NATIONAL UNIVERSITY OF LESOTHO



ASSESSING THE IMPACT OF RURAL-URBAN LINKAGES ON RURAL ECONOMIES: THE CASE OF MATEANONG COMMUNITY COUNCIL, LESOTHO

DISSERTATION SUBMITTED

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DECLARATION

I declare that this research is my work alone and it is also being submitted for the first time in fulfilment of any academic qualification. I declare that all information presented in this work, which has been drawn from other previous scholars and publications, has been referenced and acknowledged accordingly.

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DEDICATION

I dedicate this research to everyone who has supported me throughout all the life hustles and struggles I endured, to everyone who believed in me. I appreciate you. May the good Lord bless you and all your ambitions.

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ABSTRACT

Issues related to rural inaccessibility, which include low levels of information flow and poor economic performance, constitute some of the current global concerns that have prompted the establishment of international agendas such as the Sustainable Development Goals (SDGs). Against this background, this study aims to assess the impact of rural-urban linkages on rural economies, specifically road and communication networks and their economic implications on the livelihoods of Mateanong community. The research is qualitative in nature and has used interviews, open-ended questionnaires and focus group discussion as its main data collection methods. The study unearths that provision of proper rural road and communication networks enhances rural economic activities through increased market access, and also paves way for inclusive development by bridging rural-urban disparities. The findings of this study further show that lack of proper road and communication networks in Mateanong community council perpetuates issues related to poor agricultural productivity, poverty and lack of access to essential services prevailing in the area. This study concludes that rural-urban linkages promote the economic livelihoods of rural residents through enhanced accessibility, mobility and information flow. The study recommends that in order to promote rural livelihoods, the Government should enhance better funding for rural road and communication networks, develop effective project follow-up initiatives, and also prioritize performance-based tendering.

Contents

CHAPTER ONE – INTRODUCTION
1.1 Introduction
1.2 Background of the study
1.3 Statement of the problem
1.4 Research objectives
1.5 Research questions
1.6 Justification of the problem
1.7 Theoretical framework
1.8Definition of key terms
1.9 Limitations
1.10 Research structure
1.11 Chapter summary
CHAPTER TWO: LITERATURE REVIEW
2.1 Introduction
2.2 Rural-urban linkages and development
2.3 Road and communication networks in rural areas: An overview
2.4 Regulatory framework and policies regarding provision of roads and
communications networks in rural areas
2.5 Chapter Summary 23

CHAPTER THREE: RESEARCH METHODOLOGY	24
3.1 Introduction	24
3.2 Area of Study	24
3.3 Research approach	25
3.4 Research design	25
3.5 Study population	26
3.6 Sampling procedure	26
3.7 Data collection methods	27
3.8 Data collection procedure	29
3.9 Ethical considerations	30
3.10 Data analysis	31
3.11 Chapter summary	32
CHAPTER FOUR- DATA PRESENTATION, ANALYSIS AND DISCUSSION	33
4.1 Introduction	33
4.2 Policy framework guiding the provision of roads and communications netwo	orks in
rural Lesotho	33
4.2.1 Road networks	34
4.2.2 Communications networks	38
4.3 Mateanong community council roads and communications networks' condit	ions and
their economic implications on the livelihoods of local residents	42

Figure 4.1: Ha-Jorose village and the abandoned road that linked it with	h Mokhotlong
town	44
4.3.1 Livestock theft-related economic implications	44
4.3.2 Agriculture development-related economic implications	46
4.3.3 Access to basic services-related economic implications	49
4.4 Barriers hindering effective provision of proper roads and communica	tions networks
in Mateanong community council.	54
4.4.1 Lack of proper funding	54
4.4.2 Lack of local participation	56
4.5 Chapter summary	58
CHAPTER FIVE: CONCLUSION AND RECOMMENDATIONS	60
5.1 Introduction	60
5.2 Conclusion	61
5.3 Recommendations	63
References	66
APPENDICES	71
APPENDIX I: INFORMED CONSENT FORM	71
APPENDIX II: RESEARCH QUESTIONNAIRE	73
APPENDIX III: INTERVIEW GUIDE QUESTIONS	77
Ouestions for Mateanong community council residents	77

LIST OF FIGURES

Figure	4.1:	Ha-Jorose	village	and	the	damaged	road	that	linked	it	with	Mokhotlong
town	•••••				•••••					•••••	•••••	32
Figure	4.2: Is	solated Ha-I	Leutswa v	village	and	local farm	S		•••••	· • • • •		37
Figure	4.3: L	ocal road ne	etwork's	vulnei	rabili	ity to erosi	ons		• • • • • • • • • • • • • • • • • • • •			39
Figure -	4.4: P 1	revailing co	nditions o	of Mat	eanc	ong road ne	twork			· • • • •		41

ACRONYMS

ADB – African Development Bank

AU – African Union

EU – European Union

ETL – Econet Telecom Lesotho

ILO - International Labour Organization

IMF – International Monetary Fund

LCA – Lesotho Communications Authority

MoCST – Ministry of Communications Science and Technology

MoDP – Ministry of Development Planning

MoF – Ministry of Finance

MoTPW – Ministry of Transport and Public Works

NDSP – National Development Strategic Plan

NUA - New Urban Agenda

RISDP – Regional Integration Strategic Development Plan

SADC – Southern Africa Development Community

SDGs – Sustainable Development Goals

TSDP – Transport Sector Development Project

UN – United Nations

UNDP – United Nations Development Programme

VCL – Vodacom Lesotho

WB – World Bank

CHAPTER ONE – INTRODUCTION

1.1 Introduction

Rural poverty and rural-urban economic inequalities are among major global challenges, with the majority of people living below the international poverty line residing in rural areas where foreign remittances mainly received from urban centers serve as one of the main sources of sustaining livelihoods (Joseph, 2019). This is because the majority of income-generation opportunities are located in urban areas although most of the industries located in these urban areas source their inputs or raw materials and labor from the remotely-located and disadvantaged rural areas, (Big, 2019). It is therefore very important to understand the nature and impacts of the relationships between rural and urban areas for better inclusive economic development as the two realms are clearly interdependent.

This research aims to assess the impact of rural-urban linkages on rural economies, that is, to evaluate the economic impacts that rural-urban linkages, mainly roads and communications networks, have on rural societies. However, this research particularly focusses on Mateanong community council in Mokhotlong as the study area and how its rural economy has been affected by the local roads and communications' networks linking it to Mokhotlong town.

1.2 Background of the study

From the global perspective, United Nations (2020) reports the prevailing issues of rural poverty and rural-urban inequalities while at the same time acknowledging the interconnectedness and interdependence between the two realms. The European Union (2018) adds by highlighting the importance of development practitioners' acknowledgement of the strong relationships between rural and urban centers, mainly arguing that without proper understanding of these relationships

the initiatives devoted towards rural economic development are unlikely to reach their highest level of effectiveness. The organization highlights that roads and communications networks serve as the main measures of rural-urban connective as they are the primary means through which rural and urban residents exchange ideas, information, resources and services towards better living standards. Samur (2011) goes further to indicate the crucial role played by integrated development approaches in the economic development of nations such as Japan where economic inequalities between urban and rural areas are not as significant as those inherent in developing nations.

At the continental level, the African Union (2020) called for the integration of rural and urban settings into regional development initiatives rather than the efforts of trying to economically develop rural and urban centers separately. Rural and urban areas are in most cases intertwined as there are rural activities in urban settings and vice versa in most African nations (African Union, 2020). Regional integration takes into account the dynamics of the relationships between urban and rural areas in order to avoid exploitative relationships between the two and also enhance or pave way for mutual economic benefits between the two, (Agumba, 2016). United Nations (2022) also holds an emphasis that roads and communications networks are key to determining the accessibility of any area or region as they serve as the modern basic means of mobility and information flow, and therefore argues that reliable roads and communications networks linking rural and urban areas are important prerequisites of any rural development agenda.

Furthermore, SADC (2018) also acknowledges the critical role of integrated development approaches employed in the development of countries such as Botswana. The organization mainly emphasizes that Botswana is among the most promising nations in terms of economic development in the Southern Africa region because it was able to incorporate rural and urban interests in its developmental policies' formulation and implementation (SADC, 2018). Amit (2020) adds by

noting that the provision of rural-urban linkages in Botswana was coupled with huge investments in the rural areas in order to capacitate these societies towards being essential contributors in the attainment of inclusive economic development.

In addition, nationally, the Ministry of Finance (2020) highlighted the need for Lesotho to invest in rural-urban linkages as a way of enhancing rural economic development. This followed the emphasis made by Ministry of Development Planning (2016) on the alarming rates or levels of unemployment and poverty that are increasing in urban centers as these places are getting overcrowded. However, the African Union (2020) argues that Lesotho's policies of rural development are unlikely to be effective as they do not reflect the relationships between urban and rural settings but rather were formulated mainly based on the physical distinctions between the two realms. The Government of Lesotho financial report (2018) also acknowledges the alarming levels of inaccessibility for most rural areas in the country, and associates this inaccessibility with key challenges hindering the successful implementation of most rural development initiatives.

1.3 Statement of the problem

Most rural societies in Lesotho are characterized by high levels of poverty, illiteracy, food insecurity, alarming rates of unemployment, and poor agricultural productivity among other issues, (Joseph, 2019). Mateanong community council is no exception as Smith (2018) indicates that villages in this area are mostly characterized by severe poverty, illiteracy and relative isolation from the main economic activities and services located in Mokhotlong town. The scholar adds that about 38 villages fall within this area, and residents mainly lack access to better education and healthcare services, which are vital for human survival and development. This is despite a number of developmental initiatives devoted at enhancing rural-urban linkages as a move towards the creation of an inclusive economic growth and development, as emphasized by the Lesotho

National Strategic Development Plan Il 2019-2023. Such initiatives include the provision of health, sanitation and education facilities, which are also among the key focus areas of the national 5-year plan.

In addition, African Union (2020) associates the prevalence of issues related to rural-poverty and extreme rural-urban inequalities with policymakers' tendency of ignoring the interdependence and linkages between rural and urban areas in their policy formulation and implementation programs. This research therefore seeks to assess and address the shortcomings of approaches and policies used towards the development of these rural societies of Lesotho that remain impoverished, disadvantaged and isolated. If issues pertaining rural-urban isolation in Lesotho are not addressed then a significant portion of the local population is to remain stranded from major economic opportunities, which will only escalate the prevailing rural-urban inequalities prevailing throughout the country.

1.4 Research objectives

- To assess the economic impacts of Mateanong roads and communications networks' on the livelihoods of local residents.
- To assess barriers and challenges hindering effective provision of proper road and communication networks in Mateanong community council.
- To assess the policy framework guiding the provision and maintenance of roads and communications networks in rural areas, and
- To make necessary suggestions to improve the roads and communications networks in the study area.

1.5 Research questions

- What are the economic impacts of Mateanong roads and communications networks on the livelihoods of local residents?
- What are the challenges hindering effective provision of proper road and communication networks in Mateanong community council?
- What are the policy guidelines on the provision and maintenance of roads and communications networks in rural areas?

1.6 Justification of the problem

Very little has been done to assess the impact of rural-linkages, especially roads and communications' networks, on rural economies in Lesotho despite high volumes of literature noting the issues of rural areas' inaccessibility and poverty in the country. There is therefore, an essential need for a study that assesses the impact of road and communication networks on rural economies as issues entailing rural inaccessibility and rural poverty are well known, thus creating the need to assess the relationship between the two.

In addition, while there is evidently more than enough literature pertaining the economic conditions of rural societies in Lesotho and initiatives aimed at curbing such conditions, very little attention has been given to the role played by accessibility towards the development of these rural societies. The study aims to address this gap in literature, especially that pertaining the development rural areas of Lesotho, and also aims to serve as an instrumental guide for informed decision making in rural development policy formulation and implementation. That is, the study seeks to form an informed base for the establishment of development policies that can curb the highlighted issues of rural poverty and rural-urban inequalities in Lesotho.

1.7 Theoretical framework

This study uses growth and change theory of development as its primary theoretical framework. Growth and change theory is one of the main theories in the disciplines of regional development and rural-urban integration and it was developed by Solow Moktiv and Swan Peters in the late 1990s in an attempt to establish a theoretical framework that could account for the prevalence of rural poverty and rural-urban inequalities across nations (Rivera and Kapucu, 2015). These scholars add by noting that the theory of growth and change sees rural societies as isolated systems which have been incapacitated to thrive towards self-reliance and growth mainly through their inaccessibility. Growth and change theory of rural development sees mobility and accessibility as key determinants of economic growth and argues that the isolation of rural areas hinders human capital through lack of access to services, hinders investment and security which are all essential in attaining rural economic growth, (Grindle, 2019).

The theory is premised on the notion that, without mobility and accessibility, rural areas are to remain impoverished regardless of their production capacity and potential as there is no reliable connection linking rural and urban markets, (Grindle, 2019). In essence, growth and change theory sees rural economic development as dependent upon the degree of flow of information and people's mobility. This theory suggests that accessibility of rural areas enhances emergence of economically productive activities and overtime these societies adopt modern production means and eventually grow to be urban settings due to increases in human capital, stock accumulation and infrastructural adjustments, (Agumba, 2016).

The theory is relevant and applicable to this study as rural-urban linkages and rural economies form the main focus of this specific study, specifically roads and communications' networks which are key in determining accessibility and mobility within a region. The relevance of this theory to

this research in particular is further proved by the emphasis shared by growth and change theory that a change in the level of accessibility of a region, either aerially or physically, is to be followed by a relatively commensurate change in its economic growth, this is because the study also seeks to uncover how differences in accessibility influence differences in economic performance.

1.8 Definition of key terms

Rural-urban linkages - an integrated approach aimed at promoting a balanced and mutually supportive rural-urban development through manageable and enhanced spatial flows between rural and urban areas, such flows may include flows of people, information, technology etc., (UN Habitat,2019). The term also refers to integrated requirements that need to be fulfilled in relation to the interaction between urban and rural areas, mainly regarding income generation, public development programs, cultural activities as well as growth in both urban and rural areas, (African Development Bank, 2016). Rural-urban linkages can therefore simply be understood as an integrated approach to development which mainly advocates for the promotion of interdependence and economic exchange between rural and urban areas towards the attainment of inclusive economic growth for all.

Rural economy - the state or condition of a state or region which is considered traditional, isolated and out of main economic activities in terms of its production and consumption of goods and services as well as the supply of money in that region, (Aloba, 2018). Collins (2014), on the other hand defines rural economy as a pattern or setting upon which the capacity of a region or area deemed as backward and not modernized is set in relation to its distribution, production and consumption of necessities. In essence, rural economy refers to the state or condition of areas outside of industrial, populated and technologically-advanced settings in terms of their capacity to produce and consume in their isolated area.

1.9 Limitations

The researcher conducted the research field work under limited finances, limited time and in remotely isolated villages, these issues forced the researcher to rely on traditional means of transport, hired a horse to be specific, as this seemed to be the most convenient means of travelling from one isolated village to the other to conduct interviews and administer questionnaires. This allowed the researcher to reach some most remote and isolated villages within Mateanong community with ease, therefore avoiding researchers' biasness tendency of interviewing easily accessible participants only and neglecting the views of the most disadvantaged and hard to reach communities. Majority of Mateanong community council residents were not comfortable or able to participate in English, mainly due to literacy issues, however the researcher carried out all interviews with local residents using Sesotho and then translated their responses into English for presentation and analysis purposes. The issue of prevailing illiteracy among local residents also forced the researcher to self-administer questionnaires and also have the questionaries' set in Sesotho so as to ease the process for the research respondents.

1.10 Research structure

This research consists of five chapters, chapter 1 is the introduction chapter which basically introduces the research topic, its objectives, and research questions, background of the research as well as its importance and relevance. Chapter 2 basically focusses on literature review, which mainly entails discussions by previous scholars in relation to our research as well as identifying the gaps within the available literature. Chapter 3 is the methodology chapter which entails discussions on the methods used in data collection, data analysis as well as the sampling techniques employed in conducting this study. Chapter 4 is mainly on the presentation, analysis and discussion of obtained data, being the research findings, while the last chapter is the concluding chapter which

focusses on presenting conclusions and recommendations made based on the content shared by this specific research.

1.11 Chapter summary

This chapter has introduced the research topic, being the assessment of the impact of rural-urban linkages on rural economies with specific interest on Mateanong community council roads and communications networks, the main research objectives and questions, as well as the theory of growth and change which has been used as the core base of this whole study. This introduction chapter has also outlined the challenges and limitations encountered, and how the researcher attempted to overcome such challenges. The chapter further outlines how the researcher has attempted to uphold research ethics. Brief definitions of the main concepts involved as well as the overall structure of this paper have also been discussed in this specific chapter. The following chapter is therefore on literature review, which focusses on what other scholars have said in relation to this specific researched as already stated.

CHAPTER TWO: LITERATURE REVIEW

2.1 Introduction

This chapter provides a review of a selection of existing literature in relation to the impact of rural-urban linkages on rural economies. In doing so, the chapter does not only review local literature but also reviews relevant literature from the global, continental and regional perspectives. The chapter also highlights limitations or gaps within the available relevant literature. This specific chapter therefore also entails an in-depth discussion of the latest trends, debates and academic publications relating to roads and communications networks in rural areas. Moreover, the chapter has been divided into various sections for clarity purposes, these sections include an overview on rural-urban linkages and development, roads and communications networks in rural areas, and regulatory framework and policies regarding the provision of rural roads and communications networks. The chapter also has of a chapter summary as its concluding section, which mainly serves as a summary of the content shared by this specific chapter.

2.2 Rural-urban linkages and development

This section holds comprehensive discussion on the relationship between rural-urban linkages and development. Shi et al (2021) emphasize that the principal notion behind the concept of rural-urban linkages is that rural and urban areas should not be developed or treated separately in the policy formulation and implementation phases as the two realms highly depend on each other, therefore creating a crucial need for an inclusive approach that can harness the potential that their combined synergy generates. The scholars add that such an approach could enhance equal access to the benefits associated with the circular flows around urban and rural continuum. Mauri and Khan (2013) also share the same sentiments, that the linkages and relationships between rural and urban areas, and their economic impacts on these societies, should highly be considered within

development policies as such linkages have the potential of acting as catalysts towards inclusive national development. These scholars mainly posit that the separation and isolation between rural and urban development policies inherent within most national development policies accounts for the prevalence of issues related to rural poverty and rural-urban inequalities.

Lakshimi (2017) also asserts that the importance of rural-urban linkages towards the attainment of inclusive development has been expressed through major international agendas such as the Sustainable Development Goals (SDGs), especially SDG 11 which specifically entails making all human settlements safe, inclusive, resilient and sustainable, as well as in the New Urban Agenda (NUA). The scholar argues that the importance of rural-urban linkages towards development is evident in the fact that well-managed rural-urban linkages offer enhanced mobility and transfer of information which allow people to be exposed to new environments within which they can be able to identify economic opportunities that can be leveraged to make and sustain a living.

In connection to this, United Nations (2018) reports that it is important for national governments and development practitioners to in cooperate rural and urban interests in their development policy formulations and initiatives so as to enhance regional and integrated development that would pave way for a much more inclusive national development. This one-sided approach to development, which mainly prioritizes development of areas based on their economic productivity, hinders inclusive development and also accounts for issues related to urban over population and increasing unemployment in these urban areas as people migrate more from vulnerable rural societies to more developed urban settings with the hope of accessing better employment and living conditions in the urban areas, (Chen et al, 2019).

Moreover, African Union (2020) reports that urban and rural areas are highly interdependent and many households entail both rural and urban activities. The organization further highlights that the

world is also rapidly urbanizing despite the fact that the gaps between urban and rural areas remain very serious, and 85% of those living below the international poverty line still reside in rural areas. This increasing interdependence between rural and urban areas shows that enhanced rural-urban linkages are essential towards the attainment of national development as the state or well-being of one area affects that of the other. For instance, Andrew (2017) notes that urban areas often rely on rural areas for food products and water while rural areas highly depend on urban areas for better job opportunities and remittances, drought in rural areas therefore means food and water scarcity in urban areas while lack of jobs in urban areas lead to lack of remittances and income-from-abroad for rural areas.

Furthermore, Cook and Christopher (2023) also emphasize that non-farm sector is increasingly being relied upon for income generation in many African rural societies and this creates an essential need for enhanced rural-urban linkages as they are crucial towards affording the rural residents an opportunity to access better economic opportunities that are often concentrated in urban spaces. These scholars further contend that severe levels of rural-urban migration within most African nations have given birth to issues challenging sustainable development of these economically-fragile African urban settings, such issues include increasing overpopulations and alarming unemployment rates emerging within most African urban settings. Scholars such as Andrew (2017), Salter (2020) and Agumba (2016) are also of the view that enhanced rural-urban linkages pave way for effective development of the rural non-farm sector economic activities which play an important role in sustaining rural economies.

The main emphasis is that enhanced and well-managed rural-urban linkages paves way for rural produce to access bigger urban markets, therefore allowing rural societies to be economically active in the quest to achieve general national development. Spatial flows of people and

information within the rural-urban continuum provide an essential base upon which transfer and exchange of economic knowledge can better be utilized to develop rural area, (Cook and Christopher, 2023). These scholars note that rural and urban areas are economically, socially and environmentally linked, these making urban development without rural development a mere wish. In relation to this, Tanga et al (2014) indicates that this is particularly the case for nations and regions where agriculture serves as the main pillar of the economy, such as Lesotho and South Africa, as most agricultural activities are mainly concentrated in rural areas.

In addition, Zuma (2013) indicates that well-managed rural-urban linkages can enhance inclusive service delivery, mainly drawing experience from eThekweni Municipality in South Africa where rural areas, under traditional leadership, and urban areas coexist within one administrative body. This scholar mainly argues that such an administrative practice paves way for smooth cooperation between the traditional authorities and urban municipalities towards ensuring inclusive regional development. Studies from Botswana and Rwanda also revealed that enhanced rural-urban linkages allow rural entrepreneurs to develop sensibility to some of the core market demands and trends through valuation of their rural asserts as well as combining rural and urban sources of knowledge for better innovation, (Rivera and Kapacu, 2015).

In addition, while most of Lesotho's rural development policies are oblivious to rural perspectives and interests, rural and agriculture development policies also fail to highlight the importance of urban centers in the development of rural societies, (United Nations, 2018). This hinders the effective development of rural and urban areas as it becomes challenging to clearly capture the potential benefits associated with integrated development initiatives for mutual and inclusive economic development, (United Nations, 2020). In relation to this, the Ministry of Natural Resources and Land Conservation (2017) reports that it is important for the government to

prioritize enhanced management of rural-urban linkages as this can lead to positive local and national socio-cultural and economic transformations, ease the management of natural resources and also pave way for increased cooperation between urban and rural institutions for effective and efficient regional development.

Relevant literature specifically entailing how rural-urban linkages contribute to rural development in Lesotho highly lacks. And questions such as how rural-urban linkages contribute towards curbing issues related to rural poverty and rural-urban linkages still need to be addressed. The researcher is also not aware of any literature pertaining how rural-urban linkages contribute towards sustaining the benefits associated with rural-development initiatives in Lesotho. The researcher is also not aware of literature specifically stressing the role played by rural entrepreneurs towards rural development, or towards bridging the rural-urban disparities, nor is he aware of literature that has specifically focused on the linkages created by rural entrepreneurs and the ways through which these entrepreneurs benefit from such linkages.

2.3 Road and communication networks in rural areas: An overview

This section reviews academic trends and debates raised by previous scholars in relation to the state of road and communication networks in rural areas. While majority of European rural road networks remain unpaved and in challenging conditions, there is some positive progress seen in enhancing provision of proper communication networks in these rural societies (EU, 2018). In connection to this, Steuertwald and Mpholo et al (2018) highlight that rural road networks serve as lifelines of sustainable socio-economic development in rural communities yet these roads often do not receive proper funding and management in some European countries. The scholars add by drawing experience from Romania, mainly highlighting that about 70% of Romania population

resides in rural areas which are very difficult to access and this disconnects some of the most vulnerable societies from major economic activities.

Steurtwald and Mpholo et al (2018) argue that benefits associated with the availability of essential services such as health, education and finance in rural areas are difficult to sustain and enhance economic development if there are no proper and well-maintained rural road networks that can cater for reliable and regular access of these societies. These scholars posit that this is evident in countries such as Cambodia and Romania, where inefficiencies in rural road networks cripple the potential sustainable economic development of the rural societies. Palinkas et al (2015) further indicate that the importance and value of rural roads to economic growth and rural prosperity is not lost when one considers that China became the second largest global economy about the same time that its road system became the second largest in the world. In essence, the rural road networks' developments in China have had a profound impact on agricultural diversification and marketing in China hence the country's steady growth in economic terms.

From the African point of view, rural roads are not only channels to access education, health and social services, but also help the smooth transfer of policies from central governments to the communities in rural areas, (African Union, 2020). Price (2017) is of the view that most rural roads in Africa remain unpaved, with gravel and lateritic materials forming the surface layer and therefore exposing them to varying weather conditions of wetting and drying, which often result in deterioration of such roads. Due to financial constraints characterizing the majority of African societies, the rehabilitation and maintenance of these rural road networks has proved problematic and challenging, hence the prevalence of issues related to difficult accessibility across the continent's rural areas, (Thamzanga, 2017).

Water erosion easily detaches surface soil particles and subsequently transports them as sediment down slopes, as a result, wet roads with lowered soil strength lead to the formation of rills due to traffic wheels, and also hinders the already fragile rural transport systems of the majority of African countries (Smith, 2018). In relation to this, Aloba (2018) assets that while 37% of world's population have access to all-weather rural roads within 2 km, the African continent has the least access to such all-weather roads. The paper holds an understanding that the importance of rural roads to communities justifies the constant need for their good conditions, without which the sustainable development of African rural societies could be jeopardized.

International Labor Organization (2018) emphasizes that it is crucial for nations to prioritize the use of local material and resources in the construction of rural road networks as the maintenance of such roads becomes easier under such circumstances. The organization mainly argues that in such cases the material gets to be easier and cheaper to access for road maintenance purposes. Palinkas et al (2015) goes further to indicate that rural development practitioners should prioritize the promotion of context-specific rural road planning as areas differ in terms of topography and other environmental characteristics that determine appropriate material that can be used towards the construction of quality rural road networks.

World Bank (2016) adds by highlighting that rural infrastructure developments such as the provision of road networks also give rise to corrupt practices by those with power, especially politicians and local construction moguls. A number of Southern Africa countries, including Lesotho, are victims of such corrupt practices and in some cases the situation has escalated to incidents where public protests arise or the construction of some rural roads being abandoned due to corrupt tendering practices and mismanagement of funds, (World Bank, 2016).

Some of the countries constituting Southern African Development Community (SADC) are among the least developed nations in the world, and are also often characterized by poor rural road and communication network (African Union, 2020). However, it was found that by improving rural accessibility and mobility, countries would better achieve the sustainable development, (African Union, 2018). Improved rural transport systems help to develop the agriculture sector which serves as the main source of income and the baseline to the SADC countries' economies. For instance, Agumba (2016) posits that most rural societies of developing nations such as Zimbabwe remain highly underserved in regard to proper communication networks as the national governments are under-sourced to adequately provide efficient rural digital infrastructure. Likewise, the scholar highlights that some rural societies constituting Chimanimani district in south-eastern Zimbabwe has been highly unreachable since the local road networks were destroyed by the 2019 cyclone Idai, However, the scholar contends that the government has set aside funds towards rehabilitating local infrastructure in the area. In relation to this, World Bank's (2016) report emphasizes that road densities per km are generally much lower than those of Asia or Latin America. Lakshimi (2017) notes that low population densities, low levels of income and weak road planning and maintenance capabilities combine to make Sub-Saharan Africa under-equipped and overburdened in terms of rural road infrastructure. The total needs for rehabilitation of existing roads and for expansion of rural road networks are enormous and have generally not been recognized by planners and policymakers hence the prevalence of issues such as rural-urban inequalities and rural poverty, (ADB, 2016).

Salter (2020) further holds an assumption that Lesotho also has rugged topography which highly challenges the effective provision of proper rural road and communication networks. The scholar argues that the total road network of Lesotho is about 7000 kilometers of which only 1798

kilometers being paved, and rural road networks are mostly characterized by very narrow with limited space to safely pass, and lack of crash-protection mechanisms. This makes these roads very risky and dangerous, as the roads are also mainly characterized by gravel terrain which is very vulnerable to erosions. Rural road networks in Lesotho lack side pavements despite the fact that such roads are used by some of the most vulnerable members of our societies such as those walking, riding, and using animal carts as means of transport, (Tanga et al, 2014). These scholars further argue that most of Lesotho's rural communities lack proper and reliable communication networks, the scholar argues that this is mainly due to the fact that the provision of communication networks has to a larger extend been commercialized in the country.

International literature reflects an intense causal relationship between accessibility and development, however local literature clearly stipulating how Lesotho rural development initiatives are impacted by challenging accessibility lacks to confidently reflect such a relationship. It is also important to address issues such as the role played by the growing non-farm sector and how rural road and communication networks influence such economic activities. Most studies have focused on how the urban road network contribute to the national economic development, therefore giving little attention to the role played by accessibility towards rural development in Lesotho.

2.4 Regulatory framework and policies regarding provision of roads and communications networks in rural areas

This section specifically provides a comprehensive review of available literature in regard to the regulatory framework and policies guiding the provision of rural road and communication networks. Leduka (2015) posits that matters concerning the provision and maintenance of rural road and communication networks have become a critical point of discussion for many

international organizations in recent years. In connection to this, the scholar makes specific reference to the Sustainable Development Goal (SDG) 9 and the 2016 New Urban Agenda (NUA). Additionally, the United Nations Habitat (2019) also advocates for prioritization of effective provision of rural road and communication networks so as to enhance inclusive development of regions.

However, Zuma (2013) argues that different governments approach the provision and maintenance of rural road and communication networks differently, and in countries such as Philippines the construction of rural roads is the responsibility of the central government whereas in countries such as Thailand provinces are responsible for their local road networks. Shi et al (2021) add that there are still some other countries that have shifted the responsibility of rural road networks to district offices, such nations include Sri Lanka. Moreover, Chen et al (2019) assert that the prioritization of rural roads takes different forms across various nations, for instance, India constitutionally sees the provision of rural road networks as an essential human need hence rural roads are provided and maintained totally free of charge in the country, whereas some countries such as Indonesia approach the provision of rural roads from the commercial point of view.

There has been some policy shift from the traditional practice of basing rural road development plans solely on road densities, towards laying more emphasis on the preparation of target district plans so as to enhance village connectivity and optimize local road networks, (Amit, 2020). The scholar mainly draws experience from nations such as India, and argues that road density measures alone fail to clearly capture the connectivity dimension, the place utility, nor access to opportunities provided by rural roads. The main argument raised is that the provision of rural roads is easier to achieve in societies where the connectivity to opportunities and accessibility for all guide the planning, funding, construction and maintenance of rural road networks rather than in

societies where the establishment of rural roads is guided by rule of thumb and broad guidelines that are often vulnerable and subject to political manipulation.

Furthermore. Collins (2014) emphasizes that the African rural road and communication sectors have also passed through a wide ranging and consistent set of policy reforms, with strong donor support and a relatively high degree of consensus about the direction of reform, with most countries embarking on very similar paths. The scholar mainly indicates that the initial thrust behind such reforms has been to create an independent source of funding for road maintenance based on road-user charges, and also create funds that would source their finances from registered communication providers towards the provision of effective rural communication networks. Resultantly, such institutional entities are fenced off from the general government budget and administered by autonomous boards, (Mauri and Khan, 2013).

Rivera and Kapucu (2015) also argue that great majority of African countries including Lesotho, Tanzania, Zimbabwe, and Ethiopia have established second-generation road funds, and most of the others are yet to follow as policies positing for creating of such organizations have already been embarked on by many African countries. The African Union Development Agency (AUDA-NEPAD) has also established the Rural Futures Program (RFP) which in return gave birth to the 2019 Blueprint for Implementation of Rural Transformation policies in Africa framework, (Smith, 2018). The scholar mainly emphasizes that these policy frameworks have centralized and prioritized effective provision of rural road and communication networks in the quest to achieve inclusive economic development in all African states.

In addition, Grindle (2019) asserts that despite the fact that most African countries have emphasized the application of fuel levies with the hope of funding the construction and maintenance of their national road networks, the amount of fuel levies collected varies widely

across countries. Some countries reflect enormous trouble in collecting the anticipated fuel levy revenue mainly due owing evasion and delayed revenue transfers, such nations include Rwanda and Tanzania, (Thamsanqa, 2017). The scholar further indicates that road funds in Benin, Côte d'Ivoire, Ethiopia, Gabon, and Zambia are among those dependent on national budget allocations for more than 75% of their resources. In relation to this, Zuma (2013) holds an assumption that the majority of African nations allocate about 60% or more of the revenue collected through fuel levies and road-user charges towards developments in the main interurban road networks and therefore marginalizing rural roads.

Wright (2016) is of the view that road and communication policy sectors' reforms are no stranger to the Southern Africa Development Community (SADC) region. The scholar posits that about 2/3 of SADC region countries have established road agencies which are independent from line ministries and are mainly responsible for contracting out public works on behalf of the central governments. Majority of SADC member states have embarked on the SADC Vision 2050, which mainly entails the creation of an inclusive industrialized economy where all citizens enjoys equal access to economic well-being and freedom, (Wright, 2016). The scholar asserts that in pursuit of this SADC Vision 2050, SADC has also put in place the 2020-2030 Regional Indicative Strategic Development Plan (RISDP), which serves as a coherent and comprehensive guide for the implementation of regional transformation policies. Provision of rural road and communication networks form the central focus of these policy frameworks as they determine accessibility of rural settings, and therefore enhancing inclusiveness of regional economic development initiatives (World Economic Forum, 2017).

In addition, Big (2019) and Cloete (2018) emphasize that SADC has also established the SADC Industrialization Strategy and Roadmap 2015-2063 which has centralized and prioritized the

provision of accessible and proper rural road and communication networks as it seeks to promote industrialization through enhanced competitiveness and deeper regional integration. However, Cloete (2018) affirms that most development policies of some SADC countries such as Lesotho, Swaziland and Namibia still prioritize the provision of rural road and communication networks based on the quantity of rural production and population due to limited finances and weak economies. The scholar highlights that this often leads to the official neglect given to such roads as evident in Lesotho, where rural inaccessibility is a major characteristic yet very little has been done to enhance the provision of rural roads mainly due to poor economy and lacking finances. In connection to this, Dumayi and Kratzer (2019) note that compared to her neighbours, Zambia can be considered to be among few SADC countries with fair rural road and communication networks conditions.

Furthermore, Harkness et al (2020) indicate that the government of Lesotho has also embarked on a variety of policy frameworks such as the 2018/19-2022/23 National Strategic Development Plan 11, 2008 Communications Act, the African Union Agenda 2063 as well as the SADC Regional Indicative Strategic Development Plan towards enhancing rural accessibility. The government has also embarked on the Lesotho Transport Infrastructure Development Project (LTIDP) which seeks to promote the provision of proper national road networks so as to ease service delivery to the vulnerable rural populations, (Dumayi and Kratzer, 2019).

In addition, Lekoko and Joy (2015) emphasize that although the government of Lesotho has not yet implemented the evaluation of Lesotho Vision 2020, the framework served as a move towards enhanced regional transformation and laid particular emphasis on effective provision of rural road and communication networks. The scholars add that Lesotho has also implemented the 2019-2024 Lesotho Country Strategic Plan, which affirms the government's commitment towards enhancing

accessibility of remote rural areas through effective provision of proper rural road and communication networks.

In relation to policy framework guiding the provision and maintenance of rural road and communication networks, available literature lacks and questions such as how policies perpetuate rural-urban disparities still need to be addressed. The researcher is also not aware of local literature specifically entailing the challenges hindering proper provision of rural road and communication networks in Lesotho, nor is he aware of any relevant literature detailing how relevant policies marginalize rural development in comparison to urban development.

2.5 Chapter Summary

This chapter has discussed some of the latest academic debates and trends in regard to the provision of road and communication networks in rural areas, and has also discussed the content shared by previous scholars in relation to the relationship between rural-urban linkages and development. In doing so, the content shared in this chapter has been presented in numerous sections so as to enhance clarity. The chapter concludes that there is a causal relationship between rural-urban linkages and development, the chapter also concludes that the majority of rural road and communication networks are generally in poor and unreliable conditions. The chapter notes that this further perpetuates issues related to rural isolation and inaccessibility. The chapter concludes that nations have established and implemented a variety of policies aimed at enhancing rural accessibility, however it is also noted that the degree at which governments are financially committed varies hence the successfulness of the implementation of such policies also differ. The next chapter is the methodology chapter, which basically entails discussions about research methods used in conducting this specific research.

CHAPTER THREE: RESEARCH METHODOLOGY

3.1 Introduction

This methodology chapter aims to describe research methods used in conducting the study on the assessment of rural-urban linkages on rural economies, mainly focusing on roads and communications' networks in Mateanong community council. This chapter therefore, seeks to comprehensively describe the research methods used and also provide a justification for adopting the methodology, showing their relevance and applicability to the study. This chapter consists of various sections such as area of study, research approach, research design, study population, sampling procedure, data collection methods, data collection procedure, ethical considerations and data analysis.

3.2 Area of Study

The area of study is Mateanong community council which is located in Mokhotlong district. Mateanong community council consists of about 38 villages with a general population of 10,376 (Lesotho Bureau of Statistics, 2016). Smith (2018) notes that these 38 villages are very isolated and the community council is poorly developed, and as a result, residents of this area suffer from issues such as difficult access to essential public services including health, public security, education, water and sanitation as they have to travel long distances to access such services. Smith (2018) also highlights that despite prevailing issues of unemployment and poverty in the area, many families have large numbers which serves as a sign of poor family planning and this further perpetuates their vulnerability to poverty as properly raising many kids requires financial stability. In addition, the scholar indicates that a majority of households in this area highly depend on financial remittances received from abroad and also source most of the necessities in Mokhotlong town. Harkness et al (2020) also highlights areas near the Drakensburg Mountains, including

Mateanong community council, are extremely cold, and this accounts for much of their poor agricultural productivity as most cash-crops require relatively warm temperatures.

3.3 Research approach

The study employed the use of qualitative research approach, which basically seeks to uncover the insights of the phenomena at hand through the collection, analysis and interpretation of comprehensive narrative and visual data (Cloete, 2018). The scholar adds that qualitative approach mainly makes use of participant observations and interviews as the main aim is to gain full understanding from the perception of research participants in relation to our research problem. Qualitative research approach is the most relevant and applicable to the researcher's study as the study is narrative in nature and mainly seeks to uncover how roads and communication networks impact the capability of local residents in the production and consumption of their necessities. The research does not entail the use of statistical or numerical data in its data collection and analysis, hence the use of qualitative research approach which is best in uncovering an in-depth narrative understanding of the nature and scope of a research problem.

3.4 Research design

. Exploratory research designs are best for studies with limited available information, hence its relevance to this study as the impact of roads and communications' networks on rural economies remains a highly untapped field in the academia world. Exploratory research designs are also suited for qualitative studies as they are more flexible and open-ended. The research adopted a case study research design which entails a detailed study of a specific subject, with the main aim of gaining concrete, contextual and in-depth understanding of the research problem. Using case study research design, Mateanong community council serves as the researcher's specific place of interest with its economy being the central focus of the research.

3.5 Study population

The study population of this specific research consisted of Mateanong community council residents, village chiefs, and committee members, Mateanong taxi association taxi owners and drivers, Ministry of Public works and Transport officials, Roads Directorate officials, Ministry of communications and Technology officials, Lesotho Communications Authority officials, Vodacom Lesotho Officials as well as Econet Lesotho Officials. Village chiefs and Lesotho Communications Authority and Roads Directorate. This is because village chiefs are likely to be the most informed about the challenges facing all categories of local residents in relation to local roads and communications networks, Lesotho Community Authority is on the other hand the office mainly responsible for the management of national communications networks while Roads Directorate is the main body responsible for the national road networks.

3.6 Sampling procedure

The sampling technique used in this research is purposive sampling, which falls under non-probability sampling techniques of data collection. In non-probability sampling techniques, not all members of the target population have an equal chance of being selected to form part of the study sample (Joseph, 2019). Chen et al (2019) define purposive sampling as a research technique that acknowledges the researchers' discretion in selecting members of the study sample, In doing so, the researcher has selected the research sample based on the characteristics that are present within the whole study population as this could allow the researcher to investigate the main research questions guiding this study in more depth. Purposive sampling is also best suited for studies that seek to establish concrete generalizations about a large population having engaged limited sample size, the accurateness of these generalizations however depend on the representativeness of the selected sample in relation to the characteristics of the entire population, (Amit, 2020).

The researcher has purposively selected shop owners, farmers, committee members and village chiefs from Mateanong community council whose means of livelihood is affected by the local roads and communications networks. On one hand, the researcher has also purposively selected Ministry of Public Works and Transport because it is responsible for national policies pertaining national road networks while Roads Directorate has been purposively included in the sample because it is the main office responsible for the construction and maintenance of national road networks. Furthermore, the researcher has purposively selected the Ministry of Communications and Technology because it is responsible for policies guiding management of communications networks while the Lesotho Communications Authority has been selected because it is the main body governing the practices of private communications providers in line with set national guidelines and policies. Local chiefs and community council committee members are also likely to be among the most informed about the local population's views and grievances regarding roads and communications networks, while farmers and shop owners form the most economically-active categories within these areas.

3.7 Data collection methods

This research has used open-ended questionnaires, participant observations and interviews as the main data collection methods. The researcher also conducted focus group discussion. The researcher has engaged the departments of roads and communications through the use of interviews only while the local residents were engaged through the use of both interviews and open-ended questionnaires, as well as a focus group discussion. The open-ended questionnaires enabled local residents to voice their opinions about the benefits and challenges associated with roads and communications networks in the area, mainly through the selected village chiefs as their offices are the most informed about local challenges. Interviews enabled roads and

communications departments' officials to stress their role in rural road and communications networks establishment as well as the challenges facing the provision of roads and communications networks in rural areas. Observations were also used as data collection tools and this allowed the researcher to witness the situations within which local participants live in.

In gathering the findings of this research, the researcher engaged 31 research participants for the research through different methods as discussed below. The researcher interviewed a total of 13 people (see table 3.1 below). In addition to interviews a focus group was held with 11 community members from Lentsweteng and Ha Jorose villages. Joseph (2019) defines interviews as a face-to-face consultation guided by set specific questions with the aim of acquiring responses relevant to a certain research agenda. The use of interviews was essential to this specific study as it has helped the researcher acquire high and detailed responses, and also allowed the researcher to probe and make follow up questions where necessary.

Table 3.1: Research Sample Characteristics - Interviews

Organization	Female	Male	Total
Ministry of Public Works and Transport Officers	1	0	1
Ministry of Communications and Technology Officers	1	0	1
Roads Directorate Officers	1	1	2
Lesotho Communications Authority Officers	0	1	1
Vodacom Lesotho Officers	1	0	1
Econet Telecom Lesotho Officers	1	0	1
Chiefs	0	2	2
Mateanong community council committee members	1	0	1

Shop owners	1	0	1
Farmers	0	1	1
Other local residents	1	0	1
Total	8	5	13

In addition, a total of seven (7) self-administered questionnaires were distributed to village chiefs, local residents, community council committee members and taxi owners. Samur (2011) defines questionnaires as a set of written questions for the purpose of gathering information from respondents without necessarily having a physical or physical conversation, questionnaires were relevant to this specific study as they are cost-effective and the researcher had limited finances. The researcher explained the questions and content required by the questionnaires, this made it easier for the respondents to fill the questionnaires on their own considering literacy challenges facing majority of target respondents, especially local residents.

3.8 Data collection procedure

The researcher used a letter from NUL confirming that he was carrying out a research to introduce himself to research participants and also asked for their permission to be engaged in the research. This was done to assure the participants that the research is purely academic and possess no harm to their livelihoods so that they could comfortably partake in this research. Before interviewing local residents, the researcher first introduced himself to the responsible village chiefs so as to make them aware that there is a study being conducted in their villages and also requested for permission to interview their people. The researcher followed the same introduction procedures in interviewing officials from roads and communications departments, these introductions helped the

researcher in accessing relevant offices and also being afforded the opportunity and time to carry out these interviews.

3.9 Ethical considerations

Research practitioners such as Tacolli (2019) and Palinkis et al (2019) argue that ethical considerations in research serve as guidelines for researchers on how to avoid and minimize harm for engaged participants and also towards avoiding any form of research misconduct. These ethics include confidentiality, informed consent, voluntary participation and freedom for participants to partake in the research or not. To uphold these ethics, the researcher has avoided any association of research findings to any specific individual participant in the presentations of the findings and this was done to make sure that the participants remain anonymous, the researcher also informed all participants about the details and purpose of the study, and also made sure that the participants feel no danger associated with partaking in this research. The researcher also made sure that all participants participated voluntary by letting them know that they are free not to participate of withdraw their participation at any moment

Miller (2017) emphasizes that making research participants about their right to withdraw is one of the key principles guiding academic researches. In addition, the principle of confidentiality is essential in research as it allows participants to participate fully without withholding any necessary or relevant informant (Cloete, 2018). The scholar also emphasized that in order to uphold this principle, the researcher is required to safeguard the information that participants has disclosed in the relationship of trust, and the researcher should also avoid directly linking responses to the identity of any individual who has participated in the research. To uphold this principle, the researcher has used alphabets instead of real names or positions that may expose the real identities of the participants in the presentation and discussion of obtained data.

Informed consent was also sought from the participants. As Holden and Lynch (2015) describe the principle of informed consent as a research practice of making sure that all participants are fully aware about what the study is about and any risks that may be associated to it, as well as their rights as participants before an interview can take place. To achieve this, the researcher specifically made formal introductions and also assured participants that the study is only for academic purposes, and also informed them about their rights in relation to this research. The researcher also asked all research participants to sign informed consent forms so as to prove that they fully understand what the study is about and they are freely willing to participate.

In addition, participants voluntarily participated in the study. This was emphasized by Cloete (2018) as one of the fundamental principles guiding researches in academia world, and mainly entails avoiding influencing participants to participate against their will. In upholding this ethic, the researcher explained to all participants that their participation is neutral and not associated to benefits or penalties of any sort, and that there are no negative consequences they shall suffer if they refuse to participate. The researcher as also upheld the principle of privacy by not disclosing any critical or personal information without the consent of the participants and or respondents.

3.10 Data analysis

The researcher has used thematic analysis. Palinkas et al (2015) defines thematic analysis as a qualitative data analysis approach that mainly entails establishment of themes used for data presentation. The researcher has specifically used inductive thematic analysis, that is, the researcher identified patterns and similarities within the obtained research data to create themes used to analyse research findings. The use of inductive thematic analysis in this research has allowed the researcher to analyse research findings with more ease and in a more detailed, comprehensive and organized manner. The main themes identified within research findings are;

policy framework guiding provision of roads and communications networks in rural Lesotho, Mateanong community council roads and communications networks' conditions and their economic implications on the livelihoods of local residents, and barriers hindering effective provision of roads and communications networks in Mateanong community council.

3.11 Chapter summary

This chapter has presented the research methods used in conducting this study. The chapter also described the study area, being Mateanong Community Council, as well as the study population. The chapter further highlighted the primary data collection methods used, the use of explanatory and case study research design, the use of purposive sampling as the primary sampling technique in this research, the use of inductive thematic analysis approach in the data analysis of this specific study as well as the relevance of all research methods and techniques used. In addition, the chapter has discussed the main research ethics guiding this research and how the researcher has attempted to uphold such ethics. The next chapter is the data presentation and analysis chapter, which mainly focusses on presenting and analysing findings of this research.

CHAPTER FOUR-DATA PRESENTATION, ANALYSIS AND DISCUSSION

4.1 Introduction

This chapter on data presentation, analysis and discussions, presents research findings obtained through interviews, observations and open-ended questionnaires. The data has been analysed using inductive thematic analysis, that is, patterns and trends identified within obtained research responses were reviewed to create themes used in the presentation of this data. This has been done to enhance clear and logical presentation of data analysis, while at the same time easing the identification of the most relevant responses in answering the main research questions guiding this research.

This chapter entails discussions on the policy frameworks ensuring provision of rural-urban linkages, Mateanong roads and communications networks' conditions and their economic implications on the livelihoods of local residents, as well as the construction and maintenance and local participation. The concluding section of this specific chapter is the chapter summary, which basically serves as an inclusive overview of the content shared by this chapter in particular.

4.2 Policy framework guiding the provision of roads and communications networks in rural Lesotho

This section discusses the policy framework guiding the provision of roads and communications networks in Lesotho. For clarity purposes, this section has been divided into two sub-sections, road networks and communications networks. The sub-section on road networks specifically discusses policies guiding provision of roads networks, while the latter specifically entails discussions in relation to policies guiding the provision of communications networks in the country.

4.2.1 Road networks

Officials from the Ministry of Public Works and Transport and Roads Directorate office indicated that the core principles guiding the provision of national road networks are mainly based on the national 2010 Land Act, the Compensation and Resettlement Policy as well as the 1969 Roads Act. The officials further explained that the laws and policies guiding the construction and rehabilitation projects are applicable to all road sector projects in the country, regardless of the entity funding the project. It also came out that these key guiding principles include the establishment of an enabling environment for efficient, cost effective and safe transport within the whole country, and the enhancement of physical accessibility of all societies in Lesotho.

In addition, it also came out that in the Ministry of Public Works and Transport's attempt to enhance local governance and road sector tasks' allocation, the Ministry has established the 2010 Roads Directorate as the main body responsible for the construction, rehabilitation and maintenance of national road networks, whereas Road Fund has been established solely for the purpose of accumulating funds outside of government's national budget, mainly through road user chargers, and these institutional entities are mandated to work closely with relevant stakeholders such as local councils and community councils during any road project in the country.

In connection with this, an official from the Ministry of Public Works and Transport said;

The principles and policies guiding our mandate as a ministry, and the office of Roads Directorate as a body under the Ministry of Public Works and Transport, serve as footsteps towards the attainment of the broader national goals which include the establishment of inclusive sustainable economic development with access to essential services for all citizens (Interview, official from Ministry of Public Works and Transport, 20th March 2023).

The officials also indicated that the policies guiding road projects-related tendering are mainly based on costs rather than performance, this leads to construction of poor quality roads, especially in the rural areas where the terrain is also more challenging for proper road construction. It also came out that during the construction or maintenance of any road project, Roads Directorate engages the public in discussions pertaining to project land and the key principle guiding such include avoiding involuntary land acquisition and establishment of effective relations between the involved community and all other relevant stakeholders. The office further highlighted that all compensations, resettlements and valuation procedures are guided by the national compensation and resettlement policy, which emphasizes that all properties and assets involved in the construction and maintenance of roads should be valued by independent verified property assessors at the market value in collaboration with representatives from involved households and families. In connection with this, a senior official of Roads Directorate said;

these guidelines are meant to protect the interests of involved communities and households while at the same time protecting the interests of each road project, and such interests include provision of quality and reliable road networks at the lowest possible costs. Our office works on very limited resources, this makes the attainment of our mandate even harder (Interview, official from Roads Directorate Mokhotlong, 24th March 2023).

However, through focus group discussion with some of Ha Jorose and Lentsweteng villagers, the study revealed that the local residents regard the core principles aimed at enhancing fair and accurate compensation as not applicable, the residents mainly state that responsible stakeholders promise timely and fair valuation of their properties and assets, but in reality the offers made by these institutions are way less the expectations of the involved local residents. The local residents

further explained that their roads lack proper maintenance and this forces them to incur costs trying to maintain their roads because they are the ones who suffer the adverse effects of inaccessibility the most. In addition, one focus group member who is also a farmer from Ha-Jorose village, said;

during the rehabilitation of the road leading to Ha-Mohale in 2019, some big stones rolled down the mountains slope and destroyed several homes, about 4, these families only got their compensation towards the end of 2022, more than 2 years since the incident. Luckily no one had got hurt or died from the incident, we as Ha-Jorose villagers, wonder if the relevant offices really care about our livelihoods if they fail to compensate houses destroyed directly by their work on time (Focus group member and also a farmer from Ha Jorose Village, Ha Jorose, 27th March 2023).

A member of Mateanong community council committee also explained that in collaboration with relevant stakeholders, their office seeks to maximize job creation during road projects, enhance fair job allocation and ensure fair compensation of local residents by making sure that all major decisions taken are relevant to the core interests of the local people. The study also revealed that the community council committee views lack of finances as the key issue hindering the implementation of most agreements made between the council and relevant offices, such agreements include timely maintenance of the local road networks, maximization of job opportunities for local residents, timely and fair compensation of involved households for their lost assets and or access to assets.

However, the findings of the study revealed that there are no clear measures that ensure that projects resume only after partial or full compensation and resettlement of involved households, this has serious negative impacts on the livelihoods of local residents as they are not capacitated

to effectively ensure that all agreements with relevant stakeholders are fulfilled before any project commences. The government, through the ministry of public works and transport, has championed the establishment of Roads Directorate as an independent body responsible for the construction, rehabilitation and maintenance of national road networks. However, lack of funds have proven to be the main issue hindering the successful implementation of policies aimed at enhancing the provision of rural road networks, such policies include resettlements and compensations' policies. The study has also established that construction and rehabilitation of roads in Lesotho is mainly based on traffic volumes and economic productivity of the concerned area, this puts rural roads at a vulnerable position and only favours the construction and rehabilitation of urban. The findings of this research further highlight that the implementation of policies guiding effective provision of road networks in rural areas of Lesotho is to a greater extend hindered by lack of resources, especially funds.

The findings of this research are similar to those obtained from a study by Palinkas et al (2015), who highlight that most developing nations have adopted the establishment of independent road agencies with the main aim of freeing the national budget from the burden of having to solely fund the national road sector projects. In addition, this study confirms findings of Tacolli (2019) who argued that most of these agencies fail to collect or accumulate the anticipated funds, and as a result, most developing nations' road networks remain of poor quality. In connection to this, the findings also confirm those by Tacolli (2019), who indicates that lack of funds increases the use of cheap material and labour during the construction and rehabilitation of roads, this is because more concern is given to costs of the project rather than the quality of the project. In connection to this, the findings of this study also confirms a report by Molobi (2023) who revealed that the residents of Mohale village who had lost their lands during the construction of roads leading to

Mohale dam and did not get their promised compensations and entitlements on time. This deprived the victims off their means of sustainable livelihoods and therefore made them vulnerable to poverty in many ways.

The findings of this research are further in line with some of the main assumptions shared by growth and change theory which has been used to form the theoretical base of this specific research. This is because the findings reflect the isolation of Mateeanong community council and link such remoteness with the prevalence of severe poverty and lack of services characterizing the area. Discussed findings indicate that policies guiding provision of proper roads and communication networks in Mateanong community council are more cost-based and this only perpetuates the inaccessibility of the area hence lack of development experienced in the area. The growth and change theory shares the same ideas by highlighting accessibility and mobility as key determinants of rural development.

4.2.2 Communications networks

A key interviewee from the ministry of communications and technology explained that the 2008 Communications Act and the 2005 Information Communication and Technology (ICT) Policy paper serve as key foundations guiding the provision of communications networks in Lesotho. The study unearthed that Lesotho Communications Authority is mandated to monitor market demand and supply capacity of service providers in order to intervene and correct imbalances or market distortions in favour of users. Some officials from private communications' providers also explained that private sector organizations are mandated, through the policy 2005 ICT Policy, to play a key role in the development and expansion of ICT infrastructure and provision of ICT services and products. As one key participants from the ministry said;

the overriding vision of Lesotho's ICT policies is the creation of a knowledge-based society that is fully integrated in the global economy, and the main mission behind these policies is the full integration of communications and information technologies throughout all sectors of the economy in order to attain rapid, inclusive and sustainable economic development (Interview, official from Ministry of Communications and Technology, 27th March 2023).

It also came out that the Communications Act 2012, has set the establishment of the Universal Service Fund which is also aimed at raising funds towards the provision of ICT services in all inhabited areas across the country. An official from Lesotho Communications Authority explained that the SADC Guidelines for Universal Access and Service adopted by the government in June 2011 also serve as a base for the establishment of this fund, and the main hallmarks guiding its activities include enhancement of accessible and affordable ICT Services throughout the country. In relation to this, a participant from Lesotho Communications Authority said;

The country's universal coverage of communications infrastructure and services is the main prerequisite towards establishment of accessible and affordable ICT services. To achieve this, our organization manages the funds sourced through Universal Service Fund and uses such funds to tender out communications projects to certified providers, the funds are also used to subsidize projects by private communications providers (Interview, official from Lesotho Communications Authority Maseru, 20th March 2023).

A participant explained that the goals guiding the ministry include increasing wealth creation through the adoption and use of ICTs, promoting affordable and universal access to ICT products

and services, enhancing effective regulation of the sector by establishing rules and regulations that promote competition, protect and educate the consumer, create a level playing field among operators and service providers and encourage local and foreign investment in the ICT sector, as well as increasing ICT literacy levels in the country.

Responses from local residents further indicated that majority of households also depend highly on remittances received from their relatives working in local urban areas and abroad, especially households with less financial capabilities. This is because migration to Mokhotlong town or any other urban areas, local or international, mainly for better employment opportunities still serves as the main possible route out of poverty for many local households. In connection with this, a local chief said;

it is difficult for us to access funds from our relatives working in urban areas, some of these funds are meant for children whose parents are working in the urban areas. It becomes costly for us to access these funds due to high travel costs we incur, and also because we do not have reliable communications networks and this hinders our communication with the outside world and as a result it becomes difficult to even alert them of any emergencies concerning their loved ones here at home (Interview, local chief A, 29th March 2023).

Furthermore, the study revealed that ICT literacy and relevance to the livelihoods of the masses of our societies are key towards attaining the aim of making Lesotho an active member of the Global information society as expressed in the national 2030 Agenda and National Strategic Development Plan. The study also unearths that proper communications networks are essential prerequisites towards the attainment of a knowledge-based sustainable economy as they are the basic carriers of all ICT activities. Responses from Lesotho Communications Authority and Ministry of

Communications and Technology also revealed that political commitment and proactive leadership in the implementation of ICT development policies, government commitment to principles of freedom of press, access to information, as well as close alignment of ICT and other national development goals are among the essential elements needed for proper provision of communication networks

In essence, the researcher is not aware of any national policies specifically guiding the provision of communications networks in rural areas and there are also no policies advocating for better ICT funding in these areas. This is despite the fact the study revealed that rural areas possess less commercial interests and as a result private communications providers are highly reluctant to invest in communications products and services in these areas, including the establishment of communications towers. The researcher further notes that offices responsible for the proper provision of communications networks in rural areas emphasize the lack of funding and lack of government commitment to be main issues accounting for prevalence of poor communications' means in most rural areas of Lesotho. Discussed findings indicate that policy framework guiding provision of rural communication network has to a larger extend only prioritized the management of activities by private communication providers rather than actually prioritizing the provision of communication networks in all societies. That is, communication-related policies fail to encourage provision of communication networks in rural areas but instead have been centred on managing other activities of registered private communication providers in the country. It is also worth noting that the implementation of some of the policies aimed at enhancing rural accessibility through communication networks is also hindered by lack of funds.

The findings are in line with Thamzanga (2017) who highlights that access to information is critical towards the fight against issues such as poverty and unemployment. The findings are also in line

with those of Dave (2019), who indicates that access to information is critical to the development of any country, as it provides the most convenient means for members of the public to be informed about national decisions of their interest and to also hold the government accountable where necessary. The findings of this research are also in line with the applied theory of growth and change which shares the idea that mobility and accessibility pave way for enhanced rural development as they enhance flow of information, resources, capital and exchange of services between rural and urban areas. Therefore, paving way for the emergence of economically productive activities within rural settings.

Similar findings have been reported by World Bank (2016), which highlights that access to media and various means of communication is also essential towards sustaining the livelihoods of rural residents who still highly depend on remittances from abroad. In addition, this study supports findings by scholars such as Dave (2019) and Grindle (2019), who note that the provision and development of most communications systems and networks of developing nations is highly dependent upon the political will, interests and commitment. These findings are further in line with those of Monaheng (2017) who highlights that Lesotho is among the SADC countries that adopted the 2011 SADC Guidelines for Universal Access and Service, which led to establishment of bodies aimed at enhancing special funding for the provision of ICT services.

4.3 Mateanong community council roads and communications networks' conditions and their economic implications on the livelihoods of local residents

This section highlights the prevailing conditions of Mateanong roads and communications networks as well as their economic implications on the livelihoods of local residents. The local population generally perceives their road network to be in poor conditions, mainly characterized by potholes and damaged water tunnels. Responses from local residents and local taxi drivers

generally attributed the poor road conditions to lack of maintenance and poor road designs, they also indicate that the road network is in the state where only off-road and 4x4 vehicles can manage to travel due to rocky, uneven and rugged road conditions. The local residents also highlighted that some of their roads are totally damaged and no longer used and, such roads include those leading to villages such as Ha Jorose, Patiseng, Sephokong and Matlaong. In connection this, a participant residing in Patiseng village said;

the road connecting our village to Malefiloane and Ha Jorose has been out of use for about 6 years now, when the 2017 storms hit our region our gravel road, which was already in deteriorating conditions, got totally unusable for vehicles and it only had about 4 years of being used after its completion (Interview, Patiseng villager A, 29th March 2023).

The study also revealed that Mateanong communications networks lack development as they are very unreliable, with Econet being the only available communications network in the area. Responses from local residents further indicated that it is very difficult to readily access mobile networks within the majority of villages constituting Mateanong community council and, such villages include Ha Senkoasi, Phendele, Matlaong, Ha Jorose, Ha Leutsoa and Tebeleng. They also highlighted that the available Econet network is very unreliable, with sufficient signal strength for calls and texts only being available at certain specific geographical points such as mountain tops in the area. In connection to this, the study revealed that the poor conditions of Mateanong road network, as well as the unreliable communications network conditions in the area, impact negatively on rural economies as they hinder the development of some of the key economic activities that serve as the pillars of these economies, such economic activities include livestock ownership, agriculture development, and the general accessibility of essential and basic services.

In essence, the conditions of Mateanong community council road and communication networks encourages a rise the cost of living for the local population as they incur increased expenses to accessible services not available in the area. This is because bad road conditions characterizing Mateanong community council encourage transport operators to set higher prices due to high costs of maintaining their vehicles.



Figure 4.1: Ha-Jorose village and the abandoned road that linked it with Mokhotlong town 4.3.1 Livestock theft-related economic implications

The study revealed that poor road conditions limit local residents' access to security services, mainly the police, and this puts the local livestock investments at a high risk of being stolen or forcefully taken. Responses from local residents also indicated that the poor road conditions encourage stock theft as it takes quite too long for the nearest police, being those located in Mokhotlong town, to reach these villages in an attempt to rescue stolen livestock. One local Chief highlighted that;

Our villages are located quite close to the illegal crossings into South Africa, livestock thieves take advantage of this and steal our livestock to be sold in the South African because these thieves are aware that it takes too long for our police to respond, and the thieves are also highly armed, which makes it even harder for the local communities to fight the issue of livestock theft(Interview, local Chief B, 31st March 2023).

Responses from local residents also highlighted that the majority of Mateanong community council residents rely on agriculture, either through livestock or crop-production, so the issue of livestock theft really hinders the economic development of this area as livestock ownership serves as one of the main pillars of the local economy. In connection to this, a local farmer from Terai Hoek village said,

during summer most of the livestock is kept far in the mountains for better grazing pastures, there are no proper roads linking our communities with these grazing lands, only narrow and risky footpaths walking along mountain edges, and this puts the safety of headmen as well as that of our livestock investments at a great danger of being taken by the armed livestock thieves (Interview, farmer A from Terai Hoek Village, 02^{nd} April 2023).

Data from the field also revealed that lack of communications network further perpetuate the issue of stock theft in the area as it gets very difficult to seek assistance from nearby villages and contacting the police on time. The local farmers further explained that there are also occurrences where some livestock may get lost, especially when it is snowy, it gets very difficult to seek help because the communications networks in Mateanong community council area are ineffective. Data from the field also established that the issue of livestock-theft has raised a necessity for local

residents to seek additional means of guarding their livestock investments which are economically draining and include hiring at least two herdsmen and owning a bunch of dogs.

In essence, lack of proper roads and communications networks in the area hinders the protection of major local investments, being livestock ownership, and as a result economic development is very limited while poverty remains predominant. This has adverse economic implications on the livelihoods of local residents as agriculture and livestock production serve as some of the main economic pillars of the local societies through which the majority of the people sustain their living expenses. Bigger investments in livestock production are also discouraged as access and security is very limited. Even initiatives devoted at enhancing security in the area fail to reach their full effectiveness because they are challenged by limited mobility and communication which are all essential in ensuring coordination and cooperation between these villages constituting Mateanong community council.

These findings confirm studies by Harkness, et al (2020) and Lekoko and Joy (2015) who emphasized that inaccessibility and remoteness puts rural societies at a higher risk of being victims of organized criminal acts as the perpetrators get to be aware that it is quite a challenge for nearby communities and security offices to respond on time. In relation to this study's findings, Collins (2014) also confirms that availability and accessibility of national security forces is an essential element necessary in fighting any form of crime, as these organizations are well equipped, trained and also mandated to fight criminal activities of all natures.

4.3.2 Agriculture development-related economic implications

The local residents also highlighted that lack of proper road networks in the area also hinders the development of their agricultural production, especially in the recent times of intense climate change. The local residents also indicated that they fail to easily access the latest agricultural inputs

such as modified seeds and manure because they mostly lack the funds to cover necessary transportation costs. Data from the field also revealed that the issue of poor roads also hinders the chances of local residents to attend important agriculture-related workshops, as well as their chances of enjoying subsidies on agricultural products by the government. Responses from local farmers further indicated that livestock and crop-related diseases also limit local agricultural capacity as local farmers fail to access necessary medication for their livestock and crops on time. In connection with this, one local farmer, who is also a shop owner, said;

the issue of poor road conditions limits our access to agriculture-related exhibition shows which are very important towards our growth and development as small farmers. This shows offer us an opportunity to showcase our products, and also take notes from more successful commercial farmers (Interview, local farmer B from Patiseng Village, 29th March 2023).

Some local farmers, chiefs and residents indicated that transfer of information is very important towards the development and sustainability of agriculture, as it allows proper exchange of ideas and innovations between urban and rural residents. In relation to this, the study unearthed that the lack of proper communications networks hinders the local residents from seeking help from agriculture professionals as the rural farmers are most uneducated and lack informed information about some of the latest livestock and crop-related diseases. One local chief indicated that poor communications networks in the area makes the local population very vulnerable to losing some of their potential agricultural returns, as a result, most agricultural practices have remained very traditional hence the prevailing poor agricultural productivity in the area.

In essence, these issues make it too costly for the local farmers to shift from their traditional ways of engaging in agriculture to modern commercial means of agriculture production, livestock artificial insemination as well as advanced manure. Proper roads and communications are necessary to ensure smooth transportation and timely technological communication between the rural agricultural producers and the urban markets, and to also enhance cooperation among the rural farmers which is very essential in pursing increased agricultural productivity in the area. The figure below shows the isolated Ha-Leutswa village and some local farms



Figure 4.2: The isolated Ha-Leutswa village and local farms

Similar findings have been established by Macheka and Kayira (2021) study on Malawi and Zimbabwe, which revealed that the remote rural communities of both countries still face challenges such as lack of access to agricultural inputs, lack of extension services and imperfect markets for their agricultural produce.). The study findings also confirm those of Cook and Christopher (2023) and Tacolli (2019) who argue that issues of inaccessibility hinder the shift by rural farmers from traditional agricultural practices to modern cash-crops agriculture. This is because cash crops require easy means of accessing essential complimentary inputs such as

modified manure and related farming equipment, lack of roads and communications networks makes sourcing of such modern inputs quite expensive and unreliable.

The theory of growth and change also shares the same idea that inaccessibility of rural areas hinders access to security services and this discourages investments in some of the main rural economic activities hence the prevalence of issues such as poor agricultural activity as well as lacking entrepreneurship. The theory highlights that without proper linkages with urban settings and markets, rural areas are to remain impoverished as this hinders human capital and development through lack of access to services and reliable investment platforms.

4.3.3 Access to basic services-related economic implications

The study established that poor conditions of local road networks leads to transportation and travel costs to be relatively high in the area. Responses from local taxi owners and drivers indicated that this is because the road conditions require frequently maintained their taxis, meaning the taxi owners spend a lot of money to maintain and sustain their businesses. Local residents emphasize that the poor road conditions in the areas also encourage taxi operators to set high prices when charging their valuables and parcels, such prices are not set by law through relevant institutions like normal taxi fares but are rather to set by responsible taxi operators on their own discretion. In connection to this, a local shop owner using public taxis to stock, said;

as a small shop owner without a private vehicle, I rely on public transport to get new inventory for my shop from Mokhotlong town and the taxi fares that taxi operators charge me for my parcels are too high. This hinders the development and growth of my shop as I am forced to set high prices on my products, which demotivates my clients from buying considering how financially-vulnerable majority of these people already are (Interview, shop owner A from Khutlo-Peli village, 31st March 2023).

The findings of this research also revealed that unreliable communications networks drive local residents into incurring unnecessary travel costs even for purposes that could easily be satisfied through the use of telephonic communication. The local residents explained that this has a negative impact on their finances and households as it hinders the efficient use of the already scarce financial resources as well as potential savings and investments that the local population could make. The figure below shows just how vulnerable local roads are to erosions.



Figure 4.3: The local road's vulnerability to erosions

Responses from local farmers and chiefs also indicated that sheep and goats are the mostly owned animals in the area, mainly for wool and mohair production purposes as it is one of the main relied upon means of income generation for this local population. In connection to this, some local farmers highlighted that the nearest functioning shearing shed is located in Mokhotlong town and the poor road conditions hinders local farmers' efficient access to the shed as transportation costs

are very high in the area. This therefore limits the overall economic performance of the area as the majority of the local population relies on shearing activities to create income.

In addition, data from the field also indicated that the issue of poor road networks hinders efficient access to some of the most essential basic services such as health, education and finance, and as a result. Resultantly, majority of local youth have been forced to relocate to boarding schools and hostels located in Mokhotlong town to access better learning opportunities and this practice requires a lot of money. Responses from local chiefs and council's committee member indicated that a significant portion of the local population is elderly people who no longer have the necessary strength to travel long distances, especially due their challenging health conditions so accessing medical centres in times of emergence becomes a very big and costly problem. In connection to this, a 67-year-old participant from Ha-Leutsoa village said;

I travel for at least 2 hours on foot to reach the road in Ha Mohale village where I can get a taxi since there is not road specifically linking my village to the main gravel road leading to Mokhotlong town, my health is deteriorating due my age and I no longer has the necessary strength to travel that much. I, and other elderly people of my age living in this village, also fail to benefit from programs such as mobile health clinics because those vehicles fail to reach my village. (Interview, Ha Leutsoa villager A, 30th March 2023)

Furthermore, some local residents highlighted that the lack of proper roads limits the local population's access to financial institutions such as banks and this deprives them off the opportunity to acquire some essential financial knowledge and opportunities. The findings of this research also unearthed that there is a very limited number of shops in these communities, with most of them lacking financial services such as Mpesa and Ecocash, this limits the potential of

local residents to save and easily purchase commodities such as airtime. Data from the field also indicated that the transportation of fragile commodities is even more difficult, as one shop owner said;

it is very challenging to transport our inventory from Mokhotlong town to shops in this area as our road is in bad condition and highly limits the quantity of stock one can actually load on a car, let alone the transportation of fragile goods such as glass-made material like paraffin lamps and lid, and materials such as glass windows and all other goods that come in glass containers (Interview, Shop owner A from Malefiloane Village, 29th March 2023).

Some local residents from Moeaneng, Senkoasi and Motse-mocha villages indicated that modern mobile banking services have made it easier for people to settle most of their financial responsibilities from the comforts of their homes, however this is not the case for the local residents of Mateanong community council due to the lack of proper communications network. As a result, the local people here face serious challenges towards easily accessing funds sent to them through mobile banking services and therefore forces them to incur travel costs to Mokhotlong town where such services are available. The local participants also highlighted that low levels of information flow also hinder the local population access to employment opportunities, business financing as well as the overall potential of their entrepreneurial activities to be successful.

Responses from local shop owners indicated that the lack of roads and communications networks discourages serious financial investments in local businesses as thriving businesses tend to be a focus of thieves and robbers, so the inability to conveniently access police services hinders local shop owners' willingness to fully grow their businesses. The local residents further argued that most initiatives devoted towards the development of this area have been seriously hindered by

issues related to inaccessibility and remoteness, for instance, residents of Ha Leutswa village emphasize that they are not able to benefit from programs such as mobile health clinic because their location is totally inaccessible. It is also important to note that local shop owners emphasize that as much as proper road and communications networks have a disadvantage of putting their local businesses in competition with shops in the cheaper urban markets, to a greater extend they enhance the growth of local businesses as running a business becomes a quite cheaper when mobility is easier. Figure 4.4 below shows the conditions of some parts of Mateanong road network.



Figure 4.4: Prevailing road conditions in Mateanong community council

Similar findings have been noted by International Monetary Fund (IMF) (2018) and Lekoko and Joy (2015) who highlight that access to security is one of the fundamental elements that determine the growth and development of any business entity. This is because any financial investment needs assurance when it comes to safety as such entities often fall prey and targets of most criminal

activities. The findings of this research also support reports by Molobi (2018) who argues that access to essential services such as health, education and banks is also very essential towards the development of any society, as such essential services do not only enhance relevant literacy but also affords these vulnerable communities a chance to enjoy public services for which they pay tax like all other nationals of the country.

4.4 Barriers hindering effective provision of proper roads and communications networks in Mateanong community council.

This section highlights the main barriers or challenges hindering effective provision of proper roads and communications networks in Mateanong community council. The findings of this research unearthed that lack of proper funding towards the effective provision of proper roads and communications networks in Mateanong community council is among the key challenges, as well as the lack of local participation and involvement in the planning, construction and management of the local roads and communications networks.

4.4.1 Lack of proper funding

Some officials from the Ministry of Transport and Roads Directorate office explained that government funding towards the provision of rural roads still serves as the backbone for most rural road projects, these funds are however often characterized by shortfalls hence the prevailing poor conditions of most rural road networks. It came out that the revenue collected through Road Fund is insufficient for proper constructional and maintenance of the national road network. In relation to this; an official from the Ministry of Transport said;

The establishment of the Fund was based on an understanding that the office would be financially self-sufficient through road-user charges, and relieve the government from having to sponsor the construction and rehabilitation of

national road networks. This has however not been the case even today, because the fund fails to raise the necessary funds. The prevailing conditions of lacking road infrastructure within the country and the poor economic situation do not make raising funds through road-user charges and fuel levies easier either (Interview, official from the Ministry of Transport, Maseru, 20th March 2023).

Data from the field further unearthed that Mateanong road network, like most rural gravel roads, requires frequent maintenance due to its vulnerability to erosions. However, the lack of funds has hindered the necessary maintenance on this road and some parts of it have been totally closed as a result. In connection to this, the study also unearthed that there has been an attempt to extend Mateanong road from Tlkakoaneng to Tsieng village and construction material had already been collected, especially quarry, however, available funds could not complete the project and as a result it has been abandoned since. In relation to this, an official from Road Directorate said;

there are still a lot of rural road projects that are on hold due to lack of completing funds. The use of these roads by local residents prior to their thorough completion depreciates their quality and durability, especially since they have been partially constructed using limited material such as quarry (Interview, official from Roads Directorate, Mokhotlong, 28th March 2023).

In connection to this, the study revealed that due to limited funds, most road rehabilitation projects are prioritized based traffic-count activities. This does not favour rural roads as they possess low traffic counts.

Likewise, the study also revealed that government sponsorship towards provision of communications networks in rural areas serves as the main pillar. It also came out that the Universal Service Fund is also failing to meet the pre-set anticipations in regard to revenue collection. In relation to this, an official from Ministry of Communications and Technology explained that this leaves the provision of proper communications networks in rural areas dependent upon the commercial interests of private communications services providers, who often show lack of interest in investing in remote rural areas as profit-driven companies.

These findings are in line with those of Steuertwald and Mpholo (2018) who highlight that in most developing nations, most rural areas lack proper reliable communications networks. The findings also confirm those of Tanga et al (2014), who notes that private communications providers are often not keen to invest in rural areas because these areas often possess little commercial market interests due to high levels of poverty and poor economies among other issues. The research findings further emphasize on findings shared by scholars like Collins (2014) and Harkness et al (2022), who assert that limited finances hinder the quality and durability of rural roads, and this leads to costly and frequent maintenance tasks, which further challenges the financial capabilities of most road sector agencies in developing nations.

4.4.2 Lack of local participation

The study also unearthed that lack of local involvement and participation in the management of construction and rehabilitation of their local road network is among the key challenges hindering effective construction and maintenance of most rural road networks. One local chief explained that the local residents do not have any official say on matters regarding the management, construction, planning and maintenance of their local road. The chief mainly explained that as much responsible or relevant agencies and departments hold community gatherings to discuss the issues pertaining

the local road network with the public, the views of the public on the design and management of the road are often ignored, maybe on the basis that they are uninformed or irrelevant. In connection to this, a participant from Patiseng village said;

The road that used to link our village to others is now closed due to erosion and lack of proper maintenance, our community had advised the responsible road agency to provide concrete water tunnels to avoid the current situation considering our rugged topography. But they did not listen, just like they did not listen when the public recommended that this road should be maintained at least once each year (Interview, Patiseng Villager B, 03rd March 2023).

A local taxi owner and driver also explained that there are no official platforms that allow the local taxi association to directly link with the district Roads Directorate office on issues regarding the maintenance of Mateanong road network. This is despite the fact that the taxi association, as well as the public, endure serious financial costs in trying to rehabilitate the road due to lack of maintenance from the responsible agencies. In connection to this, a local taxi owner said;

We sometimes contribute as local residents and also seek some financial aid from the local taxi association trying to maintain and rehabilitate the most deteriorating parts of our local road, we alert the district road agency requesting additional assistance for our initiatives but they never come on board. As a result, our initiatives are not sustainable because we lack the necessary equipment that the office could maybe help us with towards maintaining this road (Interview, Taxi owner and Driver, Mokhotlong, 03rd March 2023).

In addition, the findings of this research highlight that local participation in regard to provision of communication networks in Mateanong community council is also very limited, mainly based on the understanding that establishment of ICT services requires technical know-how and literacy. However, some local residents explained that it would be important for the communication providers to engage the public before setting up such towers, especially in matters regarding the location of these towers. Local residents mainly highlight that through increased involvement of local residents in decisions regarding locations of proposed towers, the local population can be able to help the relevant offices about locations that can serve more communities.

These findings are similar to those of Macheka (2016) study on Great Zimbabwe World Heritage Site, the scholar highlights that lack of local involvement and participation in the management of projects aimed at developing local rural societies actually limits the development of such societies. The findings are also in line with emphasis shared by development scholars such as Tacolli (2019), Cook and Christopher (2020) and Lekoko and Joy (2019), who mainly highlight that the maintenance of most rural roads often becomes the responsibility of involved societies due to lack of proper maintenance by responsible agencies. So lack of local involvement in the management and planning phases of rural roads is injustice to local population as the adverse effects of poor road condition often become the responsibilities of societies that benefit from such roads.

4.5 Chapter summary

The research findings highlighted the prevailing issues of rural poverty and inaccessibility in Mateanong community council despite a number of policy frameworks aimed at enhancing rural-urban linkages so as to enhance the economic development of these vulnerable societies. The research findings further revealed that several roads within Mateanong community council are damaged and no longer usable, this has been caused by poor maintenance which the responsible

offices highly blame on lack of financial resources. Discussed research findings also indicate that lack of local participation and lack of proper funds are among the key issues hindering effective provision of proper roads and communications networks in Mateanong community council. It is also evident from the discussed findings that lack of proper roads and communication networks in Mateanong community council has various adverse economic effects on the livelihoods of local residents as well as on the general development of the area.

Lastly, the research findings indicated that the communications sector has to a very large extent been privatized, as a result, the provision of rural communications networks highly depends on the cost-benefit analysis of the independent companies. The study also uncovered that the government has embarked in a range of policy frameworks aimed towards enhancing rural-urban linkages in order to establish a stable private-sector led economy, and transport and communications are key areas within these frameworks. However, data from the field indicates that issues such as lack of local participation, and finance-related challenges highly hinder the smooth implementation of such policies and institutional attempts at enhancing the provision of roads and communications in rural areas. The next chapter is the concluding chapter, which basically aims to outline established conclusions and also make recommendations based on the discussed findings of this specific research.

CHAPTER FIVE: CONCLUSION AND RECOMMENDATIONS

5.1 Introduction

This chapter mainly focusses on presenting conclusions established by this specific study on assessing the impact of rural-urban linkages on rural economies. This concluding chapter further explains the relevance of growth and change theory of rural development to this specific study, and also presents recommendations established by the researcher. The study has assessed the impact of rural-urban linkages on rural economies, specifically focusing on Mateanong community council roads and communication networks. In an attempt to address the specified objectives of the study, research fieldwork was conducted mainly through the use of interviews, self-administered questionnaires and a focus group discussion. These data collection methods allowed the researcher to fully understand how the livelihoods of Mateanong community council residents are economically impacted by the conditions of their local roads and communication networks, allowed the researcher to assess the main policies guiding provision of rural roads and communications networks in Lesotho, and also aided the researcher towards establishing an understanding of the main barriers hindering effective provision of proper roads and communications networks in Mateanong community council.

The study further contends that the growth and change theory of rural development used in this study forms an important component of the base upon which the role played by rural areas' accessibility towards rural economic development can better be understood. The findings of the study indicated a relationship between accessibility and rural economic development, mainly highlighting that it is more challenging for inaccessible rural areas to economically develop than it is for rural areas with enhanced access. This is because mobility between rural areas and their neighbouring urban towns is essential towards allowing the transfer and exchange of economic

information and activities necessary for sustaining economic development in both regions. Hence, the growth and change approach views mobility and accessibility as core prerequisites towards the successful implementation of any rural development initiative. In essence, the main notions shared by this theory are evident within the findings of this specific research as the paper highlights that accessibility of Mateanong community council has commensurate economic influence on the livelihoods of local residents.

5.2 Conclusion

As the assessment of the main policies guiding the provision of rural roads and communication networks in Lesotho was one of the primary objectives of this study, the study demonstrates that issues relating to rural areas' inaccessibility, rural poverty and rural-urban inequalities form the centre of many development policies and agendas at the global, continental, regional and the local level. The study unearthed that Lesotho has embarked on a number of policies that serve as a base towards enhancing effective provision of proper roads and communication networks in rural areas, such policies include the 2008 Communications Act, 2010 Lands Act, Roads Directorate Act 2010, as well as the 2012 Resettlement and compensation policy. The study also concludes that the policies guiding provision of rural roads in Lesotho generally prioritize cost-effectiveness over quality-construction to such an extent that it hinders construction of durable and quality roads. This has led to the construction of poor quality roads in most rural areas of the country which have also proved to be more financially constraining in the long run, especially through required frequent maintenance needs.

The study revealed that the provision of rural communication networks has to a greater been privatized and commercialized, this hinders effective provision of communications networks in these vulnerable societies as they reflect little market interests for these profit-oriented

communication networks' providers. The study thus concludes that as much the country has pioneered the establishment of fund agencies aimed at enhancing provision of rural roads and communication networks, these institutional entities are for a number of reasons failing to be financially self-reliant, and therefore also failing to effectively fulfil their primary mandates.

Another primary objective of this specific study was to assess the economic impact of Mateanong community council roads and communication networks' conditions on the livelihoods of local residents. The study highlighted that roads and communication networks of Mateanong community council are generally in poor conditions. While Econet is the only available network in the area, it is very unreliable, and on the other hand the local roads are in need of maintenance and some are no longer functional. The study established that these poor conditions of Mateanong roads and communication networks generally have negative economic impact on the livelihoods of local residents as they increase costs of accessing essential services such as health and education. These conditions further hinder the development of agriculture related activities, which serve as the key base of the local economy. This also perpetuates livestock-theft related issues, which further hinder the economic development of these rural societies. The study therefore concludes that the poor conditions of Mateanong community council roads and communication networks negatively affect the livelihoods of local residents in a variety of economic ways.

To better understand the context, the study also examined barriers hindering effective provision of proper roads and communications networks in Mateanong community council. The study concludes that lack of proper funding and lack local participation and involvement are the main barriers hindering effective provision and maintenance of Mateanong community council roads and communications networks. The study highlighted that lack of funds hinders Roads Directorate department from effectively maintaining Mateanong roads hence the prevalence of their poor

conditions. Lack of funds and government investments towards proper provision of reliable communication networks are also responsible for the unreliable communication networks that the local population of Mateanong community council relies on. The study concludes that lack of local participation in the planning, construction management and maintenance phases of Mateanong road network limits effective construction and maintenance of the local road since the local people are not involved in major regarding road networks that are meant to benefit their communities.

In connection to the discussed findings of this specific research, the study concludes that rural areas' accessibility, either telephonic or physical, is an essential prerequisite for any rural development initiative to reach its highest potential of success. This is because accessibility paves way for easy transfer of information, mobility and enhanced agricultural productivity which are all essential towards the development of rural areas. The study further concludes that rural accessibility allows rural residents to easily access bigger urban markets for their agricultural outputs, allows them to identify economic opportunities and also access better job opportunities and other essential services such as banking and security with more ease.

5.3 Recommendations

The study makes recommendations and policy suggestions towards enhancing effective provision of rural roads and communication networks in Lesotho. These recommendations also seek to curb some of the main barriers hindering effective provision of road and communication networks in Lesotho, including those expressed within the findings of this specific research. Based on the discussed findings of this study, it is critical to approach development from an integrated approach that supersedes physical and administrative boundaries between rural and urban areas for better attainment of inclusive national economic development. A majority of discussed relevant policies reflect isolations between rural agriculture development and rural accessibility enhancement

initiatives, this is despite the fact that majority of rural residents rely on some form of agriculture to sustain their livelihoods and access to urban markets plays a key role towards enhanced rural agricultural productivity. Proper road and communication networks allow the rural population to source essential agricultural inputs and also sell their agricultural outputs more efficiently. This raises the need for enhanced multi-sector cooperation to better harness the benefits of initiatives aimed at developing rural areas in the country

There is also an essential need for the government to invest more in enhancing accessibility of rural areas as lack of proper funds is one of the main barriers hindering provision of proper rural roads and communication networks in Lesotho. The Government, Roads Directorate as well as the Ministry of Public Works and Transport should also prioritize performance-based tendering of rural roads projects over cost-based tendering. Performance based tendering could help enhance the quality of constructed rural roads and therefore also serve as cost-effective in the long run due to low maintenance costs required by quality rural roads.

Moreover, the government should also expand investments in rural communication networks, because independent companies are not keen to provide communication networks in these areas due to a number of private economic interests of these companies. The government, through relevant agencies and policies, should also prioritize the use of local resources in the provision of rural roads. Such resources may include construction material, labour, skills, and communities themselves. This could enhance cost-effectiveness and also enhance economic opportunities availed for the local population during the construction and maintenance of these rural road networks as the concept is more labour-intensive.

Rural areas accessibility constitutes majority of the country's adopted Sustainable Development Goals (SDGs), there is need for government to make sure that rural road networks are better funded

and managed as the general development of rural areas highly depends on their accessibility. There is also need for the government to establish and fund follow up procedures and activities so as to curb issues related to corruption and mismanagement of funds. Such follow up initiatives would also help relevant government offices to inspect road projects underway more regularly, this would ensure that private contractors meet the set road quality standards and do not sacrifice the quality of constructed roads in order to maximize their profits.

Furthermore, there is also an essential need for relevant offices to establish official platforms that could enhance the involvement and participation of local residents in the planning, construction management and maintenance of rural road and communication networks. This could increase cooperation between relevant stakeholders and involved communities, which is very important considering these developments are meant to benefit the local residents. This therefore also calls for local-oriented planning of rural roads, specifically based on the interests of the local people and the environmental conditions of the target area. Such an approach would allow relevant offices to also cooperate with involved communities towards maintenance of such roads as well as sustaining the benefits associated with them. The government could also enhance commitments and finances aimed towards maintenance activities of rural roads, such activities could be done periodically as it is evident that rural roads mostly require frequent maintenance due to their vulnerability to issues such as crosions.

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APPENDICES

APPENDIX I: INFORMED CONSENT FORM

RESEARCH TOPIC: ASSESSING THE	IMPACT OF RURAL-URBAN LINKAGES ON
RURAL ECONOMIES; THE CASE OF MA	TEANONG COMMUNITY COUNCIL, LESOTHO.
I	_ (names of participant) hereby confirm that I have
been briefed about the nature and purpose of	of this research and therefore agree to participate as a
research participant. I also confirm that I h	have been made aware of my rights as a participant,
which include my freedom to withdraw my	y participation at my own discretion and to also not
answer any questions which I may deem as o	offensive or too personal. I understand this research is
for academic purposes only and no person	onal penalties or benefits are associated with my
participation. I further agree that I have been	given a signed copy of this informed consent.
Date and Time:	
Signature of participant:	
Signature of investigator:	
For further Information, please contact;	
Mr Tsitso Duma: +266 63499475	
: <u>tsitsod6@gmail.com</u>	
Master of Arts in Development Studies stude	ent
Faculty of Humanities	

National University of Lesotho

APPENDIX II: RESEARCH QUESTIONNAIRE

My name is Ts'itso Duma (201603375), a student at National University of Lesotho under the

Department of Development Studies. I am carrying out a research entitled "assessing the impact

of rural-urban linkages on rural economies; the case of Mateanong community council, Lesotho,

under the supervision of Dr M.T Macheka. The research forms part my academic prerequisites in

order to successfully complete my 2nd year in pursuit of Master of Arts in Development studies

degree. The data collected in this research shall therefore solely be used for academic purposes

while at the same time promoting the principle of confidentiality so as to protect the identities of

our participants.

Please note that:

Your input is highly appreciated and your opinions are only to be used as opinions from a

member of the study sample, and will in no way be attributed to you as a person so as to

secure our confidentiality.

The information obtained through this research, including your opinions, is solely to be

used for academic purposes and nothing else.

You are free to participate, not to participate and terminate your participation in this

research at any time.

Your participation in this research has no benefits attributed to you as an individual nor

does it have any personal penalties.

Instructions: Please provide answers for all questions below in the spaces provided.

1. What is your village of residence?

73

2.	What your comments about the conditions of local road and communication networks?
3.	What are your means of income generation?
4.	How do the conditions of local road and communication networks affect your means of income generation?
5.	What challenges hinder the development of your society in relation to the conditions of local road and communication networks?
6.	How do available road and communication networks affect economic productivity in the area?

7.	How do local road and communication networks affect your access to essential services such as health and banking?
8.	How do enhanced linkages, through road and communication networks, with Mokhotlong town affect or influence local productivity and economic growth?
9.	Which income-generation means are the most negatively affected by the prevailing conditions of road and communication network in your area?
10.	From your own understanding, what needs to be done to sustainably enhance the conditions road and communication networks in the area?
11.	How involved are the local residents in the planning, construction and maintenance of local

the local road network?

APPENDIX III: INTERVIEW GUIDE QUESTIONS

Questions for Mateanong community council residents

- 1. What is your village of residence?
- 2. Are you a permanent or seasonal resident? If seasonal please clarify.
- 3. What is your age range? 18-24/25-34/35-44/45 and above
- 4. What type of transport do you usually use to access outside regions?
- 5. How often do you travel out of your community council using motor transport on average?

 Daily/Weekly/monthly/other, if other, please clarify
- 6. What are your means of communication with people in Mokhotlong town and beyond?
- 7. What are your means of income generation?
- 8. From your own observations and experiences, what is the state of roads and communications' networks in your area of residence?
- 9. How does the state of roads and communications' networks in your area affect the development of your society in general?
- 10. How do roads and communications' networks in your area affect your means of income generation?
- 11. From your experience, what is the involvement of local residents in the planning, construction and maintenance of roads and communications' networks in your area?
- 12. What are your thoughts about the job allocation process surrounding the construction of roads in your area?
- 13. What do you think needs to be done to increase the involvement and participation of local residents in the planning, construction and maintenance of roads in your area?

14. From your own view, what are the key challenges facing the development of your society in relation to transport and communications' in the area?

Questions for local chiefs

- 1. How do available road and communication networks in the area affect the safety and security of local residents and their properties?
- 2. What economic implications do local road and communication networks have on the livelihoods of local residents?
- 3. How do issues related to inaccessibility hinder the development of your society?
- 4. What has been done by the local residents and authorities to enhance conditions of local road and communication networks?
- 5. What are the key challenges facing the economic development of this area in relation to roads and communications' networks?
- 6. How does your office ensure fair job allocation practices construction and maintenance of local road networks?

Questions for Mateanong community council committee members

- 1. What is your village of residence?
- 2. What is your occupation or role within Mateanong community council committee?
- 3. For how long have you been holding your current position within this committee?
- 4. From your experience, what are the key prerequisites towards the attainment of economic development in Mateanong Community Council?
- 5. What would be your comment about the current state or condition of roads and communications' networks in Mateanong Community council?

- 6. What are the key challenges facing the economic development of this area in relation to roads and communications' networks?
- 7. What are the economic benefits of having proper roads and communications' networks in this area and how sustainable are those benefits?
- 8. What role does the community council play in relation to planning, management, construction and maintenance of roads and communications' networks in this area?
- 9. On what criteria are the employment opportunities resulting from construction of roads and communications' networks allocated among different villages constituting this community council?
- 10. From your experience, what is the level of cooperation between all involved stakeholders in as far as the provision of roads and communications' networks in the area is concerned?
- 11. What policies aimed at promoting the creation of employment opportunities for the local residents through establishment of roads and communications' networks does the committee have in place?
- 12. How does the committee promote involvement and participation of local residents in the planning of roads and communications' networks in the area?
- 13. What suggestions would you pose towards the attainment of economic development in relation to the provision of roads and communications' networks in the area?

Questions for local farmers

- 1. What kind of farming are you into?
- 2. For how long have you been into farming?
- 3. What are the main challenges hindering the development of business and increased agricultural productivity in the area?

- 4. What role does your access to urban markets, especially Mokhotlong town, play towards the growth and better performance of your business?
- 5. From your experience, what needs to be done to increase agricultural productivity in the area?
- 6. How good is the local market for your agricultural produce?
- 7. What are your views on the transportation costs you incur to keep your business and how do they affect your pricing?
- 8. How do local road and communication network affect the development of your business?
- 9. What alternatives do you employ to curb issues related to inaccessibility prevailing in the area?

Questions for shop owners

- 1. How do the conditions of local road and communication networks affect the performance of your business?
- 2. For how long has your business been operating?
- 3. In what ways do local road and communication networks affect your safety as a business person and that of your business?
- 4. What are the main challenges you encounter in relation to local road and communication networks?
- 5. How is your pricing influenced by local road and communication networks? And how does this affect the local purchasing power?
- 6. How do the conditions of local road and communication networks affect your access to urban markets, especially Mokhotlong town? And how does this affect the transportation cost you incur to stock?

7. From your experience, what should be done to boost entrepreneurship and economic activity in the area?

Questions for taxi association committee members and drivers.

- 1. What is your place of residence?
- 2. What is your occupation within the taxi association?
- 3. How long have you been serving in your current occupation?
- 4. What is the total number of local residents who are employed by your taxi industry in this area?
- 5. From your own observations and experiences, what would you say about the current conditions of road networks within Mateanong community council?
- 6. From your experience, how does the condition of roads' networks affect the taxi business?
- 7. What role is played by your taxi association in relation to the construction and maintenance of road networks within Mateanong community council?

Questions for Road and Communication Departments.

- 1. Which organization are you employed in?
- 2. What is your occupation at work?
- 3. What is the mandate of your organization in regard to rural areas' accessibility?
- 4. What are the key challenges hindering effective fulfilment of your organizations' mandates?
- 5. What the employment opportunities does your organization create for the local people during the fulfilment of its duties in rural areas??

6. What tools does your office use to value assets in preparation for effective compensation and resettlement of people where necessary? Such assets include kraals, water pools, water wells, forests and tress etc.

7. What are the key challenges towards increased employment opportunities for the local residents in the construction and set-up of network towers in rural areas?

8. What is the level of cooperation between your organization and community councils, as well as other relevant stakeholders and local authorities towards enhancing accessibility of rural areas?

9. From your experience, what could be done to effectively enhance accessibility of rural areas in the country?

...Thank you...

APPENDIX IV: FOCUS GROUP DISCUSSION GUIDE

- 1. What are your comments about the conditions of local road and communication networks?
 And how do those conditions affect your livelihoods in general?
- 2. How do the conditions of Mateanong community council road and communication networks affect the local economic activities and opportunities?
- 3. What initiatives have the local people embarked on in an attempt to enhance conditions of local road and communication networks and what challenges were encountered?
- 4. What socio-economic benefits do the local residents attain from improved conditions of local road and communication networks?
- 5. How are the current prevailing conditions of local road and communication networks affecting the area's linkages with Mokhotlong town? And how has this affected the development of your area?
- 6. What is the level of cooperation between the local residents, local authorities and national departments in regard to the betterment or improvement of local road and communication networks?
- 7. Which are the most relied-upon means of income generation in the area and how are they being affected by the prevailing conditions of local road and communication networks?