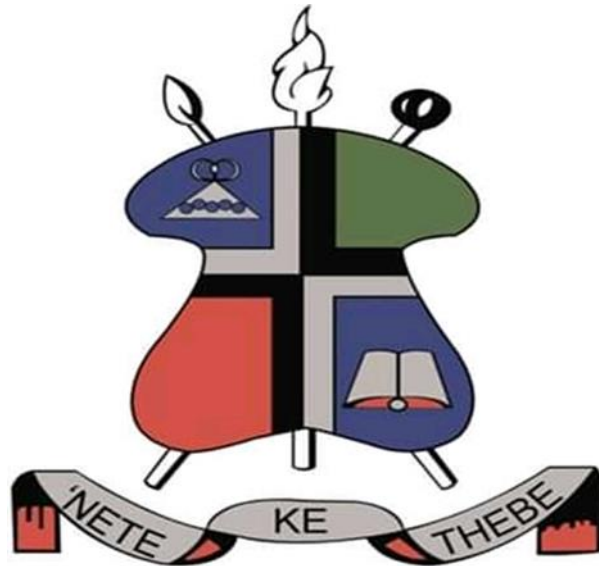


NATIONAL UNIVERSITY OF LESOTHO



**IMPLICATIONS OF LACK OF ROAD NETWORKS ON SOCIAL DEVELOPMENT IN
LESOTHO: EXPERIENCES OF MOKHOKHONG COMMUNITY**

BY

LINEO PENE

**DISSERTATION SUBMITTED
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MASTER OF ARTS DEGREE IN DEVELOPMENT STUDIES.**

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TO

THE DEPARTMENT OF DEVELOPMENT STUDIES

SUPERVISOR: DR M.T. MACHEKA

JULY 2023

DECLARATION

I, Lineo Pene, declare that this research study entitled: **IMPLICATIONS OF LACK OF ROAD NETWORKS ON SOCIAL DEVELOPMENT IN LESOTHO: EXPERIENCES OF MOKHOKHONG COMMUNITY** is my work and has not been submitted for any examination at the National University of Lesotho or any other institution.

Student's name **L. P. Pene**

Signature



Date **25 July 2023**

Supervisor's name **Dr M.T. Macheka** Signature



_____ Date **25 July 2023**

DEDICATION

I dedicate this work to my late father, Ramarake Francis Pene, who during his life played a major role in ensuring that we, his children, succeed in life. You were a great father. Continue to rest in peace.

ACKNOWLEDGEMENTS

When conducting this study, I received help and advices from many individuals. Their support contributed tremendously to the success of this research project.

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I also thank all the participants that contributed to the success of this study. They sacrificed their time and genuinely contributed a lot. I THANK YOU and wish all of you success in your endeavours.

My special thanks also go to my family. I am really grateful to have you. You have been supportive in all angles of my life. My kids, I really thank you guys for hanging in there when I was not there for you; to help you with your school work and/or attend to your needs each time I was busy with my school work too. I love you.

A special salute goes to my mother who provides love and support to her children equally. She has brought us up single-handed after the passing of our father. My MOM you are the best.

Above all, I thank God for sustaining my life. I could have not made any achievements either personal or academic, if it was not about HIS mercy and grace.

I wish to express my gratitude to the Faculty of Humanities under the Department of Development Studies for giving me a space and chance to further my studies. THANK YOU.

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ABSTRACT

Road networks are essential for achievement of social development especially in the remote rural areas. However, governments around the globe seem to be reluctant to provide roads necessary for communities residing in the remote rural areas rather, they focus on providing roads for economic benefits and/or to meet the needs of certain interest groups. Against this background, this research focused on the effects of lack of road networks on social development of rural communities in Lesotho. This study goes beyond other general studies on road infrastructure and development to imagine policy and practice intervention measures for road access to facilitate social development in rural communities. This qualitative research study was conducted in Mokhokhong through interviews and focus group discussions with community members that were sampled using stratified sampling and purposively sampled key informants such as the community leaders, Non- Governmental Organisation representatives and relevant government departments. Findings revealed that the lack of road infrastructure in Mokhokhong impacted negatively on social development of community but mainly women and children. The condition of roads in Mokhokhong leads to failure to reach hospitals by sick people which sometimes leads to deaths, pregnant women give birth at home and children fail to get necessary injections. Students and teachers also struggle to reach schools. The conditions are even worse when it rains. This is as a result of lack of political will and commitment which hinders government institutions such as local authorities from performing efficiently. The study then, concludes that lack of road networks complicates achievement of social development in Mokhokhong because the community is unable to access to primary social facilities. To ensure urgent provision of road infrastructure, outsourcing of funds and 2014 decentralisation policy should be implemented as a matter of urgency to enable entrusted government institutions to effectively deliver their duties.

Table of Contents

	Pages
Declaration.....	i
Dedication.....	ii
Acknowledgements.....	iii
Abstract.....	v
Table of Contents.....	vi
Acronyms.....	ix
 CHAPTER ONE	
Introduction.....	1
Background of the Study.....	1
Statement of the Problem.....	3
Justification of the Study.....	4
Objectives.....	5
Research Questions.....	5
Theoretical Framework.....	6
Definition of Key Terms.....	8
Limitations of the Study.....	9
Research Structure.....	10

Chapter Summary.....	11
CHAPTER TWO: LITERATURE REVIEW	
Introduction.....	12
Road Infrastructure and Development.....	12
Road Infrastructure and Rural Communities.....	14
Policy Intervention Measures on Road Infrastructure.....	18
Chapter Summary.....	22
CHAPTER THREE: RESEARCH METHODOLOGY	
Introduction.....	24
Area of Study.....	24
Research Approach.....	24
Research Design.....	25
Study Population.....	26
Sampling Procedure.....	26
Data Collection Methods.....	29
Data Collection Procedure.....	32
Ethical Considerations.....	33

Data Analysis.....35

Chapter Summary.....37

CHAPTER FOUR: DATA PRESENTATIONS, ANALYSIS AND DISCUSSION

Introduction.....38

Social challenges faced by Mokhokhong community due to lack of roads.....39

Road Infrastructure and Social development of Mokhokhong Community, Lesotho.....46

Suggested Policy Intervention Measures.....53

Chapter Summary.....59

CHAPTER FIVE: CONCLUSION AND RECOMMENDATIONS

Introduction.....60

Conclusions.....60

Recommendations.....61

References.....64

Appendices.....74

ACRONYMS

ADB	Asian Development Bank
ADBCEC	African Development Bank Chief Economist Complex
AIRCC	the Aspen Institute Roundtable on Community Change
BS	Bureau of Statistics
CBL	the Central Bank of Lesotho
DDS	the Department of Development Studies
DHMT	the District Health Management Team
DMA	Disaster Management Authority
DPE	Development for Peace Education
DR	Directorate of Roads
ED	Electoral Division
GEMR	Global Education Monitoring Report
GEI	Global Evaluation Initiative
GIH	Global Infrastructure Hub
GOL	Government of Lesotho
IDORS	International Digital Organisation for Scientific Research
IMT	The Intermediate Means of Transport

IRIP	Integrated Road Investment Programme
KFLLEM	Kirkpatrick's Four Levels of Learning Evaluation Model
LCA	Local Government Act
MP	Member of Parliament
MLGCA	the Ministry of Local Government and Chieftainship Affairs
NGO	Non-Governmental Organisations
NUL	the National University of Lesotho
PEWA	Policy, Environmental Justice and Water Resources Advocacy
PPE	Personal Protective Equipment
RECAP	Regional Economic Community Action programme
SADC	the Southern African Development Community
SDGs	Sustainable Development Goals
SSA	Sub-Saharan Africa
TB	Tuberculosis
TOC	the Theory of Change
UNESCO	the united Nations Educational, Scientific and Cultural Organization
WAN	World Animal Net

CHAPTER ONE: INTRODUCTION

1.1 Introduction

Many rural areas in Lesotho are isolated thus, people residing in them find it difficult to access basic social services such as health, education and other basic social services leading to low literacy rate, inequality and making communities prone to diseases, maternal mortality and other socio-economic problems due to absence of road networks (Tanga et al. 2014). Kwarteng et al. (2018) also adds that lack of road infrastructure hinders access to necessities of life and further argues that poor access affects the cost of living and the wellbeing of the rural people. According to Kamplan and Teufel (2016), most African governments focus more on provision of road networks for economic benefits while ignoring the needs of the rural based populations. Provision of road networks results in social cohesion which, Kamplan and Teufel (2016) argue has proven to lead to low chances of conflicts and improve stability, growth and a whole of other outcomes of development. Against this background, the study intends to examine how lack of road networks impacts on social development of rural communities living in Mokhokhong, Lesotho. The study is also meant to solicit the views of Mokhokhong Community on how lack of roads affects them socially on daily basis. It will further provide opportunities for policy recommendations and intervention strategies.

1.2 Background of the Study

Roads are key way for making it easy for communities to access socio-economic services for betterment of their wellbeing worldwide. They are therefore, instrumental in advancing goals on food security, health, energy, infrastructure development, sustainable consumption and production (World Bank 2009). However, governments seem to be reluctant to provide roads necessary for

communities residing in the rural and semi-rural areas rather, they focus on providing roads for economic benefits and/or to meet the needs of certain interest groups (Kamplan & Teufel 2016). According to ArunaShantha (2019), 65 percent of people living in the rural and semi-rural areas of Sri Lanka, India, find it difficult to access services due to lack of road networks. Especially, those who live in Weddagala, Kudawa and Wewagama for instance, have to walk about 10 km to 20 km to arrive at Kalawana town where schools, hospitals and other socio-economic centres are situated.

In Africa, the issue of lack of will by the governments to invest and develop road infrastructure in the rural and semi-rural areas exists too. Kamplan and Teufel (2016) stipulate that in Africa, the population that has access to roads is 34 percent only. According to African Development Bank (2013a), roads that are paved constitute to 16 percent only and costs for transport when compared to other developing nations are very high. Kaplan and Teufel (2016) argue that it is due to lack of roads that countries like Mali, Nigeria, Democratic Republic of Congo and Liberia have been experiencing problems. In Mali, non-existence of roads in the northern part has led to increased social grievances and weak governance; in Nigeria, the rise of Boko Haram; instability in the DRC and the outbreak of Ebola in Liberia exposed the countries on how much work still needs to be done on provision of roads.

In the Southern African Development Community (SADC) region, roads that are to cater for rural communities whether tarred or not tarred due to their defects force rural people to rely on inadequate and unreliable transport impacting negatively on the most vulnerable members of the rural communities such as children, women and the elderly (Sewell & Desai 2016). In South Africa, rural communities are encountering problems due to lack of road infrastructure development. Chakwizira (2019) argues that people residing in Limpopo, the Northern and Eastern

Cape provinces walk long distances in order for them to access primary services. Sewell and Desai (2016) also stipulate that the same situation is taking place in the province of KwaZulu-Natal in the Nyamana Community.

Lesotho is classified as one of the least developed country and the large part of the country is rural (Tanga et al. 2014). About 70 percent live in the rural areas and are poor (Letsie & Grab 2015). Lesotho's road network is said to be 7 438 kilometers where tarred roads are 1 217 kilometers and 3 758 kilometers are not tarred roads connecting the rural places to towns (Central Bank of Lesotho Economic Review 2006). According to Disaster Management Authority (2012), most of Basotho people are vulnerable to food insecurity. Tanga et al. (2014) and Letsie and Grab (2015) pinpoint that inaccessibility limits access to primary services and the mountainous terrain makes the communities in the remote highland communities to be vulnerable to poverty, inequality and natural hazards. Scholars around the world have associated problems that rural communities face with lack of road networks thus the study aims at examining the implications associated with lack of roads on social development of Mokhokhong Community in Lesotho. Whilst previous literature has focused on impact of lack of roads on the economy, this current research is mainly on its effects on social development of rural communities.

1.3 Statement of the problem

Scholars around the world have unpacked the impact of lack of road infrastructure on rural communities. These scholars have focused on the economic impact of lack of road infrastructure but this current study will examine the implications of lack of road networks on social development of communities residing in Mokhokhong, Lesotho. This study goes beyond many general studies on road infrastructure and development to imagine policy and practice intervention measures for road access to facilitate social development in rural communities. Scholars have also pinpointed

that governments around the globe, seem to be reluctant and/or lack will to provide their rural communities with road networks necessary for them to easily access essential services making them prone to poverty, inequality and diseases. Rather, these governments have been focusing on providing road networks to cater for the needs of certain interest groups while ignoring the needs of the majority of their people.

There are scholars that have been focusing on improvements that the governments of former colonised countries around the world have been engaging in order to change for the better for the people. Scholarly evidence suggests that since independence, governments including Lesotho have been working hard to make improvements including improving road infrastructure. Even though, efforts have been made since independence to improve the road infrastructure, communities especially those living in the rural and semi-rural areas are left out and as result are suffering due to lack of road networks.

1.4 Justification of the Study

Different scholars, which have written about implications of lack of road networks, have been focusing on the economic development side of view mostly. They argue that once economic development has been achieved then the rest will follow. Thus, this research is important as it will provide literature on how provision of roads to enable communities to have access to primary social services is key and it should be prioritised. This is because it will lead to improved school attendance and high literacy rate; reduction of deaths including maternal mortality and deceases and reduction of other problems that affects the community socially. As a result, ensuring that goals on food security, health, energy, education and overall infrastructure development,

sustainable consumption and production, which scholars classify as indirect benefits can be achieved resulting to economic development.

It will also provide data on how lack of roads affects social development of communities leading to grievances, which might result in protests that might disturb governments' focus on plans meant to ensure economic development as well. The study will again help the policy makers in Lesotho and around the world through the policy intervention measures that will be suggested in this study. Additionally, since the views of the Mokhokhong community will also be written in this study, the government and the policy makers in Lesotho even those of countries around that world which their communities share the same views and/or are faced with the same problems will be able to come up with solutions as per the community needs.

Both international and regional organisations, governments and other groups of interest when making plans on how social development intervention measures, economic growth, peace and security and Sustainable Development Goals are implemented should take into consideration that the road infrastructure is also developed as all can be achieved when road networks are available. Therefore, this research project is going to help these stakeholders on how they can incorporate the issue of provision of roads on the development plans they have on hand and help policy makers on issues they should focus mostly on to cater for the need of the communities.

1.5 Objectives

- To explore social challenges faced by Mokhokhong community in Lesotho due to absence of road networks.
- To assess how lack of road networks impacts on social development of communities residing in Mokhokhong, Lesotho.

- To suggest policy intervention measures that can be employed to help cab social problems that Mokhokhong community encounter due to lack of roads.

1.6 Research Questions

- What are the social challenges that Mokhokhong community encounter due to lack of road networks?
- How does absence of roads impact on social development of rural and semi-rural communities in Lesotho?
- Which policy intervention measures can be employed to help solve social problems that Mokhokhong community encounters due to lack of road networks?

1.7 Theoretical Framework

The study adopted the Theory of Change (TOC). It is not clear who founded TOC and thus is difficult to trace when TOC was first used. However, the Center for Theory of Change (2023) argues that it can be traced back in the late 1950s in evaluation with Kirkpatrick's Four Levels of Learning Evaluation Model. Jaeger (2022) says a hint at its origins can be found in the evaluation community among the work of Huey Chen, Peter Rossi, Micheal Quinn Patton and Carol Weiss. Even though, this is the case, Jaeger (2022) asserts that it was popularized by Carol Weiss in the 1990s, who was a member of the Roundtable's steering committee on evaluation, as a means to model and evaluate community initiatives within the Aspen Institute Roundtable on Community Change. According to Focus (2015) and O'Flynn and Moberly (2017), TOC is an approach to planning, learning, reflection and documentation of the change that is made by development planners and practitioners.

The research study is undertaken because there is a problem that needs to be solved hence is investigated. TOC as a theory that has been adopted in this study has features within it that provides evidence that it is relevant to this study. Serrat (2017) stipulates that TOC provides full descriptions of how a problem at hand is expected to be addressed and how an intervention will lead to the desired results. It does so by providing processes that governments and their development partners should follow to solve the problems faced by their people. Focus (2015) states that the processes that should be used when planning, implementing and/or developing TOC involves asking questions such as; what is the long term goal that need to be achieved? That long-term goal is regarded as CHANGE according to TOC. In this study, the long-term goal that is desired to be achieved is social development.

According to Focus (2015), the following question to be asked is; what conditions to be put in place to achieve the goal? What needs to be put in place in this case is provision of road networks. Then, there should be immediate and/or early outcomes for intermediate outcomes to be achieved (Focus 2015). The immediate outcomes after provision of roads will be access to social primary services such as health and education. According to Focus (2015), the intermediate outcomes also may lead to another set of outcomes and such goals may be poverty reduction, decreased maternal mortality, improved literacy rate, sustainable agricultural production and other goals.

Then, lastly, the long-term outcome (CHANGE) will be achieved and in this case, the long-term outcome is social development (Focus 2015). Therefore, TOC is relevant to the study, as it advocates for change. It takes into consideration the methods (HOW) to be used for achieving the intended goal and prescribes steps to be followed in order to achieve such a goal, thus providing the involved stakeholders with a clear picture of how to tackle issues surrounding absence of roads networks and for achievement of social development.

TOC also has principles that prove its relevance to the study. It provides a framework that is useful to communicate about the intervention to policymakers and development partners (Global Evaluation Initiative 2022). On this basis, TOC is relevant to the study as one of the main objectives of the study is to suggest intervention measures in order to solve social problems caused by lack of road networks.

1.8 Definition of key terms

Community refers to “a group of people that interact and support each other; are bounded by shared experiences or characteristics, a sense of belonging, and by their physical proximity,” Cobigo et al. (2016:192). Therefore, community is not a sole individual rather is a group of people who live at a certain geographical location who support each other and share experiences that are social, economic, political and cultural.

Road is a path over which vehicles and other traffic may lawfully pass,” (Ibrahim 2016:1). Road includes pathways and other structures such as culverts and bridges. There are different types of roads are tarred and unpaved roads. According to Ibrahim (2016), roads are meant to connect neighbouring villages, towns, ports within the country and connect neighbouring countries as well.

Road Networks are a set of intersecting roads and their interconnections allowing the selection of several different travel paths between the start and end points. Road networks in this study are the main focus, as their absence according to scholars restricts communities’ movement to reach places where they are able to access primary social services thereby impacting on their social development.

Social Development, according to World Animal Net (2017), is an upward directional movement of society from lesser to greater levels of energy, efficiency, quality, productivity, complexity,

comprehension, creativity, choice, enjoyment and accomplishment. Noyoo (2015) asserts that Social development is a process meant to improve the well-being of the whole population without discriminating other members of the community through investing, removal of barriers and use of programmes and projects so that people can work toward achieving their set dreams. The social aspects that the study intends to address are on health and education which are not available in the literature in Lesotho. The researcher will explore issues on rural community living infrastructure which is rural roads and rural social development infrastructure such as schools and health care centres.

1.9 Limitations of the Study

The researcher encountered challenges during data collection. They included failure to collect data from medical practitioner. The researcher had to ask for permission from Ministry of Health and to do so there are protocols to be followed. These protocols take time without realising the urgency of the academic dissertation. I was required to write a proposal as per their guidelines. Then submit it to the Ministry of Health, where the officials would review and make a decision of whether they allow or do not allow me to conduct a research at St. Joseph hospital in Roma. The reviewing process also takes time. If, they did allow me to conduct the research, they would give me approval letter and the process does not end there. I was again, required to go to the District Health Management Team (DHMT) with the approval letter, in order to get another letter, which permits me to conduct a research. Then, I was to take that permission letter from DHMT, attach two other letters, one from me asking for permission to collect data and another, from the National University of Lesotho directed to the Hospital also to ask for permission on my behalf as a student to collect data. This whole process was going to take time and I ended up not collecting data from the Hospital.

Another challenge that I encountered was with some government officials which were on the fields. This was a challenge because they kept on postponing. Therefore, to collect data, it took me long time than anticipated.

1.10 Research structure

Chapter 1: Introduction

This chapter the researcher will introduce the chapter then, provide the history of road networks by tracking down their implications on social development on the international level; in Africa; in the SADC region; and in Lesotho. The gap that will be found will help the researcher to examine the problem in-depth and suggest policy intervention measures that will be helpful to the stakeholders as justification of the study.

Chapter 2: Literature Review

In this chapter, the researcher will focus on reviewing debates from previous scholars on road networks and their implications on social development of rural communities.

Chapter 3: Research Methodology

In this chapter, the qualitative and quantitative research method will be used, data collection instruments and sampling techniques will also be discussed.

Chapter 4: Data presentation, Analysis and Discussion

In this chapter, the researcher will present the research findings, analyse and discuss them.

Chapter 5: Conclusion and Recommendations

Here the researcher will conclude based on the findings and then provide suggestions and /or recommendations on what she thinks should be done to ensure a better change.

1.11 Chapter Summary

In this chapter, the first section is the introduction of the study. The second section is the background of the study. The third section is the statement of the problem. The fourth section is justification of the study. The fifth section consists of objectives while the sixth section consists of research questions. The seventh section is the theoretical framework. The eighth section is the definition of key terms. The ninth section provides the limitations of the study and the last section is the structure of the research.

CHAPTER TWO: LITERATURE REVIEW

2.1 Introduction

This chapter reviews existing literature on implications of lack of road networks on social development of communities residing in remote areas. The focus will be on literature on road infrastructure and development and aspects that governments look at when providing road networks. Previous studies will also be reviewed to understand issues surrounding road infrastructure and the link to rural communities. To achieve this, the chapter will provide literature at the global level, national, regional and then specifically to Lesotho.

2.2 Road Infrastructure and Development

Road infrastructure is essential to achieve long-term development. For road infrastructure to lead to development, it should have social inclusion element within it because inequality and disparities will be reduced resulting to sustainable economic growth (Global Infrastructure Hub 2023). Cigu et al. (2019), pinpoint that an important element towards development particularly economic is road infrastructure as it ensures efficiency and effectiveness in resource distribution. Thus, countries around the world spent substantial amount of money for provision of road infrastructure meant to ensure country's development (Hasan et al. 2022). Therefore, planning and prioritisation for development of road infrastructure is made to meet certain development goals, which differ per country globally.

Development and investment in road infrastructure is a poverty reduction strategy to some countries. An example is China where rural road infrastructure investment is meant for poverty reduction and stimulates economic growth (Ngezahayo et al. 2019). Li et al. (2023) stipulate that

the government of China has invested in rural road infrastructure in rural Exodus and Sichuan Province as a strategy to encourage engagement in entrepreneurship as well as to develop their agricultural practices while ensuring sustainability at the same time. In addition, Cai et al. (2023), assert that the government has done this under the proverb, “Want to be rich? Build roads first!” and thus has increased rural road mileage from 137.1km in 2003 to 404km in 2018, decreasing the number of population living under extreme poverty from 1.895 billion to 650 million achieving 70 percent global poverty eradication.

Provision and development of road infrastructure by other countries is associated with achievement of both economic benefits and women empowerment. In Bangladesh, development of rural road networks improves economic status as it helps provide opportunities to micro, small and medium sized enterprises especially for women (Gupta et al. 2018). In Nicaragua, provision of bridges has aided in ensuring 60 percent increase access to labour markets still for women (Kaiser & Barstow 2022).

The findings of Ekeocha, et al. (2021), confirm that there is an existing relationship between road infrastructure and economic growth in Africa. Therefore, road infrastructure in African countries is prioritised to cater for economic development just like in other countries around the world especially in the urban areas. In Kenya, road infrastructure is developed to generate economic opportunities as roads’ function is observed to encourage people to engage in entrepreneurship and income generation through wage labour in the urban areas (Greiner et al. 2021).

Road infrastructure investment in African countries is also made based on achievement of the agricultural development through mobility of goods and services (Kongolo 2020). According to Manggat et al (2018) and Ngezahayo et al. (2019), in Sub-Saharan African countries, road infrastructure is developed to achieve sustainable development through improvement of

agricultural sector, which is the main source of income, enhance small and medium scale businesses and help open access to job opportunity. Kongolo (2020) has a similar view as he states that roads are important as they support and enhance agricultural development as well as rural development.

It is evident through reviewed studies that road infrastructure is mainly prioritised to meet developments channeled to achieve economic benefits; improvement of agricultural production, access to markets, employment opportunities, increasing income and reduction of poverty. Achieving social development through road infrastructure has thus received little or no attention by scholars and there is lack of evidence on the issue. Against this background, this study seeks to investigate how road infrastructure can contribute to social development particularly in the remote areas of developing countries such as Lesotho.

2.3 Road Infrastructure and Rural Communities

Li et al. (2018) categorise rural roads as rural community living infrastructure, and schools, healthcare centres and social interactions facilities as rural social development infrastructure. Therefore, socio-economic development of the community depends on availability of transport infrastructure (Khanani et al. 2021; Sewell et al. 2019). Tirth et al. (2021), agree by stating that access to social services (such as health and education) is facilitated by provision of roads, thereby enhancing social outcomes, reduces time and cost travel. Reduced time for travelling helps to encourage children to go to school especially girls and on the other hand, elderly people, disabled people and people who are in need of medical attention also due to reduced travel time and cost are able to access health facilities (Tirth et al. 2021).

Additionally, provision of rural roads facilitates provision of communication infrastructure, which helps provide rural communities with information that enhance their way of thinking and of doing things thereby reducing their vulnerability (Tirth et al. 2021). Manggat et al. (2018) findings support the view that development of road infrastructure in the rural areas acts as a medium of communication between the rural communities and the outside world. Again, availability of roads helps to cater for the needs of the people as it allows them to have access to their daily needs and also plays a significant role in developing such communities (Kwarteng et al. 2018). Kaiser and Barstow (2022), agree that rural roads are essential and beneficial as they provide support to the poorest members of the rural and isolated populations who miss out on socio-economic benefits by making access and mobility easier for them.

Even though, it is evident that there are positive benefits for rural communities that are, brought about by investment and provision of rural roads, there are other observations by scholars, which need to be noted. Hasan et al. (2022), stipulate that road infrastructure development depends on varying decisions and judgements of government officials and such decision-making processes lead to allocation of resources in the manner that often by pass societal benefits. Kiaser and Barstow (2022), assert that even economic growth and policy making is mainly focused in the urban areas, as a result, investment and spending on road infrastructure is prioritised for urban development ignoring rural areas. Hence, social development in the rural areas is classified to be low due to lack of access to all-weather rural roads especially in the Sub-Saharan Africa where rural road density is defined to be the lowest making intervention on education and health costly and unreliable (Roux 2019).

Decision making for provision of road infrastructure in the rural areas is again based on the total number of people that resides in a particular area. According to Cigu et al. (2019), in India, rural

roads are provided if people that live in a particular rural area are above 500 while those with less than 500 are mostly ignored. China is another example, as road investment in rural Exodus and Sichuan Province was done because these provinces have the largest rural poor population (Li et al. 2023). The majority of people that resides in remote areas are thus, left behind.

Another reason why societies face difficulty in accessing social facilities is because of the status of rural roads. According to Espinet et al. (2020), in Cambodia, 800, 000 people living in three provinces to walk to hospital, they require more than an hour and during rainy periods, 18% have to walk an additional 30 minutes while 27% lose access completely and this may lead to deaths or make treatment of severe conditions critical. Espinet et al. (2020), further stipulate that students at high school level walk more than half an hour to arrive at school and those in primary level are even more disadvantaged. Therefore, investment in rural roads should be prioritised for reduction of time spent to reach primary social services in order to ensure human and social development.

Again, lack of rural roads again exposes rural communities to be severely impacted particularly when there are disasters or during major health crises such as the COVID 19 outbreak as they make it difficult for those who need immediate medical attention to reach health facilities on time especially on rainy periods (Jerolleman 2020; Espinet et al. 2020). This was seen in countries like Cambodia, where it rained from May to September and movement of goods such as food supplies, medicine and other essentials and patients was difficult while the rest of the communities were under lockdown in their homes (Espinete et al. 2020). According to Mogle (2018), due to lack of roads infrastructure, for a small Texas rural community to recover, it can take months even years. Lack of road infrastructure development therefore implicates health outcomes as it hinders access. In Brazil, it increases mortality rates thereby decreasing life expectancy rate in the rural areas, in

Nepal, it decreases immunisation rates and in Ghana, it affects tuberculosis testing (Kaiser & Barstow 2022).

Roads are an important asset that serves as a backbone of rural dwellers' livelihood (Espinet et al. 2020). But, the conditions of the roads in the remote areas are alarming in Africa. Most of rural roads are not paved and the surface layer of the roads is not thick and is made of lateritic material in the developing countries around the world including in the Sub-Saharan Africa (Ngezahayo 2019). According to Kongolo (2020), Tanzania also has more unpaved roads (91.8%) when compared to Kenya (91.1%), Angola (89.6%), Ethiopia (87%), Nigeria (85%), South Africa (78.7%) and Sudan (63.7%). Different weather conditions further contribute to the worse state of rural roads as the top soil is easily eroded. These bad conditions make it difficult for rural communities to make movements as during rainy seasons, the roads become muddy (Ngezahayo 2019).

Countries around the world seem to be reluctant to provide road infrastructure especially in the rural areas. According to Ngezahayo et al. (2019), 80 percent of roads in countries such as South Africa, Nigeria, Angola, Kenya and Tanzania, which rural communities rely on are in bad conditions, worsening their poverty status and affecting their social development. Lesotho poverty rate fell from 56.6 percent in 2002 to 49.7 percent in 2017 and 58 percent of population that resides in rural and mountainous areas continue to be the poorest (World Bank 2023).

The reviewed literature highlights that road infrastructure has both advantages and disadvantages. Scholars do also demonstrate that road infrastructure should be prioritised as it is beneficial and essential even though the intention has been to boost economic growth and achieve development of the nations. It is therefore, important now to examine on how development of road infrastructure can be made for people particularly the marginalised. Differing views on decision-making, and

prioritization on provision of road infrastructure, makes this study even more significant as implications of road infrastructure on rural communities still needs to be investigated deeper in order to grasp the depth of impacts.

2.4 Policy Intervention Measures on Road Infrastructure

Scholars such as Okeocha et al. (2022) are of the view that governments and policy makers in Africa should evolve and implement policies that are meant to increase investments in basic infrastructure such as roads as a way to improve economic performance on a sustainable basis.

It is clear that road infrastructure is a need and at the same time is essential for rural communities to develop socially but there are issues that needs to be looked at, as are observed to be the reason why governments are seen to be reluctant to provide rural communities with roads. According to Okeocha et al. (2022), infrastructure development in Africa is slow when compared to other parts of the world. Kaiser and Barstow (2022), stipulate that the reason is issues related to lack of political commitment, accountability, capacity and fiscal efficiency, which play a vital role in making transport policies to be ineffective hence their sustainability is seen to be limited. Kwarteng et al. (2018), on one hand, argues that blame should be put on inadequate policies and failure of governments to influence funding agencies and development partners in order to be able to provide rural communities with road infrastructure. The Scholar argue that institutions like the Asian Development Bank, when refusing to assist governments particularly those from less developed countries, have raised concerns as to why resources should be wasted on the constructions of roads if there is no guarantee of traffic that meet the very purpose the roads are constructed.

Kwarteng et al. (2018) argue that governments should be in the position that enables them to persuade institutions like Asian Development Bank (ADB) by making them aware of other benefits

that are brought about by provision of road networks. They should also work towards changing their mindset as they will be able to stop ignoring the needs and socio-economic development of the people that can be achieved through availability of roads (Kwarteng et al. 2018). Kaplan and Teufel (2016) posit that currently, master plans of policies are dominated by economic benefits and if the project is suspected to may produce short-term economic returns, it does not receive the attention it needs. In Lesotho, master plans on policy, according to Workman (2019), are based on three pillars of development, which are democracy, economic growth and management of the environment. Therefore, governments and development partners when judging the value of the projects should start using a broader set of criteria, which will help make projects such as road networks to be effective (Espinet et al., 2020). In addition, Ngezahayo, (2019), posits that rural roads policies do not show how provision of all-weather roads will happen in order to increase access.

It is clear that there are various problems caused by lack of road infrastructure impacting on the social development of rural communities necessitating a need for governments and development partners to prioritise rural road construction. Policy makers should plan policies mainly focusing on reliability, accessibility and ensure lesser possibilities of incidents in order to achieve development (Aderibigbe & Gumbo 2022). Further, Kaiser and Barstow (2022), suggest that policy and governance should be inter-twined with basic human rights. Khanani et al. (2021), posit that road infrastructure impacts may differ in the context of location and individual class, therefore suggests that place-based and people-based policies be combined to address the issues around effects of road infrastructure. The scholar also suggests that policies should protect land rights and also incorporate social impacts of road infrastructure.

Khanani et al. (2012) argue that even though provision of roads leads to positive social impacts on rural communities however, there are social problems that arise once a road project has been completed. Therefore, according to Kaiser and Barstow (2022), policy makers should integrate different ministries and researches be conducted so that the policies that will be made will be evidence-based. Espinet et al. (2020), suggest that an innovative geospatial analytics tool should be used to identify high flooding risk and low accessibility to hospital areas as they believe that it is an evidence-based method for new investments prioritisation. The tool as stipulated by Espinet et al. (2020) will assist in ensuring that rural communities are able to access hospitals as well as schools and other social services because it is advantageous in that it assesses investment needs based on various and critical factors including the degree of accessibility, geospatial analysis and projected flooding costs. Further, it provides data and maps on the locations of schools, health centres and flood risk places.

While other scholars are focusing on policies meant to mitigate challenges after completion of road project, other studies propose what has to happen to reduce problems that rural dwellers encounter to ensure that provision of rural roads takes place. The Intermediate Means of Transport (IMT) is being proposed to be used in the Sub-Saharan African countries as it has been used and is accepted in Asia (Kwarteng et al. 2018). According to Kwarteng et al. (2018), IMTs are cheaper to acquire and are user friendly. ArunaShantha (2019), on the other hand posit that difficulties that rural people face should be solved through use of Integrated Road Investment Programme (IRIP) as it is beneficial in that it provides efforts to develop the rural road networks and improves people's wellbeing at the same time.

Feeder roads also are regarded as the perfect intervention measure for cabbing implications that rural areas face due to lack of roads. According to Kaiser and Barstow (2022), countries like India,

Ethiopia, Liberia, Rwanda and Ghana have held campaigns meant to advocate for feeder roads as an appropriate intervention measures that can provide and sustain socio-economic gains for rural communities. Kaiser and Barstow (2022) also advice countries to use manuals that countries like Afghanistan and Myanmar have used, which were developed by Regional Economic Community Action programme (RECAP) agency in the aim of providing information on how implementation, maintenance, and management of rural roads should be undertaken.

Rural roads are not only advantageous in making access to education, health and other primary social services but are also important in effective transfer of policies from government ministries to the rural areas contributing to social development of communities residing there, according to (Kaiser & Barstow 2022). Therefore, decentralisation is recommended as an appropriate measure that is suitable to cater for the needs of the poor within the rural communities (Kaiser & Barstow 2022). Workman (2019) also vouches for decentralisation as a way to achieve social development of rural communities. Decentralisation as a policy according to Workman (2019) is a long-term strategy meant to empower citizens and promote equitable development and is designed to provide guidance for deepening and widening the social benefits of the citizens. Wincherster and King (2018) further assert that decentralisation can rectify inequalities because it is a process that is multifaceted and multi-sectoral and local authorities can control their own resources to ensure effective service delivery. Decentralisation has the potential to address issues of local government concerns such as rural roads and public health in a cost-effective way because its focus is on local development. It also has the potential to increase ownership of development projects as it relies heavily on the discourse of participation and grassroots development (Workman 2019).

Countries such as Rwanda are enjoying social benefits of decentralisation. It is therefore a country which governments can refer to if they need to achieve inclusive development. Goodwin's findings

(2021) revealed that Rwanda through decentralisation has achieved service delivery, empowerment and inclusive development to its poor and socially excluded communities: 78.9 percent strongly agree and 18.9 percent agree that their well-being socially has improved and 95 percent believe their economic status has improved also because of decentralisation. In South Africa, decentralisations has shaped and improved access to healthcare centres, however findings also reveal that there are other aspects that need to be considered such as the distance and means of transport (Wincherster & King 2018).

Studies reveal that different countries around the world have identified intervention measures meant to improve the status of infrastructure for development. It is then important to examine what policy intervention measures that can be adopted and be relevant in the case of Lesotho. These policies should be developed to ensure that they will have social impact element in them as evidence provides that countries have been implementing these measures to cater mainly for traffic and economic development purposes.

2.5 Chapter Summary

Scholars around the world argue that road infrastructure development is meant to mainly stimulate economic growth. Economic aspects that countries focus on when providing roads include improvement of agricultural production encourage entrepreneurship, women empowerment and poverty reduction. Reviewed studies also reveal that road infrastructure is essential for use by communities especially those residing in the remote rural areas. However, globally, prioritization and decision making for development and provision of road infrastructure is not in favour of rural areas exposing communities that reside there to difficulties in accessing primary social services. Factors that have been identified by scholars, which are observed as barriers that hinder governments and policy makers from looking out of the box when aiming at road infrastructure

development and rural societies suffer as a result. They include lack of commitment, failure to convince sponsors, and accountability. As a result, policy intervention measures have been suggested as a means to provide a route to achieving social development.

CHAPTER THREE: RESEARCH METHODOLOGY

3.1 Introduction

This chapter is meant to present the research methodology, which, according to Sileyew (2019) is a path that a researcher needs to follow in order to conduct and achieve unbiased research study. The aim of this chapter is to show what research approach was adopted and why, where the study was conducted, the population under study (who), how the sample was formulated, what design of the study was used and why, what data collection methods and procedures were used and when data was collected, ethical considerations and how data was analysed.

3.2 Area of Study

The study was undertaken in Mokhokhong. Mokhokhong is a place that is found in Roma, Maama constituency. Mokhokhong has an elevation of 1601metres above sea level. Mokhokhong is described as a rural settlement with two ecological zones namely lowlands and foothills. Mokhokhong is a place that consists of six villages (Bureau of Statistics Lesotho 2016). These are Ha Phillip, Ha Mabathoana (Matete), Malimong, and Mapheaneng, which are characterised as lowlands. Then, Ha Motebele and Likhorong are foothills.

3.3 Research Approach

The study adopted a qualitative research approach to help achieve the objectives of this study. According to Anas and Ishaq (2022), the approach develops an understanding of human and social phenomena. Cleland (2017) stipulates that qualitative approach is used to understand daily human experiences. This approach is beneficial to the study as it focuses on problems that affects the entire population by providing an understanding of how people as a group or individually think of

the problem that is being investigated. This research study through use of qualitative approach was undertaken to explore and discover people's views, ideas, attitudes and experiences, they have encountered in the absence of road networks. This approach is relevant to this study as it also provides a wide range of techniques to be used to help understand the problem, which in this study is lack of road networks in Mokhokhong and how it implicates access to basic social services such as education and health.

Qualitative research method also provides information that is in-depth and to enable deeper understanding. According to Cleland (2017), this method addresses the why and how questions. It is through opinions, ideas and experiences that people are able to explain how they understand their surroundings (Ugwu & Eze Val 2023). Again, Ugwu and Eze Val (2023), assert that this method is helpful in improving our understanding of why people's attitudes change. This method is advantageous as it offers a complete description and analysis of a research subject, without limiting the scope of the research and the nature of participants' responses (Cleland 2017; Ugwu & Eze Val 2023). This is advantageous to the study as the Lesotho government and other development stakeholders will learn and be able to fully understand the problem through what Mokhokhong community that live in the isolated area think and say about the issue. Thereafter, be able to come-up with policies that take the views and ideas of that community at heart thus, cater for their interests and achieve social development.

3.4 Research Design

A research design is a plan and/or a framework, which is meant to describe how the central problem of the study will be investigated (McCombes 2019; Bouchrika 2022). I chose to employ a case study as a research design. This is because a case study provides information on a particular subject such as a group of people, a place or a phenomenon, which is used in social, educational, clinical

and business research (McCombes 2019). I chose to use a case study research design as it allowed me to explore and gain an in-depth knowledge on how the lack of road networks implicates social development of Mokhokhong community in Lesotho.

3.5 Study Population

The population of the study consists of the community members that reside in Mokhokhong, Lesotho. According to Bhandari (2020), population is a set of elements and/or individuals that the researcher is interested to study because they share similar characteristics. These people are the ones that have experiences on daily basis on how lack of road networks coupled with bad weather conditions affects them. There are 830 people in total that live in Mokhokhong, with which 288 live in Ha Phillip, 320 in Ha Mabathoana, 40 in Malimong, 74 in Mapheaneng, 83 in Ha Motebele and 25 in Likhorong (Population and Housing census of 2016). The sample was drawn out of this total number of 830 of people per village respectively. Out of these total number, community leaders even the counsellor were included as they are part of the population that resides in Mokhokhong. There were other key informants, that were included in the study and they were, Non-governmental Organisations representatives, Roads Directorate and Ministry of Local Government and Chieftainship Affairs officials.

3.6 Sampling Procedure

In this research study, the researcher adopted stratified sampling. Stratified sampling is explained as a method of sampling that allows the researcher to obtain a sample that best presents the entire population that is being studied (Hayes 2022). This technique divides elements of the population into smaller groups called strata. Then, these elements within each subgroup will be selected randomly (Singh 2018; Hayes 2022). According to Hayes (2022) stratified sampling produces a

more accurate sample relative to the population under study. Mokhokhong comprise of six villages that is why stratified sampling was adopted in this study. The villages in Mokhokhong were used as subgroups and in each village, participants were selected randomly. Here, I intended to select more women to balance gender issues because most of my key informants that were purposively selected were male persons. For instance, the chiefs, councilor, Non- Governmental Organisation representatives, Roads Directorate and Local Government and Chieftainship Ministry officials were all male persons.

The study also adopted purposive sampling because I needed information that would describe fully the situation in Mokhokhong through experiences of the community in order to get the full picture of the problem. The study also intends to get intervention measures needed to help cab implications of lack of road networks in Mokhokhong. Therefore, I employed purposive sampling because some of the participants in this study have been selected as they have knowledge of what can be done to help reduce or eradicate challenges that Mokhokhong community face due to lack of road infrastructure. According to Nikolopoulou (2022), purposive sampling is a technique in which participants are selected based on purpose; the participants have features that are needed in the sample to help avoid biasness, while at the same time, the researcher is able to get useful and rich information. Campbell et al. (2020) also agrees by adding that purposive sampling is used to identify participants that the researcher believes will be beneficial in providing appropriate and useful information that is why I decided to use it.

I purposively sampled the chief of Mokhokhong because he is the traditional leader and the custodian of the community who is knowledgeable about Mokhokhong. He knows about the primary needs of Mokhokhong community that implicates social development of the community that lives in Mokhokhong. The Chief also is aware of how lack of roads affects him and his people,

and knows about challenges and problems that people residing in Mokhokhong have to endure due to absence of road infrastructure. Thus, can also suggest intervention measures that can help change their living conditions.

Again, local council representative was also purposively selected. The councilor is one of the community leaders that has a full picture of the needs that that lives in Mokhokhong. Councilors are community representative in the local council who are elected by people under the auspice that they can help present the societies' basic needs in the local council. They are also entrusted to ensure that such needs are provided. Local council is a government institution that among many of its functions, is assigned to ensure provision of road infrastructure ('Nyane 2019). Even when such needs are not provided, the councilor is in the position to tell where the challenge was and can therefore, suggest intervention measures that help overcome such challenges to ensure effective service delivery in the future.

Education practitioners from Mokhokhong Primary School were also purposively sampled. The reason being that education practitioners are the overseers who are mandated to implement education policies to ensure access to equal and the quality education. He/she is assigned to ensure that teaching and learning materialise. Again, she/he monitors day-to-day attendance and performance of pupils. She/he is also able to identify barriers that may affect teaching and learning processes. Therefore, are in the position to also help suggest possible intervention measures to help overcome challenges that can have impact on education services, thus ensure provision of sustainable education.

Purposive sampling was also used to select officials from Directorate of Roads and Ministry of Local Government. These government officials are entrusted to plan, develop and implement government policies in an intention to ensure that communities receive primary services such as

road infrastructure. They are mandated to work with other development units, sponsors and other stakeholders to ensure efficient service delivery. They are also in the position to identify barriers that may threaten and/or hinder provision of basic services including road infrastructure. It is through their daily experiences that the government officials can provide policy intervention measures necessary to help overcome problems that can potentially cripple effective service delivery.

Non-governmental Organisations such as Development for Peace Education (DPE) and Policy, Environmental Justice and Water Resources Advocacy (PEWA) were again, purposively selected in this study. NGOs are development stakeholders that work in an attempt to promote effective service delivery for improvement of the livelihood of communities including those residing in remote areas. They are capable of developing recommendations on how the government ministries and departments can come up with policy that can better strengthen measures intended to ensure social development. They are also able to assess government operations in an effort to ensure sustainability and suggest policy intervention measures that are both relevant and inclusive.

3.7 Data Collection Methods

Because the study has adopted the qualitative approach, primary data was collected through use of group discussions and interviews. These methods were useful as they are powerful in obtaining narrative data that allows the researcher to investigate people's views in greater depth. These methods are also helpful in that they assist in revealing in-depth information so that we are able to understand the conditions and experiences that the targeted audience encounters (Anas & Ishaq 2022).

Interviews were used as data collection method. Interviews are used to collect data in qualitative research, which its findings are based on people’s opinions and experiences (Ugwu & Eze Val 2023). The researcher chooses semi-structured interviews because they are flexible. Semi-structured interviews allowed the researcher to make changes during the interview process (Ugwu & Eze Val 2023). The intension was to gather suitable and relevant information while sticking to the central plan. I interviewed a total of 18 people in Mokkhokhong. I interviewed three people in each village respectively mostly women. The table below provides full details of people that were interviewed in each village.

Interviewees			
Village	Female	Male	Total
Ha Phillip	3	0	3
Ha ‘Mabathoana	2	1	3
Lits’eng (Motse Mocha)	3	0	3
Malimong	2	1	3
Ha Motebele	2	1	3
Mapheaneng	2	1	3
Total	14	4	18

Community leaders including the councilor, government officials from Ministry of Local Government and Roads Directorate, educator and Non-governmental organisations representatives were interviewed as well and they were all male persons except the educator. In total, key informants that were interviewed were seven. Interviews were useful because they saved me and participants time. It took me about 20 to 30 minutes to interview the participants. Ministry of Local

Government officials and NGOs representatives also allowed me to make follow up questions where I needed clarity. To avoid going to representatives and officials' offices numerous times for follow up, phone call interviews were also helpful. According to Ugwu and Eze Val (2023), phone interviews are the best choice because they make data collection process quicker, simple and cheaper. This method was also helpful as I used it to interview the education practitioner. The educator was not available for face to face because of work commitments. Learning and teaching would be disrupted and the appropriate method therefore was phone call interview.

Focus group interviews were also used for collecting data. Focus group interviews are data collection method where a small group of people who share similar characteristics are selected and gathered together to answer the questions collectively (Ugwu & Eze Val 2023). According to Ugwu and Eze Val (2023), they allow interaction of participants and at the same time allow the researcher to observe participants' attitudes and gain their point of view. Again, to conduct focus group interviews is not time consuming and findings are consistent. I was able to conduct focused group discussions in one day inconveniently because the community leaders were holding a public gathering for Mokhokhong community. The community leaders helped me to select participants and allocated time to when to interview participants from different villages respectively. There were six group discussions, which took 30 to 45 minutes. A total of 51 participants were engaged in the group discussion. The number of participants varied from seven to ten:

Group Discussions			
Village	Female	Male	Total
Ha Phillip	6	4	10
Ha 'Mabathoana	4	6	10

Lits'eng (Motse Mocha)	5	3	8
Malimong	2	5	7
Ha Motebele	2	6	8
Mapheaneng	3	5	8
Total	22	29	51

3.8 Data Collection Procedure

Before collecting data from participants in Mokhokhong, the researcher sought consent from the chiefs in Mokhokhong. The chiefs then helped in the selection of participants that were interviewed and those who engaged in the group discussions. Interviews and group discussions took place during the weekends to avoid the possibility of informants in Mokhokhong not being available. The reason being, that their livelihood is based on engaging in subsistence agriculture especially women while men take care of domestic animals. To collect primary data in Mokhokhong, I translated the interview questions in Sesotho. The reason was that they were able to receive and understand the questions better in their own language. Recording device was also used during the interviews and audios were labeled in order to ensure proper management of data.

The researcher again sought permission from the Ministry of Education in Lesotho before going to Mokhokhong Primary. During the week, interviews were conducted for collecting data from Ministry of Local Government and Directorate of Roads officials, as they were available at work during working hours only. The interviews took 30 to 45 minutes depending on how questions were answered. To collect data at Mokhokhong Primary school the, researcher used phone call interviews to avoid disrupting teaching and learning.

3.9 Ethical Considerations

Ethical considerations in a research study are a set of principles meant to protect the rights and dignity of participants and to ensure safety of participants (Bhandari 2021). The purpose of these considerations is to maintain academic integrity, enhance research validity and avoid harm in all its forms, by all means possible. According to Bhandari (2021), these ethical considerations are protected by international laws as well as scientific codes of conduct. There are ethical considerations that were observed in this study:

3.9.1 Debriefing

Debriefed which is one of the ethical principles was observed in this study. Debriefing is a process whereby the researcher provides information about the research study without deceiving participants (Price et al 2020). Participants should be made aware of the purpose of the study, processes to be undertaken as well as informing the participants about their ethical rights. All information about the nature of the research should be disclosed. When, debriefing participants, deception should also be avoided. Price et al. (2020) debriefing is important as information that it provides helps in decision making during informed consent processes including use of recording device. Participants might also not be tempted to prioritise their own interests when debriefing was conducted well (Drolet et al. 2023). In this study, participants were debriefed in the beginning of the interviews and focus group discussions. Informing the participants about the true nature of the research allowed me to be able to get their trust, resulting in being allowed to use recording device that was helpful when analyzing data.

3.9.2 Informed Consent

Informed consent is another ethical principle that was observed. Informed consent is a situation in which all research subjects are made aware and understand fully any information about the research in order to be able to make a decision of whether they still want to participate or not (Arifin 2018; Price et al. 2020). Additionally, Bhandari (2021) posits participants engage in the study because they are aware of the risks, the purpose and potential benefits of the study. In order to get the consent from the participants, I presented the letter that was provided to me by the Department of Development Studies at the National University of Lesotho. I gave this letter to the councilor, officials at the Ministry of Local Government and Chieftainship Affairs and Directorate of Roads and NGOs' representatives as they could read. To get verbal consent from participants in Mokhokhong, I read it out loud and interpreted it in Sesotho so that the participants understood what was written in the letter. Assuring my participants that whatever they say was going to be used for academic purposes only also helped me to get their consent. This was also helpful as they allowed me used a recording device.

3.9.3 Voluntary participation

I ensured that participants engaged in this study voluntarily. Voluntary participation means that participants in the study are not forced or pressurised through any means including being bribed or threatened or be misled as a way to make them believe that participation is compulsory (Bhandari 2021). This means that participants are free to engage or do not engage in the study. As a way to ensure that the participants are aware of this ethical right, I informed them that they are not obliged to participate but rather their participations meant that they are helping in the research process. I also informed them that there is nothing beneficial that they will get in return because I am conducting this study because it is an academic requirement for me to acquiring masters from the Department of Development Studies at the National University of Lesotho (NUL).

3.9.4 Right to Withdraw

Right to withdraw is the ethical consideration that was honoured in the study. Informing the participants about their right to withdraw is the requirement that put participants at ease and thereby provides their consent and participate voluntarily (Gordon & Prohaska 2022). I informed the participants during the debriefing that nothing would happen to them if they wished not to participate, even if they wanted to withdraw at any stage of the research process, they should not hesitate to do so as it is their ethical right. Therefore, they were not forced to participate. They were also not given anything as a form of bribery that could lure or pressurise them to participate. It is with great pleasure to say that interviews and group discussions went well without any withdrawals.

3.9.5 Confidentiality

Confidentiality is another key ethical principle that was observed in the study. Confidentiality means that the researcher knows the participants but hides their personal information to protect them from any kind of harm (Bhandari 2021). Any personal information about the participants should be hidden from anyone else. A researcher should try by all means to ensure confidentiality because harm can come in different forms including psychological, social, physical, and legal form. In order to comply with this principle, I used number coding in order to hide all identifiable information of participants. For instance, I used code numbers such village 1, 2, 3 etc. I also used generalised description of participants: I used words like community leaders, government officials so that anyone reading and/or who might have access to this study will not specifically identify the participants. I therefore guarantee that confidentiality was observed.

3.10 Data Analysis

Content analysis was employed in this study. Content analysis is defined as a method of analysis based on what is said, written or recorded (Parveen & Showkat 2017). To simplify the meaning, the scholars, define these two words separately: content as a message and analysis as the meaning of the message (Parveen & Showkat 2017). I used recording device during interviews and each audio was labelled. Labeling of audios after each interview was helpful because retrieving information was easy.

Data was analysed by listening to recordings, which helped the researcher to ensure that all valuable data was captured. When analysing the researcher summarised in English raw data which was in Sesotho while at the same time ensuring that the meaning was not lost in the process. Scholars support this and note that writing a synopsis is advantageous. They define a synopsis as an initial extraction of data based on the meaning (Academic Skill Kit 2023). I then organised the raw data from individual and group interviews based on similarities, differences, and suggestions at all stages of the analysis.

Presentation of data from recordings is a tricky process that needs a researcher to be very attentive. As a result, the researcher in some instances had to re-listen to audio recordings. This was helpful as the researcher was able to notice some missing information. This was helpful because I was able to make follow up and with data collected from follow up, I was able to improve the truthfulness of data.

Narrative analysis was also used for analyzing data. Narrative analysis is a method of presenting participants' stories considering the context of each case and varying experience of each participant (Rashid 2023). The purpose for doing narrative analysis in this study was to take into consideration the objective of the study in order to provide a clear picture of how lack of road infrastructure was impacting on Mokhokhong society based on their daily experiences. Narrative

analysis also helps in exploring aspects of power and social justice (Rashid 2023). Similarly, Rutherford (2018) argue that it is useful in examining how power is reflected in stories from research subjects because as they narrate their stories, the researcher is able to understand how social structures and power dynamics impact on societies. Again, narrative analysis was used because it helps in identifying areas of concern and in development of responsive interventions to the needs of the communities.

3.11 Chapter Summary

This chapter provided an overview of the research methodology and explored the procedures that were followed. This was done by answering the what, where, when, who, which, why and how questions: What research approach and design were employed in the study and why? Where was the study undertaken? Who were the respondents and why? What techniques were used to come up with a sample and why? Which procedures were followed to collect data? What ethical considerations were observed in the study? How was data analysed?

CHAPTER FOUR: DATA PRESENTATION, ANALYSIS AND DISCUSSION

4.1 Introduction

The study explores the implications of lack of road networks on social development of rural communities in Lesotho based on experiences of Mokhokhong Community. In order to achieve this objective, this study draws on interviews and group discussions. Interviews conducted with Mokhokhong community and community leaders revealed that the critical challenge is access to schools and health facilities: children are not performing well due to low attendance and difficulty to access health facilities endangers the lives of elderly people, pregnant women, children and sick people. Another challenge is the fact that the government structures responsible for providing them with road infrastructure have failed them hence, the society is facing social challenges that are unbearable to cope with.

Again, the phone call interviews were used to collect data from education practitioners in Mokhokhong Primary School also revealed that the school is not performing well because teachers and children struggle to go to school due to lack of road networks. Findings through interviews held with the Directorate of roads, Ministry of Local Government and local council's officials responsible for provision of road networks in the rural areas also revealed that the government institutions also have challenges that hinders them from performing as expected by the community. The most common challenge they face is low budget that the government of Lesotho allocates for them each year. The following subsections discuss social challenges encountered by Mokhokhong community, challenges faced by government institutions that hinder them from providing Mokhokhong community with road infrastructure and lastly, suggestions for intervention measures that can be used to help resolve social challenges faced by Mokhokhong community.

4.2 Social challenges faced by Mokhokhong community due to lack of road networks

Mokhokhong is a rural place that is found in Roma, Lesotho. The place is isolated. Lack of road infrastructure makes the place to be difficult to be accessed. My findings reveal that Mokhokhong community encounter social challenges, as they are unable to access basic needs and services such as health and education. The following subsections discuss the challenges that Mokhokhong community encounter due to failure to access health and educations facilities.

4.2.1 Impact of lack of Road networks on Access to Health Facilities

The study findings revealed that patients are unable to seek medical assistance on time as the distance coupled with the state of being sick makes travelling unbearable. When asked about the challenges they face and the risk of not being able to reach hospital, the researcher noted how deep the impact is. Tears in the eyes and trembling voices was evidence enough to feel their pain. When expressing their experience, community member said:

My eldest son might not have died...I used to complain even to my children about lack of road infrastructure when I was faced with some challenges. But the impact of lack of road infrastructure hit me when my eldest son passed on because we were not able to take him to hospital as it rained non-stop for two weeks and the river was flooded. When he got sick, he could still walk. When days went by without going to the hospital to get help, and not getting any pain killers from the shop, as it is situated on the other side of the river, his health kept on deteriorating. One morning he said, he was feeling too cold. I went to the other room to get more blankets, and he passed on. I failed to take my son to the hospital because there is no bridge and the road condition could not have allowed any driver even the skilled one to drive as our roads are in a bad conditions and too slippery when it rains.

I wish we can be provided with at least footbridges. So that, some deaths can be avoided (Interview, community member in Mokhokhong, Village E, 28th April 2023).

Do you see how swollen I am? Yesterday, I was unable to see. I wanted to go to hospital but when I thought of the distance that I had to walk, I did not even dare try to take a risk. I will go when I am being carried with a stretcher (Interview, community member in Mokhokhong, village B, 28th April 2023).

Lack of roads affects us in the manner that is difficult to cope with especially when you are sick or you have a patient. That is why some of us die on the way to the hospital or die at home. There are cases of people dying in their homes alone. We usually, find them after days (Interview, community member in Mokhokhong: village A, 28th April 2023).

The situation here in Mokhokhong is very bad. We carry people when they are sick even when they have passed on (Interview, community member in Mokhokhong: village F, 28th April 2023).

Pregnant women are hit hard by lack of road infrastructure in Mokhokhong. The reason being that they are unable to access health services. They are not able to attend clinic in order to get medical supplements that they need. Even when they are in labour, they end up giving birth at home. The study further established that there are no support groups or trained people in Mokhokhong that can take care of pregnant women even when giving birth. Women in Mokhokhong when expressing worries, they said:

I am not trained to help a pregnant person when giving birth but I have helped some of them. I wish we can be trained. Training will also help us to avoid being infected with

disease as we do not have gloves (Interview, community member in Mokhokhong: village B, 28th April 2023).

We do not have people that have been trained to help pregnant women when giving birth. Sometimes, they end up being sick because of difficulty in giving birth and being assisted by untrained people. This is a problem as the woman's state cannot allow her travel to hospital because of the distance and lack of road infrastructure. Even the new born also end up missing her/his 7 days' injection because of the mothers' sickness and the distance she is supposed to walk (Group Discussion, women in Mokhokhong, 28th April 2023).

Access to the nearby hospital by women travelling or carrying a sick child or children is a great challenge due to lack of road infrastructure. Lack of road networks also makes immunisation of children impossible to take place. Additionally, previous studies also assert that failure of vaccination campaigns for children, slow and/or lack emergency responses to pandemic outbreaks and other shocks is due to absence of road infrastructure Mphande (2016). It affects women who have newly born children as it makes travelling to the hospital for immunisation difficult. When asked if they have cases of children that are not getting necessary injections, women said:

Yes, after giving birth. The child has to get injection after seven days, and travelling is a problem because of being unfit and fragile soon after giving birth. So, our children do miss injections (Interview, community member in Mokhokhong, village C, 28th April 2023).

Yes, children miss injections. Some miss injection because of the distance that mothers have to travel especially those living in Ha Motebele, Mapheaneng and some from Malimong and Motse-mocha. We heard that there is an outbreak of measles and all children around the country are being immunized. Our children have not been immunized

even the ones that were at school. We heard that nurses from hospital came to inject children for measles but our children were not immunized. It is alleged that, the nurses could not reach the school where most of our children were (Group Discussion, community members in Mokhokhong, 28th April 2023).

It also affects elderly people when they are supposed to go to hospital because when they are sick or they are supposed to go for check-up. There is a van in Mokhokhong that is being hired when elderly people want to go to Roma to get their pensions and when they need to go for checkups. However, some elderly people claim that they cannot afford it. Some claim that it is difficult to get in the van especially if they are supposed to sit at the back of the van. They have to be pushed up to get in and they do not feel well especially, women as man/men that push them have to touch their backs. Some complained that being pushed when you are sick makes the body to be very painful coupled with not being able to sit well especially when there are many people that are riding in the back. Movement by vehicles in the rural areas is described by Kwarteng et al. (2018) as unsafe, crowded and expensive due to absence of road networks. Lack of roads does not only impact on access to health facilities but also when elderly people need to go and get their pension money. As one elderly expressed:

Lack of road infrastructure affects me. I am too old. If I need to go to Roma or Maseru for checkup or to get my pension money, I feel unease as my body is too tired and the distance that I have to travel is too long. Lack of road infrastructure makes our lives to be difficult as there is no public transport that can make us travel easily and safe. When I was younger, I could walk these long distances but now because of my health status and old age, it's difficult. That is why I have even reduced my movements and by so doing and I do not feel good. When I used to travel my body was good now, I feel sick frequently because I am no

longer walking as I used to because of the state of my health now (Interview, Elderly person in Mokhokhong: village D, 28th April 2023).

Lack of road infrastructure is not only a barrier that hinders access to hospital only. It also affects transportation of the deceased to and from the mortuary. This impacts on men that live in Ha Motebele, Malimong, Motse mocha and Mapheaneng as the vans cannot reach these villages and are forced to carry corpse with stretchers from their homes to Ha Mabathoana where the van can be accessed. The same task takes place when the deceased comes back from the mortuary, as the mortuary van cannot go beyond Ha Mabathoana and men have to carry the coffin back home. One man explained by saying:

I live in Mapheaneng. Every time someone dies, we know as men that we have an additional work to do. We carry our loved ones that have died to where we will be able to access a van that will transport the corpse to and from the mortuary. Even when the corpse comes back for burial, we know that we have to go and carry the coffin (Interview, community member in Mokhokhong: village F, 28 April 2023).

It is because of lack of road infrastructure, which prohibits access of public transport that men in Mokhokhong have to endure difficulties. Availability of public transport contributes to reduced travel distance and time. This confirms Kaiser and Barstow (2022) argument, that the status of the road and the mode of transport are factors that influence the time spent for accessing health facilities. They further argue that most of the community members in the rural areas are poor. It is because of this status that they do not possess private cars and cannot afford to hire private vehicles during emergencies. Thus, people residing in the rural areas when in real need, sort to use low-technology measures, which are energy and time consuming to carry their ill to hospitals (Kaiser & Bastow 2022).

4.2.2 Impact of lack of Road Networks on Access to Education Facilities

Lack of road networks has been an inter-generational challenge in Mokhokhong. Children from primary to high school level have been struggling to access schools due to lack of road infrastructure. During rainy period, students mostly at primary level do not attend school. Findings of the study reveal that schools that children from Mokhokhong attend are Mokhokhong Primary School, Maphotong Primary and Roma Primary School. However, community members during focus group discussion expressed that most of the children who attend school in Mokhokhong Primary School are especially those aged 6 to 10 years old.

Findings also revealed that students that have enrolled in High school level attend schools at Manonyane High, St. Mary's High and Christ the King High School. However, findings revealed that the enrolment to high school level has been low as the distance and absenteeism when it rains affects students' performance leading to drop out of school. These findings are in line with Sewella and Lottering (2019)'s study that revealed lack of access and attendance to school disrupt teaching and learning leading to poor academic grades. Similarly, Kaiser and Bastow (2022), also asserts that factors that make schooling difficult leading to drop out include, bad weather, long distances, safety to and from school. Hall (2019) agrees by saying that long distances that children are supposed to walk may force children to wake up early in order to arrive to school early leading to exhaustion which can impact on their learning ability.

When expressing their concerns parents said:

Our children are not going to school as expected especially during rainy period. That is why every year their performance at school is disappointing every year. My two boys ended up dropping out of school and went to seek employment in the factories in Maseru. They

are now working there (Interview, community member in Mokhokhong: village D, 28th April 2023).

It rains a lot almost throughout the year, during the past years including this year. As a result, our children are not attending school well and it affects their performance. The days that the children have to attend school have decreased. This is because of the days that the children have to stay at home due to rain coupled with winter as the schools are closed (Interview, community member in Mokhokhong: village E, 28th April 2023).

In Mokhokhong, the distance that both the students and education practitioners have to travel to access Mokhokhong Primary school is too long due to lack of road infrastructure. As a result, both the students and teachers arrive at school tired affecting teaching and learning in the negative way. Previous studies have also shown that lack of road infrastructure in the remote areas contributes to low school attendance making it difficult for students to catch up with class work because teachers do not have enough time to help learners that are usually absent (Sekiwu et al 2020).

When expressing their frustration, teachers said:

The terrain of Mokhokhong and lack of road infrastructure together makes the distance that we have to walk to be longer. Students from Mapheaneng, Malimong, Motse-mocha and Ha Motebele are the most negatively affected by long distances that they walk to and from school. These villages are situated very far from the school. Lack of road infrastructure affects these students' attendance mostly when it rains. As a result, they are usually tired in class and their grades are bad. As teachers, we are also affected by the distance, as there is no public transport because of the state of the road (Interview, education practitioner from Mokhokhong Primary School, 17th May 2023).

When it rains, lack of road infrastructure makes the process of teaching and learning slow as each time these students are absent is the time that we know that we are moving two steps back resulting in poor performance of our school. Engaging in extracurricular studies to allow students to catch up is impossible, as we are not living here in Mokhokhong. We cannot leave the school late for the students and for our safety (Interview, education practitioner from Mokhokhong Primary School, 17th May 2023).

The study revealed that the Government of Lesotho has worked hard to make access to school easier by building public schools in the rural areas. However, access still seems to be uneasy task to be achieved due to absence of road infrastructure. As scholars argued before, lack of resources such as roads are an impact for children living in the remote areas, which affects their attendance to schools (Mosia 2022). In 2018, children aged 6-12, 14, 800 were not going to school and 3,100 dropped out of school, 2, 200 of children aged 13-17 were not going to school while 46, 000 had dropped out of school (Mosia 2022). For those children who are still in school, their attendance is low and their performance is affected. Thus, children in the rural areas in Lesotho take more than 2 years to acquire literacy skills when compared to urban students who take close to two years only to acquire similar skills (Mosia 2022).

4.3 Road infrastructure and social development of community residing in Mokhokhong, Lesotho.

The study findings revealed that there is relationship between road infrastructure and social development. Scholars' findings also affirm that social development of the community depends on availability of transport infrastructure (Khanani et al. 2021). However, this research established that there are differing views with regard to achievement of social development through provision of road networks based on politics and lack of confidence on the Government of Lesotho. Even

though, this is the case, some community members still have hope that social development in Mokhokhong can be achieved through provision of road infrastructure if the newly elected government has a will and commits itself to do so. This is because there is a newly elected government, which some believe will provide them with road infrastructure. When expressing their views Mokhokhong community members said:

Yes, social development can be achieved through provision of road infrastructure. Roads allow us to do many things that can change our lives for better. We have just been unfortunate that previous government and even local councils did not consider providing us with roads. But indeed, roads can help achieve social development (Group Discussion, community member in Mokhokhong, 28th April 2023).

It is too soon to say that we will not achieve social development here in Mokhokhong. The government we have just elected is different from the previous governments that we have been voting for. It is my belief that, this time there will be a change, we will have roads (Group Discussion, community member in Mokhokhong, 28th April 2023).

Yes, social development can be achieved. I believe this government will help. Even if they do not provide us with tarred roads but they will do provide us with road networks or footbridges and we will be able to reach hospitals. As you know, no one can do anything when he/she is sick (Group Discussion, community member in Mokhokhong, 28th April 2023).

However, social development to some community members that resides in Mokhokhong is seen to be something that will not be achieved anytime soon based on the current status of the road. The community that lives in Mokhokhong are frustrated about the previous governments failing to

provide them with road infrastructure. Also, with the fact that there are other things that, they regard as basic needs are not provided to them:

There are various things that we need to achieve social development; road networks are our main need. We also wish to have a clinic looking at how we struggle when our children or any family member is sick. We also need electricity looking at how life nowadays is. It is not good to see our children reading or doing their homework using a candle. We do not have means to charge our phones, which children in this century need to do their school work, yet we expect them to pass. To say that social development here in Mokhokhong will be achieved is a dream. There is so much that still needs to be done (Group Discussion, community members in Mokhokhong, 28th April 2023).

I do not know how social development can be achieved. Without provision of roads or mere footbridges? There is no way that social development will be achieved in Mokhokhong, no way! (Group Discussion, community member in Mokhokhong, 28th April 2023).

It is clear social development can be achieved through provision of road infrastructure and is a something that community of Mokhokhong cries foul for. Findings from previous studies describe social development as a process of planned institutional change to bring about better adjustment between human needs and aspirations, social policies and programmes (Mondal n.d.). The studies further argue that social development entails changes through achievement of sustainable development goals (Mondal n.d). Other studies, on the other hand posit that social development involves values, which cannot be measured in monetary terms (Wang et al 2022). They argue that governments in order to create and protect these social values, they should assess the needs of the people; introduce some structural changes in society including letting go of old institutions and/or coming up with new institutions or making changes on the existing institutions; making institutions

responsible to people; and engaging people in decision making. Therefore, social development should be observed in terms of individual and collective well-being rather than focusing on economic aspects.

Institutions that are responsible for provision of road infrastructure for collective well-being, on one hand, are not performing effectively as expected. While, lack of road infrastructure, on the other hand, has proven to have negative social implications on community, that lives in Mokhokhong. There are government institutions that are responsible for provision of road infrastructure in the rural area like Mokhokhong. They are ministry of local government; directorate of roads; and local councils.

Directorate of Roads' role is to plan, design, develop and maintain small and large -scale roads around the nation. The directorate constructs big and small roads: paved, unpaved/gravel and soil roads. Again, the government officials confirmed that the directorate also constructs tracks and bridges as well as footbridges. The findings revealed that directorate's mandate in constructing road networks is to connect villages, connect towns, connect districts and construct roads to allow access to borders. Furthermore, they use different ways of collecting data in order to prioritise provision of roads to a certain place. They are: a) Provision of road infrastructure based on the number of people that resides in that particular place. b) Provision of road infrastructure if a place have facilities such as schools, clinics and shopping centres to allow access and c) Provide road infrastructure if our minister has been informed by other ministers in the parliament about the place like Mokhokhong that needs a road.

Ministry of Local Government, Chieftainship and Parliamentary Affairs is another government structure that is responsible for service delivery of road infrastructure. The study further established that the Ministry of Local Government is mandated to help providing councils with

resources such as labour, offices and financial support to ensure that they perform effectively. The ministry use councils as an intermediate unit responsible to promote and consolidate sustainable service delivery and enhance quality of life.”

Local councils in total are 64 and are a unit of local government in Lesotho (GoL 2014). Members in the community councils are representatives from each Electoral Division (ED) within the council (GoL (2014). The functions of local councils include control of natural resources, environmental protection, land allocation, provision of roads and bridle paths among many other functions (Local Government Act No.6 of 1997). Their main aim is to promote social and economic development; to ensure provision of services to communities in a sustainable manner; to promote a safe and healthy environment and to encourage the involvement of communities and community organisations in the matters of local government. However, previous studies stressed that local councils are few in number while serving many villages that is the main reason why some villages suffer due to failure to receive services they are in need of (‘Nyane 2019).

The findings showed that in Mokhokhong, the development structure that the community supported and believed that will provide road infrastructure is the local council. Local councils have been democratically- elected since 2005 to present. Their duties have been to help bridge the gap between the government and the communities by facilitating citizens’ mobilisation, identify development needs and implement projects such as opening up new rural roads. It was revealed that these councils, however, have remained under-funded and not structurally supported by a clear administrative and service delivery framework. Therefore, are observed to be performing poorly leading to Mokhokhong citizens’ dissatisfaction. Mokhokhong community members expressed their despair about local councils, as follows:

We have elected three councilors since 2005 and since then, they have done nothing for us. Soon, we will be going for elections and I do not see a point in going for such elections any more (Group Discussion, community member in Mokhokhong, 28th April 2023).

These councilors are paid for doing nothing. I think local councils should be cancelled. It is just a waste of money (Group Discussion, community member in Mokhokhong, 28th April 2023).

Whoever came up with the idea that we should have local councils, came up with a bad idea. It is not working. These people do not even have tools or money to do their work! (Group Discussion, community member in Mokhokhong, 28th April 2023).

Councilors are elected and after being elected, we expect them to provide us with basic needs like roads but they just sit in offices doing nothing. They do not even come back to inform us what they are doing. They come back after five years when we are going for elections again and expect us to vote for them again. This is really nonsense! (Group Discussion, community member in Mokhokhong, 28th April 2023).

Community leaders and local government ministry officials also expressed where they think the problem is with regard to why do local councils as government institutions fail to execute their projects including road networks that are a need in Mokhokhong:

As a person, I thought local councils can work for us. I supported the idea but I now realise that the government came up with this institution to shift the blame from them to the local councils. Duties of ministry of local government and directorate of roads such as provision of roads that connects villages, connects villages to social facilities have been shifted to be duties of local councils but they are not equipped enough to execute their projects. Even

the budget that is allocated for them has been reducing in this past years. Why the government is reducing it? We do know! To make matters even worse, such money sometimes is taken back by the ministry of local government after it was allocated (Interview, community leader in Mokhokhong, 28th April 2023).

I do not believe that blame should be put on local councils. The problem is the fact that the councilors to execute their plans, they dependent on the ministry of local government. The Process for availing the budget that the local councils need to execute their projects takes time. Sometimes, the money ends up being taken back because of these processes coupled with the local councils not being given enough time to do their work like tendering processes after given such money (Interview, Official from Local Government Maseru, 19th May 2023).

Directorate of roads as another government department that is responsible for provision of road infrastructure in the rural areas. The road directorate official, when speaking on behalf of the institution expressed challenges why as the department are failing to provide Mokhokhong with road infrastructure:

I do not know of a place called Mokhokhong. We have a database that allows us to know the place that needs road infrastructure but I now realise that we need to improve it so that people like those living in Mokhokhong do not suffer. The other problem is our budget. The budget that we have now is not even 10 percent of the budget that we need to maintain or construct new roads around the whole country. For us to that, we need 30 or plus billion amount of money which we do not have. Therefore, I cannot say that even with the information that you have brought now, I can promise that we will look into the matter and act on it. The road that is of priority this year is only one here in Maseru. I suggest that the

local council can start the job then maybe we will upgrade from where they have started maybe on the next budget (Interview, Official from Roads Directorate Maseru, 3rd May 2023).

4.4 Suggested Policy intervention measures to help curb social problems that Mokhokhong Community encounters due to lack of road infrastructure

While, the community leaders and the community that lives in Mokhokhong have lost hope on government and its institutions including the local councils, government officials expressed that decentralisation policy should be implemented to address barriers that led to failure to provide Mokhokhong with road infrastructure. The respondents revealed that the policy was instituted in 2014 but has not yet been implemented. As ‘Nyane (2019) argue, this policy will enable the central government to implement Section 106(1) of the constitution, which stipulates that “parliament shall establish such local authorities as it deems necessary to enable urban and rural communities to determine their affairs and to develop themselves.” The law also stipulates that these local “authorities shall perform such functions as may be conferred by an act of parliament.” When expressing why decentralisation should be urgently implemented, the local government official indicates:

This policy allows different people with different expertise to be under one structure shortening processes for planning, budgeting and implementation of projects (Interview, Official from Local Government Maseru, 19th May 2023).

The decentralization policy was adopted in 2014 to deepen democracy and help take local councils to a higher level by providing them with policy guidance, robust institutional structures and financing mechanism (Kali 2020; GoL 2014). Scholars’ findings also argue that in Lesotho,

decentralisation is meant to shift responsibilities from the top to the bottom units (Kali 2020). The scholars further state that government of Lesotho through decentralisation will also transfer decision-making powers to local councils (Kali 2020). The sub-national governments are divided into four levels and they are; community councils, district councils, urban councils and municipality council.

The main objectives of the policy are to increase citizens' access to public services; ensure quality and accountable service delivery at local levels; increase participation of citizens and non-state organisations in governance and service delivery. Other objectives included to enhance local autonomy by ensuring that local government institutions are sustainably capacitated and organised with a strong collective voice etc. (GoL 2014). But, on top of all, the core component of decentralization is financial responsibility. However, this policy has not yet been implemented. Hence, it was suggested during fieldwork that decentralisation should be implemented, as people believe that it will allow local councils to work better and ensure that community of Mokhokhong receive road infrastructure. One government official highlighted that:

Even though the decentralisation policy can help ensure that local councils do their duties without any barriers, the policy has not been implemented since 2014. We do not know the real reasons behind that, or maybe it is because of coalition governments, which since 2012 until present have been unstable leading to change of governments within a short period of time. However, we do hope this new government will consider executing it for the benefit of people that live in Mokhokhong. Also, for our local councils to be able to plan and implement projects, such as road networks in a smooth and sustainable manner (Interview, Official from Local Government Maseru, 19th May 2023).

It was also revealed that despite the fact that, previous governments have been reluctant to implement the policy, there were some members of parliaments that were given the responsibility to ensure that it is implemented. As Wang et al. (2022) pin points that government is a key structure that is responsible for enhancing social development of the society through its policies. Respondents further revealed that even though there was the Member of Parliament in 2020 that was given the responsibility to implement the policy, the policy is yet to be implemented. This means that even control of the budget and service delivery functions since the adoption of the policy are still managed by the central government. The decentralisation policy has not yet been tried and tested, thus is a theory. According to Ministry of Local Government in Lesotho, for this policy to be fully implemented there are phases that needs to be undertaken. The ministry of local government official explained what has been happening including the implementation process like this:

We have adopted decentralisation in 2014 but the previous governments were reluctant to implement this policy. For this policy to be implemented full, we have to implement it on phases. The government of Lesotho has undergone two phases now. The government has amended a bill that has been passed in parliament. Public awareness was also conducted and recommendations that were noted. These recommendations were mostly meant to ensure that local authorities operate effectively and also prescribed mitigations measures to solve unpleasant relations that are exist between the chiefs and councilors. There are laws and procedure that needs to be followed and to achieve full implementation of the policy might take time (Interview, Official from Local Government Maseru, 19th May 2023).

The study showed that since the policy has not been implemented since 2014, this has resulted in communities such as Mokhokhong to experience social challenges due to lack of road infrastructure. Therefore, there are procedures to be followed and laws to be amended to ensure that the policy is implemented. Hence, community leaders, roads directorate officials and local government ministry officials still advocated for decentralisation. The following suggestions from respondents shed more light:

The local council should be equipped with tools and should directly be provided with their own budget, which they will use and account for. This can be done through decentralization (Group Discussion, community leaders and community members Mokhokhong, 28th April 2023).

Like, I have said that our budget is less than what we need and cannot promise anything now. I think local councils can provide Mokhokhong with road infrastructure but they can do it after decentralisation policy has been implemented. Local councils now share a budget with ministry of local government, which poses some barriers when local councils try to implement development projects. Therefore, this policy has sections that stipulates that local councils to directly be provided with their own budget, even equipment too. So, it is only then that Mokhokhong will have roads (Interview, Official from Roads Directorate Maseru, 3rd May 2023).

There is nothing that I think can work well than to implement decentralisation policy. All we need is political will and the commitment of our government to ensure that this policy is implemented fully (Interview, Official from Local Government Maseru, 19th May 2023).

The government officials suggest the implementation of decentralisation policy as an intervention measure to address the challenge. In addition, Non-Governmental Organisations such as Development for Peace Education (DPE) and Policy, Environmental Justice and Water Resources Advocacy (PEWA) also vouch for it. However, they argue that there are handicaps that need to be taken care of first. Lack of will was underlined as the main one as explained by the NGOs:

There is lack of political will and our governments therefore, cannot commit in insuring that decentralisation policy is implemented. Politicians do not want to let go of powers that they have over government institutions. That is why, previous governments have failed to implement laws that were meant to pave the way for the policy to be implemented, so that local councils can have power to plan and manage resources. For instance, there are three laws that I know of that have been rejected in the parliament since 2014 by different governments (Interview, DPE representative, 11th June 2023).

As with many government policies (mine policy being an example), the decentralisation policy has been lacking political will for implement by government. My assessment is that governments in Lesotho are playing narrow partisan politics, which lack vision and foresight. There is no continuity in government policies. Each time, after a change of government, things start anew. There is no patriotism and willingness to engage in sustainable developments. If our governments as like this, how can Lesotho achieve development at local level! (Interview, PEWA representative, 13th June 2023).

Even though, there are challenges that are highlighted as the key barriers for implementation of decentralisation policy, there is still hope that it should be executed. As NGOs emphasised the need to implement decentralisation policy in order to ensure that local councils receive budget necessary for them to perform efficiently:

We suggest that there should be an inter-government relations legal framework. This legal framework will make provision of basic services anywhere in the country including in Maama councils to be done in an integrated manner. This will allow the parliament when allocating the budget to in the manner that even when the government changes, the new government will be obligated to follow the same pattern and procedures. We also suggest that there should be district local governments. The reason being that there should be experts, from different ministries that will be appointed and be located in the district local government to supervise the development projects that will be planned and implemented. Therefore, when the government gives the central government budget, even the district local government will get its own budget. For instant, the district local government should be allocated M2 million for construction of road, M200 000 for provision of clean water to achieve integrated developments. Unlike, now when we have so many councils within the district, which makes management of resources difficult, and monitoring the performance of each council around the country is impossible. That is why many vulnerable communities are suffering. All councilors should also be placed in the district local government, so that they can report the needs of the grassroots. In this way, the district local government will be able to plan yearly which projects should be prioritised and which communities are more vulnerable. Even, the villages will be informed based on the framework and timetable how provision of services will happen. This will put people's minds at ease as mandates will be properly communicated (Interview, DPE representative, 11th June 2023).

I suggest that local councils should have its own direct budget to enable it to start and carry out meaningful developments. Without finances controlled by local councils, nothing

can ever materialise. Government must be committed to bring real changes to the people. Fundamentally, government and parliament must expedite reforms programmes because these reforms will bring much needed changes that will be beneficial to the citizens of Lesotho. Additionally, decentralisation policy was adopted in 2014, I think it should be reviewed to see if it is still relevant now or there are changes that needs to be made and/or the government should come up with a new decentralisation policy (Interview, PEWA representative, 13th June 2023).

4.5 Chapter Summary

This chapter revealed that lack of road infrastructure exposes the community that lives in Mokhokhong to social challenges. The main challenges are with regard to failure to access education facilities disrupting learning and teaching, failure to access to health services exposing the community to health risks and the community members suffer as a result. Again, the study reveals that lack of road infrastructure poses barriers that hinder social development of the society. The study also reveals that government institutions that are responsible for provision of projects including road networks face challenges, which hinder them from performing effectively. Thus, are reviewed by the community to be performing poorly. As a result, decentralisation is therefore, suggested as a policy intervention measure. The emphasis being that the local councils will receive the budget necessary for them to operate effectively and procedures that need to be followed during implementation process should consider taking into consideration the public opinion. The study further, reveals that political will and commitment are key for ensuring that the policy gets prioritisation and urgency that it requires. However, whether the policy will work or not is an assumption because it has not yet been tried and tested. But, the intentions are genuinely meant to ensure that the government institutions perform well in the future.

CHAPTER FIVE: CONCLUSION AND RECOMMENDATIONS

5.1 Introduction

This chapter concludes the study and suggests recommendations. The conclusion is based on three objectives of the study. Thus, the concluding paragraphs will clarify how each objective was achieved and if the three main questions were answered or not. Then, the last part of the chapter will be the recommendations. These recommendations are meant to provide suggestions that may work in future for remote and inaccessible rural areas experiencing challenges such as those in Mokhokhong.

The study investigated implications of lack of road network on social development of rural communities in Lesotho using Theory of Change. The study demonstrates that the Theory of Change is an appropriate theory as it provides steps on how to identify social problems and come up with mitigation processes as its main goal is to bring about positive change. The study reveals that lack of access to social facilities such as schools and hospitals and failure to achieve social development in remote and inaccessible areas is all because of absence of road infrastructure. Prioritisation and provision of road infrastructure has been shown to be influenced by the desire to achieve economic growth rather than social development. TOC provides a framework that is useful to communicate intervention measures meant to achieve long term change and political will and commitment are presented as vital and appropriate method of operating that can help government institutions to execute their duties effectively for achievement of social development of societies especially those living in remote areas.

5.2 Conclusion

One of the main findings of the study is to investigate social challenges faced by Mokhokhong community in Lesotho due to absence of road infrastructure. Based on the experience of the community and findings after engaging in fieldwork, the conclusion is Mokhokhong is a place that is in need of road infrastructure. Even though, within the local council there is Mokhokhong representative, community of Mokhokhong face many social challenges due to lack of road networks, hence the study aimed at exploring those challenges. It can be concluded that these challenges affect the whole community but women and children suffer the most. The study also reveals that education and health facilities are not easily accessible contributing to failure to achieve social development in Mokhokhong.

In an attempt to understand the impact further, the study explored the implications of lack of road infrastructure on social development. The study concludes that lack of road networks complicates achievement of social development in Mokhokhong. Thus, the study concludes that the government of Lesotho's lack of commitment really poses problems to the isolated communities while at the same time ignores people's basic need such as road infrastructure. The study further concludes that failure to directly allocate resources including the budget to local authorities hold this unit hostage resulting to inefficient performance.

The study concludes that social development and sustainable livelihood of the rural communities including that in Mokhokhong could be achieved if road infrastructure is developed first. The study also concludes that lack of road infrastructure is a result of policy and practice issue that is the unimplemented 2014 decentralisation policy. The study further concludes that a setback is lack of political will in implementing policies that are meant to help remote communities to access basic social services.

5.3 Recommendations

The study provides recommendations to prescribe remedy needed to overcome social challenges that rural communities without road access encounter. These are:

- Road networks should be number one priority for Mokhokhong community so that they access to education and health facilities.
- The government of Lesotho through its institutions should prioritise provision of bridges including footbridges to remote areas to ensure safe crossing of rivers for the community including elderly people, patients, students and education practitioners to access primary facilities.
- Training some of the community members on helping pregnant women when giving birth to avoid maternal mortalities is also critical.
- Necessitate Equipping communities with skills on how to use Personal Protective Equipment (PPE) during child birth and how to handle a newborn child to avoid any kind of infection.
- Support group people should be selected from communities who will be responsible for taking care of patients that stay alone in their homes as some are found dead after days. The support group will also help care for elderly people that are sick, Tuberculosis (TB) and HIV and AIDS patients.
- The government through Ministry of Health should help provide support groups with equipment and materials that are used when a woman is in labour.
- The government to build a clinic in Mokhokhong community for people to get medical assistance nearer. Pregnant women will also be able to attend clinics and children to access necessary injections.

- The government should also ensure that the health practitioners stay nearby the clinic; they should be provided with houses so that when there is any emergency, they will be available.
- Education practitioners also recommend that the government to provide them with houses so that they do not have to travel to school every day.
- The government of Lesotho to provide the Maama local council with equipment and to provide a budget to harmonise provision of projects like road networks.
- The 2014 decentralisation policy should be implemented as a matter of urgency to enable elected councilors to effectively deliver their duties
- Outsourcing funds for road construction since the current budget is not enough to cater for provision of road infrastructure needed in the rural areas like Mokhokhong.
- The government should have a body of researchers that will be in charge of conducting researches meant to find places where vulnerable communities like those in Mokhokhong resides. This will help find out their priority basic needs that require urgent resolutions and institutions responsible can act accordingly.
- The government of Lesotho should have a will, commit and implement suggested policy intervention measures for instance decentralization policy.

REFERENCES

Academic Skill Kit, (2023), *Writing a Synopsis: Learn How to Prepare and Write a Synopsis Assignment*, United Kingdom: Newcastle University.

Aderibigbe O. and Gumbo T., (2022), “Influence of Socio-economic Attributes on Travel Behaviour in the Rural Areas of Nigeria: Towards a Sustainable Rural Planning and Development,” *an Open Access Journal*, 10(1), 181-199. DOI: <https://doi.org/10.1080/21650020.2022.2072946>.

ADBCEC (African Development Bank Chief Economist Complex), (2013a), “High Transport Costs in Africa,” *Market Brief*, 4(10).

Anas N. and Ishaq K., (2022), “Qualitative Research Method in Social and Behavioural Science Research,” *International Journal of Management, Social Sciences, Peace and Conflict Studies*, 5(1), 89-93.

Arifin S.T., (2018), “Ethical Considerations in Qualitative Study,” *International Journal of Care Scholars*, 1(2), 30-33.

ArunaShantha A., (2019), “the Impact of Road Development on Livelihood Implication among Rural Community: Sri Lankan Experiences,” *JOSR Journal of Humanities and Social Science*, 24(6), 7-21.

Bhandari P., (2020), *Population vs. Sample: Definitions, Differences and Examples*, Available Online: www.scribbr.com, (accessed on the 14th February 2023).

Bhandari P., (2021), *Ethical Considerations in Research: Types and Examples*, Available Online: www.scribbr.com, (accessed on the 14th February 2023).

Bouchrika I., (2022), *Types of Research Design: Perspective and Methodological Approaches*, Available Online: www.research.com, (accessed on the 13th February 2023).

CBL (Central Bank of Lesotho), (2006), “The Upward Revision of Road Maintenance Levy: Implications for Lesotho Economy,” *Economic Review*, 70, 1-4.

Cai J., Huang C., Deng Z. and Li L., (2023), “Transport Accessibility and Poverty Alleviation in Guizhou Province of China: Spatiotemporal Pattern and Impact Analysis,” *Sustainability*, 15(4), 3143, DOI: <https://doi.org/10.3390/su15043143>.

Campbell S., Greenwood M., Prior S., Shearer T., Walkem K., Young S., Bywaters D., and Walker K., (2020), “Purposive Sampling: Complex or Simple? Research Case Examples,” *Journal of Research in Nursing*, 25(8), 652-661, DOI: 10.1177/1744987120927206.

Chakwizira, J., (2019), “Rural Transport and Climate Change in South Africa: Converting Constraints into Rural Transport Adaptation Opportunities,” *Jamba: Journal of Disaster Risk Studies*, 11(3), 1-8, a718.<https://doi.org/10.4102/jamba.v11i3.718>.

Cigu E., Agheorghesei D.T., Gavriluta (Vatamanu) A. F. and Toader E., (2019), “Transport Infrastructure Development, Public Performance and Long-Run Economic Growth: A Case Study for the EU-28 Countries,” *Sustainability*, 11(1), 67, DOI: <https://doi.org/10.3390/su11010067>.

Cleland J.A., (2017), “the Qualitative Orientation in Medical Education Research,” *Korean Journal of Medical Education*, 29(2), 61-71. DOI: 10.3946/kjme.2017.53.

Cobigo V., Martin L. and Mcheimech R., (2016), “Understanding Community,” *Canadian Journal of Disability Studies*, 5(4), 181-203, DOI:10.15353/cjds.v5i4.318.

DMA (Disaster Management Authority), (2010), *Awareness on Disaster Preparedness*, Maseru: Government of Lesotho. Google Scholar.

Drolet M., Rose-Derouin E., Leblanc J. Ruest M. and Willimas-Jones B., (2023), “Ethical Issues in Research: Perceptions, Research Ethics Board Members and Research Ethics Experts,” *Journal of Academic Ethics*, 21(2), 269-292. DOI: 10.1007/s10805-022-09455-3.

Ekeocha D.O., Ogbuabor J.E. and Orji A., (2021), “Public Infrastructural Development and Economic Performance in Africa: a New Evidence from Panel Data Analysis,” *Economic Change and Restructuring*, 55, 931-950, DOI: <https://doi.org/10.1007/s10644-021-09334-8>.

Espinet X., Aliyev S., Atanton-Geddes Z. and Bun V., (2020), *The Road to Healthier Communities: Rethinking Rural Accessibility Amid a Health Crisis*, Available online: www.blogs.worldbank.org., [accessed on the 23 January 2023].

Focus F., (2015), “Theory of Change: How to Navigate towards Positive Change in complex Social Settings,” *An Inspiration Guide for Development CSOs*, www.globalt.focus.dk.

GIH (Global Infrastructure Hub), (2023), *Methodology: Defining Inclusive Infrastructure and the Framework through Global Research on the Lessons Learned from Inclusive Practices*, Available online: www.inclusiveinfra.github.org, (accessed on the 6th July 2023).

Goodwin M., (2021), “Evaluating the Success of Decentralisation in Facilitating the Inclusion of Rwanda’s Marginalised,” *The European Journal of Development Research*, 34, 2251-2271.

Gordon E.J. and Prohaska T. R., (2022), *the Ethics of Withdrawal from Study Participation*, Available online: www.ncbi.nlm.nih.gov, (accessed on the 4th July 2023).

Government of Lesotho (GoL), (2014), *National Decentralisation Policy for Lesotho*, Ministry of Local Government, Chieftainship and Parliamentary Affairs, Available online: [www.fao.org>les187064](http://www.fao.org/faolex/les187064), (Accessed on the 15th May 2023).

Greiner C., Greven D. and Klagge B., (2021), “Roads to Change: Livelihoods, Land Disputes, and Anticipation of Future Developments in Rural Kenya,” *European Journal of Development research*, 33(3), 1-25, DOI: 10.1057/s41287-021-00396-y.

GEI (Global Evaluation Initiative), (2022), *Better Evaluation*, Available Online: www.betterevaluation.org, (Accessed on the 15th February 2023).

Gupta M., Bandyopadhyay S., Mahapatro M. and Jha S., (2018), “the Effects of Road infrastructure and Transport and Logistics Services Interventions on Women’s Participation in Informal and Formal Labour Markets in Low and Middle-Income Countries: A Systematic review,” *Campbell Systematic Reviews*, 14(1), 1-57, DOI: 10.1002/CL2.200.

Hall K., (2019), *Children Living Far from School*, University of Cape Town: Children’s Institute.

Hayes A. (2022), *How Stratified Random Sampling Works, with Examples*, Available Online: www.investopedia.com. (accessed on the 9th February 2023).

Hasan M. U., Quium A. S. M. A., Rahman M., Khatum F., Akther S., Haque A., Jahan S., Islam I., Ahmed T. and Shubho Md. T. H., (2022), “A Methodology for Planning and Prioritisation of Rural Roads in Bangladesh,” *Sustainability*, 14(4), 2337, DOI: <https://doi.org/10.3390/su14042337>.

Ibrahim O. (2016), *Types of Roads and Road Components*, [www.researchgate.net], DOI: 10.13140/RG.2.1.1052.3925.

Jaeger E., (2022), *History: Theory of Change*, St. Joseph's University, [www.actknowledge.org].

Jerolleman A., (2020), "Challenges of Post-Disaster Recovery in Rural Areas," In: Laska S.(ed), *Louisiana's Response to Extreme Weather: Extreme Weather and Society*, Springer, Cham, DOI: https://doi.org/10.1007/978-3-030-27205-0_11.

Kaiser N. and Barstow C.K., (2022), "Rural Transportation Infrastructure in Low- and Middle-Income Countries: A Review of Impacts, Implications, and Interventions, *Sustainability*, 14(4), 1404-2149. DOI: <https://doi.org/10.3390/su14042149>.

Kali M., (2020), "Challenges and Prospects of Decentralisation in Lesotho," *International Journal of Humanities, Art and Social Studies (IJHAS)*, 5(2), 11-20.

Kamplan D. S. and Teufel F., (2016), "The Role of Road Networks in Addressing Fragility and Building Resilience," *African Economic Brief*, 7(5), 1-8.

Khanani S.R., Risper S. Adugbila E. J. and Martinez J.A., (2021), "The Impact of Road Infrastructure Development Projects on Local Communities in Peri-Urban Areas: The Case of Kisumu, Kenya and Accra, Ghana," *International Journal of Community Well-Being*, 4, 33-53. DOI: <https://doi.org/10.1007/s42413-020-00077-4>.

Kongolo M., (2020), "Perceived Role of Rural Roads in Supporting and Enhancing Rural and Agricultural Development in Mwanza Region, Tanzania," *Issues in Social Science*, 8(1), 31-49.

Kwarteng C.A., Iyer-Raniga U. and Guillermo A., (2018), "Transport and Accessibility Challenges Facing the Rural People Living Along Feeder Roads in Ghana," *Civil Engineering and Architecture*, 6(5), 257-267.

Lesotho Times (LT), (June 6, 2020), “Government must Prioritise Decentralisation: Rapapa,” *Lesotho Times*, Available online: www.lesothotimes.com, (accessed on the 3rd June 2023).

Letsie M.M. and Grab W.S., (2015), “Assessment of Social Vulnerability to Natural Hazards in the Mountain Kingdom of Lesotho,” *Mountain Research and Development*, 35(2), 115-125, <https://doi.org/10.1659/MRD-JOURNAL-D-14-00087.1>.

Li H., Nielsen J. and Chen R., (2023), “Rural Entrepreneurship Development in Southwest China: A Spatiotemporal Analysis,” *Land*, 12(4), 761, DOI: <https://doi.org/10.3390/land12040761>.

Li M., Zhong R., Zhu S., Ramsay L. C., Li F. and Coyte P.C., (2018), “Access to Community Living Infrastructure and Its Impact on the Establishment of Community-Based Day Care Centres for Seniors in Rural China,” *International Journal of Environmental Research and Public Health*, 15(6), 1184, DOI: 10.3390/ijerph15061184.

Manggat I., Zain R. and Jamaluddin Z., (2018), “The Impact of Infrastructure Development on Rural Communities: A Literature Review,” *International Journal of Academic Research in Business and Social Sciences*, 8(1), 637-648.

Mapcarta, *the Open Map*, Available Online: <http://www.mapcarta.com>, (accessed on the 7th February 2023).

McCombes S., (2019), *Research Design: Types, Methods and Examples*, Available Online: www.scribbr.com, (accessed on the 13th February 2023).

McCombes S. (2019), What is a Case Study? Definition, Examples and Methods, Available Online: www.scribbr.com, (Accessed on the 13th February 2023).

- Mogle D., (2018), *East Texas Tornadoes: Case Study to Help Rural Communities Prepare for and Deal with Disasters*, Tyler Morning Telegraph. Available online: <https://www.cbs19.tv/article/news/east-texas-tornadoes-case-study-to-help-rural-communities-prepare-for-and-deal-with-disasters/501-503997125>.
- Mondal P. (nd), *Social Development: Useful Notes on Social Development*, Available online: www.yourarticlelibrary.com (accessed on the 2nd June 2023).
- Mosia A.P., (2022), *Leaving No Child Behind, Boys' Disengagement from Education: Lesotho Case Study*, UNESCO (United Nations Educational, Scientific and Cultural Organisation), Available in Open Access: <http://www.unesco.org/open.access>, (accessed on the 6th February 2023).
- Mphande A. F., (2016), "Transportation," In: *Infectious Diseases and Rural Livelihoods in Developing Countries*, Singapore: Springer. DOI: https://doi.org/10.1007/978-981-10-0428-5_5.
- Nikolopoulou K., (2022), *What is Purposive Sampling? Definition & Examples*, Available Online: <https://www.scribbr.com/methodology/purposive.sampling>, (accessed on the 10th February 2023).
- 'Nyane H., (2019), "A Critique of the Newly Proposed Model of Decentralisation in Lesotho," *Commonwealth Journal of Local Governance*, 22, 1-21.
- Noyoo N., (2015), "Introduction to the Concepts of Social Development," In: *Development and Social Work: Social Work of the South*, VI, 27-41.
- O'Flynn M. and Moberly C., (2017), *Theory of Change*, INTRAC for Civil Society.
- Parveen H. and Showkat N., (2017), *Content Analysis*, Aligarh Muslim University: e-Pg Pathshala.

Price P.C., Jhangian R. and Chiang I. A., (2020), “Research Ethics: From Moral Principles to Ethics Codes,” *Research Methods in Psychology* (2nd Canadian Edition), BCcampus.

Rahman M., Tabash M. I., Salamzadeh A., Abduli S. and Rahaman S., (2022), “Sampling Techniques (Probability) for Quantitative Social Science Researchers: A Conceptual Guidelines with Examples,” *SEEU Review*, 17(1), 42-51, DOI: 10.2478/seeur-2022-0023.

Rashid H., (2023), *Narrative Analysis in Qualitative Research: Research Methodology*, Available online: www.limbd.org. (accessed on the 5th July 2023)

Rutherford A., (2018), “Reading between the Lines: Narrative Analysis and Social Justice,” *Feminism and Psychology*, 28(4), 550-556.

Roux A., (2019), “A Framework for Assessing the Risks and Impacts of Rural Access Roads to a Changing Climate,” *International Journal of Disaster Risk Reduction*, 38, DOI: <https://doi.org/10.1016/j.ijdrr.2019.101175>.

Sekiwu D, Sempala F. and Naluwemba F., (2020), Investigating the Relationship between School Attendance and Academic Performance in Universal Primary Education: the Case of Uganda,” *African Educational Research Journal*, 8(2), 152-160, DOI: 10.30918/AERJ82.20.017.

Sewell S.J and Desai S.A., (2016), “The Impact of Underdeveloped Roads on the Livelihoods of Rural Women: Case Study of Nyamana Community,” *Review of Social Sciences*, 1(8), 15-29.

Sewella S.J. and Lottering R.T., (2019), “A Comparative Study of Community Perceptions Regarding the Role of Roads as a Poverty Alleviation Strategy in Rural Areas,” *Journal of Rural Studies*, 71, 73-84. DOI: <https://doi.org/10.1016/j.jrurstud.2019.09.001>.

Serrat O., (2017), “Proposition 24: Theories of Change,” *Knowledge Solution*, 237-243, DOI: 10.1007/978-981-10-0983-9_24.

Sileyew J.K., (2019), “Research Design and Methodology,” *Chapter Metrics Overview*, DOI: 10.5772/intechopen.85731, Available Online: www.intechopen.com, (accessed on the 14th February 2023).

Singh S., (2018), *Sampling Techniques*, Available online: <http://www.towardsdatascience.com>. (accessed on the 10th February 2023).

Tanga T.P., Ramakatsa L., Monaheng C., Matobo T. and Abie S., (2014), “the Impact of Improved Road Infrastructure on the Livelihoods of Rural Residents in Lesotho: The Case of Phamong,” *Studies of Tribes and Tribals*, 12(2), 209-218, DOI: 10.1080/0972639X.2014.11886701.

The Center for Theory of Change, (2023), *Try Theory of Change Online: TOC Origins*, Available online: www.theoryofchange.org, (accessed on the 15th February 2023).

Tirth V., Wagale M., Singh A. P., Sarkar K.A., Singh R. K. Algahtani A. and Islam s., (2021), “Investigating the Adverse Impacts of Rural Roads Using a Fuzzy Multicriteria Approach,” *Journal of Civil Engineering and Management*, 27(6), 441-453. DOI: <https://doi.org/10.3846/jcem.2021.15264>.

Ugwu C. N. and Eze Val, H. U., (2023), “Qualitative Research,” *International Digital Organisation for Scientific Research (IDOSR) journal of Computer and Applied Sciences*, 8(1), 20-35.

UNESCO, *Global Education Monitoring Report*, UNESCO Institute for Statistics, Available Online: <http://www.education.estimate.org>, (accessed on the 6th February 2023).

Wang B. Xia L. and Wu A.M., (2022), “Social Development with Public Value: an International Comparison,” *Social Indicators Research*, 162, 909-934.

Winchester M. S. and King B., (2018), Decentralisation, Healthcare Access and Inequality in Mpumalanga, South Africa,” *Health and Place*, 51, 200-207, DOI: <https://doi.org/10.1016/j.healthplace.2018.02.009>.

Workman L.C., (2019), “Ebbs and Flows of Authority: Decentralization, Development and the Hydrosocial Cycle in Lesotho,” *Water*, 11(2), 184. DOI: <https://doi.org/10.3390/w11020184>.

World Animal Net, (2017), “Definition of Social Development,” *Social Change*, [worldanimal.net > module-1 > social change].

World Bank, (2009), *Reshaping Economic Geography: World Development Report*, Washington, DC: World Bank Group.

World Bank, (2023), *Lesotho Overview: Development News, Research, Data*, available online: www.worldbank.org, (accessed on the 18th April 2023).

APPENDICES

APPENDIX 1-INTERVIEW GUIDE

THE NATIONAL UNIVERSITY OF LESOTHO

Department of Development Studies

Informants Interviews

My name is Lineo Pene (200202024). I am a Masters student at the National University of Lesotho (NUL). As it is a requirement from the Department of Development Studies that Master students should carry out a research study, I am carrying out a research entitled: Implications of Lack of Road Networks on Social Development of Rural Communities in Lesotho: Experiences of Mokhokhong Community. It is therefore important to note that, data to be collected during this period is for academic purposes only. Again, it is important to record that this research project can also be disseminated to the wider community through publication in one of the international journals.

Thus, please note that:

- Your input will be reported as a population member opinion and not attributed to you as a person, therefore, your confidentiality is guaranteed.
- If at any stage of the interview, you feel uncomfortable and want to stop, you will be allowed to do so as it is your right.
- You will not be penalized and there is no action that will be taken against you, if you choose not to participate, that is to say, it is your choice to either take part or not or withdraw at any stage of the interview.
- There are no benefits of any form for participating in this research project.

- If there is and/or are questions that you feel not comfortable answering, it is ok to ask me to skip such question(s).

You are not to mention your names or any identifiable information.

Do you have any questions before we start the interview?

If there are no further questions and agree to participate then, let us start the interview.

Thank you for participating. [If allowed, I will then turn on recording device]

Interview Guide for Mokhokhong community Leaders

1. How does lack of road infrastructure affects the community that lives in Mokhokhong?
2. How easy is it to access social facilities such as schools and hospitals?
3. As a leader, is there any action that you took to find help? What did you do? How is the progress? Any challenges?
4. In this place, are there any existing structures within the community that were formed to identify problems and find solutions such as this one of lack of road networks? How does the structure work? Is the society pleased with how it is working? Are there any challenges?
5. Is there any other organisation(s) whether Non-governmental or governmental that you are working with in finding solutions to road infrastructure impacts? What organization(s) is that? How is the progress? Have there been any challenges?
6. As a leader, what interventions do you expect from the government of Lesotho with regard to the social problems that the community is facing due to lack of roads?
7. What do suggest should be done by either the community or the government to help solve the social implication caused by lack of road networks

Interview Guide for Mokhokhong community members

1. Which village do you live at?
2. How does lack of road infrastructure affect you as a member of the community that lives in Mokhokhong?
3. Please explain in details and/or give me examples of occasion(s) which you will never forget that lack of road infrastructure made you suffer the most? Especially with regard to access to schools or hospitals.
4. As a member of the Mokhokhong community, to your knowledge, is there any structure within the community that focuses on finding solutions to problems that the society encounters? If yes, please name the structure. Which problems have they solves that you know of? Based on your opinion, do you think they are doing enough? What are the challenges?
5. As a member/community, have you ever involved any government ministry or department to help find solutions to your problems?
6. What interventions do you expect from the government of Lesotho with regard to the social problems that you are facing due to lack of roads?
7. What do you think should be done to solve the social problems that the community encounters? Any suggestions?

Interview Guide for Focus Group Discussions in Mokhokhong

1. Which village is this?
2. How does lack of road infrastructure affects the community that lives in this area?
3. Please explain societal problems in details, particularly, with regard to access to schools or hospitals.
4. Is there any structure within the community that focuses on finding solutions to problems that the society encounters? If yes, please name the structure. Which problems have they solves that you know of? Based on your opinion, do you think they are doing enough? What are the challenges?
5. As a community, have you ever involved any government ministry or department to help find solutions to your problems?
6. What interventions do you expect from the government of Lesotho with regard to the social problems that you are facing due to lack of roads?
7. What do you think should be done to solve the social problems that the community encounters? Any suggestions?

Interview Guide for Ministry of Local Government and Road Directorate Officials

1. Which Ministry/department is this?
2. As a Ministry or government department, what is your role?
3. How is progress with regard to provision of road infrastructure especially remote rural areas including in Mokhokhong?
4. Do you believe as the ministry or government department, you are performing well in places such as mokhokhong? If no, what are the challenges?
5. What do you think should be done to solve the problems that your ministry/department encounters to ensure efficient performance?
6. Are there any organisations that your ministry/department collaborates with in ensuring that places such as Mokhokhong receive road infrastructure? Which organisations are those? How are your working relations? Any progress on your work? Any challenges?
7. Have you ever involved the Mokhokhong community to find out social problems that they encounter due to lack of road infrastructure? And what mitigation measures do they suggestion either temporary or long term?
8. Do you believe that indigenous knowledge can help in enhancing the policies meant to meet the needs of the rural communities like that of Mokhokhong?
9. What do you think the government can do? Are there any policies that you think the government can implement that can contribute to effective provision of road infrastructure?

Interview Guide for Non-Governmental Organisations Representatives

1. What is the name of the organisation that you are working for?
2. What is its role?
3. How is your organisation working relations with the government of Lesotho through its ministries and/or departments?
4. Do you believe that government of Lesotho through its ministries or institutions that are entrusted to provide rural areas such as Mokhokhong with road infrastructure are performing their duties well to ensure that this place is not facing any social problems? If no, why do you say so? What do you think are the challenges?
5. What do you think should be done to solve the problems that government ministry/department encounters to ensure efficient performance?
6. 2014 decentralisation policy has been suggested as the appropriate intervention measure by the community even government officials, why do you think it has not been implemented since then? What are the main challenges that obstruct its implementation?
7. What do you think the government can do to ensure its implementation because the government institutions especially the local councils are blamed by Mokhokhong community to be performing poorly? What do you think the government can do in order to ensure effective provision of road infrastructure in Mokhokhong?

Once again, thank you for your participation and time that dedicated to help in ensuring that this academic research project is a success.

~ END OF INTERVIEWS ~