, some households within the village are able to generate income to extent of saving some portion for future use. Seemingly, inference could be made that the rural households practice are able to diversify their

activities with income which they generate on daily business. Savings and self-reliant are clearly acknowledged by literature as ideal approaches and strategies towards the attainment of sustainable development.

4.5.3 Household employment status

Employment status of household is significant in assessing the ability and likelihood to alleviate income-poverty. In other words, it is imperative to consider employment status of a household in order to determine ability to meet basic necessities such as food and clothes. In addition, the literature demonstrated that livelihood practices may be exercised by more than one individual in the household. Figure 4.18 below has five categories and namely are: employed, unemployed, self-employed, pensioner and others, which are used to describe employment status of households in Madumeleng Village. These categories are basically used to assess possibility of a household to alleviate unabated issue of income-poverty. The conceptual framework avowed that a household with the greatest unemployment rate are sceptical to income-poverty and exposed to chronic diseases such as malnutrition which immensely affect their life expectancy. The findings overtly depicts that relative majority (37%) of households are unemployed while negligible (35%) of households are self-employed in Madumeleng Village (see figure 4.18). Therefore, one could infer that rural people are not entirely contingent upon government social security yet mobilize local resource to augment their household income. Seemingly, households in Madumeleng Village have feasible endowments and depending on innovation in widening up opportunities before the government.

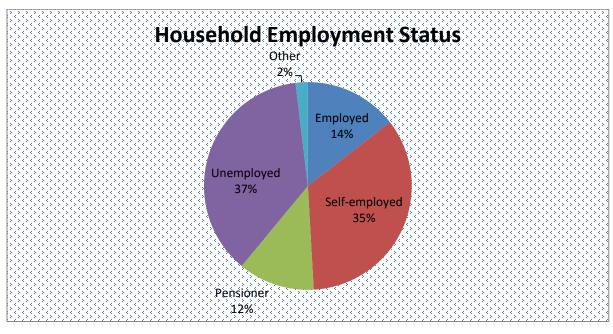


Figure 4.18: Proportion of household employment status

One respondent attested that there were no job opportunities in the vicinity before resorting to urban migration strategy. Conversely, the prospective respondent further revealed that labour migration was not better enough to alleviate income-poverty due to unpredictable and inconsistent remittances. Consequently, rural households opt for the establishment of small businesses and trading within their proximity. Figure 4.15 further demonstrates that an average households (14%) in the village are respectively employed. Albeit the salary variance, income-poverty does not apparently affect the entire households in Madumeleng Village. However, numerous household members in the village are prevalently employed in the white-owned commercial farms such as ZZ2 and Westfalia. These commercial farms are mainly characterised by low level of salaries and seasonal employment. Theoretically, households with tertiary education are inclined to decent job and livelihood opportunities which ensures socio-economic security and ability to respond to sudden shocks. Few (12%) households are the beneficiaries of pension grants in the Village (figure 4.18). Madumeleng Village is extensively constituted by the recipients of pension grants which mainly serve as their source of income. Lastly, negligible (2%) of households categorised their employment status as "Other" which realised to refer to different activities such as contractual employment feeding schemes

in the local schools. The contractual employments lacks sustainability and could not overwhelm income-poverty in the household (Ellis, 2011).

4.5.4 The level of support from public-private entities

To improve living conditions and widen access to resources in rural areas, households deserve sustainable support in order to stimulate self-reliance and independent (Alemu, 2012). In other words, analysis of support received from entities remain indispensably large because it determines the possibility of income-poverty alleviation in developing countries. It is further significant to ascertain satisfaction level from recipients from either public, private or Non-Governmental Organizations (NGOs) entities vested interest. Figure 4.19 below has five categories which are used to define the nature and level of support received by households in Madumeleng Village. Relative majority (37%) of respondents in the village share same sentiments that they do not receive any support from entities. Lack of support remain one of major factors which deter the rural households from practicing manifold livelihoods concurrently (Smith et al., 2001). One respondent arrogantly stated that "social grant would not be defined as a specific support emanating from government because due to the fact that is exclusive and issued through certain prerequisites such as disability, age and perceived insufficient for establishing an initiative thereof". There is a clear indication that ordinary people are discontent with the support they receive from externalities. Some prospective respondents pointed out that "government officials are only available when elections are approaching".

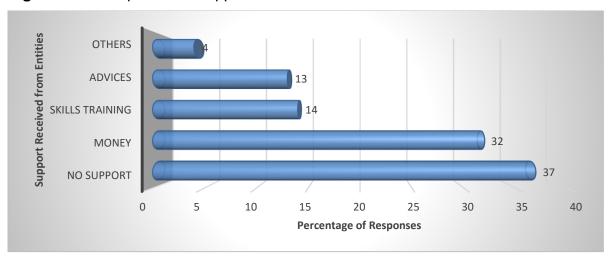


Figure 4.19: Proportion of support from various entities

Figure 4.19 further demonstrates considerable number (32%) of households who receive support in a form of money in Madumeleng Village. imperatively, financial support plays a pivotal role in the development of micro start-ups in rural areas. However, provision of money requires periodic monitoring and evaluation in order to determine viability and sustainability of such support towards livelihood activities. It has been found that some entities such as Small Enterprise Development Agency (SEDA), Small Enterprise Development (SED), Lottery and municipal projects exercise financial support in order for community members to start businesses. In addition, these entities ensures optimum use of funds and provide access to micro loans with low repayment rates. 14% of households in the village occasionally receive skills training kind of support particularly on resource thrift and livelihoods management (see figure 4.19 above). The study has further found that ABSA bank was acknowledged by respective households as an active entity which provides skills development in the village.

A skills training support is deemed significant for human development and management of initiatives mainly because it is associated with innovation and creativity. Figure 4.19 demonstrates that the minority of 13% households receive support in terms of advices in Madumeleng Village. Theoretically, most rural people lack special cognitive support from entities especially government and level of dependency ascend. Support received by rural people in developing countries occasionally is meant for manipulation and exploitation (Smith *et al.*, 2001; Owusu *et al.*, 2010). The study draw an inference that most rural households do not really receive from government to uplift their livelihood activities. However, private entities play a noticeable and salient role of support to maintain and promote local economic development in rural areas such as Madumeleng Village. Livelihood studies depicted that socio-economic transformation of local people is exhorted by level and content of support received by the intended beneficiaries. Therefore, it is necessary to encourage the sustainable partnership of public, private and civil society in the accomplishment of socio-economic transformation and income-poverty alleviation at grassroots level in South Africa.

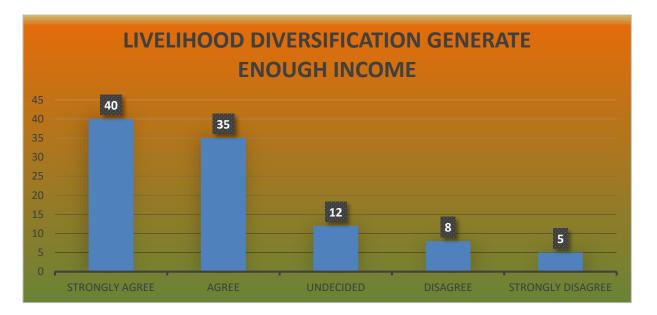
4.6 Evidence of the contributions of livelihood diversification towards household income-poverty alleviation

Livelihood studies revealed that the process of practicing of disparate livelihood activities have positive impact on the lives of the people particularly poverty stricken groups (Ellis, 2011; Senadza, 2014). Livelihood diversification is mainly practiced by people who seek to generate income and alleviate food insecurity in their households. It is in the context of this section to determine the extent to which livelihood diversification contribute towards the alleviation of income-poverty at a household level. Livelihood diversification may be practiced through on-farm, off-farm and non-farm activities particularly in developing countries. The literature stated that performance of on-farm activities, in terms of income generation, inclined to be surpassed by both off-farm and non-farm activities because of, among other reasons, the persistence of soil infertility and erratic climatic conditions (Ambimbola & Oluwakemi, 2013). Consequently, farm households resort to nonagricultural activities. Significantly, this section investigate the contributions of livelihood diversification towards household income-poverty. It entails an analysis of the adequacy of generated income in the household as well as respondent's perceptions regarding the relationship study variables namely: livelihood diversification and income-poverty in Madumeleng Village.

4.6.1 Outcomes of practicing multiple livelihoods

In Africa, a number of studies have demonstrated that while most rural households are involved in agricultural activities as their main source, they also engage in other income generating activities in order to supplement their main source of income (Barret *et al.*, 2001; Ambimbola & Oluwakemi, 2013). In addition, with the practice of on-farm and offfarm activities, rural households are able to generate more income to maintain and improve their living standard. Albeit livelihood diversification is prevalently renowned for most rural people in developing countries, non-agricultural activities are critical components of the diversification process. The study found that relative majority (40%) of households are constructing diverse portfolio of livelihood activities to generate enough income in their respective households in Madumeleng Village. Therefore, livelihood diversification is acknowledged and embraced by most households as a nascent strategy for augmenting income and an ideal route out of poverty in rural areas. In addition, few of the respondents obtain income from only one source as almost all households in Madumeleng Village reckon that the process of combining farm and non-farm activities contribute towards socio-economic standard in their households.

Figure 4.20: Respondent's intensity on household income generated through livelihood diversification



Results shows that large number (35%) of households in Madumeleng Village reckon that livelihood diversification generate hefty income (figure 4.20). This corroborates findings of Ambimbola & Oluwakemi (2013) that in Nigeria, the practice of more than one livelihoods sources (on-farm and non-farm) provide high returns of income in Ondo State

households and widens up opportunities for alleviating food insecurity as well as low welfare. Generally, one could extrapolate that rural people acknowledge the significance of constructing diverse livelihood portfolios as an optimum approach household income augmentation. Some respondents in the village revealed that non-farm activities plays an essential role in supplementing farm income when juxtaposing livelihood sources. Figure 4.20 found that negligible (12%) households are undecided about the contributions of livelihood diversification in the alleviation of income-poverty.

Thus, there are people who do not recognize the impact and benefits of livelihood diversification in respect of their household income. In other words, these people are unsure whether the practice of livelihood diversification yield the greatest benefit in the household. The results shows negligible 8% of respondents disagree that livelihood diversification provide sufficient household income. Therefore, livelihood activities vary in terms of returns and some do not generate enough income. Theoretically, some rural households fail to generate suffice income due to varying household endowment, access to resources, educational status and nature of environment (Perz, 2005). One prospective respondent shared their livelihood activities do not yield average returns as consequent of support deficiency anticipated from entities. Subsequently, the study found that at least 5% of households strongly reckon that their application of livelihood diversification is largely in vain. The magnitude and level of income are largely predetermined by the nature of livelihoods and assets adopted by the household.

4.6.2 The adequacy of income generated in the household

Deducing extent to which livelihood diversification contribute towards the alleviation of unabated magnitude of income-poverty encapsulate an analyses of perceptions from respective respondents on the adequacy of income generated within the household. In other words, the magnitude of income that is generated in the household determine the potentiality of livelihood diversification towards transforming socio-economic standards. It is in this context that the study sought to ascertain perception of respondents who reckon that livelihood diversification provide enough income. The study has adopted five varying levels of perceptions which are ranging from; very adequate, Adequate, neither/nor,

inadequate and very inadequate, in order to establish the satisfaction of household income. According to figure 4.21, a relative large number (34%) of households highly concur that practicing livelihood diversification provide sufficient household income. Generally, this implies that livelihood diversification is renowned as ideal approach to supplement household income in Madumeleng Village.

Informed by the results and findings, it could be inferred that livelihood diversification is basically a convenient strategy for alleviating income poverty in rural communities. A large number of prospective respondents in the village articulated that they strongly agree livelihood diversity generate enough income for the household transformation. They went on to share that albeit educational status in respective households, hinging upon one source of living is extremely risky into the household considering socio-economic issues such as inflation and seasonality. Relative majority (39%) of households showed their satisfaction regarding the impact of livelihood diversification specifically on alleviating income poverty. It is significant to weigh the adequacy of income generated with the proportion of household size. The literature revealed that households to resort to livelihood diversification. In their empirical study in Nigeria, Ambimbola & Oluwakemi (2013) have discovered that households with 7-10 members were extremely prone to poverty and income inequality. It has been found that considerable number of people who perceive the adequacy of income generated emanate from households with least household size.

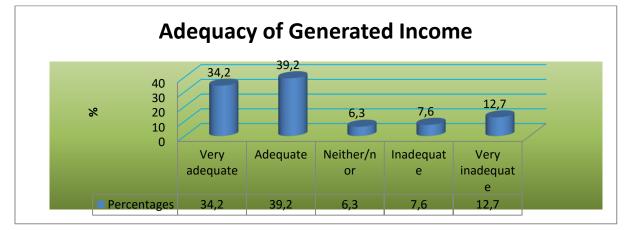


Figure 4.21: Intensity of respondents regarding the adequacy of household income

Figure 4.21 demonstrate that average of 13% households perceive income generated by different livelihood practices are very inadequate. In most cases, the adequacy of income determined the nature of livelihoods which households resort to practice. Conspicuously, there are some respondents who discern that their income does not meet basic amenities. A prospective respondent articulated in vernacular that "Tshelete ya phei ke e nyane, a e *dire selo*". To interpret, the social grant is not adequate and satisfactory. Seemingly, most households largely regard social grants as their main source of income. Additionally, one respondent shared that "although the social grant is not that enough to purchase sustainable food, it plays a significant role for monthly groceries and paying out credits". The findings further revealed that competition over local resources is one of the major factors which affect magnitude of household income. As a result, only those with competitive advantage and access to productive assets would benefit and generate enough income for their household. Similarly, the study found that negligible 8% of households perceive that income which they generate through multiple livelihoods are overtly inadequate (figure 4.21). This corroborates literature that some rural households adopt livelihoods with low returns vehemently (Perret et al., 2005; Ellis, 2011; Oyinbo & Olaleye, 2016).

Access to resources and inadequate infrastructure are some of the identified factors that retards some rural households to choose livelihood activities which produce high profits. Furthermore, figure 4.21 demonstrates that minority of 6% households are uncertain whether their income is sufficient or not. In other words, these households do not realise impact of their income albeit their effort. Through empirical observation, most respondents who are unsure about impact as well as adequacy of generated income are better-off families with average household size. Alemu (2012) corroborates that rural households with potential to diversify their income sources into non-farm activities are relatively better-off than those who hinges upon farming activities alone.

4.7 Conclusion

The process of practicing more than one livelihood activity has become popular and renowned ideal trajectory out of poverty. Rural households are inclined to practice both

farm and non-farm based activities concurrently as a way to either generate income, alleviate food insecurity, responding to risks, seasonality and decline in agricultural productivity. Livelihood researchers corroborates findings of this study that there is a trend that rural people start to prefer non-farm activities over on-farm sources of income. In developing countries, almost half of the rural population depend on non-labour sources of income such as social grant, remittances and pensions. Rural development studies revealed that the practice of livelihood diversification contribute towards generation of income and improving the standard of living. However, in the recent chapter, it has been acknowledged that practice of livelihood diversification does not determine absolute alleviation of income-poverty. Therefore, it could be inferred that every household which exercise livelihood diversification guarantee to combat income-poverty. The study herein affirmed that various households have diverse access to either remunerative on nonremunerative livelihoods. Furthermore, it has demonstrated that education, household headship, household size, endowment and infrastructure development are important components across low-return and high-return livelihood activities. In addition, there are number of challenges which hinder the practice of livelihood diversification and these may include erratic rainfall and resource competition in Madumeleng Village.

CHAPTER 5

FINDINGS, RECOMMENDATIONS AND CONCLUSION OF THE STUDY

5.1 Introduction

The extent to which livelihood diversification contribute towards alleviation of an everincreasing issue of income-poverty is well acknowledged by rural people and literature across developing countries. A plethora of livelihood studies, including this one, have demonstrated a symbiotic and inextricable relationship that livelihood diversification has towards the alleviation of household income-poverty in rural areas. Undoubtedly, there are manifold reasons and motivations for deciding to diversify in the household. These motivations vary in context and circumstances such as a desire to accumulate, invest and a need to spread risks or maintain incomes as well as to cope against seasonality. It is in this context that the study herein sought to ascertain and investigate the extent to which the practice of concurrent multiple livelihood activities contribute towards alleviation of income-poverty, with specific reference to Madumeleng Village.

Systematically, the study adopted methodological triangulation through mixed methods of qualitative and quantitative. This chapter mainly focuses on major findings which ascertained from Madumeleng Village regarding the relationship of rural livelihood diversification and income-poverty alleviation. The penultimate section of the chapter demonstrate general conclusions which are predetermined by primary and secondary data emanating from the study area and literature review respectively. Subsequently, the last section recommend measures which may enhance contributions of rural livelihood diversification towards alleviation of household income-poverty.

5.2 Findings of the study

The study aimed at investigating contributions of rural livelihood diversification towards alleviation of household income-poverty alleviation in Madumeleng Village. The study further used textual data in a form of literature which emanates from journals, articles and

books in respect of the nature of practicing diverse livelihood activities and ascertain the conditions of income-poverty alleviation. Questionnaires, interview schedules were used to gather primary data from prospective respondents within the village. Ultimately, the data was captured into International Business Machine-Statistical Package for Social Sciences (IBM-SPSS) version 23. The SPSS software was beneficial when producing descriptive numerical results. The results were then presented in the form of graphs and pie charts through excel software. In relation to the primary objectives of the study, this section basically succinct major findings regarding the contributions of rural livelihood diversification towards alleviation of income-poverty within Madumeleng Village as the study area.

The types and characteristics of rural livelihoods;

- The study discovered that considerable number of households in Madumeleng Village discern non-farm activities as an indispensable means of income supplement. Thus, the finding herein corroborates the literature which demonstrated that non-agricultural activities has widened rampant and gap on farming activities pertinent to returns and benefits. In addition, it has been found that this gap is largely effectuated by manifold issues such as lack of arable land, seasonality and less rainfall.
- Notwithstanding prevalent controversial productivity and reliability, on-farm activities could not be treated with scant attention; considering that some households rely and generate their income while diminishing food insecurity thereof. Seemingly, better-off farming households have potential to generate income through selling products along streets and shopping complex in the village. The findings suggest that geographical location plays an important role in determination of livelihood choices among households in the village. Noticeably, Madumeleng Village overtly is characterised by dams, rivers and extensive land which stimulate some household to practice farming.

The study discovered that both agricultural and non-agricultural activities are respectively reliable particularly on income augmentation. Livelihood studies have demonstrated that sustainability of these livelihood sources is mainly informed by the standard of infrastructure and market access particularly in developing countries. Moreover, poor households are plagued with some barriers which obstruct them to enter into high-return livelihood activities. Prevalently, lack of proper infrastructure, business communication channel as well as market access deter the economic potential of livelihood activities in Madumeleng Village.

Modes and processes of rural livelihood diversification;

- There are disparate factors which stimulate or cajole rural households to construct diverse livelihood portfolios concurrently. The factors may include low income, food insecurity, unemployment, availability of social relief, risk minimization, capitalizing opportunities and seasonality. These factors are common in Madumeleng Village and relative majority of households have revealed that income generation is the main reason for adopting the approach of livelihood diversification. Furthermore, the village is located next to the main road or corridor and as a result, households opt to capitalize on the prospects.
- Only few household hinges upon one type of rural livelihood in developing countries. The practice of multiple livelihoods is common in Madumeleng Village and only few demonstrated that they are still contingent upon single type of livelihood activity. Furthermore, the study discovered that some households practice livelihood activities intuitively. That is, resort to practice livelihood diversification with less consideration and feasibility to the strategy. They commonly practise multiple livelihoods as response to crises and risk. It has been discovered that intuitive livelihoods are not sustainable and produce less.
- Household income and consumption are prevalently used as a criterion for measuring money-metric poverty in most developing countries (Rogan, 2013).

The findings show that a large proportion of households could be classified 'better-off' as are found above recognised poverty line of South Africa. The finding suggest that income-poverty is gradually alleviated in rural areas through the practise of livelihood diversification, particularly from non-farm activities.

The conditions and statuses of rural household income-poverty;

- The study found that most households are prone to multidimensional poverty because of influence from their household size. Ordinarily, an increase in size or number of household members persuade rural people to resort diverse livelihood portfolios in order to meet basic needs. The literature has already demonstrated that household size and endowment are some of key components which are affecting the household's living conditions especially across rural communities. Therefore, an increase in household size and lack of regenerative assets perpetuate poverty in rural areas. Herein, majority of households in the study area are found to be constituted by large number of members wherein some are revealed as dependence.
- The study further discovered that most households are headed by male as compared against female figures. The plethora of poverty studies have scant attention on the household headship when analysing poverty in rural areas. Literature have depicted households which are headed by female and youth are realised poverty stricken immensely. This owes the necessity to analyse household's headship and gender when studying poverty-related issues. Concomitantly, educational statuses basically predetermine potentials of household head's headship. However, the study discovered that the village is largely dominated by male figures who are discerned economically and physically inactive to partake in development projects and programmes. Literature has concurred that educational levels play significant role across

livelihood activities in terms of the returns and productivity. In developing countries, a number of women have realised illiterate within rural areas.

- Although it was initially perceived as a short term measure to address poverty, the study has discovered social grant as one of the major sources of income in Madumeleng Village. Prevalently, social grants are deemed inadequate but are mainly supplemented with other livelihood activities. Relative majority of household members are recipients of manifold social grants in Madumeleng Village. Therefore, it could be deduced that considerable households hinges upon unsustainable sources of income and should they not be maintained, may revert to the low living standard.
- Rural areas do not receive support from entities and only trivial interventions are made towards supporting local initiatives established by indigent people. The findings of the study are even common across global experience. The study found that level of support from various entities is extremely minimal and as a result, their livelihood activities become unsustainable and defunct.

The contributions of rural livelihood diversification towards household income-poverty alleviation;

- Indispensably, the study has clearly demonstrated that practice of livelihood diversification is an ideal route to alleviate and combat income-poverty.
- Moreover, it is discovered that farming alone is not an adequate source of revenue within the households. Diversification of livelihoods is common and renowned among residents in Madumeleng Village. Empirically, households establishes small businesses along main road and shopping complex while exercising crop production and fishing as per geographical advantage.

- Rural households, particularly the poorer get plague with various challenges when constructing diverse portfolio of livelihood activities within developing countries. This study succinct the findings that competition over resources is increasingly intense and fierce especially on land and business related activities. Seemingly, the shopping complex is quite cooped up yet attracting numerous people from other areas within the area of jurisdiction. In addition, erratic climatic conditions affect their agricultural productivity and livestock especially in farming households. The study found some households are not spurred to produce or sell agricultural products largely because they decay and rot as a consequent of business competition. Furthermore, study found most households are unable to market products as influenced by inadequate and fragmented infrastructure.
- The study revealed that success of livelihood diversification is predetermined by adequate infrastructure, access to information and financial markets.

5.3 Recommendations

- To attain sustainable socio-economic transformation, enabling and conducive environment should be created in order to encourage local people to establish and retain productive livelihood activities which are marketable and income-induced. Access to market and shopping complex continuum will optimistically influence intensity of resource competition and fragmentation within the village. In addition, access to market will be incentive for rural households to diversify activities and manage to produce adequately for subsistence and commercial purposes.
- Considering minimal level of support by public and private entities towards local initiatives, it is advisable for government to take centre stage in supporting local activities such as self-help groups and co-operatives on a sustainable basis. Furthermore, government should actively spur skills development programmes in order to capacitate, sustain and retain existing livelihood activities.

- Despite the availability of dams and rivers in the vicinity, the government should provide villagers with alternative water through tanks and irrigational canals in order to encourage agricultural practices at local level. In addition, agricultural equipment should be affordable and accessible to the indigent in the society.
- Overtly, rural areas are exposed to fragmented and inadequate infrastructure in the country. Thus, the government should invest into adequate and reliable infrastructural development. In other words, proper infrastructure development and services should be discerned focal point of rural development and poverty alleviation approaches in South Africa. The situation in which households which are located close to the main road and shopping complex benefit better than others suggest an equitable distribution of resources and access to basic infrastructure and education. Thus, rural development should aim at sustainable investment on important components like clean water, electrification, routes and sanitation as well as educational facilities for socio-economic transformation.
- Rural development should promote the practice of livelihood diversification at a household level. The results suggest that ideal strategy for combating poverty in rural areas would be in vain with a mere focus on agricultural development. That is, immense attention should be directed to the practice of non-agricultural activities as the study depicted extent to which non-farm and off-farm activities contribute towards income augmentation in the household. The practice of single livelihood activity is deemed risky and produce inadequately. In addition, equitable practice of both agricultural and non-agricultural activities should be greatly fostered amongst households. This owes to the possibility of proactively responding against uncertainty such as seasonality and erratic inflation.

5.4 Conclusion

Notwithstanding steering effort at national and international level, multidimensional poverty particularly income-poverty has been unabated and persistent within rural households. In developing countries, different poverty reduction strategies have been formulated in order to alleviate multi-dimensions of poverty. There are number of factors

which lead to the failure of state interventions in developing countries including South Africa. Factors which hinder success of interventions include inadequate international support in terms of funding, lack of state capacity, less monitoring and evaluation, inappropriate coordination between spheres of government and political unrest. On a global scale, an overt inability of state to deal with issues associated with poverty has cajoled local people to construct diverse livelihood activities which have the potential respond against multidimensional poverty.

As acknowledged by literature, non-farm livelihood activities are well acknowledged by rural people and embraced as an ideal pathway out of income poverty across rural households (Alemu, 2012). In addition, combination of on-farm and non-farm livelihood activities positively gained ground across the global perspective. Indeed, significance of these livelihoods thoroughly acknowledged within existing literature. Considerable livelihood studies demonstrated the effectiveness and reliability of combining on-farm and non-farm activities towards income generation. Tremendously, findings herein concurred that practice of livelihood diversification contribute tremendously towards household income-poverty alleviation. In addition, households who adopt on-farm and non-farm are potentially able to generate income and thus meet other basic amenities.

Moreover, the study discovered that contributions which livelihood diversification has towards socio-economic transformation is prevalently informed through nature, output as well as environmental context within which livelihood strategies are adopted by the household. Such suggest that social, economic, environmental and political contexts exert influence on the performance of livelihood activities. Thus, this reiterate the fact that livelihood activities have specific contributions towards household's ambitions. This study demonstrated households which practice single livelihood activity were found to be vulnerable to number of challenges including income-poverty. The practice of single livelihood activity discovered unsustainable and inadequate for income generation within the household. Consequently, most rural people have embarked on practicing at least two diverse livelihood activities. In Madumeleng Village, the practice of multiple livelihoods through combination of on-farm, non-farm and off-farm activities is common for adequate income augmentation in households. The literature has already indicated rural households have disparate motivations and priorities in the adoption of livelihood diversification as survival strategy.

The study herein discovered that most households in Madumeleng Village practice livelihood with potential to yield income and able to purchase enough food. Shopping complex in the village has widen opportunities for most households to practice income generating livelihoods and availability of farming homesteads spur food production for household consumption. However, agricultural livelihoods are associated with various challenges like lack of rainfall and infertile soil which ordinarily compel rural household to consider non-agricultural livelihoods in order to supplement farming outputs. Although livelihood diversification acknowledged by people as ideal route out of poverty, study discovered that some households still fail to combat income-poverty as a result of common barriers of inadequate education, lack of marketing access and inaccessible into formal credit facilities.

Therefore, welfare and ability to alleviate income-poverty in the household is associated with the typologies of livelihood activities diversified by the household. Combination of onfarming and non-farming activities offers households the ability to alleviate incomepoverty. Ordinarily, strengths and potentials of livelihood diversification are commonly determined by the access to financial, social, environmental, institutional and human capitals of respective households in rural areas. Thus, contributions of rural livelihood diversification towards household income-poverty alleviation are largely influenced by adequate access to productive assets, household educational endowment, locational advantage as well as social networks.

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APPENDIX A: HOUSEHOLD SURVEY QUESTIONNAIRE



Masters in Development Planning and Management Research Project

RESEARCH PROJECT TITLE:

The Contributions of Rural Livelihood Diversification towards Household Income-Poverty Alleviation in Madumeleng Village, Limpopo Province

This questionnaire is intended to gather information on the contributions of livelihood diversification towards household income-poverty alleviation in Madumeleng Village. The research project is registered with the Department of Development Planning and Management, School of Economics & Management at the University of Limpopo. The survey results of this project will be exclusively for academic purposes. No information will be used against any member of your household and the community at large. Anonymity of the respondents is guaranteed, and you do not need to write your name nor contact details on this questionnaire. Participation in the study is voluntarily and respondents have the right to withdraw from the study at any time.

Thank you in advance

SECTION A:

Demographic Profile of a Household (Mark with an X where necessary)

1. Please specify the category which matches number of your household members.

	Number of household members				
1	1-5 Members				
2	6-10 Members				
3	11-15 Members				
4	16 and Above				

2. State the number of household members in terms of their positions in the household.

	Gender	
1	Male	
2	Female	

3. Specify the category which matches educational status of your household head

	Educational statuses	
1	No schooling	
2	Primary	
3	Secondary	
4	Tertiary	

SECTION B:

Types and characteristics of rural household livelihoods

4. Identify category which best describes livelihood choice (s) practiced in your household

	On-farm activities	
1	Crop farming	
2	Livestock farming	
3	Fishing	
4	Others	
	Off-farm activities	
1	Permanent job	
2	Seasonal job	
3	Casual job	
4	Work in commercial farms	
5	Others	
	Non-farm activities	
1	Social grant	
2	Repairs	
3	Traditional healing	
4	Businesses and local trades	
5	Others	

5. Generally, how would you rate reliability of following household's livelihood activities?

	1.Very	2.	3.Unsure	4. Unreliable	5.Very
	reliable	Reliable			unreliable
1. On-farm activities					
2. Off-farm activities					
3. Non-farm activities					

6. How productive are those livelihood activities in the household

Livelihood choices	1.Very Productive	2. Productive	3. Unsure	4. Unproductive	5.Very unproductive
1. On-farm activities					
2. Off-farm activities					
3.Non-farm activities					

SECTION C:

Methods and processes of livelihood diversification

7. Does the household practice singular or multiple livelihoods? (Please mark **X** only one answer)

1. [] Singular livelihood 2. [] Multiple livelihoods

8. Describe how diversification started in the household

9. Which of the following strategies does the household use to diversify? (Please mark)

1. [] Agricultural production2. [] Trading3. [] Self-employment4. []Multi-spatial means of survival5. [] Grants

6. [] Other (Specify).....

10. On a scale of 1-5 where 1 represents the most producer and 5 the least producer, please specify which of the following livelihood strategies produce the greatest benefits towards household income, depending on the order of relative priority.

[] Agricultural production [] Trading [] Self-employment

[] Multi-spatial means of survival [] Grants

11. Describe how the household diversify their livelihood activities?

12. What benefit (s) does the household obtain from practicing more than one kind of livelihood activities?

1. [] Additional income	2. [] Produce enough food
3. [] Interpersonal skills	4. [] Business management
5. [] Others	s (Specify)

SECTION D:

Conditions and Status of income-poverty

13. Please specify category which best corresponds to the household monthly income?

1. [] No income.2. [] Less than R10003. [] R1001-R20004. [] R2001-R30005. [] R3001-40006. [] Above R4001

14. How would you rank the major sources of income in the household on a differential scale provided below where 1 represents most preferred and 9 the least preferred?

Sources of Income

1. Social grant

2.Hawker	
3.Remittances	
4.Formal employment	
5.Craft fair	
6.Livestock	
7.Beer brewing	
8.Crops	
9.Carpentry	
10.Others	

15. How reliable are these sources towards income-poverty alleviation?

Source of Income	Very reliable	Reliable	Unsure	Unreliable	Very unreliable
	1	2	3	4	5
1. Social grant					
2.Hawker					
3.Remittances					
4.Formal					
employment					
5.Craft fair					
6.Livestock					
7.Beer brewing					
8.Crops					
9.Carpentry					
10.Others					

16. Please specify the category which best describes household spending on generated income.

1. [] Saving some portion 2. [] Purchase Food for the household

3. [] Maintain means of survival 4. [] Other (Specify).....

17. How would you describe the level of satisfaction in relation to specified household spending?

Activities	High satisfactory	Satisfactory	Neutral	Unsatisfactory	Highly unsatisfactory
	1	2	3	4	5
Saving					
some					
portion					
Purchase					
food for the					
household					
Maintain					
means of					
survival					
Others					

SECTION E:

Determinants of income-poverty alleviation

18. Choose the category which best describe the household employment status.

 1. [] Employed
 2. [] Self-employed
 3. [] Pensioner

4. [] Unemployed 5. [] Other (Specify).....

19. What kind of support does the household receive from any entities (Public, Private and Non-Governmental Organizations?)

1. [] Money	2. [] Skills training	3. [] Advice	4. [] Other
(specify	5. [] No Support		

20. How would you rate the significance of support from such entities?

Support	Very	Significant	Neither/Nor	Insignificant	Very
	significant				insignificant
	1	2	3	4	5
Money					
Skills					
training					
Advice					
Other					
No					
support					

SECTION F:

Contributions of livelihood diversification towards household income-poverty alleviation

On a scale of 1 to 5; where 1 is 'strongly agree' and 5 is 'strongly disagree', please specify with an X the best option.

Contributions	Strongly	Agree	Undecided	Disagree	Strongly
	agree				disagree
	1	2	3	4	5
21. The practice of different					
livelihoods helps household in					
generating enough income.					

22. Large amount of income in								
the household is generated								
outside agriculture.								
23. Explain to what extent does income generated through different livelihood activities								
contribute towards income in the household?								
24. How adequate is the income generated through such livelihood diversification?								
1. [] Very adequate 2. [] Adequate 3. [] Neither/nor								
4. [] Inadequate 5. [] Very inadequate								
Recommendations								
26. What are the challenges faced by household when practice its livelihood activities?								
27. What do you think should be done to reduce such challenges and by whom?								
28. What could be done to enhance the contributions of livelihood diversification towards								
income-poverty alleviation?								

End of questions...Thanks your cooperation.

APPENDIX B: INTERVIEW SCHEDULE FOR KEY INFORMANTS



RESEARCH INTERVIEW SCHEDULE FOR KEY INFORMANTS IN MADUMELENG VILLAGE, GREATER LETABA MUNICIPALITY, LIMPOPO PROVINCE

RESEARCH PROJECT TITLE:

The Contribution of Rural Livelihood Diversification towards Household Income-Poverty Alleviation in Madumeleng Village, Limpopo Province

The interview schedule is meant to find necessary community-based information from key informants. The project is a fulfilment of the requirements of the degree Master of Development (Planning & Management) to the Department of Development Planning & Management, School of Economics & Management, at the University of Limpopo, Turfloop campus. Key informants, in this regard are encouraged to probe information about livelihood diversification in relation to income-poverty alleviation in the community. With all due respect, anonymity of key informants is completely guaranteed and thus encouraged to provide their standing point in the community freely. The overall interview schedule information will be used sorely for academic purpose.

Thank you in advance

1. What kind of livelihood activities practiced in Madumeleng Village?

3. To what extent do you think these livelihood activities benefit the community?

4. What is the most common livelihood activities carried out concurrently in the village?

5. What is your view regarding income-poverty in the village?

6. Do you think the practicing different of livelihood activities contribute towards incomepoverty alleviation within the community?

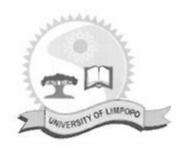
6. What do you think can be done to improve livelihood diversification practiced in the village?

8. What are the probable challenges faced in the village when practicing livelihood activities concurrently?

9. What do you think should be done to reduce such challenges and by whom?

THANK YOU

APPENDIX C: LETTER FOR PROOF OF EDITING



University of Limpopo School of Molecular and Life Sciences Private Bag X1106, Sovenga, 0727, South Africa Tel: (015) 268 3960, Email:mkateko.ngobeni@ul.ac.za

TO WHOM IT MAY CONCERN

This is to confirm that the Master of Development in Planning and Management research entitled 'The contributions of rural livelihood diversification towards household income-poverty alleviation in Madumeleng village, Limpopo Province'. By Maake M.S Student Number: 201007424 has been proofread and edited, and that I am satisfied with both its current academic and technical layouts.

Yours truly

Ms M.M Ngobeni (English Lecturer)

School of Molecular and Life Sciences

APPENDIX D: TURNITIN REPORT

THE CONTRIBUTIONS OF RURAL LIVELIHOOD DIVERSIFICATION TOWARDS HOUSEHOLD INCOME-POVERTY ALLEVIATION IN MADUMELENG VILLAGE, LIMPOPO PROVINCE

ORIGINALITY REPORT

% SIMILAR		% 11 INTERNET SOURCES	%7 PUBLICATIONS	% 7 Student papers				
PRIMARY SOURCES								
1	ul.netd.ac			%2				
2	academic	journals.org		% 1				
3	gbata.org			% 1				
4	4 www.readperiodicals.com			<%1				
5	ageconse	arch.umn.edu		<%1				
6 edepot.wur.nl Internet Source			<%1					
7	uir.unisa.a Internet Source			<%1				

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APPENDIX E: LETTER FOR PERMISSION TO COLLECT DATA

APPENDIX F: LIST OF PUBLICATIONS

Meso, K.K., Manamela, M.G. & Maake, S.M. (2016). Rural-urban nexus: Controversies and policy imperatives in South Africa. *Journal of Public Administration*, 51(1):103-114.

Maake, S.M. (2015). Rural livelihood diversification and income-poverty alleviation Nexus. South African Association of Public Administration and Management (SAAPAM) 15TH Annual Conference Proceedings, 440-450.

Maake, S.M. (2015). Hunching Sustainable Development: Exorcizing Household Food Insecurity heyday via Rural Livelihood Diversification? A South African Context, Proceedings of the 3rd Biennial Conference on Business Innovation and Growth, 452-460.