

**IMPLICATIONS OF THE COVID-19 PANDEMIC ON SERVICE DELIVERY: A
CASE STUDY OF LEPELLE-NKUMPI LOCAL MUNICIPALITY IN LIMPOPO
PROVINCE IN SOUTH AFRICA**

by

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DECLARATION

I, Makalela Kagiso Innocent, declare that:

- The research titled: Implications of the Covid-19 Pandemic on Service Delivery: A case study of Lepelle-Nkumpi Local Municipality in Limpopo Province in South Africa, is my original research.
- The research report is submitted to the University of Mpumalanga, in fulfilment of the requirements of the degree Doctor of Philosophy in Development Studies. It has not been previously submitted by me for any examination at this or any other University.
- I further declare that I submitted the thesis to originality checking software (TURN-IT-IN) and that it falls within the acceptable requirement for originality.
- This research does not contain other personal information or data, pictures, graphs, or other information unless specifically acknowledged as being sourced from other persons.



Makalela Kagiso Innocent

15/04/2026

Date

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DEDICATION

This thesis is dedicated to:

*My mother, **Sebake Dinah Makalela***

For always standing by my side throughout my academic journey and her unwavering support and consistency in praying for me to complete my study within the specified time constraints.

ACRONYMS AND ABBREVIATIONS

ARIMA	Autoregressive Integrated Moving Average
CDM	Capricorn District Municipality
CS	Community Survey
CWP	Community Work Programme
DDM	District Development Model
DLG	Developmental Local Government
DMA	Disaster Management Act
DMF	Disaster Management Framework
DoH	Department of Health
DPLG	Department of Provincial and Local Government
FGR	Focus Group Respondent
GEAR	Growth Employment and Redistribution
GHS	General Household Survey
HSRC	Human Science Research Council
ICT	Information and Communication Technology
IDP	Integrated Development Plan
KI	Key Informant
KPA	Key Performance Area
LED	Local Economic Development
LGTA	Local Government Transition Act Second Amendment Act
LGTAS	Local Government Turnaround Strategy
LNLM	Lepelle-Nkumpi Local Municipality
MIG	Municipal Infrastructure Grant

MM	Municipal Manager
MTEF	Medium-Term Expenditure Framework
NDLTD	Networked Digital Library of Theses and Dissertations
RDP	Reconstruction and Development Programme
RSA	Republic of South Africa
SANETD	South African National Electronic Theses and Dissertations
SCT	Social Change Theory
SDBIP	Service Delivery Budget and Implementation Plan
SDS	Semantic Differential Scale
SPSS	Statistical Package for the Social Sciences
Stats SA	Statistics South Africa
TCM	Theory of Change Management
UK	United Kingdom
UNDP	United Nations Development Programme
US	United States
VPT	Virtual Project Teams
WHO	World Health Organization
WSA	Water Service Authority

ABSTRACT

This thesis aims to investigate the implications of the Covid-19 pandemic on service delivery within the Lepelle-Nkumpi Local Municipality, located in the Limpopo province of South Africa. Service delivery remains an urgent and pressing issue that impacts municipalities worldwide, and South Africa is no exception. Many local municipalities continue to grapple with persistent and escalating backlogs in service delivery. These challenges manifest in various forms, often characterised by inadequate access to essential services such as clean water, reliable electricity, effective sanitation and efficient refuse removal. Moreover, the unrelenting service delivery challenges underscore the critical need for responsive governance and innovative solutions to enhance the quality of life for residents in these communities. The extensive body of literature indicates that the emergence of the Covid-19 pandemic significantly intensified the existing service delivery challenges across all municipalities.

This research employed a mixed-method approach, utilising a sequential exploratory design, to solicit the perceptions of community members regarding the provision of services. It aimed to uncover the multifaceted challenges of service delivery and assess the profound impact that the Covid-19 pandemic had on service delivery. This research was grounded in the Theory of Social Change and Kurt Lewin's Theory of Change Management, which served as the foundational frameworks for interpreting the findings. The study employed a sequential exploratory design, divided into two distinct phases, each dedicated to specific data collection and analysis processes. The first segment included the quantitative phase, followed by the qualitative phase. The quantitative phase is conceived from the positivist paradigms, whereas the qualitative phase is conceived from constructivism. The semi-structured questionnaire was used to collect quantitative data from 449 households in selected wards in the municipality using the systematic sampling method. The data was analysed using inferential and descriptive statistics. Pearson's chi-squared and coefficient of correlation tests were used to determine the relationship between variables, and subsequently the direction and the magnitude of the relationship between the Covid-19 pandemic and service delivery. The qualitative data were collected from the seven (7) respondents holding different portfolios in the selected ward using a focus group discussion. The purposive sampling was used to collect data from the three (3) municipal officials using one-on-

one interviews. The qualitative data was analysed using thematic analysis, and NVivo 14 software was used to create both the main themes and emerging sub-themes.

The findings highlighted that Lepelle-Nkumpi was significantly overstretched regarding its financial and operational capacity. The municipality struggled to provide essential services effectively, and its engagement methods with the community were severely disrupted due to the onset of the pandemic. This situation has underscored the challenges faced by local authorities in maintaining service delivery and community interaction during a crisis. The adoption of Covid-19 regulations further prevented community gatherings, which made it difficult for communities to hold consultation meetings with the municipality to discuss service delivery issues. Furthermore, this research revealed that there is a significant statistical relationship between Covid-19 and service delivery. The research concludes with the development of a comprehensive and strategic model designed to guide local government planning for service delivery, particularly in the challenging context of crises like the Covid-19 pandemic. The model is aimed at optimising service delivery in the context of crises. Furthermore, it seeks to enhance responsiveness and adaptability, ensuring that services are effectively delivered even in the context of crises.

Keywords: *Constitution, Covid-19, Democratic Local Government, Disaster Management, Implementation, Information and Communication Technology (ICT), Integrated Development Plan (IDP), Leadership, Government, Limpopo, Municipality, Planning, Regulations, Virus.*

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CHAPTER 1: INTRODUCTION

1.1. Introduction

The study's primary focus is to investigate the implications of the Covid-19 pandemic on service delivery in the Lepelle-Nkumpi Local Municipality (LNLN). The coronavirus (Covid-19) pandemic was first identified in China, city of Wuhan at the end of 2019 (Mohan & Nambiar, 2020). The Covid-19 pandemic became an unprecedented and pressing international issue, with many countries reporting a precipitous increase in Covid-19 cases (Herdiana, Mukhlis & Madya, 2020). It has been pragmatically evident that the Covid-19 problem is not exclusively limited to public health, but involves multidimensional aspects, including socio-economic, modes of communication, governance, and institutional systems (World Health Organization, 2020). The responsibility for effectively tackling Covid-19 lies within the amalgamated three spheres of government (Herdiana, Mukhlis & Madya, 2020). Specifically, the local government is no exception to the latter, and it is deemed to play a leading role in tackling Covid-19. The literature states that the "local government is regarded as the sphere of government that maintains close contact with the people" (Mofolo, 2016:231). As a result, the support of the national government in responding effectively to the Covid-19 pandemic became pertinent. Additionally, Chapter 3 of the Constitution references the principles of cooperative governance and intergovernmental relations (RSA, 1996). It promotes coordinated efforts across all spheres of government, as well as ensuring the well-being of citizens. These include the protection of people from incidents of both natural and man-made disasters. Although the national government plays an important role in policy reconfiguration and instruments for the planning and implementation of service delivery targets and budgets.

It is important to realise that local municipalities, on the other hand, are expected to be at the forefront in tackling disasters such as the Covid-19 pandemic (SeyedAlinaghi, Mirzapour, Pashaei, Afzalian, Tantuoyir, Salmani & Dadras, 2023). The considerations in tackling disasters include the following: First, cases of Covid-19 infection differ from one region to another. Therefore, the local municipalities must keep abreast and be aware of the conditions of the spread of Covid-19. Second, they must serve the local communities directly to ensure the need for community services and deal with the Covid-19 pandemic effectively and efficiently using their resources.

Third, the local government knows the characteristics of local communities regarding cultural values, so efforts to tackle Covid-19 in the form of policy instruments can accommodate the character of the community (Apeti, 2021). Consequently, a multiplicity of scholars noted the deleterious impact of Covid-19, leading to institutional and governance changes (Munzhedzi & Phago, 2020; Ika, 2020; Nomani & Parveen, 2020). This is attributed to the fact that countermeasures such as municipal budgets are constraints as part of measures to contain Covid-19, as the budget increases due to the increasing number of infections. This is a problem for municipalities as they have limited public budgets (Herdiana, Mukhlis & Madya, 2020). The Jakarta Minister of Finance echoed the fact that many local municipalities do not have sufficient funds to tackle Covid-19 (Basith & Indrasiti, 2020; Setiaji, 2020). The study conducted by Ika (2020) indicated that the leadership of many municipalities is still not optimal, and there is a perpetual coordination problem between the central government and local government in the effort to deal with Covid-19. Another important point is that the “local government in South Africa is charged with the constitutional responsibility of rebuilding local communities and environments to establish a democratic, integrated, prosperous, and genuinely non-racial society” (Tshabalala, 2024:13). Chapter 7 of the Constitution of the Republic of South Africa (1996:74) mandates the local government to: “provide a democratic and accountable government for local communities, ensure the provision of services to communities in a sustainable manner, promote social and economic development, promote a safe and healthy environment, and encourage the involvement of communities and community organizations in the matters of local government”. However, despite the constitutional prerogative, the Covid-19 pandemic negatively affected the provision of basic services to local communities, municipal communication systems and public participation mechanisms, and that is precisely because of the implementation of the National State of Disaster declaration to curb the spread of the Covid-19 pandemic. This chapter will provide a base within which to explore the research justification, research design, and methodology, and the significance of the study.

1.2. Background of the study

The literature on local government service delivery planning and implementation is extensive. Service delivery planning and implementation are at the core of bringing development to the people (Matloga, Mahole & Nekhavhambe, 2024). Scholars such

as Ouwencamp and Van der Waldt (2024) indicate that the local authorities are essential in enhancing planning and execution at the community level through an integrated development planning approach. However, it is evident that many local municipalities continue to face planning and implementation in planning distress (Munzhedzi & Phago, 2020). Continually, many rural municipalities in provinces such as Limpopo, Mpumalanga and Northwest are still struggling to achieve clean audits (Matlala & Uwizeyimana, 2020). These rural municipalities had difficulties primarily in delivering expected services to communities. “Poor services such as roads, sanitation, water, health facilities, electricity, and basic shelter continue to be a scorching concern (Magagula, Mukonza, Manyaka & Moeti, 2022).” Makalela (2018:1) indicated that “service delivery beneficiaries perceive municipalities as progressing at a slow pace, and service delivery beneficiaries are on the verge of losing hope and trust in local government”. It is precisely for the same reason that many rural municipalities still face a conundrum, particularly in operationalising municipal plans and programmes. That is despite concerted efforts exerted by the national and provincial departments in building a differentiated approach to municipal financing, planning and support (Nowak, 2020).

The White Paper on Local Government (1998) is crucial and clarifies the developmental vision and practices for local government (RSA, 1998). Essentially, the White Paper indicates that developmental local government permits a new approach to planning and implementation with a set of new tools to build on the government’s capacity. Conceptualising the fundamental meaning of developmental local government in South Africa is derived from the policy intended to provide households with infrastructure and services, “the creation of liveable, integrated cities, towns, and rural areas, local economic development, as well as community empowerment and redistribution” (Dlamini & Reddy, 2018). Furthermore, the meaning captured in the White Paper on Local Government (1998) resonates with the terms of the Bill of Rights in the Constitution of the Republic of South Africa of 1996. The effect is to place the local government as the implementing agent for the development mandate in South Africa. The concept of developmental local government emphasises municipalities as agents of change capable of delivering services to communities even in times of crisis, such as the Covid-19 pandemic (Letsoalo, 2020). This thesis contends that disaster

management planning must be integral to local government development to facilitate effective crisis planning, particularly during events like the Covid-19 pandemic.

The inclusion of the disaster management plan in the municipal IDP must not serve as a compliance tool; instead, it must be comprehensively operationalised to help municipalities adequately respond to crises such as the pandemic. Furthermore, scholars such as Munzhedzi and Phago (2020) published an article on “the necessity of a germane developmental local government agenda in South Africa: A post-Covid-19 contemplation”. In their study, it was revealed that the Covid-19 pandemic deleteriously exposed many municipalities as irredeemable, dysfunctional and unable to realise their developmental agendas. This is a result of the fact that many municipalities are still characterised by some upheaval, incidences of skills deficiency and capacity, leadership problems and deficient management. Therefore, it is on that basis that municipal development plans are facing an emerging need to consider the Covid-19 effects and government regulations where adherence needs to be maintained (Munzhedzi, 2020). Scholars such as Dzigbede, Gehl and Willoughby (2020) reiterated the need for effective cooperation between the municipality and communities in responding effectively to the emerging pandemics. That is on the basis that the local government is at the coal face of government response to crises.

1.3. Statement of the research problem

Despite the global and unprecedented health crisis perpetuated by the emergence of the Covid-19 pandemic, many local municipalities continue to be in planning distress, particularly in the implementation of service delivery as conceptualised in the municipal Integrated Development Plans (IDP). Municipal planning distress emanates from various challenges facing municipalities, including inadequate financial capacity, improper targeting and political meddling (Makalela, 2018). Lepelle-Nkumpi Local Municipality is no exception. The municipality is “predominantly rural and characterized by a huge backlog of basic services such as water, electricity, sanitation, and refuse removal” (Lepelle-Nkumpi IDP, 2021/2026). Furthermore, the municipality continues to witness service delivery protests that are often marred by vandalism and unrest (Beyers, 2015). The year 2020 marked the inception of the covid-19 pandemic, although it officially ended in April 2024. Therefore, the pandemic has triggered a series of profound socio-economic and governance challenges that resonate

throughout numerous municipalities across the country. As local government struggle to adapt to the rapidly changing landscape, communities are experiencing unprecedented disruptions to their economies, public health systems and social structures. Furthermore, the effects put some strain on the provision of service to the communities. As Covid-19 continues to spread with devastating consequences on local communities, local government remains at the forefront of combating the outbreak (Mundhedzi & Phago, 2020). Local government disaster preparedness, service delivery, infrastructure and human capital, resource capabilities, and intergovernmental coordination remain key to the Covid-19 response and mitigation strategy. As part of regulations issued under the national state of disaster declaration, “municipalities are required to revise their IDPs and budgets”. The revision is precisely to prioritise programmes and projects aimed at containing the spread of Covid-19 (Nomani & Parveen, 2020). The revised budgets needed to be submitted to the national Cooperative Governance and Traditional Affairs (COGTA) by the end of May 2020. As a result, municipalities experienced significant budget cuts as they have had to reallocate budgets towards Covid-19 countermeasures (Talabis, Babierra, Buhat, Lutero, Quindala & Rabajante, 2021). The budget cuts had a huge bearing on the implementation of municipal programmes and service delivery. On the other hand, the Covid-19 regulations, such as the restrictions on the movement of people, made it impossible for municipalities to convene any public meetings, including IDP forums and public consultation processes (Nel & Lewis, 2022). It is on this basis that this study aims to ascertain the implications of the Covid-19 pandemic on service delivery. This study aims to enhance the ongoing discourse regarding the pivotal role of municipalities in delivering essential services, particularly in the context of crises. By examining the multifaceted challenges and responsibilities faced by local government during times of emergency, the research seeks to illuminate how municipal actions can significantly impact community resilience and service availability.

1.4. Aim and objectives of the study

This section covers the aim and objectives of the study.

1.4.1. Main aim

The thesis aims to investigate the implications of the Covid-19 pandemic on service delivery in the Lepelle-Nkumpi Local Municipality. Its significance lies in advocating for

effective planning and implementation of service delivery in South African local municipalities during crises, such as the Covid-19 pandemic. Drawing from the aim, the objectives of this thesis are listed below.

1.4.2. Specific objectives of the study

The thesis seeks to:

- understand the community's perceptions of service delivery in the municipality;
- examine the challenges of service delivery in the municipality;
- determine the impact of the Covid-19 pandemic on service delivery in the municipality; and
- recommend measures to enhance service delivery during crises such as Covid-19.

1.5. Research questions

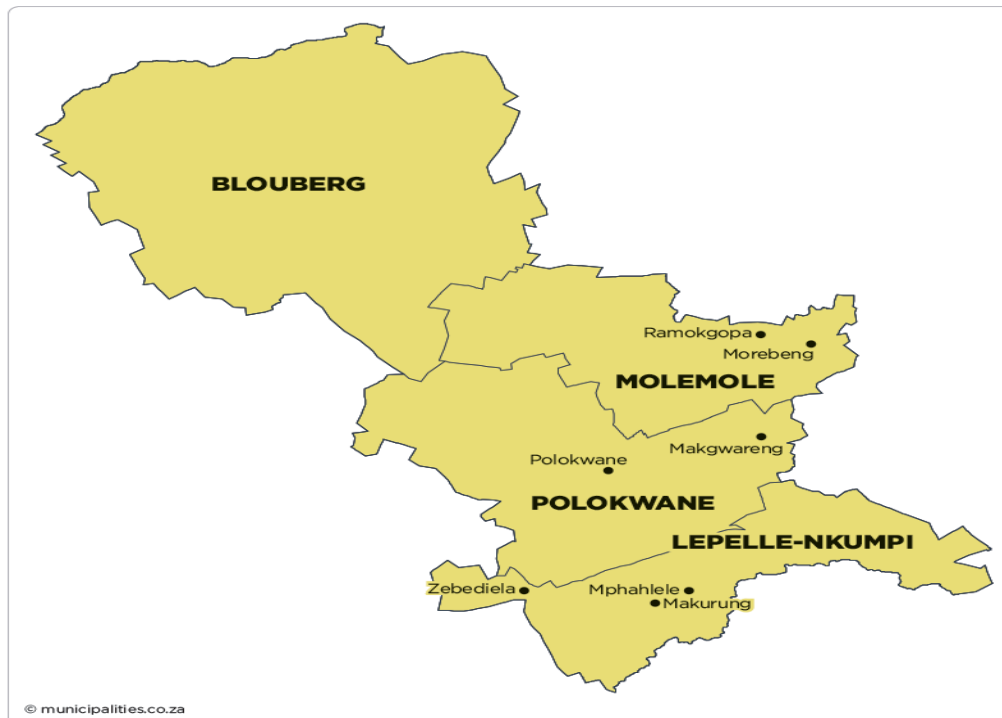
The main research question of this thesis is: "*What are the implications of the Covid-19 pandemic on service delivery in Lepelle-Nkumpi Local Municipality?*" From the main question, specific research questions include:

- What are the community's perceptions of service delivery in the municipality?
- What are the challenges of service delivery in the municipality?
- What is the impact of the Covid-19 pandemic on service delivery in the municipality?
- What can be done to enhance service delivery during crises such as Covid-19 in the municipality?

1.6. Scope of the study

The research project focused on the Lepelle-Nkumpi Local Municipality, located under the Capricorn District Municipality in Limpopo province of South Africa.

Picture: 1.1. Capricorn district map showing Lepelle-Nkumpi Local Municipality



Source: www.lepelle-nkumpi.gov.za.

1.6.1. Limpopo province

This research was conducted in Limpopo province, which is situated in the northern part of South Africa. The province serves as an important gateway, connecting the country to its neighbouring nations, including Zimbabwe, Mozambique and Botswana (Lepelle-Nkumpi IDP, 2021/2026). The province is divided into five district municipalities and 25 local municipalities, and each of the municipalities offers a unique blend of culture and landscape. Limpopo's geographical significance is profound, acting as a bridge between South Africa and other regions in Sub-Saharan Africa. To the south, it shares borders with the provinces of Mpumalanga, Gauteng and North-West, tracing a varied landscape from east to west. Notably, its border with Gauteng not only defines provincial limits but also encompasses the densely populated and economically vibrant Johannesburg-Pretoria axis, reflecting the intricate tapestry of urban and rural life (Capricorn District Municipality IDP, 2021/2026). Furthermore, a comparative study was conducted by Mfumu (2024) on the economic development in the Eastern Cape and Limpopo provinces in South Africa since the advent of democracy. The study revealed that Limpopo province is one of

the poorest provinces, with continued poor levels of service (Mfumu, 2024). In terms of the demographics, “Limpopo province is estimated to be the home of about 5,799,090” (Lepelle-Nkumpi’s IDP, 2021/2026). The total population of Limpopo, as counted in the Census 2022, increased by 1.2 million people from more than a decade ago in the Census 2011 to 2022 (Census, 2022). The reason for the precipitous increase in population in the province includes, among others, the high birth rate simply because the province has a youthful population structure and notwithstanding migration dynamics. The province is divided into five districts, namely: Mopani, Vhembe, Capricorn, Waterberg and Sekhukhune. Most people in the province are reported to speak the Sepedi language (56.0%), followed by Tshivenda (17.1%), and Xitsonga (16.6%). In the province, Christianity is the dominant religion with an affiliated population of 74.1% (Census, 2022). It is important to note that many municipalities across the province experienced an increase in the number of households from 1,418,085 in 2011 to 1,601,083 households in 2016. Most of the municipalities in the province showed an increase in the number of households, except for Blouberg and Makhuduthamaga local municipalities, which recorded a decline. Polokwane local municipality had the highest number of households in 2016 at 239,116 households, followed by Thulamela and Greater Tubatse local municipalities at 125,361 households respectively (Census, 2022).

The South African policy framework aimed to ensure adequate access to basic services by all citizens. This includes the fact that all households are required to have access to safe drinking water, sanitation, refuse removal services, sufficient and affordable clean and safe energy (Ledger, 2021). Generally, South Africa has set a target of achieving access to improved drinking water services for all citizens. Overall, 572,846 households in the province derive access to water from the piped water inside the yard as their main source (Census, 2022). Whereas 253,519 and 210,302 households rely on community stand or pipe (tap) water inside the house, respectively. Other sources of water include boreholes and communal taps, used by 164,706 and 142,680 households, respectively.

In the province, access to basic functional sanitation services is one of the key development priorities. Generally, access to basic sanitation is important because it ensures the wellbeing of communities. According to the Community Survey (2016), a total of 40% of households in Limpopo used pit latrines or toilets without ventilation

pipes as the main type of toilet facility, whereas only 20.8% of households used flush toilets connected to a public sewerage system. Access to safe energy sources in all households is key to achieving sustainable development goals. Many households in the province use electricity as their main source of energy. A total of 84% of all households access electricity through an in-house prepaid meter, 7.5% access electricity through an in-house conventional meter, and 5.6% of households do not have access to electricity. Waste management service delivery, including refuse removal, refuse dumps and solid waste disposal, is one of the most important development priorities in the province. The report from the community survey indicated that 66% of the households in the province use their refuse dumps, while 22% reported that the local authority collects refuse at least once per week. Additionally, 6% of households in the province do not have refuse removal services, and, therefore, they resort to dumping or leaving rubbish anywhere (Census, 2022).

Also, the province boasts an extensive and well-maintained network of roads, railways and air links that facilitate seamless connectivity. Importantly, the N1 route, which runs the entire length of the province from Johannesburg, is the busiest overland corridor in Africa, bustling with vibrant cross-border trade in both raw materials and value-added goods (Makalela, 2018). Additionally, the vibrant port of Durban, recognised as South Africa's busiest maritime gateway, directly services the province, complemented by the strategic importance of the ports of Richards Bay and Maputo, which further enhance its trade capabilities (Wall, 2024). The province excels in tourism activities as one of the pillars of economic growth and development, along with mining and agribusiness. The Limpopo Department of Economic Development, Environment and Tourism has identified the province as a preferred eco-tourism destination. The region is rich in mineral resources, including platinum group metals, iron ore, chromium, diamonds and copper, along with significant reserves of gold (Limpopo Development Plan, n.d.). Mining activities in the province contribute to more than one-fifth of the provincial economy (Department of Trade and Industry (DTI), (n.d.).

1.6.2. Lepelle-Nkumpi Local Municipality

Lepelle-Nkumpi local municipality is a vibrant and predominantly rural municipality situated within the Capricorn District Municipality (CDM) in the Limpopo province of South Africa. The municipality is located approximately 55km south of the city of

Polokwane. Lepelle-Nkumpi offers a unique blend of scenic landscapes and rich cultural heritage (Lepelle-Nkumpi IDP, 2021–2026). The municipality has a population of approximately 233,925, in 61305 households, and an average household size of 3.8. The municipality is divided into 30 wards, which comprise 94 settlements with an average size of 8,000 people (Lepelle-Nkumpi IDP, 2021–2026). Moreover, 95% of the municipal land falls under the jurisdiction of traditional authorities. Lepelle-Nkumpi IDP (2021–2026) indicated that the “municipality covers 345,478 km², which represents 16% of the district’s total land area”. According to the municipality’s IDP for 2021/2026, the municipal budget was compiled in cognizance of the Covid-19 pandemic. The municipality took a deliberate decision, supported by the Evolution of Planning policy in the realm of the municipal environment, to ensure improved access to water, electrification, sanitation and refuse removal services. Also, it committed to ensuring that resource allocation was aimed at spatial integration and economic growth rather than just addressing service delivery backlogs (Lepelle-Nkumpi IDP, 2021/2026). It is important to note that the municipality works closely with the national and provincial governments in planning for unforeseen disasters through the Disaster Management Act 57 of 2000. However, the district municipality serves as the implementing agent through the development of the Disaster Management Framework (DMF). The Act “provides an integrated and coordinated disaster management policy that focuses on preventing or reducing the risk of disasters, mitigating the severity of disasters, emergency preparedness, rapid and effective response to disasters, and post-disaster recovery” (RSA, 2000). The Act allows each municipality to prepare a disaster management plan and further coordinate its implementation with other role players.

1.7. The rationale of the study

The rationale and the motivation to undertake this research study were based on various reasons. Firstly, it was motivated by the fact that the Lepelle-Nkumpi municipality continues to face service delivery challenges that the researcher has been observing and through the articles already published on planning and implementation challenges facing the municipality. The study was then motivated to investigate on a broader scale and to understand how to address the challenges facing the municipality. The study was driven by a compelling need to explore the significant implications of the Covid-19 pandemic on service delivery, recognising a notable gap

in existing literature. This thesis emerges from the absence of comprehensive studies that investigate how crises, particularly the Covid-19 pandemic, have affected service provision within the municipality. By delving into this uncharted territory, the research aims to shed light on the challenges and transformations that have arisen in service delivery as a direct consequence of the pandemic, providing valuable insights for future strategies and policies. The assertion was further substantiated by an extensive search conducted on two prominent digital repositories, namely, the Networked Digital Library of Theses and Dissertations (NDLTD) and the South African National Electronic Theses and Dissertations (SANETD). This inquiry revealed a notable gap in the existing literature, highlighting that the effects of the Covid-19 pandemic on service delivery within South African local municipalities have yet to be explored comprehensively. This study also aims to delve into the intricacies of contemporary municipal governance systems, particularly in relation to crises like the Covid-19 pandemic. It is evident that the pandemic has significantly disrupted municipal planning and implementation, creating unprecedented challenges for local government. This research, therefore, is rooted in the desire to understand and address those challenges. By proposing a comprehensive model designed to enhance service delivery during times of crisis, this study seeks to provide valuable insights and actionable strategies for municipalities navigating similar situations in the future.

1.8. Limitation of the study

Initially, this research did not have funding to undertake this project. However, the researcher later applied for a research support grant from the University of Mpumalanga, which was approved and made funds available to support the data collection of both quantitative and qualitative phases. Because the survey was undertaken before the national government elections, the researcher received a lot of reluctance from the municipality to participate. The build-up activities in preparation for the national elections delayed the data collection process due to the unavailability of certain municipal officials. However, the researcher ended up being able to gather the information from the identified officials for the interview, except for the municipal manager. It is then that the municipal manager delegated KI3 to respond to the interview question on her behalf. One member of the community who was selected to form part of the focus group discussion declined at the last minute. The ward councillor also opened the focus group discussion meeting and left the session to attend to the

pressing community matters. There was also a high level of reluctance from some of the community members to participate, as they kept asking about the financial benefit of taking part in the study.

1.9. Significance of the study

The Covid-19 pandemic, which was a relatively recent phenomenon, has significantly intensified the myriad and unrelenting challenges facing local government. This unprecedented crisis has underscored the vital need for local authorities to adapt and respond to evolving circumstances. To effectively tackle these challenges, it is essential to prioritize the delivery of services to the community beneficiaries. Achieving this goal requires not only meticulous planning but also seamless implementation, ensuring that resources are allocated wisely and that the needs of all constituents are met swiftly and efficiently. It is on that basis that I have developed an interest in this research. The motivation also came from the fact that the researcher wanted to understand the implications of Covid-19 on service delivery by soliciting the perceptions of those who are affected or community members. The study's findings can guide local government in planning and implementing service delivery during the Covid-19 pandemic, serving as a baseline for municipalities across the globe. This thesis seeks to establish a comprehensive framework that integrates local governance systems with disaster response, exemplified by the Covid-19 pandemic, to enhance the planning and execution of essential services. By addressing these issues, the thesis will tackle both the immediate challenges presented by such crises and contribute to the broader discussion on the effectiveness of local government in crisis response. The research seeks to illuminate strategies for improving both the planning and the actual delivery of services in the face of unprecedented challenges like the Covid-19 pandemic. Practically, the knowledge derived from this study will provide valuable insights into enhancing the ability of local municipalities to effectively strategise and execute service delivery amidst the challenges posed by the Covid-19 pandemic. In practical terms, this research serves as a crucial benchmark for municipalities, policymakers, development practitioners and decision-makers, guiding them in the formulation of practical and achievable strategies for planning and implementing service delivery during times of crisis and public health emergencies. These strategies can be used to infuse local government planning. Additionally, the

results will be shared among various municipalities within CDM, with the expectation that the significant challenges of service delivery can be reduced.

1.10. Definitions of concepts

To clarify, the following definitions of key terms are provided, as their meanings may differ when applied in different contexts or by various disciplines.

Covid-19 pandemic

Coronavirus disease (Covid-19) is an infectious disease. Kassa (2023:1) describes Covid-19 as “a highly contagious respiratory disease caused by the SARS-CoV-2 virus”. SARS-CoV-2 is believed to spread from person to person through droplets released when an infected individual coughs, sneezes or talks (Kassa, 2023). The most common signs and symptoms of Covid-19 are fever, cough and trouble breathing (Lone & Ahmad, 2020). The Covid-19 pandemic disrupted and halted service delivery in almost all South African municipalities.

Service delivery

Service delivery encompasses “the systematic provision of services by government bodies and public entities” (Kanyane, 2010). Service delivery also includes a range of social initiatives designed to uplift communities. These initiatives aim to enhance the quality of life and empower individuals, ultimately fostering sustainable livelihoods and facilitating prosperity within communities. Effective service delivery plays a crucial role in driving social progress and economic resilience (Yende, 2023). Examples of service delivery in this research include municipal services such as water and sanitation, electricity and refuse removal.

Planning

Planning is the process of deciding in advance what is to be done, who is to do it, and how it is to be done, and when it is to be done (Dale, 2005). Planning in the context of this research would mean “the ability of the local municipalities to discharge their constitutional responsibilities to develop strategies to deliver services to the rural communities” (McKenzie, 2023).

Disaster

Disaster may be referred to as sudden or unexpected misfortunes (Furedi, 2007). They often result in disruptions and damage to property and physical infrastructures. In the context of this study, disaster refers to the Covid-19 pandemic. The pandemic disrupted the normal day-to-day ways of doing things. The pandemic deleteriously affected the delivery of services by the municipalities.

1.11. Thesis layout

This thesis is divided into six (6) chapters, and each chapter is constituted as follows:

Chapter 1: Introduction

Chapter one provides the general orientation of the study. The chapter provides the background of the study, the problem statement, the aim and objectives, the rationale, and the significance of the study.

Chapter 2: Literature review, theoretical and conceptual framework

This chapter provides a comprehensive review of the literature on the Covid-19 pandemic and service delivery. The chapter also discusses the relevant theories that guide this research as well as the conceptual framework.

Chapter 3: Covid-19 pandemic and service delivery in the South African context

This chapter provides an overview of the Covid-19 pandemic and service delivery in the context of South Africa. The chapter presents the South African government's response to the pandemic.

Chapter 4: Research design and methodology

This chapter provides a detailed research methodology used in operationalising this research. This research followed a mixed-method approach, and a sequential exploratory design was used to systematically integrate both the quantitative and qualitative research findings. The research design, methods of collection, analysis and sampling techniques for both quantitative and qualitative approaches are explained in detail. The chapter concludes with the presentation of data control management and ethical considerations.

Chapter 5: Findings and analysis

This chapter provides a comprehensive discussion on the findings and analysis of the results for the quantitative and qualitative phases. The chapter concludes with the integration of findings for quantitative and qualitative research.

Chapter 6: Conclusion and recommendations

This chapter presents the conclusion and recommendations. The chapter culminates in a thorough discussion of a framework designed to enhance service delivery, particularly in the context of crises such as the Covid-19 pandemic.

1.12. Conclusion

In conclusion, planning and implementation of service delivery is a complex issue affecting local government. The planning and implementation of service delivery is not immune to the effects of non-social environments, such as disasters, such as the Covid-19 pandemic. It can further be deduced that the pandemic had a deleterious impact on the provision of services by the municipality. The above section provided the introduction and background of the study, followed by the statement of the research problem, which provided the rationale for undertaking this research. The statement of the research problem provides a reason for why this research must be conducted, an identification of the gap of knowledge and how it will be addressed. The research questions were outlined together with a summary of the research aim and objectives. The conceptual clarification of concepts has been provided for ease of reference and for a better understanding of the use of concepts in the study. A synopsis of the literature review was conducted to provide insights and an overview of Limpopo province, and a subsequent discussion on Lepelle-Nkumpi municipality as the unit of analysis for this research. An outline of the significance of the study and its contribution to the knowledge base was provided.

The next chapter provides a conceptual and theoretical review of the literature related to the study.

CHAPTER 2: LITERATURE REVIEW, CONCEPTUAL AND THEORETICAL FRAMEWORK

2.1. Introduction

The previous chapter provided an introduction and background to the research. It also outlined the rationale and justification for the study. Additionally, the chapter detailed the research justification, which included the aim and objectives of the research, a statement of the research problem, and the significance of the study. This chapter is dedicated to a comprehensive literature review. The primary objective of this chapter is to critically examine the existing body of literature on the Covid-19 pandemic and its implications for service delivery in the context of local government. This focuses on the discourse concerning local government in South Africa, as well as exploring pertinent themes such as the developmental role of local government, the integrated strategies for planning and implementation of service delivery, and the concept of developmental local governance. Moreover, it aims to provide a nuanced understanding of how the pandemic has shaped and transformed service delivery frameworks at the municipal level. In summation, the review of literature on the implications of the Covid-19 pandemic and service delivery in South Africa forms an integral part of the literature review that leads to the conceptual framework and conclusion of the chapter.

2.2. The Covid-19 pandemic and its implications in rural communities

The development literature indicated that “the Covid-19 pandemic has infected millions of people around the world and caused over 6 million deaths” (Gupta, Nguyen, Raman, Lee, Lozano-Rojas, Bento & Wing, 2021). The World Health Organization (WHO) predicts that “the overall burden of Covid-19 remains uncertain, and the regulation of socioeconomic conditions after the pandemic is still not clear” (WHO, 2021). Countries around the world have undertaken a wide range of strategies to halt the deleterious impact of Covid-19 and control economic fallouts left in its wake. Continually, many rural areas of developing countries pose difficulties in developing and implementing effective responses to the pandemic (Dutta & Fischer, 2021). Their difficulties are precisely due to several factors that include, *inter alia*, dilapidated and underdeveloped health infrastructure, uneven state capacity for infection control, and unrelenting poverty. It is pervasive that the detrimental effect of Covid-19 on health and mortality, and widespread social and economic disruptions continue to have far-reaching

impacts on wellbeing, particularly in rural communities across the globe (Van Bavel, Baicker, Boggio, Capraro, Cichocka, Cikara & Drury, 2020; Sumner, Holy & Ortiz-Juarez, 2020; Sibley, Greaves, Satherley, Wilson, Overall, Lee & Houkamau, 2020). Nonetheless, it has been established that many rural institutions are viewed as having a potential role to play in rural poverty alleviation and sustainable development (Zondo, 2020). Hence, a need for the enforcement of local institutions in rural areas and capacity building as fundamental elements of strategies for rural poverty alleviation is necessary. The spread of Covid-19 in 2020 was fast and dramatic. With the high death toll experienced by various countries around the world, it is clear that the pandemic had a tremendous impact on the general economy and local communities, particularly rural areas (Zondo, 2020).

Most of the studies conducted on the socioeconomic impacts of the pandemic focus on the central government level, with only a few on the sub-national level. Maher, Hoang and Hindery (2020) argue that from the perspective of local public entities responsible for service provision, this pandemic resulted in unprecedented and fragmented planning in rural areas. Scholars such as Workie, Mackolil, Nyika and Ramadas (2020) reiterated that the effects of Covid-19 are prevalent in the disruption of rural production systems such as crops, livestock and fisheries. Scholars such as Shafi, Liu, Jian, Rahman and Chen (2021:2) state that “the disease preventive measures significantly put pressure on food supply chains worldwide, resulting in a temporary shortage of food supply and a rise in costs”. On the one hand, “the social distancing measures helped control the spread of disease”; however, they disturbed normal life and increased psychological and socioeconomic pressure among local people (Shafi, Liu, Jian, Rahman & Chen, 2021). There is also compelling and pragmatic evidence by scholars and practitioners alike that recognises local municipalities as the solution to the developmental challenges facing rural communities. The challenges include, but are not limited to poverty, unemployment and inequality (Helalo, 2015; Khalil-Babatunde, 2014; Munzhedzi & Makwembere, 2019). The Covid-19 guidelines and regulations as gazetted by the Nation’s State of Disaster also contributed immensely to rural fragmentation and frustrations. Due to unprecedented measures taken to contain the spread of disease, such as isolating individuals and implementing lockdowns, local communities experienced heightened tensions from wage and employment losses, increased expenses and challenges to

business survival (Qiu, Shen, Zhao, Wang, Xie & Xu, 2020; El-Zoghby, Soltan & Salama, 2020; Shafi, Liu, Jian, Rahman & Chen, 2021). “Due to the rapid increase in the number of new cases, Covid-19 created panic, anxiety, income, and expenditure pressures, leading to a psychological and socioeconomic imbalance in many rural communities” (Zhang & Ma, 2020). It is evident that “many businesses were closed wholly or partially during the initial outbreak period” (Shafi, Liu, Jian, Rahman & Chen, 2021:8). Furthermore, they stated that “rural economies often strive for financial stability, and in times of highly uncertain and unpredictable situations such as the Covid-19 pandemic, rural communities are highly vulnerable, mainly due to loss of income and employment” (Shafi, Liu, Jian, Rahman & Chen, 2021:8). On the other hand, “the World Bank also pointed out that local households face the challenge of losing income and employment, leading to financial stress” (Asia, 2020; Phillipson, Gorton, Turner, Shucksmith, Aitken-McDermott, Areal & Monteiro, 2020).

Shafi, Liu, Jian, Rahman and Chen (2021) highlighted that “the pandemic has significantly affected local people psychologically, leading to socioeconomic vulnerability”. Many rural households experienced a loss in household income because of the pandemic. Similarly, scholars such as Asia (2020) stated that “the impact of the recent outbreak of Covid-19 on health, society, and the economy is far-reaching, significant, and devastating”. In comparison with other natural disasters, and past crises such as foot and mouth disease outbreaks. Various scholars also argued that “Covid-19 is unique in its predictability and impact on society; additionally, poor households, especially in rural areas, have been adversely affected to a greater extent” (Shafi, Liu & Ren, 2020; Phillipson, Gorton, Turner, Shucksmith, Aitken-McDermott, Areal & Shortall, 2020). The effects of Covid-19 are not beyond crops, livestock and fisheries. Shafi, Liu, Jian, Rahman and Chen (2021:2) stated that “the disease preventive measures significantly disrupted food supply chains worldwide, resulting in a temporary shortage of food supply and a rise in costs”. For example, “in the case of rural communities, most people are involved in small business activities such as the production of crafts, small vending shops, small restaurants, and tourism” (Ali, Ahmed & Hassan, 2021:8). Research indicates that in times of unpredictable crises, such as the Covid-19 pandemic, rural communities often face greater hardships. Their limited access to resources and healthcare can significantly increase the difficulty for them in navigating the challenges and recovering effectively from such

events (Phillipson, Gorton, Turner, Shucksmith, Aitken-McDermott, Areal & Shortall, 2020). The literature on previous outbreaks suggests that pandemics, “such as foot-and-mouth disease, also had a significant impact on rural economies” (Asnakew, Amha & Kassew, 2021; Adunlin, Murphy & Manis, 2021). The same goes for the Covid-19 pandemic, which not only affected rural economies but also disrupted the municipal operations, leading to perpetual and continued service delivery backlogs.

2.3. The socioeconomic impact of the Covid-19 pandemic

The Covid-19 pandemic was first discovered in China and later spread across all other countries. It then created an impression that it was purely attributed to the deleterious impact on the health of people all over the world. However, it transcends beyond health and affects and shocks the country's economy globally (Islam, Jannat, Rafi & Aruga, 2020). For example, in the data released by Worldometers on 10 November 2020, a total of 218 countries were affected by the pandemic, with a total of 51,407,774 cases, including active and inactive cases, 1,271,853 deaths, and a total of 36,199,396 patients who recovered. Furthermore, the reasons for the effects on these countries lie in a combination of factors such as biological and socio-economic conditions that allowed the pandemic to bypass their traditional containment strategies. However, comparing Covid-19 to other previous crises, the Covid-19 pandemic was more severe and complex as it had a profound impact on society in the world, as there are enormous social and economic problems at all levels. According to the study by Gorain, Choudhury, Molugulu, Athawale and Kesharwani (2020), Covid-19 became the largest economic pandemic in human history after the Spanish Flu from 1918 to 1919. From the economists' view, this pandemic is the crisis that has had the most impact on the country's economy since the economic crisis that happened in the year 1929, known as The Great Depression (Siddiqui, 2020). The study conducted by Katris (2021) about unemployment and the Covid-19 impact on Greece using a Vector Auto Regression (VAR) found that the Covid-19 case had an impact on the overall unemployment rate in EU27 countries. The shock from Covid-19 cases in Greece had smaller impacts on all kinds of unemployment. The result also shows that the impact of Covid-19 on unemployment in Greece is lower compared to the EU27 countries. With regard to forecasting, the researcher suggests that VAR models can be used to understand the impact of the shocks, and Autoregressive Integrated Moving Average (ARIMA) models in forecasting. The study by Chi-Wei Su, Kedai, Sana Ullah, and

Zubaria Andlib (2021) about the Covid-19 pandemic and unemployment dynamics in European economies concluded that Germany, the United Kingdom (UK), and Spain have a positive relationship in unemployment because of Covid-19. The final results show that Covid-19 cases caused unemployment in Germany, the UK and Italy, while Covid-19 deaths caused unemployment in Italy and the UK. It highlights that most European countries in the study had increased unemployment rates due to the pandemic. Lai, Khan, Thaljaoui, Chammam and Abbas (2021) were interested in researching the impact of Covid-19 on the unemployment rates of developed and developing countries of Asia and found that the unemployment rate is three times higher in developing countries compared to developed Asian countries. It affects the country itself, and they need more time to address the implications of Covid-19.

Researchers such as Blustein, Duffy, Ferreira, Cohen-Scali, Cinamon and Allan (2020) conducted a study on “Unemployment in the time of Covid-19: A research agenda”. The study revealed that in the face of the impact of the Covid-19 crisis and unemployment, it has been highlighted that the youth population was already vulnerable within the workforce before the crisis. The Covid-19 pandemic perpetuated massive job losses, and the growing precarity of work is having particularly painful impacts on young people across the globe. The Covid-19 economic crisis, with vast increases in unemployment (and competition between workers) and the probable growth of digitalisation, may result in a major dislocation of young workers from the labour market for some time (Cavallieri, 2021). Gangopadhyaya and Garrett (2020:1) stated that “the sharp reduction in US economic activity associated with public health efforts to slow the spread of the Covid-19 virus is likely to result in millions of Americans losing their jobs and livelihoods, at least temporarily”. The Covid-19 crisis has fundamentally shattered the illusion of security at work, which is now reeling with unprecedented job losses (International Labor Organization, 2020). During this Covid-19 crisis, massive unemployment has become the defining feature of work, with millions of individuals and families now cast into a world of uncertainty and precariousness (International Labor Organization, 2020). Because work is connected to survival in many societies, the loss of employment opportunities represents a source of existential fear that complements and compounds the intense anxieties about painful and premature death. Smith, Edwards and Duong, (2021), in their study, revealed a steep decline in employment opportunities as the Covid-19 pandemic

brought the economic expansion to a sudden halt, taking a tremendous toll on the labour market. For example, in the US, the unemployment rate increased in 2020, surging to 13% in the second quarter of the year before easing to 6.7% in the fourth quarter (Smith, Edwards & Duong, 2021). Still, a decade-long economic expansion ended early in 2020 because of the Covid-19 pandemic, and efforts to contain it led businesses to suspend operations or close, resulting in a record number of temporary layoffs. This goes to show the magnitude of the impact perpetuated by the Covid-19 pandemic in the recent dictum.

2.4. Local government changes in communication mechanisms during the pandemic

The advent of the Covid-19 pandemic forced municipalities to pragmatically re-think and re-design their governance practices to manage uncertainties (Sharma, Luthra, Joshi & Kumar, 2022). According to Kilby and McWhirter (2022), “the Covid-19 shock has had a serious and lasting negative impact on organizations”. Due to the Covid-19 crisis, many organisations were confronted with a set of challenges in terms of organisational capability, provision of critical infrastructure, supply chains and healthcare services, and that was due to the unpalatable Covid-19 regulations and protocols (Durugbo, Almahamid, Budalamah, Al-Jayyousi & BendiMerad, 2022). To this end, the Covid-19 regulations have meant that, among others, the communication codes had to change. The change includes prohibitions in interpersonal communications both internally and externally, leading to reshaped communication habits, meetings, interviews and corporate routines (Serttas, 2021). Covid-19 resulted in a communication shift and, *inter alia*, one of the developments that the pandemic made imperative was to minimize face-to-face communication, and that had a bearing on the efficacy of the public sector. Serttas (2021), Jarman, Rozenblum & Wismar (2020), stated that during the Covid-19 pandemic, face-to-face meetings and public spaces were abandoned. For example, private spaces, specifically homes, have been transformed into offices, necessitating the adaptation of office life to home conditions. This shift resulted in a heightened reliance on computer-mediated communication. According to Petrič, Petrovčič and Vehovar (2011), the dominance of technology in communication has diminished gestures in interpersonal interactions.

Ataguba and Ataguba (2020:3) stated that “effective communication became an essential tool in the country's strategy to combat Covid-19”. The emphasis was on

promoting behavioural changes by showcasing simple daily preventive measures to help stop the spread of the virus. In the face of the overwhelming amount of information available to the public at the beginning of the pandemic, government communication aimed to provide clear and concise updates to keep South Africans informed about the latest developments (Mohd Hanafiah, Ng & Wan, 2021). The government was one of the most trusted sources of information regarding Covid-19 (Azar et al., 2020). Early evidence from South Africa indicates that individuals who are already socioeconomically disadvantaged have been disproportionately affected by the economic and social consequences of the pandemic (Arndt, Davies, Gabriel, Harris, Makrelov, Modise & Anderson, 2020; Mulholland & Sinha, 2020; Labuschaigne, 2020).

Before the onset of the Covid-19 pandemic, the government had developed a comprehensive communications strategy aimed at effectively managing disasters. This well-organised strategy facilitated collaboration among multiple government departments and the Government Communication and Information Service (GCIS). It was strategically deployed to ensure a coordinated and efficient national response to the emerging crisis posed by the virus, ensuring that accurate information was disseminated and that resources were allocated effectively across the country. The GCIS was tasked with “ensuring the coherence of the communications strategy from the national level to provincial, district, municipal, local, and rural levels” (Mohd Hanafiah, Ng & Wan, 2021). In the main, the government's dissemination emphasised the importance of staying at home and wearing a mask. For example, in South Africa, the president, as the head of state, was trusted to lead the nation during the pandemic. On the other hand, health experts, followed by the government, were identified as the most reliable sources of information and were recognised to contribute to efforts to curb the spread of the pandemic across communities. However, compliance with guidelines and regulations also showed a varied picture (Shafi, Liu, Jian, Rahman & Chen, 2021). It can be deduced that the disruptions in terms of the traditional communication mechanism used by the municipality contributed immensely to the service delivery challenges. Furthermore, the promulgated government regulations also served as impediments to the ability of municipalities to deliver services during the pandemic.

2.5. Information and Communication Technology (ICT) as a mechanism for service delivery in local government

The Covid-19 pandemic brought the insurmountable need to transform the future of local government in line with contemporary governance dictum. The implementation of the Covid-19 protocols and regulations necessitated the need for local government across the globe to plan and implement service delivery through Information and Communication Technology (ICT). For example, a study conducted in the Philippines by Torrentira (2020:64) revealed that “Covid-19 regulations such as lockdowns, social distancing, and community quarantines contributed deleteriously to the effective involvement of communities in local government matters across the globe”. During the pandemic, the minimised mobility of people resulted in a lack of community engagement. Moreover, the Covid-19 pandemic detrimentally affected all the municipal activities that depend on face-to-face communication (Pantić, Cilliers, Cimadomo, Montaña, Olufemi, Torres & Van den Berg, 2021). This includes participation processes in affairs of local government.

Another study that was conducted by Agullah and Eyikorogha (2021) on maximising e-governance and Covid-19 revealed that as the Covid-19 pandemic forced lockdowns, most countries in the world, including Nigeria and many municipalities, had to pursue digital government strategies, many with innovative initiatives. Forcing many municipalities to shift to e-governance to keep up with their planning and implementation targets. Many governments around the world have gradually turned to information technologies (IT) to keep up with today's demands. Historically, many governments in this sphere have only been reactive, but recently there has been a more proactive approach to developing comparable services, such as e-commerce and e-business (Bhuvana & Vasantha, 2021). To demonstrate their commitment, readiness and seriousness in joining the knowledge age, governments at different levels in Africa are taking the initiative to drive the ICT revolution in the public service and society in general. It is important to note that the inculcation of ICT in governance shapes the future of local government (Armstrong, Gandhi & Lanjekar, 2012). It is successfully developed and utilised effectively in developed countries like the United Kingdom, the United States of America and China; however, using government services through ICT in South Africa is still far from being unobtrusive. In South Africa, for example, Covid-19 disrupted face-to-face communication and that had a bearing

on the efficacy of the public sector. In many organisations, communication channels such as Zoom, Virtual Project Teams (VPT) and Webex were to be effectively used to improve service delivery (Serttas, 2021; Jarman, Rozenblum & Wismar, 2020). Given the current state of the country, coupled with unprecedented challenges of electricity blackouts and load-shading, it has become difficult to fathom effective communication (Petric, Petrovcic, and Vehovar, 2011). Therefore, it is the task of the organizational managers to maintain uninterrupted communication, determining strategies to prevent digital communication channels such as mail, ZOOM meetings, Microsoft Teams, and WhatsApp groups from turning into message confusion (Serttas, 2021). The multiplicity of literature demonstrates that Covid-19 contributed deleteriously to the communication breakdown (Petric, Petrovcic, and Vehovar, 2011; Jarman, Rozenblum, & Wismar, 2020; Serttas, 2021). Many municipalities were caught wanting, precisely because the existing communication mechanisms were disrupted, leaving communities in a quandary. Under those circumstances, face-to-face communication had to be abandoned as part of Covid regulations, and that had a bearing on the efficacy of the public sector. Scholars such as Lee, Malcein and Kim (2021) lamented that ICT plays an important role in helping people adapt to restrictions on in-person gatherings. Many organisations in the public, private and philanthropic sectors have developed messaging and outreach programmes to specifically promote social connections and reduce loneliness via emails, websites or smartphone applications. ICT serves as a communication channel and social interaction media between sources of information and receivers. However, the use of ICT can also be problematic. Among children and university students, excessive screen time and limited outdoor activities during the pandemic have potentially worrisome outcomes for myopia (Wong, Tsai, Jonas, Ohno-Matsui, Chen, Ang & Ting, 2021), sedentary behaviours causing disrupted sleep routines and reduced physical activity (Romero-Blanco, Rodríguez-Almagro, Onieva-Zafra, Parra-Fernández, Prado-Laguna & Hernández-Martínez (2020).

2.6. The Government Responses to the Covid-19 Pandemic: Regional Experiences

The pivotal role of government in global health emergencies like the Covid-19 pandemic cannot be downplayed. The government is the primary responder, strategic planner, policy maker, peace and order keeper, financier, provider, and programme implementer, among others. In a nutshell, the government must play a leading role

during crises. Failure in government response to any pandemic can result in uncontrolled infection spread, deaths, economic collapse, social unrest, hunger, violence and other crises that may lead to the collapse of the same government that has sworn to protect and defend its people from harm (World Emergency Covid19 Pandemic Ethics Committee, 2020). However, the Covid-19 pandemic has revealed problems in resiliency, crisis preparedness, leadership and management of governments worldwide. It exposed the growing disparity between the state and the people, as seen in mass defiance of state policies and protocols in response to the pandemic around the world. The pandemic not only revealed some striking failures of leadership and policymaking in some states, resulting in more deaths and high infection rates, but also excellence in management by some state leaders. Therefore, it has been highlighted that the efficacy of different governments in managing the Covid-19 pandemic was optimised by the adoption of a comprehensive approach that involves both the government and society in dealing effectively with the pandemic (Hong, 2024). The latter was achieved by “seeking scientific expertise, engaging health professionals”, including community leaders, and involving vulnerable and marginalised populations. The strategy required coordinated efforts between national and subnational governments.

Therefore, the section below focuses on the regional response to the Covid-19 pandemic across different regions, such as Africa, Europe, North America and South America. The regions were purposely selected because the Covid-19 pandemic was widely spread in these regions and affected many local government worldwide.

2.6.1. Covid-19 pandemic: African Region

January 2020 marked the emergence of the novel coronavirus disease (Covid-19), which became prevalent and spread from Wuhan to Hubei province and the rest of China, eventually spreading globally within a short period (Gao & Yu, 2020). The government of Wuhan initially reported 37,198 confirmed cases and 811 deaths in China, and cases increased daily. As a result, the “Emergency Committee of the World Health Organization (WHO) declared the Covid-19 pandemic an outbreak and public health emergency” (Chapungu, Dube & Chikodzi, 2023:60). Scholars such as Bwire, Ario, Eyu, Ocom, Wamala, Kusi and Talisuna (2022) conducted a study on the “Covid-19 pandemic in the African context”. The scholars predicted the worst scenario to

occur in the African region regarding the government's response to the pandemic. This is because “Africa is the least developed of the continents in terms of the human development index, lagged behind others in the achievement of the United Nations sustainable development goals (SDGs), has inadequate resources for the provision of social services, and has many fragile states” (Puplampu, Hanson & Arthur, 2023: 103). Simply put, it is predicted that those in low- and middle-income countries such as Africa would be the most negatively affected by the pandemic. Countries across sub-Saharan Africa have implemented variable control strategies to combat the pandemic; however, despite the continent being among the least affected in terms of direct case burden, morbidity and mortality, it has experienced marked socioeconomic disruption (Murewanhema & Dzinamarira, 2022). The pandemic disrupted the socioeconomic aspects of the many people living on the African continent. The Covid-19 pandemic has not only affected the lives of millions of families on the continent but also disrupted the pace of economic and social development, resulting in incalculable economic and social losses. Therefore, it necessitated the implementation of various control measures to combat the spread, morbidity and mortality of the disease by different countries (Murewanhema & Dzinamarira, 2022). In response to curbing the spread of the pandemic, the governments of different countries in the regions had to plan quickly in a relatively short period to effectively coordinate and manage the pandemic. Scholars such as Nduhura, Tshombe, Molokwane, Twinomuhwezi & Nuwagaba (2021) stated that “many African countries, such as Zimbabwe, Zambia and South Africa, have experienced a wave of the pandemic from its inception, driven by service delivery destructions in many local government”. The wave of the pandemic contributed to increased mortality and demand for healthcare services. These included admission space, high-dependency and intensive care, personal protective equipment and healthcare personnel (Bwire, Ario, Eyu, Ocom, Wamala, Kusi & Talisuna, 2022).

According to Kassegn (2021:32) African countries’ government’s failure to respond adequately to the pandemic is attributed to the fact that the “majority of the countries’ health systems are heavily dependent on donor aid and are ill-equipped and under-resourced”. The latter serves as an impediment, making it difficult for the government to deal decisively with the raging pandemic (Dzinamarira, Dzobo & Chitungo, 2020). Moreover, many countries in the region continue to experience a lack of support mechanisms such as intensive care infrastructure, ventilators, and financial resources

to bankroll the fight against the Covid-19 pandemic (Dzinamarira, Dzobo & Chitungo, 2020). However, “there is some cause for optimism, for example, in West Africa, infrastructure like diagnostic testing facilities, intensive care units, surveillance, and systems for reporting emergencies used during the Ebola Virus Disease (EVD) outbreak of 2013–2016 can be leveraged to fight the Covid-19 pandemic” (Dzinamarira, Dzobo & Chitungo, 2020:1). On the other hand, continental bodies like the Africa Centres for Disease Control and global development partners have improved the capacity of the continent to handle the pandemic.

As part of Africa’s response to the Covid-19 pandemic, many African countries implemented various mechanisms to curb the spread of the pandemic. For example, Kassegn (2021:32) stated that “countries introduced airport screening and adopted mitigation efforts such as hand washing, social distancing, and stay-at-home lockdown measures”. These countermeasures played an important role in ensuring a low rate of transmission in the continent. Scholars such as Senghore, Savi, Gnanngnon, Hanage and Okeke (2020) revealed that these measures were found to be unsustainable because of the socioeconomic dynamics in most African states. Due to the development challenges facing many African countries, “the introduction of lockdowns as a strategy to curb the spread of the pandemic exacerbated the challenges” (Dube, Nhamo & Swart, 2023:202). Many economies in the African continent largely depend on people relying on hand-to-mouth, and the introduction of Covid-19 measures, such as “lockdown, affected the majority of livelihoods as their capacity to earn a living was eroded”. The effectiveness of the government’s pandemic response relies mostly on the adequate provision of water and sanitation infrastructure (Muridzi, Meyer & Masengu, 2021). However, many African countries are still without adequate infrastructure to support basic hygiene, and other countries continue to experience limited potable clean water. The lack of adequate water provision perpetuated a slow response to the pandemic by many African countries. Additionally, it became difficult for many African countries to effectively manage the spread of the pandemic because of inadequate surveillance and laboratory capacity to perform testing coupled with limited fiscal support to acquire testing or build the diagnostic capacity necessary to decentralise testing (Nkengasong & Mankoula, 2020; Gilbert, Pullano, Pinotti, Valdano, Poletto, Boëlle & Colizza, 2020). Moreover, the health system in many of the countries in the region was not adequately equipped to handle the pandemic and could

not provide the required testing facilities to its citizens and the containment measures were not sufficient to slow down the community transmission in the early stages (Biswas, Afiaz & 2020; Islam, Talukder, Siddiqui & Islam 2020; Monjur & Hassan, 2020; Rahman, Chisty, Alam, Sakib, Quader, Shobuj & Rahman, 2022).

E-governance was found to be a panacea for governments across countries in the region to keep up with their service delivery commitments during the pandemic. For example, scholars such as Muridzi, Meyer and Masengu (2021) conducted a study on Urban Governance in Africa: A Perspective of E-Governance in South Africa Urban Municipalities. The study indicated that the use of e-governance was found to be an effective approach in management during crises. Most local authorities have adopted the use of e-governance for service provision (Batara, 2017). The global Covid-19 pandemic has reinvigorated the role of e-government in urban municipalities. The utilisation of conventional e-governance services is becoming more widespread as social distancing drives online interaction. E-government platforms provide an opportunity for innovation and development within local authorities (United Nations, 2020). The adoption of e-governance has shown a significant growth worldwide. Scholars such as Batara (2017) have argued that local government need to keep up with e-governance practices and development to satisfy the imperatives of good governance. However, online local government services and internal process streamlining have helped governments and municipalities contain and even cut costs. The squeezing of public budgets due to reduced tax revenues has remained a huge challenge for local administrators (Scholl, Jurisch, Scholl & Krcmar, 2014). Local government have been forced to establish ways to overcome the effects of budget trimming while at the same time meeting the ever-higher expectations of citizens and businesses for modern online services (AlAwadhi & Scholl, 2016).

The government is not considered the sole undertaker of all the work; the government collaborates with actors outside the bureaucratic system to improve efficiency. Recent studies published on new public management, new public governance and co-production suggest that cooperation and collaboration across the sectors is deemed to provide quality public services and reduce costs (Brudney, 2020). For example, the government of Wuhan in China centred its governance capacity on building information mechanisms for the effective management of the Covid-19 pandemic. To this end, it is clear that information plays a critical role in rationalised decision-making

and can influence individual conduct. The government did not infuse scientific risk communication into decision-making and regarded the outbreak as a common public health issue instead of an emergency without a precise investigation and consensus about the epidemiological characteristics of Covid-19 (Zhang, Li & Chen, 2020).

2.6.2. Covid-19 pandemic: North American Region

North America is located in the northern and western hemispheres, and the continent includes superpower countries such as Canada, the United States, and Mexico. The continent has been severely affected by the Covid-19 pandemic. This is simply because the Covid-19 pandemic has generated worldwide social and economic upheaval, with the United States experiencing disproportionately high levels of infection and economic fallout (Mueller, McConnell, Burow, Pofahl, Merdjanoff & Farrell, 2021). As of November 2020, the United States led the world in confirmed Covid-19 cases and deaths (Alexander, Unruh, Koval & Belanger, 2022). The continent experienced a peak in the spread of the virus, signalling the need to curb the spread of the virus. The reported cases of the Covid-19 pandemic and mortality increased precipitously, recording 13 million confirmed active cases and 262,000 deaths due to Covid-19 in the US (Dong, Du & Gardner, 2020). On the other hand, scholars such as Unruh, Allin, Marchildon, Burke, Barry, Siersbaek and Williams (2022) stated that all countries faced common challenges during the Covid-19 pandemic. The challenges included, among others, scaling up testing capacity as well as implementing timely and appropriate containment measures to prevent the spread of the pandemic. There is a multiplicity of studies conducted on the government response to the Covid-19 pandemic, particularly in the US. For example, scholars such as Baccini and Brodeur (2021) conducted a study on explaining governors' response to the Covid-19 pandemic in the US. The study highlighted that "the Covid-19 pandemic resulted in the most severe threat the country had faced since World War II". Furthermore, the Covid-19 pandemic has caused massive economic damage, and its consequences were worse than those created by the 2008 global financial crisis (Ilzetzki, 2020). During the unprecedented health problems perpetuated by the spread of the Covid-19 pandemic, the government response in countries within, for example, Asia and Europe implemented hard measures such as lockdowns. The lockdown implied prohibiting travelling and restrictions on people's movement. The introduction

of lockdowns was deemed a feasible strategy adopted by various governments to prevent the spread of the pandemic.

The various governments of different countries on the various continents suffered the repercussions of the Covid-19 pandemic. For example, the government of Canada had the plans, experience and infrastructure to effectively manage and respond to a pandemic. However, Canada's performance during the Covid-19 pandemic, especially after the first wave, reveals several shortcomings and areas for strengthened responses (Allin, Fitzpatrick, Marchildon & Quesnel-Vallée, 2022). The several shortcomings in the country contributed to Covid-19 fatalities in vulnerable segments of the population. In countries such as the UK, the government was proactive in its approach to managing the pandemic. The UK government introduced satellite test centres, mobile testing units were set up, and self-administered home testing was introduced (Alexander, Unruh, Koval & Belanger, 2022). The development of literature also provided evidence that a lockdown is one of the major mechanisms available to halt the spread of Covid-19. The United States surpassed China and Italy in terms of the number of Covid-19 cases, and the government had to resort to hard measures to curb the spread of the pandemic. As a response, the US issued a statewide order urging their citizens to stay home, whereas 14 states issued orders only in part of the state (Baccini & Brodeur, 2021). The skyrocketing number of cases in the US was because of inaction and the lack of a scientifically informed, unified government response to sustain the spread of the pandemic. The literature revealed that the US took early, albeit limited, actions to combat Covid-19. The government created an Incident Management System to track and coordinate its public health response and established the Centre for Disease Control (CDC) as an agency that leads the country's public health emergency programme. Despite efforts such as establishing the Coronavirus Task Force, screening passengers, self-isolating from returning travellers, and using the Incident Management System to track and coordinate its public health response, the US government fell behind in its fight against Covid-19 and has failed to recover (Murphy-Greene & Brown, 2022).

In terms of curbing the spread of the pandemic, the US government adopted mechanisms that are similar to the government of South Africa. The government mandated key public health measures to contain the spread of Covid-19. For example, the government issued Covid-19 guidelines such as hand washing, physical distancing

and respiratory etiquette. The government also initiated a 15-day voluntary national lockdown on 16 March and the wearing of face masks in public spaces (Park & Maher, 2020). Scholars such as Berman (2020) echoed that the government of the US used its authority through the Constitution to regulate public health and ensure the safety and wellbeing of the people. It is for this reason that the Covid-19 pandemic prompted states to utilise these authorities in more intrusive ways. For example, social distancing requirements, curfews, business closures, travel restrictions, limits on assembly, quarantines of people or places exposed to the disease, and isolation of infected individuals in all 50 states.

Overall, countries took actions to develop Covid-19 countermeasures to protect their citizens and help enhance testing capacity and improve access. In Canada, testing occurred in emergency departments, designated hospitals, mobile clinics and drive-through facilities. Some regions offered in-home testing. In Ireland, testing took place in hospitals, government offices, Covid testing centres, meat factories and nursing homes. These actions were undertaken as part of the preparedness and response to the pandemic.

2.6.3. Covid-19 pandemic: European Region

Covid-19 has proven to be a formidable challenge for many countries in the European Union to manage effectively. The European continent has not been an exception to the impact of the Covid-19 pandemic. The continent experienced an increase in Covid-19 cases (Goniewicz, Khorram-Manesh, Hertelendy, Goniewicz, Naylor & Burkle, 2020). Like any other continent, the European Union has adopted and implemented several strategies in its response to manage the spread of the pandemic. The governments of various countries on the continent resorted to the closure of borders and significant limitations on the mobility of people to mitigate the spread of the virus. Therefore, the magnitude of how different countries responded to the pandemic shows how some countries have done well in managing the Covid-19 pandemic, while others have failed. According to Rahman, Sajib, Chowdhury, Banik, Bhattacharya and Ahmed (2021), the pandemic severely affected almost all the important sectors across different countries in the region, specifically the economy, agriculture, education and health. The literature revealed that a government with a higher level of public confidence is more likely to overcome the outcome of policy or administrative failures

and benefit from the democratic participation of the citizens (Johnson, Gossner, Colzani, Kinsman, Alexakis, Beauté & Ekdahl, 2020). Moreover, the impact of Covid-19 was felt throughout the world, with the European Union as no exception. The countries in the continent were found to be overwhelmed and under attack by Covid-19. At the helm of the effective government response to the pandemic was access to information. Access to information led the European Council, together with other EU institutions, to adopt relevant EU legislation that seeks to coordinate access to information to ensure a coherent EU-wide response to the pandemic (Johnson, Gossner, Colzani, Kinsman, Alexakis, Beauté & Ekdahl, 2020).

According to Forman and Mossialos (2021) a number of European countries, such as the Netherlands, Sweden, Denmark, Finland, France, Germany and Spain, struggled in their response to Covid-19 – particularly in 2020, when much was still unknown about the disease – amid the fact that these are among the countries with the highest health security capabilities to respond to infectious disease outbreaks, as articulated by the Nuclear Threat Initiative and Johns Hopkins Bloomberg School of Public Health (2019). Similarly, most of Western Europe has proven themselves to be resilient to epidemics preparedness. However, the Covid-19 pandemic proved to be difficult to manage. Moreover, it was widely acknowledged that different regions are found to be unprepared when it comes to dealing with pandemics. Regions such as the EU are well equipped with resources at their disposal to fight infectious outbreaks because they have high-performing health systems and scientific institutions in the world. However, there was a limited and ineffective response to the Covid-19 pandemic despite the establishment of the European response to communicable diseases to deal with Covid-19. Countries such as Italy, Germany, Spain and France have experienced a precipitous increase, recording over 6,000 Covid-19 cases daily (Hadi, Balla & Sidamo, 2020). For example, Italy had diagnosed over 27,000 cases around late February to early March in 2020, the highest number outside China. However, as part of the response to curb the spread of the pandemic, they also implemented nationwide restrictions on the movement of people (Anderson, McKee & Mossialos, 2020).

2.6.4. Covid-19 pandemic: South American Region

South America is a continent located in the Western Hemisphere with a considerable portion in the Northern Hemisphere. The region is also described as the southern subregion of the Americas. This section presents government responses to the pandemic in South American countries, intending to trace and analyse factors related to the state's capacity to respond to the Covid-19 pandemic. For reiteration, scholars such as González-Bustamante (2021) stated that the Covid-19 pandemic has generated unprecedented socioeconomic disruption on a global scale, resulting in pressure on health systems. Most European countries and the United States had to deal with the accelerated growth of infections and enormous pressure on their health systems. However, the low cases in the first wave of the pandemic contributed to a small margin in taking drastic measures against the pandemic and attempting to contain the infection. To this end, countries in the region initially resisted the call for social distancing and border closures during the first wave. However, in the second wave, the exponential increase in daily cases necessitated the implementation of strict measures to curb the spread. For example, countries such as Argentina, Bolivia, Brazil, Chile, Colombia, Paraguay, Peru and Uruguay implemented measures such as social distancing, closure of schools, workplaces and public transport, and restrictions on meetings and national and international travel. Moreover, "Uruguay stands out as an outlier, surpassing the situation with remarkable success". The country has a total of 3.5 million people located on the Atlantic coast of South America. However, "the country established a universal access health integrated system with public and private medical centers that provide widespread access to all medical services and procedures, including intensive care" (Moreno, Moratorio, Iraola, Fajardo, Aldunate, Pereira-Gómez & Interinstitutional Covid-19 Working Group, 2020).

Many governments across the region based their response to the pandemic mostly on access to information and trust in government. For example, the study conducted by Hossain and Biswas (2022) indicates that trust in government, sources of information, and government actions are key to successful pandemic management. In many practical cases, the level of distrust has often led to public dissatisfaction and uprising, which ultimately results in a change in leadership (Li, 2011). On the other hand, the media also played a role in the government's response to the pandemic. Social media plays a crucial role in disseminating information and fostering public trust in information

sources in the region. Withstanding the traditional media, contemporary social media has become an important source of information, giving citizens wider access to participate in politics (Ardèvol-Abreu & Gil De Zúñiga, 2017). On the other hand, knowledge production and awareness are very important for any government during crises. The knowledge production and awareness of people's beliefs, attitudes and perceptions permit the government to navigate in terms of effective government response during disasters (Bolaane, Moalosi, Rapitsenyane, Kgwadi, Kommula & Gandure, 2022). The efficacy of the management of outbreaks such as pandemics or any other national disaster requires government efforts and intervention; however, it is also dependent on the knowledge of how the public perceives the threat of the disaster.

Therefore, it can be deduced from the above analysis of the regional response to the pandemic that regions such as Africa were slightly behind in terms of their response to the pandemic as compared to other regions. That is precisely because many African countries lacked an integrated and coordinated mechanism to manage the spread of the pandemic. Many countries worked in isolation from each other. The lack of a coordinated response strategy contributed not only to the mortality rate but also to economic and social losses. On the other hand, European countries were slightly resilient in their response, although overpowered by the skyrocketing number of Covid-19 cases and infections. However, the common responsive strategy adopted by all the regions to curb the continued spread was the suspension of travel, closure of borders, nationwide restrictions on movement, and the closure of social facilities, as they were declared super spreaders. Moreover, it has been clear that access to information played a critical role in the management of the pandemic across regions.

2.7. Leadership and the management of the Covid-19 pandemic in municipalities

Effective leadership is important in effectively managing any pandemic (Agarwal, Ferdousi, John, Nalven & Stahl, 2020). The Covid-19 pandemic has brought about an unprecedented economic and social crisis that has affected many businesses, organisations and municipalities across the globe. There is a great difference between power and leadership: the mere possession of power or being in a position of authority does not make one a leader. At the core of leadership is the ability to enable a group of people to achieve a goal that none of them could accomplish on their own, while

political power is simply related to control, authority and influence. State leaders are expected to be effective and unitive, especially in times of national emergencies, and so is the system of governance in a state. Governance is the management of public affairs by state and non-state associations. The state government is the leadership or management of public life. The government's effectiveness and unity are shown in different responsive, relevant, operative, efficient and ethical ways and means of responding to the pandemic and its effects. Any government, national, state, provincial, community and/or tribal, and its leaders, are expected to lead the people and gain their collaboration, to a unified action against Covid-19. Scholars such as Kaul, Shah and El-Serag (2020) conducted a study on leadership during crisis: lessons and applications from the Covid-19 pandemic. Scholars illustrated several characteristics and practices that effective leaders embody during a crisis. The development of literature revealed that effective leadership includes developing an effective communication strategy, realism, innovation, decision-making and devising short- and long-term plans. However, the Covid-19 pandemic exposed the leadership vacuum in almost all municipalities.

2.8. Legislative and policy framework for Disaster Management in Local government.

2.8.1. *Constitution of the Republic of South Africa, 1996*

The *Constitution of the Republic of South Africa (1996)* advocates for the bill of rights of the citizens. Chapter 2 of the Constitution becomes the pertinent cornerstone from which this study derives its argument. Chapter 2 enshrines "the rights of all people in our country and affirms the democratic values of human dignity, equality, and freedom". It is explicit that the state must respect, protect, promote and fulfil the rights in the Bill of Rights. However, the Covid-19 pandemic proved beyond a reasonable doubt some of the limitations on the use and the applicability of the Constitution. Subsection (1) of the Bill of Rights indicates that the Bill of Rights applies to all laws and binds the legislature, the executive, the judiciary and all organs of state. Subsection (2) is a provision of the Bill of Rights that binds a natural or juristic person if, and to the extent that, it is applicable, taking into account the nature of the right and the nature of any duty imposed by the right. However, certain rights as part of the government plan to curb the spread of the pandemic had to be suspended, and such rights include the limitation on the movement of people.

2.8.2. Disaster Management Act 57 of 2002

When disasters occur, impacts are immediately and intensely suffered at the local level (Matsuoka, Takeuchi & Shaw, 2013). The Covid-19 pandemic in South Africa was recognised as a disaster under the Disaster Management Act 57 of 2002. The Disaster Management Act 57 of 2002 posits that all the local municipalities are mandated constitutionally to develop a comprehensive plan that responds swiftly and adequately to unforeseen circumstances. Disaster Management Act 57 of 2002 “provides for an integrated and coordinated disaster management policy that focuses on preventing or reducing the risk of disasters, mitigating the severity of disasters, emergency preparedness, rapid and effective response to disasters, and post-disaster recovery”. The Act provides for each municipality to prepare a disaster management plan and further coordinate its implementation with other role players. The act is further explicit in the sense that the district municipality is primarily responsible for the coordination and management of local disasters as and when they occur. As such, the district must develop a Disaster Management Framework for all of its local areas detailing how it will deal with the coordination of its work (Lepelle-Nkumpi IDP, 2021/2026). An article published by Manyaka, Madzivhandila and Molepo (2021) on Disaster Management Plans and the Integrated Development Planning Processes of Municipalities in South Africa revealed that planning and implementation of the Disaster Management Act by municipalities is still far from being unobtrusive. The article further indicated that disaster management and preparedness remain scorching concerns in many municipalities. Moreover, it is pervasive in many municipalities that alienates disaster management in their plans, and as a result, contributes to the continued inability to respond adequately to disasters. The literature explicitly indicated that adequate planning is one of the prerequisites for municipalities to respond effectively to disasters.

2.9. Enhancing service delivery planning and implementation during the Covid-19 pandemic

It is pragmatically evident that the Covid-19 pandemic exacerbated service delivery backlogs across all municipalities. Many local governments are facing large losses in revenue and increased expenditure because of the Covid-19 crisis (Green & Loualiche, 2021). As a result, local government experiences a budget deficit precisely

because the pandemic inextricably led to a substantial decline in the tax revenue collected by the state and local government. The literature explicitly indicates that service delivery planning and implementation encounter several challenges, which include, *inter alia*, corruption, limited financial resources, capacity building on personnel and political meddling (Makalela, 2018; Nemec & Špaček, 2020). As a result, such challenges perpetuated the backlog in service delivery across municipalities. Dzigbede Gehl and Willoughby (2020) argue that local municipalities must collaborate effectively for the benefit of rural communities. The effective management of Covid-19 is inextricably linked with local government capacity. The local government ought to play a salient role in dealing with the Covid-19 pandemic. Herdiana, Mukhlis and Madya (2020) argued that the local government is one of the determining factors for the success of the response to Covid-19.

In the aftermath of apartheid, the government assigned a significant responsibility to local municipalities to deliver various essential services to their communities (Madzhivandila & Asha, 2012). Despite this delegation of authority, many of these local government faced persistent challenges in effectively providing these services and implementing their development strategies. Even before the Covid-19 pandemic, these municipalities grappled with issues such as inadequate infrastructure, resource constraints, and insufficient planning, which hindered their ability to meet the needs of the populations they served. On the other hand, the inability of local municipalities to deliver expected services to their service delivery beneficiaries is often marred by community dissatisfaction, which leads to service delivery protests. Alexander (2010:26) argues that “the service delivery protest became obtrusive and rife in many local communities across the country”. Managa (2012) echoed similar sentiments and affirmed many communities continue to experience the unrelenting and unprecedented wave of popular and violent protests, often characterised by civil unrest and vandalism. The variations in terms of trends and patterns of service delivery protests recorded in the country are mainly a result of planning ineptitudes at the local level, which were further perpetuated by the Covid-19 pandemic (Alexander, 2010; Managa, 2012; Mashamaite, 2014; Haque, 2020). However, service delivery planning and implementation of government programs were marred by challenges during the Covid-19 pandemic.

2.10. Theories of development

It is important to note that different schools of traditional development theories that have emerged in the past few decades are reflected by different theorists or protagonists. Some of the basic arguments of traditional development theories include, amongst others, modernisation, Marxism, dependency and humanistic people-centred development theory, which will be elaborated on. The theories of development are important as they serve as a base or lens within which to guide the implementation of this research. Scholars such as Eisenhart (1991) echoed that theories in research are aimed at providing research with clear philosophical, epistemological and analytical underpinnings (Eisenhart, 1991). Therefore, this research commences with a review and basic argument for modernisation theory.

2.10.1. Modernisation theory

Modernisation theory emerged in the late 1950s and early 1960s (Evans & Stephens, 1988). The theory stems from the ideas of Durkheim, Weber and Parsons, who explained the transformation from traditional to modern societies in terms of population growth with its divisions of labour, personal motivation, and the change of moral values and norms. The theory is very articulative in that the theory in its origin and nature seeks to study the process of social evolution and the development of societies (Goorha, 2010). The theory presents development on a linear path towards modernity. Modernisation theory is a school of thought that seeks to present a systematic trajectory of development from simple, undifferentiated systems to complex, highly differentiated systems; the most complex of these being modern industrial society (Desai, Potter & Potter, 2013). In short, the theory, in its thinking and understanding, brings about some form of development that is based on emulation from industrialised countries. The theory assumed the status of being a school of thought after the Second World War. The theory in its application and contribution is premised on the work of Rostow (1959), who presented and formulated solutions to overcome the unrelenting absolute poverty and inequalities in Third World countries.

Therefore, these theories are mostly Eurocentric, rooted in Western economic history, and consequently structured by that unique, although historically important, experience (So, 1990). Protagonists such as Rostow (1990:55) argue that “all countries

must undergo a series of five stages in the process of attaining economic growth". The five stages are traditional society, pre-conditions for take-off, take-off, drive to maturity, and age of high mass consumption. For example, in the traditional society stage, the society is characterised by primitive technology, hierarchical social structures, production, and trade based on custom and barter. It is like pre-seventeenth-century Britain. Not many social and economic changes can be observed at this stage. The pre-condition for the take-off stage has the following characteristics: improved technology and transport, increased trade and investments, economically based elites and more centralised national states gradually emerged, the expansion of markets and the development of new industries (Rostow, 1990). All this economic progress has been possible due to education entrepreneurship and institutions capable of mobilising capital. In this stage, the economy is not self-sustained. Rostow stated that there is a need to stimulate the economy to make it move to the next stage.

The take-off stage is characterised by rapid economic growth, more sophisticated technology, and considerable investments, particularly in the manufacturing industry. Capital and resources must be mobilised to raise the rate of productive investments from 5% to 10% of the national income. More investments will improve the process of industrialisation, allow economic growth to overtake the population growth rate, and make agriculture more commercialised due to the demands of urban centres. The drive to maturity stage is characterised by self-sustaining growth, and increasing investments, between 10% and 20% of national income. Other characteristics are more sophistication of technology, diversification in the industrial and agricultural sectors, and imports. The age of mass consumption stage is characterised by the increasing importance of consumer goods (such as cars, fridges and washing machines) services and the rise of the welfare state. Europe reached this stage after the Second World War, but the US reached this stage during the 1920s and 1930s.

However, the theory in its application in addressing the challenges facing underdeveloped countries was marred with critiques. The theory was criticised for alluding that developing countries must imitate or follow the development path undertaken by Europe and America in their struggle for economic development. This poses a challenge in the sense that it becomes practically impossible to convince societies that were once colonised and whose economies have been manipulated to serve capitalistic countries to imitate the Western experience of economic growth.

Scholars such as Garst (1985) pointed out that the theory creates dependency and exploitation of third-world countries. The theory neglects the social and cultural structure of third-world countries and imposes on the poor, ethnocentric processes to develop. The theory is criticised because it fails to recognise the fact that one system cannot be adopted by all countries due to the diverse historical and cultural backgrounds of the countries' development (David, Theron & Maphunye, 2009).

2.10.2. Marxist theory

The Marxist theory is the second theory of development postulated by the protagonist Karl Marx. Therefore, it is important to note that the collapse, in 1989 and 1991, of the Eastern European and Russian regimes signified for many the end of socialism, the end of history, the irrelevance of Marx's critique of capitalism, and his conception of a post-capitalist alternative. This is notwithstanding the claim in Marx theory that "the country that is more developed industrially only shows to the less developed, the image of its future" (Marx, 1867:8–9 in Evens & Stephens, 1988:743). As in the modernisation theory, Marx sees the role of the market as the solvent that would break down traditional cultures and allow for development to take place (Evans & Stephens, 1988:749). In summation, Marxism theory has been associated with Eurocentrism and economic determinism, where economic 'laws' determine the course of human history and where 'the economy' determines other spheres of human life such as politics, ideas and state actions. It is on that basis that once such a starting point is accepted other precepts can logically follow: A comprehension of capitalism as operating according to its essential 'laws of motion' that cannot be disregarded (or contravened); a linear (straight line) view of history, where all countries follow the same path, for example, through the five stages of human history (primitive communism, slavery, feudalism, capitalism, socialism); and a form of Eurocentrism, where the economically dynamic West 'delivers' development to the stagnant East (Selwyn, 2013). Over and above the loopholes identified in both modernisation and Marxist theory became more apparent, and the latter triggered the dependency theory which emerged as another school of thought to articulate the weaknesses of both modernisation and Marxism.

2.10.3. Dependency theory

The failure of both modernisation and Marxism theory to address the challenge of development in less developed countries has led to the need for dependency theory. Dependency theory originated in Latin America, from the beginning of the 1950s to the first half of the 1970s. In a nutshell, the dependency theory opposes the application of modernisation theory in its approach to solving the development challenges of the less developed countries. Theorists of modernisation schools failed to consider external factors and historical factors responsible for the underdevelopment of Third World countries. Therefore, the dependency theory argues that the persistent increment in industrialisation in developed countries equally subjects poor countries to underdevelopment as a result of the economic surplus of the poor countries being exploited by developed countries (Smith, 1979). The rise of dependency theory was seen during the crisis of Orthodox Marxism in Latin America because of the decline of trust in the orthodox Marxism school of thought. Hence, the protagonist suggested that the Latin American nations should undergo the bourgeois industrial revolution before they could wage a proletarian Socialist revolution (Munck, 2007). However, other countries such as China and Cuba did not conform to the bourgeois industrial revolution and went straight into adopting the socialist revolution.

scholars such as Dos Santos (2019) formulated three types of historical forms of dependence: colonial dependence, financial-industrial dependence, and technological-industrial dependence. According to Dos Santos (2019), colonial dependence is a dependent country's physical domination of a dominant country. Simply put, it is known as the process of colonisation, where colonialists control land, mines and human resources, and they export gold, silver and tropical products from the colonised country. Moreover, Dos Santos explains the financial-industrial dependence as a situation where the dependent countries are still being dominated by the dominant countries. Consequently, this places the dependent countries in a situation where they have the task of exporting raw materials and agricultural products to the affluent countries. Lastly, the technological-industrial dependence came into effect in the post World War Two era when an ample number of less-developed countries started to experience a precipitous increase in industrial growth. On the other hand, Frank (1969) argued that the major causes of inequality are historical colonialism and Western capitalism. Evans and Stephens (1988) noted that, in

contrast with modernisation theory, dependency theorists regard the state and its agents as active actors in the process of underdevelopment.

2.10.4. The humanistic paradigm theory

It is important to note that the failure of the competing theories of modernisation and dependency gave the theorists and practitioners a complete realisation that development had to be more human-centred. The humanistic paradigm theory advocates putting the needs, priorities and community interests at the forefront of development. The service delivery beneficiaries and communities are increasingly becoming the focus of development. Simply put, the local government has the constitutional mandate to represent and serve the interests of the citizens. According to David, Theron and Maphunye (2009), “the humanistic paradigm is premised on enabling members of the society to be able to realize their potential through capacity building and mobilization of local resources for an improved standard of living that is concomitant with their aspiration”. The theory provides an outline for the government policy for reform and development right across the local government system. Also, the reforms put a strong emphasis on accountability as the bedrock of a properly functioning system of local democracy, providing for better engagement with citizens. Although the ultimate purpose of local government is to promote the wellbeing and quality of life of citizens and communities, through effective, accountable and democratic representation, and efficient performance of functions and delivery of services at the local level. Thus, the local authority role embraces a combination of service delivery, regulating relevant matters in the public interest, promoting sustainable physical and spatial development, and uniquely, providing democratic representation and accountability (Cernea, 1985). The theory further postulates that the local government is the primary vehicle of governance and public service at the local level, delivering efficient and good value services to people, performing a wide range of appropriate functions, and representing citizens and communities, as effectively and accountably as possible.

scholars such as Korten (1990) advocate for development that is concentrated on the needs of the people. Whereas Asha (2014) describes “people-centered development as a process by which the members of society increase their personal and institutional capacities to mobilize and manage resources to produce sustainable and justly

distributed improvements in their quality of life”. The virtue of the definition supports the notion that people should decide for themselves what constitutes a better life. Therefore, the unprecedented South African history of colonisation, disempowerment and macro-level development thinking led to the bottom-up approach to planning and implementation of service delivery. For example, the first democratically elected government, through the promulgation of policy prescripts, deemed it necessary to embrace the people-centred approach (Meyer & Theron, 2000). Therefore, the subsequent section discusses the adopted theories.

2.11. Theoretical and conceptual framework of the study

Two popular theories are used to guide understanding in the study. These pertinent theories are Social Change Theory and Kurt Lewin’s Theory of Change Management, used as lenses and frameworks in this research. These theories are integrated to provide a comprehensive overview of how crises such as the Covid-19 pandemic contribute to the change in the planning and implementation of service delivery.

2.11.1. Social Change Theory

This study aims to investigate the implications of the covid-19 pandemic on service delivery in Lepelle-Nkumpi Local Municipality. Before the emergence of Covid-19, the municipality had difficulties in delivering expected services to its beneficiaries (Aklilu & Makalela, 2020). Moreover, the Covid-19 pandemic contributed to the service delivery backlogs and challenges. This research employs Social Change Theory as one of the lenses for the interpretation of research findings. The fundamental roots of the Social Change Theory are derived from the work of Phillips (2001). The author juxtaposes and proposes to explain the social change, issues, and problems that have arisen in an attempt to define and delimit the area of change. The area of change, as conceptualised in the work of Phillips (2001), explains the following three basic questions:

(1) What are the assumptions made in the theory about the nature of society and the nature of change; (2) What is the scope of the phenomenon to be explained, the level of human actions to be studied, and what kind of things to be considered as “change”; and (3) What is the focus of determinacy; for example, what variables are to be used to determine change? The theory of social change postulates the fact that change is an evident feature of social reality than any social-scientific theory. This means that

planning and implementation at the local government are inextricably subjects of change. The subject of change in the sense that development needs and priorities continue to evolve over time. To this end, at all times, the circumstances dictate the direction within which planning and implementation at the local government unfold. Therefore, the direction of thoughts and conceptions of change appear to have mirrored the past and present realities of different epochs to a large degree.

Contemporary theories of social change have become more generalized to explain far-reaching processes of change in the past and present. In a review of contemporary theories of change Strasser and Randall (1974, have identified, *inter alia*, the following attributes of change, the magnitude of change, time, direction, and rate of change. According to Strasser and Randall (1974), the attribute of change may be summarised as follows:

- Structural determinants of social change, such as population changes, the dislocation occasioned by war, or strains and contradictions,
- Processes and mechanisms of social change, including precipitating mechanisms, social movements, political conflict and accommodation, entrepreneurial activity, and.
- Directions of social change, including structural changes, effects, and consequences.



Source: Strasser and Randall (1974), attributes of change

2.11.1.1. Crises and their impact on social change

Planning and implementation of service delivery at the local level are subject to change. That is because planning and implementation are custodians of change that occur in an unpredictable environment. The development needs of communities continue to evolve with time to suit and satisfy pressing priorities. On the other side, the literature is explicit on the fact that “planning and implementation of service delivery can be influenced by the change in the non-social environment” (Strasser & Randall, 1974). The non-social environment includes the manifestation of unplanned disasters such as pandemics, earthquakes, plagues and floods. In that case, such issues are

incorporated into contemporary social change theories, precisely because of their unpredictability and the difficulty in making generalizations or predictions about their consequences. On the other hand, Wittfogel's theory (1960), suggested the fact that social and political structures are determined to control and manage the impact of disasters. A study conducted by Toya and Skidmore (2007), on the economic development and the impact of natural disasters, revealed that as countries develop, they devote greater resources to safety, including implementing precautionary measures designed to reduce the impact of disasters. For example, in the case of the Covid-19 pandemic, a study conducted by Gao and Yu (2020) revealed that "in managing the impact of Covid-19, the government should pay attention to building information mechanisms for handling a public health emergency". Based on the decision-making model with bounded rationality, information can influence individual behaviour by changing individuals' understanding of alternatives and their consequences (Fung, Tse & Fu, 2015).

It is anecdotally evident that the prevalence of disasters directly challenges the social order. To this end, disasters may directly or indirectly provide a background for change. In South Africa, with specific reference to local government, the promulgation of the Disaster Management Act 57 of 2002 aims to pre-empt and guard against threats to the planning and implementation of service delivery by the non-social environments. *Inter alia*, the Act aims to "coordinate disaster management policy that focuses on preventing and reducing the risk of disasters, mitigating the severity of disasters, and ensuring emergency preparedness, rapid and effective response to the disaster" (Raseala, 2020).

Important to note is that crises of a social nature are more often treated as potential sources of social change. As Turner and Killian (1957) point out, well-institutionalized policies for dealing with crises often reduce the pressure for change that might arise. The renowned author Robert Nisbet (1969) makes crisis his central explanatory principle in analysing the cause of social change. In speaking of what he calls the "crisis-born nature of change", the author says, "The first point to be made about change is that wherever it exists in substantial degree, it is associated with some form of crisis. However, in the context of this study, the Covid-19 pandemic has become a crisis that has led to unprecedented change in the planning and implementation of

service delivery across all municipalities. Social change theory also complements and encapsulates some of the rudiments from Lewin's Theory on Change Management.

2.11.1.2. The significance of the Theory of Social Change

The theory of social change is crucial in this research to interrogate the causes and effects of change in the planning and implementation of service delivery in local municipalities. It has been noted that the theory of social change has exhibited great variation in the way it defines and conceptualises the phenomenon of change (Nisbet, 1969). It is worth mentioning that the literature suggests some complimentary traits in the work of Kurt Lewin's Theory of Change Management (1947). The theory provides a clear lens and a framework for modern research associated with the deleterious impacts and the influence of change by the non-social environments (Strasser & Randall, 1947). The framework provides a framework to study the causes and effects of change on the planning and implementation of service delivery. This study extensively utilises the Theory of Social Change to gain a deeper understanding of how effectively planning and implementation of service delivery occurred during the Covid-19 pandemic. Consequently, examining the various factors that contributed to both the causes and the extent of societal change will play a crucial role in analysing and interpreting the research findings. By focusing on these dynamics, the study aims to shed light on the complexities and challenges faced during this unprecedented period. For the same reason, this study utilizes Kurt Lewin's Theory of Change Management to support this research and address the existing gap. The following section explores Kurt Lewin's Theory of Change Management.

2.11.2. Kurt Lewin's Theory of Change Management

Kurt Lewin is a German-Jewish social scientist and a social activist who is globally known to be the intellectual father of organisational change (Schein, 1996; Kritsonis, 2005; Burnes, 2019). Lewin's theory of change management embraces the fact that change management is of paramount importance to any organisation. The *Modus Operandi* of Lewin's theory of change management is centred around the fact that change is constant. It may mean different things in a different context. However, for the purpose of justification in this study, it means that change management forms an integral part of government and public sector service in general. Moreover, in the context of this study, the Covid-19 pandemic contributed deleteriously to changes in

government, thus necessitating the implementation of change management for effective planning and implementation of service delivery. In the context of scholarship, change management is considered using change management theories. Therefore, this study draws its lens from the combination of theories of social change and change management. To this end, Lewin introduces a Three-Step Change Model, namely: unfreeze, change process and refreeze.



Source: Lewin's Change Management Model (1947)

The Three-Step Change Model introduces driving and restraining forces to change and advocates for government and public sector reform toward improved performance. According to Cummings, Bridgman and Brown, (2016), the three-step change model is regarded by many scholars in the field of social science as the classical or fundamental approach to managing change. Lewin's theory postulates and argues that the first step in organisational change and management processes is to unfreeze the prevailing status quo (Lewin, 1947b). It is prevalent that the proponents advocate for the machination of ways to overcome resistance and conformity, and that can be achieved by: (1) acceleration of pertinent driving forces that unfreeze the mind and circumstances at that point in time; (2) decreasing restraining forces that impede transition from the prevailing status quo; and (3) discovering an amalgamation of increasing the driving forces and restraining forces (Kritsonis, 2005; Cummings, Bridgman & Brown, 2016). The second step is changing the process which is about the phase of transition and the desire for the new state of governance. This step can

be achieved by: (1) encouraging and recognising the fact that the contemporary state of governance is marred with unrelenting planning and implementation distress, and there is a need for a shift to fresh views and change; and (2) instilling new perspectives that support change (Alderman, 1993; Kritsonis, 2005). The third and final step in this model is refreezing. This is mainly about sustaining and solidifying the change that has been implemented and avoiding a situation wherein the change is short-lived. This step can be achieved by: (1) balancing the driving and restraining forces; (2) institutionalising the new change by introducing regulatory frameworks to support it; and (3) integrating new systems for the change and a new culture for it (Kritsonis, 2005; Burnes, 2019). However, as a common practice in social science, most theories are subjected to criticism. Lewin's theory is no exception. Just like many others, the theory has been criticised for its simplicity, and that it is prescriptive, monotonous, lacks a naturally occurring sequence and cognitive dimension, and only took form after his death (Kanter, Stein & Jick, 1992; Palmer & Dunford, 1996; Weick & Quinn, 1999; Bartunek & Woodman, 2015; Cummings, Bridgman & Brown, 2016). Otherwise, notwithstanding its criticisms, the theory is still relevant in raising pertinent dynamics that reform the performance of government and organizations, the theory provides a framework, and paradigm shifts that unequivocally lead to the transformation of government in South Africa. It is pragmatically evident that the Covid-19 pandemic contributed precipitously to the change in organizational and management processes. The Covid-19 pandemic has changed the dynamics that concern life and human interactions around the entire globe ranging from health, transportation, communication, teaching and learning to the act of governance (Agullah & Eyikorogha, 2021). As Covid-19 continued to perpetuate across the globe, with unprecedented regulations that pose threats to the act of governance, many local government had to change their act of governing. As Covid-19 continued to enforce regulations such as the lockdown and social distancing in order to curb the spread of the virus, many local government municipalities across the globe had to pursue digital government strategies coupled with innovative initiatives (Allen, 2022; Agullah & Eyikorogha, 2021). It is important to consider the fact that Covid-19 necessitated a change in the realm of the local government sector. Therefore, the change must be consummate and complementary to improving the local government sector performance and ultimately improving the planning and implementation of service delivery. The literature has noted the poor performance of the local government sector in general (Aklilu &

Makalela, 2020). Many municipalities are in planning and implementation distress and characterised by poor service delivery related to water, sanitation, electricity, and refuse removal services (Dikotla, Mahlatji & Makgahlela (2014). To this end, poor planning and implementation of service delivery necessitate radical changes as a result of the Covid-19 pandemic.

2.11.3. Service delivery in the context of change in the social environment

There is a growing need for research to focus comprehensively on the socio-economic aspects of the pandemic as opposed to only a predominant focus on epidemiological issues (Nemec & Špaček, 2020). The local government as the first responder to natural shocks has grappled with Covid-19 (Dzigbede, Gehl, & Willoughby, 2020). Many municipalities responded to Covid-19 at an unprecedented scale, despite immediate and major disruptions to their budgets (Reutter, 2020). Therefore, it is important to note that municipalities, as entities of local government, in most instances finance their development activities based on the budget, which has a programme structure. However, due to the global Covid-19 pandemic, municipal incomes have declined. Moreover, municipalities had to adjust their budgets and reduce expenditures, which could disrupt several processes in municipalities (Soltes, Stofkova & Durica, 2021). However, it is evident that the state of local government across the country was characterised by service delivery challenges times before Covid-19. The local government was already facing many challenges, including poor service delivery and weak institutional governance capabilities. The literature vehemently indicated that around 63% of the 257 municipalities were already in financial distress, a third of the municipalities were dysfunctional, and only, 7% of senior managers in local government complied with the minimum competencies prescribed for their jobs (Glasser & Wright, 2020). Furthermore, other challenges included poor financial management, endemic profiteering or corruption in the procurement process, poor asset management, and weak accountability and oversight. However, scholars have argued that in since many municipalities were in a state of distress, it is pragmatically evident that existing interventions adopted to address these challenges have so far been ineffective, and Covid-19 simply amplified and perpetuated some of the challenges.

The Covid-19 pandemic adversely affected municipal revenue sources, and that includes the intergovernmental grants referred to as transfers and the municipal own revenue collection. Continually, it is evident that, before Covid-19, the growth in national transfers was already decreasing due to the national government's fiscal consolidation. The Covid-19 pandemic has added more pressure on the government to tighten its fiscal consolidation measures. According to Nemec and Špaček (2020), some of the intergovernmental grants that were protected, such as the equitable share, are no longer as protected as before. In short, transfers are now under significant pressure. Own revenue sources, such as property tax and service charges, are under pressure.

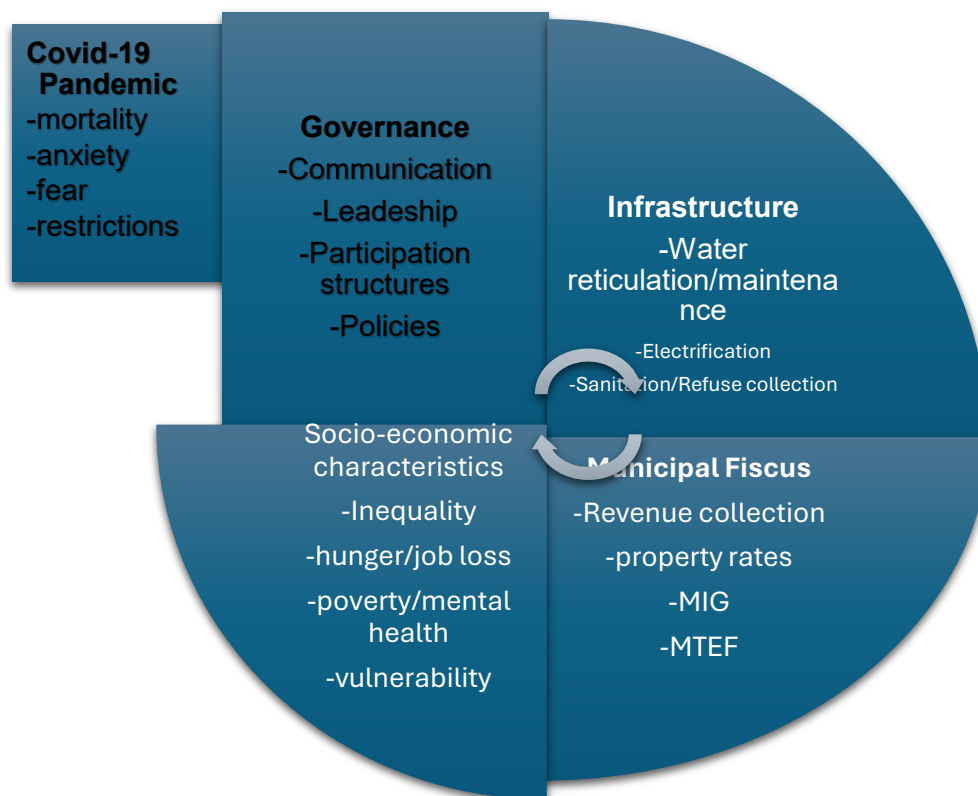
2.12. Conceptual framework

This research uses a conceptual framework to ascertain the association between the Covid-19 pandemic and service delivery at the local level. Planning and implementation of service delivery has always been a daunting challenge affecting almost all municipalities across the globe (Shongwe & Meyer, 2023). Municipalities face challenges such as financial mismanagement, lack of coordination, political will, corruption, and political meddling (Asha & Makalela, 2020). The Covid-19 pandemic habitually perpetuated the inability of municipalities to plan and implement service delivery programs (Narsiah, 2021). Municipalities were found wanting and overwhelmed by the pandemic. The pandemic contributed to a lack of service delivery as most of the project's budget had to be reprioritised to support programmes that help curb the spread of the pandemic. Municipalities had to change their governance approach, change their methods of engagement and communications, and budget preparations (Joseph & Williams, 2022). The two adopted theories of social change and Kurt Lewin's theory of change management complement the magnitude of change and the relationship between Covid-19 and service delivery. The proposed conceptual framework uses the literature review and theories that intend to guide the development of this study. The theoretical framework in this study would account for the socio-economic impact of Covid-19 on service delivery. Scholars such as Hevia and Neumeyer (2020) emphasise that partnerships between local government and various sectors and stakeholders, including communities, national and provincial departments, civil society and non-governmental organisations, are essential. These collaborations are expected to help local municipalities adopt planning approaches that can withstand

crises and protect communities. However, South African municipalities still face significant challenges when it comes to crisis planning. The Covid-19 pandemic demonstrated the inability of municipalities to deal with crises, which also contributed to the delay in the provision of various services to communities. Therefore, the emerging conceptual framework for analyzing the socioeconomic impact of Covid-19 in the South African local government demonstrates a systematic indication of the magnitude of Covid-19 on service delivery. The aspects of the proposed conceptual framework serve to provide a comprehensive understanding of the impact of the Covid-19 pandemic on service delivery in Lepelle-Nkumpi municipality. The aspects of the framework are indicated as follows: The Covid-19 pandemic as a predecessor, Municipal governance, infrastructure, socioeconomic characteristics, and municipal fiscus.

A CONCEPTUAL FRAMEWORK FOR ANALYSING THE IMPACT OF THE COVID-19 PANDEMIC ON SERVICE DELIVERY

Figure 2.1. A conceptual framework for the Covid-19 pandemic on service delivery



2.12.1. Change in Governance

All municipalities are constitutionally mandated to promote public participation and delivery of expected services to their beneficiaries. As a result, Covid-19 contributed to the delay in decision-making, IDPs of many municipalities were thrown off course and public participation was disrupted (Ncube, 2021). The nature of public participation radically changed with the drafting of the new South African Constitution in 1996. The new Constitution asserts that South Africa is a Constitutional democracy country that upholds the principle of participatory democracy. Participatory democracy is referred to as a situation whereby the public is actively involved in decision-making processes such as law-making and oversight. The intention of public participation and involvement in democratic processes is primarily to influence decision-making processes that reflect 'the will of the people (RSA, 1996). In terms of Section 12 of the Constitution (RSA, 1996), South Africa is one sovereign, democratic state founded on the following principles of public involvement:

- Promotes active and representative participation towards enabling all community members to meaningfully influence the decisions that affect their lives.
- Engages community members in learning and understanding community issues, and the economic, social, environmental, political, psychological, and other associated courses of action.
- Incorporates the diverse interests and cultures of the community in the development process, and disengages from the support of any effort that is likely to adversely affect the disadvantaged members of a community;
- Actively enhances the leadership capacity of community members, leaders, and groups within the community; and
- Utilizes a community's diversity to deepen shared understanding and produce outcomes of long-term benefit to the whole community or society.

A study in the Philippines by Torrentira (2020) revealed that Covid-19 regulations such as lockdowns, social distancing and community quarantines contributed deleteriously to the effective involvement of communities in local government matters across the globe. During the pandemic, the minimised mobility of people resulted in a lack of community engagements. Furthermore, the Covid-19 pandemic detrimentally affected all the municipal activities that depend on face-to-face communication (Pantić, Cilliers, Cimadomo, Montaña, Olufemi, Torres & Van den Berg, 2021). This includes participation processes in affairs of local government.

2.12.2. Change in Infrastructure

The devastating effect of the Covid-19 pandemic has affected the overall economy and the construction industry. The development literature indicates that to a greater magnitude due to Covid-19, some repairs and maintenance were often deferred, and infrastructure projects postponed (King, Rahman, Fauzi & Haron, 2021). The Covid-19 protocols and regulations permitted lockdown as part of the mechanism to curb the spread of the virus. As a result, lockdown regulations were suspended among others in the construction sector including the development of infrastructural projects (Jallow, Renukappa & Suresh, 2020; King, Rahman, Fauzi & Haron, 2021). As a result, municipalities were confronted with a huge backlog of infrastructural projects. Consequently, the backlog can contribute to the delay in service delivery. The deleterious impacts of Covid-19 were felt through all segments, including the Construction industry, both operationally and financially (Gamil & Alhagar, 2020). Lepelle-Nkumpi IDP (2021–2026), indicated several service delivery-related predicaments due to Covid-19. The municipality had difficulties delivering infrastructure-related services such as the construction of access roads for regional and settlement integration, stormwater control and infrastructure, existing road maintenance, and household sanitation infrastructure. The results from the continued Covid-19 protocols, which introduced strict measures such as lockdowns to prevent unnecessary movement and a work-from-home policy. The study conducted in the United Kingdom (UK) on the impact of the Covid-19 outbreak on the UK infrastructure sector revealed that lockdown measures proved difficult in managing the multiplicity of municipal infrastructural projects, as many people were required to work from home. This has led to delays in municipal project activities as many staff cannot physically

go on-site and conduct work. The managers are finding it difficult to manage their teams (Jallow, Renukappa & Suresh, 2020).

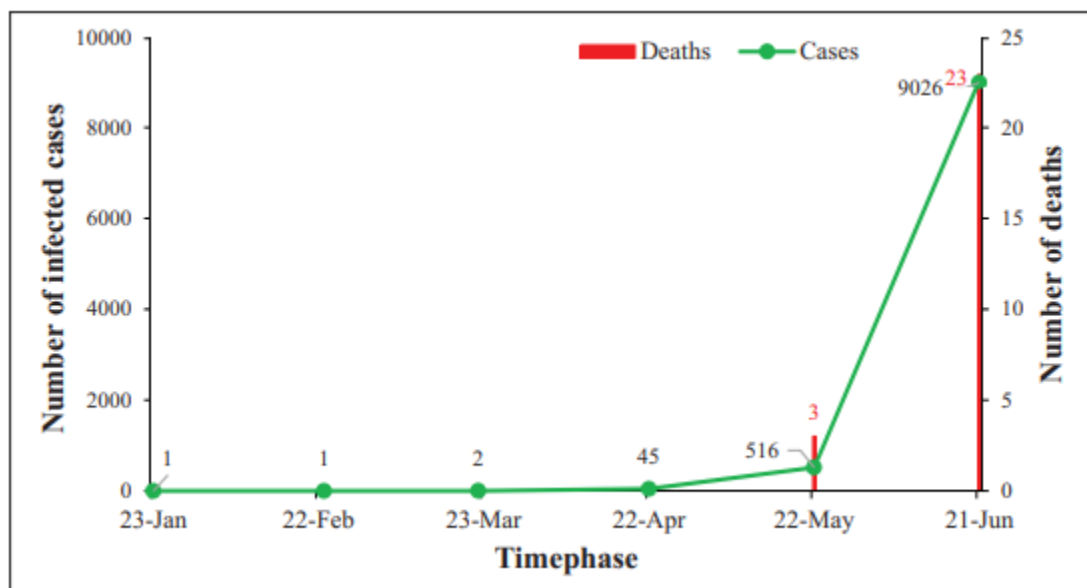
Infrastructural projects such as power, water, and telecommunications projects were affected by the emergence of the pandemic. To a certain extent, the pandemic contributed to the delayed implementation and completion of such projects due to Covid-19 regulations. For example, the pandemic restricted the movement of goods and services. The transport sector also suffered the consequences of the pandemic in the sense that construction materials could not be delivered to certain sites. The development literature explicitly elucidated that at the helm of curbing the spread of the pandemic, water and sanitation infrastructures were crucial in society, especially because hygiene played a critical role in alleviating the spread of the disease. On the other hand, departments and service providers such as ESKOM, Transnet, water boards, and the private sector tried to operate during the pandemic, but their operations were marred with challenges such as limitations on the workforce, restrictions and the fear of contracting the virus. It became prevalent that the demand for information and communications technology services escalated rapidly as staff switched to working from home, and the need for virtual governance escalated across all the municipalities. Therefore, there was a palatable need to improve and develop the existing telecommunication infrastructure to support efficiency in the planning and implementation of service delivery.

2.12.3. Socioeconomic Change

The Covid-19 repercussions have a direct bearing on the health conditions of the people, mortality and widespread social and economic disruptions (Dutta & Fischer, 2021). Hence, it has far-reaching impacts on human wellbeing (Bavel, Baicker, Boggio, Capraro, Cichocka, Cikara & Drury, 2020; Summer, Hoy & Ortiz-Juarez, 2020). Therefore, it is evident that the social impact of Covid-19 was dire and contributed unrepentantly to inequalities, hunger and vulnerability in communities across the globe. Studies have shown that the spread of Covid-19 is inextricably associated with neuropsychiatric issues such as fear, anxiety, depression, panic attacks, psycho-motor excitement, suicidal deaths and a general decrease in overall well-being (Brooks, Webster, Smith, Woodland, Wessely, Greenberg & Rubin, 2020; Xiang, Li, Zhang, Jin, Rao, Zeng & Hall, 2020). Similarly, people who are infected with Covid-19 were found

to be at a greater risk of developing mental health problems, as they are facing stigma and discrimination from their family members. As a result, some succumb to death. For example, the diagram below illustrates the emergence of Covid-19 and its associated death rate. In the figure below, the Y axes represent the number of infected cases, while X axes represent the series (time)

Figure 2.2: Number of Covid-19 infected cases and deaths in Nepal (as of 21 June 2020).



Source: Poudel & Subedi (2020)

The study conducted by Bukari, Essilfie, Aning-Agyei, Otoo, Kyeremeh, Owusu and Bukari (2021) in Ghana on the impact of Covid-19 on poverty and living standards. The study revealed that the Covid-19 pandemic is a threat to the achievement of the Sustainable Development Goals (SDGs). The delay in the implementation of social programs is entrenching poverty by deteriorating standards of living in most sub-Saharan African countries, including Ghana. Before Covid-19, an ample number of people in Sub-Saharan Africa lived in extreme poverty, and alarmingly, the number of poor people in the region increased by 9 million (World Bank, 2020). In essence, it was projected even in the absence of Covid-19 that, by 2030, nearly 9 out of 10 extremely poor would be in sub-Saharan Africa. Now with Covid-19, current estimates suggest that the world's progress in achieving zero poverty in this region by 2030 will slog back by seven extra years owing to Covid-19 (Mahler, Schmidt, Nowell, Qi, Van Metre, Hladik & May 2020). To enumerate this fact, there is a paucity of literature on

how the pandemic affected particularly the lives of persons living in poverty. The literature suggests that Covid-19 has significantly increased poverty in diverse ways. It includes loss of jobs, lack of access to basic health services, and decrease in per capita household consumption of food and non-food goods (Austrian, Pinchoff, Tidwell, White, Abuya, Kangwana, Ochako, Wanyungu, Muluve & Mbushi, 2020; HSRC, 2020; Kesar, Abraham, Lahoti, Nath & Basole, 2020; Malik, Meki, Morduch, Ogden, Quinn & Said, 2020). While the search for understanding of the interface between pandemics and poverty has spawned considerable interest since the great depression, the quest for ending poverty in all its forms everywhere in recent times amidst Covid-19 has rekindled the debate about the distributional effect of pandemics on poverty. Thus, recent studies have been ardent to understand the channels through which Covid-19 affects poverty to engender policy-based debates. Key studies with this agenda include Martin, Martin et al. (2020) in the United States (US), Kesar et al. (2020) in India, Malik et al. (2020) in Pakistan, Austrian et al. (2020) in Kenya, Human Science Research Council (HSRC) (2020) in South Africa, Le Nestour et al. (2020) in Senegal and Durizzo et al. (2020) in South Africa and Ghana. From this plethora of literature, three key gaps emerged: First, it is premature to conclude that the health impact of Covid-19 is greater than the economic impact since most studies on the pandemic are heavily skewed toward health and macro impacts. Thus, imperative in the contemporary scrutinisation to capture the socio-impact.

As the Covid-19 pandemic was first discovered in China and later spread across all other countries, it brought a detrimental impact on employment. In the initial stage, it created an impression that it is purely attributed to the deleterious impact on the health of people all over the world. However, it transcends beyond health and affects and shocks the country's economy globally (Islam, Jannat, Rafi & Aruga, 2020). For example, according to the data released by World Meters on 10 November 2020, a total of 218 countries were affected by the pandemic with a total of 51,407,774 cases, including active and inactive cases, 1,271,853 deaths, and a total of 36,199,396 patients have recovered and the latter is a result of the factors such as socio-economic from those countries. However, comparing Covid-19 to other previous crises, the Covid-19 pandemic was more severe, and complex as it has a profound impact on society in the world, as there are enormous social and economic problems at all levels. According to the study by Gorain et al (2020), Covid-19 became the largest economic

pandemic in human history after the Spanish Flu from 1918 to 1919. From the economist's view, this pandemic is the crisis that had the most impact on the country's economy since the economic crisis that happened in the year 1929, known as The Great Depression (Siddiqui, 2020). The study conducted by Katris (2021) about unemployment and Covid-19 impact on Greece using a Vector Auto Regression (VAR) found that the Covid-19 case Granger had an impact on the overall unemployment rate only in EU27 countries. The shock from Covid-19 cases in Greece also had smaller impacts on unemployment. The final result also shows the impact of Covid-19 on unemployment in Greece is lower compared to EU27 countries. For the forecasting part, the researcher suggests that VAR models can be used to know about the impact of the shocks and Autoregressive Integrated Moving Average (ARIMA) models in forecasting. The study by Chi-Wei Su, Kedai, Sana Ullah and Zubaria Andlib (2021) about the Covid-19 pandemic and unemployment dynamic in European economies concludes that Germany, the UK and Spain have a positive relationship in unemployment because of Covid-19. The results also show that Covid-19 cases caused unemployment in Germany, the UK and Italy, while Covid-19 deaths resulted in unemployment in Italy and the UK. It highlights that most European countries in the study had increased unemployment rates due to the pandemic. Lai et al (2021) are interested in researching the impact of Covid-19 on the unemployment rates of developed and developing countries of Asia and found that the unemployment rate is three times higher in developing countries compared to developed Asian countries. It affects the country itself, and they need more time to address the implications of Covid-19 itself.

2.12.4. Change in municipal fiscus

The study conducted on the Covid-19 pandemic and budget shortfalls in local government in Slovakia revealed that the pandemic had negative effects on all local government nationwide, regardless of the status of the town or municipality (Čajková, Šindleryová & Garaj, 2021). The study further revealed that the pandemic has not only revealed weaknesses in the healthcare system but has also posed a threat to the financial capacity of public and non-profit organizations (Čajková, Šindleryová & Garaj, 2021). Several district municipalities (DM) in South Africa rely on approximately 75–85% of transfers while their revenues account for the remaining 15–25%. Thus, it is a clear indication that DMs were fairly insulated from the financial effects of Covid-

19 because the majority of their revenues were guaranteed in the form of intergovernmental transfers (Ncube, 2021). However, this changed, given that intergovernmental grants continued to be vulnerable. Grants to local government were decreased by 2% over the Medium-Term Expenditure Framework (MTEF). This is due mainly to the reduction in the equitable share, which the national government has historically protected to fund basic services such as water, sanitation, electricity, and refuse removal. The equitable share is going to fall by 4% while the general fuel levy shared with metros will decrease by 1 % over the MTEF between 2020-2021. According to Ncube (2021), fiscal consolidation will adversely affect municipalities, especially those that rely heavily on transfers. DMs are thus now even more vulnerable. Overall, Ncube (2021) argued that the progressive realisation of basic services is going to be affected in the medium to long term. There is still uncertainty lingering around the gap between municipal revenues and expenditures and the gap is expected to widen further going forward. There is also on the other side an anecdotal fact that, unfortunately, municipalities cannot count on transfers to close this gap and that is precisely because of the fiscal consolidation measures (Čajková, Šindleryová & Garaj, 2021). Revenue collection levels declined across all municipal categories. Covid-19 did not only affected the revenue collection, however, it also affected revenue sources as well. Revenue sources from water, refuse and sanitation were adversely affected. The other disillusionment attributed to the Covid-19 pandemic was and still is the ability of service delivery beneficiaries to pay their debts. This in turn undermined the ability of municipalities to pay for bulk service providers. Thus, that is why it is not surprising that the number of municipalities failing to pay Eskom increased from 24 before Covid-19 to 38 as of December 2020; for water boards, the number increased from 11 to 13. Therefore, is it clear that Covid-19 is seen as an obstacle to progress, however, there are positive aspects or some opportunities to learn amidst the pandemic. Ncube (2021) proposed the following recommendations to promote post-Covid-19 recovery:

- the reprioritisation of resources;
- the adoption of measures to enhance efficiency (there is a lot that municipalities that can do with limited resources);

- revenue enhancement measures (municipalities should leverage the competencies of private partners, value for money must be the buzz-word);
- the capitalisation on opportunities to build local economies;
- the development of new supplementary revenues (e.g business tax and land value capture instruments for cities); and
- driving infrastructure-led growth (and repairs and maintenance should be prioritized to stimulate the recovery).

It is anecdotally evident that during the Covid-19 pandemic, almost all countries' economies experienced strenuous economic downturns, which perpetually led to the budgets of state and local government under pressure (Clemens & Veuger, 2020). It is pragmatically evident that the Covid-19 lockdowns generated unusually large declines in consumption relative to income. This is in no small part because incomes have been buoyed by fiscal stimulus, some of which is taxable and some of which is not. As a result, Covid-19 has resulted in a dramatic decline in personal consumption expenditures on both hard and soft services at large. The fact of the matter is that the Covid-19 economic shock is that it affects not only the poor and working class but also the core middle-class ratepayers' municipalities rely on to cross-subsidize indigent services. Still, Stats SA found that between the quarters ending December 2018 and 2019:

- annual purchases of water grew by 10.5%;
- annual electricity purchases grew by 12.4%;
- employee-related costs, accounting for a sizable portion of municipal expenditure grew by 7.4%;
- grants from the national government grew only marginally;
- property rates from residential consumers were already seen to be falling;
- electricity purchases were higher than the growth in sales (9.8%) as were water purchases compared to sales (3.1%) meaning local the government was already eating into surpluses generated from electricity and water provision before the lockdown; and

- bad debt had risen by 23% while the interest paid rose by 10.3%.

In summation, this is to say that SA's local government were already in a tight spot financially before the arrival of Covid-19. Moreover, the study argues that Covid-19 further puts local government under financial constraints. The pandemic accelerated the inability of communities to pay for service rates due to several reasons – *inter alia*, lockdown regulations, and loss of employment and income as a result of the pandemic.

2.13. The assessment of the impact of the Covid-19 pandemic using the Probit variables

In the context of the current study, the logit variables are used as a binary method to measure the impact of the Covid-19 pandemic on service delivery across various sectors. The variables enable the analysis of the various factors as well as their likelihood of contracting Covid-19. Probit uses various variables such as the number of infections, the rate of hospitalisation, and mortality as indicators to measure the impact of the Covid-19 pandemic. The Covid-19 pandemic was declared a public health emergency across various countries in March 2020, affecting over 100 countries in a matter of weeks (World Health Organization, 2020). On 1 April 2020, the WHO reported that Covid-19 had been detected in more than 200 countries and territories, with approximately 823,626 confirmed cases and 40,598 deaths. The pandemic brought about unprecedented public health challenges (Elam-Evans, 2020). For the current study, the magnitude of the Covid-19 pandemic in this study is also measured using variables such as healthcare service delivery, economic service delivery, social service delivery, and infrastructure service delivery.

2.13.1. Health service delivery

The Covid-19 pandemic resulted in immense pressure on the countries' health systems, and that was due to the precipitous increase in the rate of hospitalisation, an increase in intensive and emergency care units, a shortage of staff in hospitals because of the fear of contracting the pandemic, and the bed occupancy rates (Hasan, Neill, Das, Venugopal, Arora, Bishai & Gupta, 2021). On the other hand, because Covid-19 was sudden and unexpected in most countries, it increased the known risk factors for mental health problems, which has created a burden for many health facilities. The promulgation of Covid-19 regulations, such as lockdown and physical distancing, perpetuated the social isolation among communities, loss of income,

loneliness, inactivity and limited access to basic services, and decreased family and social support, especially in older and vulnerable people (Moreno, Wykes, Galderisi, Nordentoft, Crossley, Jones & Arango, 2020). The downturn in the economy caused by Covid-19 contributed immensely to unemployment, financial insecurity and poverty, which also hindered access to health services, resulting in deleterious effects on physical and mental health (Tsamakis, Tsiptsios, Ouranidis, Mueller, Schizas, Terniotis & Rizos, 2021). Because of the unpredictability and uncertainties around the Covid-19 pandemic, many health institutions experienced a surge in staff absenteeism as a result of the fear of contracting the virus (Fullana, Hidalgo-Mazzei, Vieta & Radua, 2020). Scholars such as Cerda and García (2022) conducted a study on factors explaining the fear of being infected with Covid-19. The study stated that the longer the pandemic lasts, the greater the fears people may face, affecting their socioeconomic wellbeing and mental health. The pandemic, as one of the most devastating infectious diseases, affected millions of people across the globe, resulting in millions of mortalities. For example, a study was conducted in the United States by Blumenthal, Fowler, Abrams & Collins (2020), which revealed that the US has 4% of the world's population as of 16 July 2020, the country recorded 26% of its Covid-19 cases and 24% of its Covid-19 deaths. The figures demonstrated an unprecedented deep crisis in the public health system. The tables below indicate the socioeconomic and health-related characteristics of the Covid-19 pandemic, as well as the rates of infections and government response to the pandemic. Table 1 indicates the socio-economic and health-related characteristics of selected countries, and Table 2 indicates COVID-19 infection characteristics and government response.

Table 1
Socioeconomic and health related characteristics of selected countries.

Characteristic (median; 95%CI) ¹	Outcome (n = 50)
Population in millions	32.6 (11.1 to 55.1)
Median population age in 2020	40 (36 to 42)
Percent females within the population	50.4% (50.2 to 50.7%)
Population density (people per km ²)	101 (69.4 to 137)
Socioeconomic characteristics	
Per capita GDP (\$US)	\$23,122 (\$13,777 to \$41,370)
Health care spending per capita (\$US)	\$1914 (\$45 to \$10,246)
Percent unemployment	5.2% (4.2 to 5.9%)
Income dispersion within the nation ²	35.4 (30.8 to 41.4)
Level of corruption within the nation ³	58.5 (46.1 to 69.0)
Health related characteristics	
Obesity prevalence	22.1% (20.2% to 23.1%)
Smoking prevalence	34.0% (29.1 to 39.9%)
Diabetes prevalence	6.8 (5.8 to 7.6)
Adult mortality rate (deaths per 1000 people) ⁴	74 (65.7 to 93.7)
Global Health Index (GHI) score ⁵	84.8 (82.6 to 87.0)
Health care capacity (per million population)	
Hospital beds	3092 (2662 to 4243)
ICU beds	87 (65.5 to 112)
Physicians	2866 (2311 to 3521)
Nurses	6235 (5379 to 8343)
Global Health Security Capabilities (GHS)⁶	
Overall GHS score	58.4 (53.6 to 60.6)
Prevention: Prevention of pathogen release	52.8 (49.1 to 57.1)
Early Detection and Reporting: of potential global epidemics	71.2 (61.6 to 74.6)
Rapid Response: mitigating the spread of a pathogen	52.0 (42.5 to 51.9)
Health System: Able to treat the sick and protect workers	46.4 (47.5 to 59.2)
Compliance: Commitments to improving national capacity	58.9 (52.5 to 62.8)
Risk Environment: Overall risk environment and country vulnerability to biological threats	70.9 (64.1 to 77.2)

Table 2
COVID-19 infection characteristic and government responses.

Characteristic as of May 01, 2020 (median; 95%CI) ¹	Outcome (n = 50)
Number of cases	17,054 (10,674 to 25,809)
Number of recovered cases	4522 (2992 to 10,359)
Number of critical cases ²	83 (50 to 148)
Number of deaths	620 (245 to 1194)
Total number of tests done	186,561 (106,385 to 275,848)
Testing per million population	10,657 (5709 to 22,809)
Cases per million population	1032 (670 to 1598)
Recovered cases per million population	201 (123 to 480)
Critical cases per million population ²	7 (2.8 to 14.6)
Deaths per million population	33 (16 to 53)
Mortality rate ³	4.2% (3.1% to 5.7%)
Critical case rate ^{2,3}	2.5% (1.9% to 3.7%)
Recovery rate ³	40.2% (26.8% to 54.2%)
Border closure	
Complete	38 (76%)
Partial	10 (20%)
Remained open	2 (4%)
Time to any border closure from first reported case in China	78 days (77 to 80)
Time to any border closure from first case in reference country	23 days (18 to 44)
Lockdown	
Complete	40 (80%)
Partial	5 (10%)
Curfew only	5 (10%)
Time to any lockdown from first reported case in China	78 days (76 to 81)
Time to any lockdown from first case in reference country	23 days (19 to 32)

Source: Chaudhry, Dranitsaris, Mubashir, Bartoszko & Riazi (2020)

Abbreviations: GDP = gross domestic product, ICU = intensive care unit. 1 Missing data due to unavailability was present for the number of physicians per million population (36% missing) and GHI score (32% missing). 2 Income dispersion is measured by the Gini coefficient, which is presented on a scale from 0 to 100. Countries with a more uniform dispersion of wealth have higher scores. 3 Corruption within a country is measured by the Corruption Perceptions Index, which is presented on a scale from 0 to 100. Countries with less systemic corruption in their institutions have higher scores. 4 Probability of dying between 15 and 60 years per 1000 population. 5 Measured on a scale from 0 to 100, the GHI score grades countries on variables such as life expectancy, overall fitness and imposes penalties on health risks such as tobacco use and obesity. It also takes into consideration environmental factors such as access to clean water and sanitation. 6 Measured on a scale from 0 to 100 and presents a country's overall preparedness in the event of a global pandemic. Higher scores indicate a greater level of national preparedness.

2.13.2. Social service delivery

The literature states that the Covid-19 pandemic had deleterious effects on the supply of food in rural communities, increased the rate of domestic violence, mental health problems, and social isolation rates. For example, as the Covid-19 pandemic of 2020 unfolded, considerable attention has focused on the resiliency of food supply chains in a time of crisis. Canada, and many other countries, experienced a sharply visible demand-side shock in panic buying or hoarding behaviours by consumers because of the pandemic (Hobbs, 2020). As governments around the world ramped up social distancing policies, many consumers engaged in stockpiling behaviours in anticipation of movement restrictions and fear of disruptions to food distribution systems. This caused major disruption to economic activity with severe restrictions on international travel. The impact on agriculture and global food security has been complex (Torero, 2020). The pandemic added to the food security challenges posed by climate change and major conflicts, both of which have been major factors contributing to recent food insecurity. The large global economic impact of Covid-19 had implications for agriculture and food production (Somner, Hoy & Ortiz-Juarez, 2020). The global economy has been severely affected by the curtailment of economic activity as people isolate to minimize the spread of the virus. The development of literature from scholars such as Hwang, Rabheru, Peisah, Reichman & Ikeda (2020) stated that the Covid-19 pandemic has led to the implementation of unprecedented “social distancing” strategies crucial to limiting the spread of the virus. The social distancing strategy perpetuated the isolation of people who are either exposed to or infected with Covid-19. However, there is a high cost associated with the essential quarantine and social distancing interventions for Covid-19, especially in older adults, who have experienced an acute, severe sense of social isolation and loneliness with potentially serious mental and physical health consequences (Jeste, Lee & Cacioppo, 2020). The isolation of people may have put older adults in a precarious and vulnerable position as they are mostly functionally dependent on family members or supported by community services (Hwang, Rabheru, Peisah, Reichman & Ikeda, 2020).

2.13.3. Economic service delivery

The development of literature is clear that the emergence of the Covid-19 pandemic had a deleterious impact on GDP, municipal fiscus, household income, and the rate of

unemployment. According to Roy (2020), “the Covid-19 pandemic created a widespread global shock, creating a severe economic slowdown”. Whereas Akbulaev, Mammadov and Aliyev (2020) echoed that the “Covid-19 pandemic affects people and societies around the world and will have a lasting impact on the global economy and trade”. South Africa’s economic fortunes were deleteriously tied to the Covid-19 pandemic in a manner that affected the GDP, growth rates, municipal revenue collections, and impacted the household income because of the lockdown promulgated by the government as part of the measures to curb the spread of the pandemic (Akbulaev, Mammadov & Aliyev, 2020). Since the pandemic exacerbated health and mortality concerns, government measures, such as lockdowns, contributed negatively to economic shocks. An ample number of municipalities were reportedly not able to collect revenue during the pandemic. The municipal infrastructure grants were not fully utilised to support service delivery in many municipalities. Moreover, many municipalities had to resort to redirecting service delivery funds and channelling them towards supporting Covid-19 programmes. On the other hand, businesses have had to close due to the pandemic, losing millions in revenue, leading to retrenchment and loss in household incomes (Kyung & Whitney, 2020). The South African government introduced new regulations under the Disaster Management Act to slow and manage the spread of Covid-19. These included size limitations on public gatherings, travel restrictions, school suspensions, port of entry closures, and the cancellation of government events, which were later refined (Chitiga-Mabugu, Henseler, Mabugu & Maisonnave, 2021). Forced reduction in production has led to the closure of segments in the manufacturing sector, agriculture, construction, trade, and mining (Arndt, Davies, Gabriel, Harris, Makrelov, Modise & Anderson, 2020). However, Chitiga-Mabugu, et al. (2021) stated that some interrelated problems facing various countries were not entirely because of the Covid-19 pandemic. To a certain extent, the pandemic practically contributed further to weak economic growth, high unemployment, falling per-capita income, and unsustainable government debt trends (De Villiers, Cerbone & Van Zijl, 2020).

2.14. Synthesis of Social Change and Kurt Lewin's Theory of Social Change Management

Both the Theories of Social Change and Kurt Lewin's Theory of Change Management are crucial for interpreting the findings of this research. The Theory of Social Change clarifies the extent of change, identifies what constitutes change, determines the factors influencing change, and outlines the variables used to assess change (Phillip, 2001). Therefore, the epistemological underpinnings of this research are grounded on the fact that crises lead to change and that planning and implementation of service delivery are subject to change. This is precisely because the development priorities of communities are turbulent. The local municipalities are at all times expected to deliver services in line with the turbulent priorities of communities. The development priorities of communities are not stable. Kurt Lewin's Theory of Change Management presumes that change may mean different things in different contexts. Therefore, in the context of this research, Kurt Lewin's Theory of Change Management presupposes that for the efficacy of local municipalities, there is a need to enact and instil change at an organizational level. The Covid-19 pandemic presented an opportunity for organizations to adapt to change and assess their readiness to adopt and consolidate new changes in their realm of planning. Therefore, the commonality in these theories is that enactment of change needs to accommodate the change in the non-social environment. That is precisely because the non-social environment has a detrimental impact on organisational planning, and Covid-19 is no exception. The non-social environment includes disasters such as pandemics, earthquakes and floods. Both theories advocate for the incorporation of non-social environments into the planning and implementation dictum. This is precise because of their unpredictability and challenge in predicting or generalising about their consequences. The Covid-19 pandemic has created a significant crisis that has necessitated changes in how we plan and implement service delivery. Consequently, two theories are essential for this research, as they work together to explore the challenges of planning and delivering services within the context of the Covid-19 pandemic. As a result, this research necessitates the incorporation of two distinct theories, as they work in tandem to thoroughly explore and elucidate the complexities surrounding both the planning and the implementation of service delivery during the unprecedented challenges posed by the Covid-19 pandemic. These theories, in the context of this study, work together to

provide a comprehensive framework for understanding the planning and implementation of service delivery in the context of crises.

2.15. Conclusion

The development of literature revealed that poor planning and implementation of service delivery in the local municipalities is still a subject of contention. It has emerged from this chapter that the municipalities are still in service delivery planning and implementation distress. On the other hand, the advent of the Covid-19 pandemic perpetuated the challenges facing municipalities. It has been highlighted that in as much as the pandemic was a new phenomenon, municipalities were found wanting in the mechanisation of their responses to the pandemic. The municipalities must develop a comprehensive plan to respond adequately to unforeseen circumstances such as the Covid-19 pandemic. However, it can be deduced that municipalities inculcate disaster management plans in their IDPs mostly for compliance purposes. The prevailing argument in this chapter is that the Covid-19 pandemic negatively impacted the planning and implementation of service delivery in the municipality.

The literature review in this chapter shows that the Covid-19 pandemic resulted in inadequate service provision across all municipalities. It is confirmed by the fact that the pandemic halted municipal operations, resulting in disruptions in governance, traditional consultation, and communication mechanisms and their impact on service delivery. The literature indicated that the pandemic perpetuated the service delivery backlogs across municipalities. The efficacy of digitalisation of service delivery as a panacea for effective service delivery was also discussed. It is clear from the review of the literature that the digitalisation of service delivery led to an urgent need to embrace technology in local government planning and the acceleration of service delivery. A study conducted by Torrentira (2020) highlighted that the use of technology has the potential to contribute positively to service delivery and effective community participation. The literature also indicated that various countries across the region were overwhelmed by the pandemic. Countries adopted various response mechanisms in dealing with the spread of the pandemic. The use of lockdowns, masks, and social distancing was found to be a common strategy to halt the spread of the pandemic across various regions.

The subsequent chapter discusses Covid-19 and service delivery in the context of South Africa

CHAPTER 3: COVID-19 AND SERVICE DELIVERY: A SOUTH AFRICAN PERSPECTIVE

3.1. Introduction

The economic and social effects of the Covid-19 pandemic have significantly disrupted service delivery, particularly at the local government level. Many municipalities and communities in South Africa have faced challenges in providing efficient services due to the pandemic. Almost all South African municipalities have been facing service delivery challenges such as poor provision of water, electricity, sanitation and refuse collection even before the advent of the pandemic. The Covid-19 pandemic further exacerbated the service delivery challenges. Therefore, the primary purpose of this chapter is to systematically engage with the available literature on service delivery and the Covid-19 pandemic in the South African context. The purpose is to evaluate the South African government's response to the pandemic. This literature review commences with the historical antecedence of local government in South Africa, intending to establish the mandate and the evolution of local government in South Africa, the democratic local government, the legislative framework for service delivery planning and implementation, and the South African government's response to the Covid-19 pandemic. Furthermore, the chapter discusses the perceptions of people on service delivery planning, challenges, and the impact of service delivery in the context of Covid-19.

3.2. The historical antecedents of local government in South Africa

The history of local government in South Africa dates to at least 200 years before the two former British colonies (Cape Colony, Natal Colony) and the two former Boer Republics (Orange Free State and Transvaal) were united to form the Union of South Africa in 1910 (Mathenjwa, 2018). At that time, the country developed its distinctive systems of local government in South Africa. The system placed local government under the jurisdiction of the four provinces (Cloete, 1997). On the other hand, it is important to note that the current and contemporary local government dictum is a result of historical forces, specifically colonisation and apartheid (Kaywood, 2021). Moreover, for a comprehensive understanding of local government, it is important to consider the impact of historical forces and their relationship to the existing local government system. The apartheid local government system successfully perpetuated gross inequalities among other social ills and an inadequate supply of essential

services (Fuo, 2014). Another significant feature of the local government of the time was the lack of autonomy (Mbatha, 2003). For example, the then Department of Native Affairs and white local authorities made all policy-related decisions on behalf of other local authorities (specifically for black local authorities). The South Africa Act introduced the Westminster system of government and because it represented the aspiration of whites only it led to the formulation of the African National Congress (ANC) in 1912. Furthermore, the South Africa Act, 1909, Section 85 "made provincial councils responsible for municipal and other local authorities, and Section 93 provided that all powers, authority, and functions lawfully exercised at the commencement of the Act shall be and remain in force until varied or withdrawn by Parliament or the provincial councils having powers in that behalf" (South Africa, 1909:52). The Act further gave voting powers to whites only; non-whites were legally not allowed to participate in the decision-making process at any government level. Advisory committees for black townships were established under the auspices of white municipalities and remained effective until 1971. Hence, it exacerbated the tensions and unrest among the black majority to demonstrate their dissatisfaction. That is precisely because the South African municipalities during this period were characterised by, *inter alia*, their own management structures for black inhabitants, exclusion of black inhabitants from the municipal tax base, intentionally ignoring needs of rural people, political controversy, administrative constraints and financial backlogs (Cameron and Stone 1995:78; Reddy 1996:201).

3.3. The move towards democratic local government

The development of literature has been very explicit in an attempt to root out and clarify public administration. It is in the same vein that local government also needs to be provided in perspective. Local government is defined as a system consisting of community management and administration (Lockard, 1968; Cloete, 1995). Local government is described as the sphere of government in close contact with its constituents or service delivery beneficiaries. It is further involved in rendering a wide range of services to the inhabitants residing within its area of jurisdiction (Venter, 1998:201). It encompasses the political and bureaucratic structures and processes that regulate and promote community activities. According to Koma (2010), "local is aptly defined as a sphere of government located within communities and well placed to appropriately respond to local needs, interests, and expectations of communities".

Van der Waldt (2006) asserts that “local government is at the coalface of public service delivery” Thornhill (2008:492) also articulates this view by stating that “the local government is often the first point of contact between the individual and a government institution”. The argument provides an affirmation that the local government is the government closest to the people. The other sentiments shared by Roux (2005:64) are that “local government is described as a public organization authorized to manage and govern the affairs of a given territory or area of jurisdiction. In the context of South Africa, there exists myria policy frameworks and legislative measures that outline the essential role of local government in fostering community development and ensuring the well-being of citizens (Nkwinika, 2021). Despite these well-intentioned policies and laws, municipalities continue to grapple with significant challenges in delivering essential services. This persistent issue of inadequate service delivery stands out as the foremost obstacle that municipalities face, hindering their ability to meet the needs of their constituents effectively.

The implementation of the new Constitution of the Republic of South Africa, along with several accompanying policy frameworks, envisioned a substantial enhancement of the role of local government (Mkhatshwa-Ngwenya & Khumalo, 2020). This transformation calls for municipalities to embrace a developmental approach, wherein they actively lead, manage, and strategically plan for sustainable development within their communities. Such a mandate requires local government to not only respond to the needs of their residents but also to foster inclusive growth and improve the quality of life for all citizens (Mautjana & Mtapuri, 2014). Municipalities play a crucial role in managing public resources, and one effective method they employ to minimise wasteful spending is through integrated development planning. This strategic approach is not just a procedural requirement; it is fundamental for local government to adapt to their evolving responsibilities as outlined in the Constitution of 1996 and other relevant laws. Integrated development planning serves as a vital tool that enables municipalities to stay aligned with their mandates, ensuring they operate efficiently and responsibly while addressing the needs of their communities. The importance of this planning process has been emphasised by various scholars, including Mashamba (2008) and Beyers (2015), who highlight its impact on enhancing governance and promoting sustainable local development. However, apart from the need to embrace IDPs as a legal requirement for local development, it is pragmatically

evident that, in most instances, the impact of IDPs has yet to be shown. The study conducted by Oranje, Harrison, Van Huyssteen and Meyer (2000) indicated that IDP problems across all local government are largely attributed to a lack of knowledge, inability to adapt to new ways of doing things (change), lack of commitment, and coordination at a national and provincial level. According to the IDP Guide Pack, "Integrated Development Planning is a process through which municipalities prepare a strategic development plan for five years". *Local Government: Municipal Systems Act 32 of 2000* defines the IDP as a comprehensive and strategic plan for municipal development, integrating and coordinating various sector plans (RSA, 2000). Therefore, many local municipalities are still experiencing poor service delivery despite having a clear planning and development framework that fosters effective implementation. This research reflects on the integrated approach to service delivery planning and implementation in the contemporary dictum.

3.4. The democratic and developmental municipalities: 2000 to date

The purpose of this section is to provide a broad overview of the evolution of local government in democratic South Africa from 2000 to date. The section serves as a framework for understanding local government successes and challenges over the years. As a point of departure, it is important that in the context of democratic local government transformation, development is viewed as a "process by which local inhabitants increase their personal and institutional capacities to mobilize and manage resources to reproduce sustainable and justly distributed improvements in their quality of life consistent with their aspirations" (Turok et al., 1994:30). The local government transformation is premised on the principles that development must ensure capacity-building, economic growth, economic resource distribution, participation, empowerment, and self-reliance (Alba & Navarro, 2003). Therefore, the section provides the timelines for local government from 2000, as it was declared the launch of democratic local government. The local government trajectory commenced with consolidating metros, districts, and local municipalities. On the other hand, the Municipal Infrastructure Grant (MIG) was approved, with the Department of Cooperative Governance, to eradicate municipal infrastructure backlogs in poor communities to ensure the provision of basic services such as water, sanitation, roads, and community lighting, notwithstanding its challenges. Scholars such as Rangwato, Mukonza and Molepo (2022) conducted a study on the spending of municipal

infrastructure grants at Ba-Phalaborwa municipality. The study revealed that a lack of planning for MIG, coupled with community unrest and inadequate monitoring and mechanisms, serves as an impediment to overall spending of MIG in municipalities.

In 2004, the Department of Provincial and Local Government (DPLG) launched project consolidation that targeted 136 municipalities that were in the planning and implementation distress. The fact of the matter is that the “sphere of government that is closest to the people” (Davids & Maphunye, 2005:59) operates under enormous pressure to fulfil its developmental mandate, which demands the establishment of inter alia democratic and accountable government, sustainable services, promotion of social and economic development (RSA, 1996). Therefore, to respond to this situation, the national government through DPLG introduced, amongst other programmes, project consolidate to capacitate ‘failing or under-performing’ municipalities to fulfil their developmental mandate. The period of 2005 was classified as the launch of Intergovernmental Relations Framework Act No.13 of 2005. The act was enacted to lay the interdependent and interrelated relationships between the three spheres of government as well as intergovernmental forums and mechanisms. The intergovernmental framework period led to the period of 2006, the second local government elections where the ruling party ANC retained its majority with two-thirds of the vote. The period of 2008 was characterized by global financial and economic crises. Scholars such as Bordo & Landon-Lane (2010), asserted that the global crisis ended with government bailouts of insolvent banks, guarantees of the liabilities of the banking system, the provision of credit facilities to unclog financial markets, and expansionary monetary and fiscal policy in many countries.

In 2009, a significant shift occurred in the course of democratic local governance. During this pivotal year, the Department of Cooperative Governance and Traditional Affairs (COGTA) assumed responsibility for overseeing cooperative governance, placing a renewed emphasis on collaboration with traditional leadership institutions (Coetzee, 2010). The establishment of democracy heralded a transformative era in local government, where traditional leaders became integral members of the governance framework, recognized through indigenous law. This integration signified a blending of modern democratic principles with deeply rooted cultural traditions, as noted by Shabangu and Khalo (2008).

Scholars such as Kgobe and Makalela (2018) wrote an article on “the unabated power of South African traditional leaders on service delivery enhancement”. The study highlighted the potency of traditional leadership in enhancing service delivery in rural communities. The state of the local government reports on the other side laid the basis for the development of the Local Government Turnaround Strategy (LGTAS). The strategy was established in November 2009 as a tool for achieving developmental local government (Van Niekerk, 2012). In 2019, the president of South Africa, Cyril Ramaphosa, unveiled the District Development Model (DDM), a strategic framework aimed at enhancing collaboration among the different levels and entities of government. This initiative was designed to improve the delivery of essential services and to foster positive developmental outcomes within local government. By bridging gaps and promoting coordinated efforts, the DDM seeks to streamline processes and create a more effective governance system that directly addresses the needs of communities across the nation. The 2016 period marks the fourth local government election where the ANC lost support and fell to its lowest since 1994. With the precipitous decline in the ruling party's dominance, coalition and minority governments have become prevalent.

In 2020, the country experienced an unprecedented turn in the form of the Covid-19 pandemic. The Covid-19 pandemic has hit the country, halting many processes. All the government departments had to focus on crisis management and emergency governance issues. The Covid-19 pandemic exacerbated the broader economic, developmental, and governance issues that local government has faced over the previous decade. The fifth local government elections were held in 2021, and the ANC lost its outright majority in all metros (Buffalo City, Mangaung, and Nelson Mandela Bay). The coalition government became more prevalent and the order of the day. The period 2021 and beyond is the period of democratic local government restoration and rebuilding.

3.5. Legislative Framework for service delivery planning and implementation in South Africa

Constitutionally, all South African municipalities are mandated to deliver on basic municipal services. Despite its complexities, legislation regarding service delivery must be seen as a guiding document for municipalities to make informed and

considered decisions (Sebola, 2015). The development literature explicitly indicates that legislation serves and protects the people who benefit from the delivery of municipal services. The signing of the new Constitution of the Republic of South Africa in 1996 established local government as the central element of the governmental delivery system and the initiative aimed at eradicating poverty (Mogale, 2003). Therefore, the following pieces of legislation should be explored precisely because they serve as the rudimentary base within which the planning and implementation of service delivery is premised.

3.5.1. Constitution of the Republic of South Africa, 1996

Scholars such as Mlambo and Maserumule (2024:221) vehemently state that “the South African Constitution is still highly regarded internationally as one of the most progressive”. They further stated that the “constitutional court adopted the Constitution on December 4, 1996, and it went into effect on February 7, 1997”. As a point of departure, section 151.3 of the Constitution states “that a municipality has the right to govern, on its initiative, the local government affairs of its community, subject to national and provincial legislation, as provided in the Constitution” (RSA, 1996). In other words, despite the principle of intergovernmental relations, municipalities are also autonomous as far as governance is concerned. “Local government is aptly defined as a sphere of government located within communities and well-placed to appropriately respond to the local needs, interests, expectations, and priorities of communities” (Koma, 2010). Therefore, local government is at the forefront of public service delivery. Section 153 delineates the various responsibilities that a municipality bears in relation to development. This includes planning for land use, ensuring the provision of essential services, and fostering sustainable growth within the community. These duties aim to enhance the overall quality of life for residents while promoting responsible and efficient land management (RSA, 1994). Besides, the constitution was formulated to democratise the republic and eradicate the inequalities attributed to the previous apartheid regime, to raise the standard of living for all South Africans and allow them to enjoy equal rights.

The constitution further requires the government to utilise public resources efficiently and effectively and hold different organs of government accountable to the people, particularly local government. The national, provincial, and local government have not

yet adequately fulfilled their functions. For example, according to the constitution, everybody has the right to adequate provision of water, electricity, sanitation and refuse removal so that people can reside in a safe environment. The functions mentioned above are clearly articulated in the constitution to assist state institutions and state organs, including municipalities, in executing their responsibilities. Notwithstanding, some municipalities fail to address the functions for which they are responsible, even though the Constitution of democratic South Africa (RSA, 1994) requires them to do so.

3.5.2. *White Paper on Local Government, 1998*

The development of literature is explicit on the fact that the municipalities, as the sphere of government in close contact with the communities, are mandated to work together with communities for effective service delivery (Magagula, Mukonza, Manyaka & Moeti, 2022). The White Paper on Local Government was introduced to engage directly with communities to identify the most effective ways to address their needs. It emphasises collaboration across different sectors within local government and promotes alignment between provincial and local government authorities (RSA, 1998). The developmental role of a municipality is an essential function that every municipality must undertake to ensure effective service delivery to its communities. The 1998 White Paper on Local Government thoughtfully addresses the critical issues surrounding Cooperative Government. It advocates for the positioning of local government within a framework of cooperative governance, highlighting the importance of collaboration and partnership among various spheres of government to enhance service delivery and community engagement. This framework aims to foster a more integrated approach, ensuring that local authorities can effectively contribute to national development while responding to the unique needs of their communities. The issues around participatory governance are premised on the White Paper on Local Government. The act is explicit in stating that every development effort must guard against exclusivity. The act was enacted to ensure that the development process is inclusive, interactive and transparent. However, the advent of the Covid-19 pandemic disrupted the municipal operations and made it impossible for municipalities to adequately exercise the participatory form of development and governance. The emergence of the Covid-19 pandemic necessitated the review of the act. This is

precisely because the act was published 25 years ago, and the ideal future of local government is marred by planning and governance turbulences.

3.5.3. *Local Government: Municipal Structures Act 1998 (Act No.117 of 1998)*

Scholars like Baatjies (2008) have asserted that the legislation is fundamentally grounded in the obligation for municipalities to create frameworks that adhere to established statutory requirements concerning the various types and classifications of municipalities. In this context, a municipality is endowed with specific duties and powers as outlined in Sections 156 and 239 of the Constitution, further detailed in Section 83 of the Act. This highlights the crucial role municipalities play in governance and local administration, ensuring compliance with constitutional requirements. Scholars such as Mafema, Tshishonga and Maphunye (2009). Research has shown that communities often undergo sporadic surges in service delivery protests and demonstrations. These outbursts are typically rooted in the challenges municipalities face in meeting their essential service delivery obligations. As residents grow increasingly frustrated with unmet needs, these tensions can manifest in public expressions of dissent, highlighting the ongoing struggles local government encounter in effectively fulfilling their mandates (Tirivangasi & Mugambiwa, 2016). The *Local Government: Municipal Structures Act of 1998* provides a vital legislative framework that underpins local governance and community engagement. To facilitate a structured communication channel between local government and the communities they serve, Sections 72 to 74 of this Act empower metropolitan municipalities and legally constituted local municipalities to establish ward committees within their respective jurisdictions. These ward committees play a crucial role in representing community interests and ensuring that local perspectives inform municipal decision-making. Furthermore, as outlined in Section 32(1) of the Act, municipal councils are permitted to delegate specific powers to their ward committees, fostering a more collaborative governance model. However, this delegation excludes certain powers, such as those identified in Section 160(2) of the 1996 Constitution, and the authority to approve the Integrated Development Plan (IDP). Ultimately, the *Local Government: Municipal Structures Act* is designed to enhance the efficiency and effectiveness of service delivery by clearly delineating the responsibilities and functions of ward committees, thereby strengthening the connection between government and the communities they serve.

3.5.4. *Local Government: Municipal Systems Act, 32 of 2000*

The *Local Government: Municipal Systems Act of 2000* was enacted to provide key principles and mechanisms that enable municipalities to promote social and economic development in local communities. The legislation aims to enhance residents' quality of life by ensuring universal access to essential services such as clean water, sanitation and electricity (RSA, 2000). Additionally, the Act encourages community participation in decision-making to address the needs and aspirations of all citizens. Scholars such as Nabatchi and Amsler (2014), in their study on direct public engagement in local government, stated that it is paramount for municipalities to inculcate the views of the communities in the decision-making processes. The inclusion of communities' views builds the rapport that is premised on cooperation and trust and improves the delivery of services. On the other hand, Chapter 5 of the act articulates the establishment of IDP planning as a strategic tool for the effective delivery of services in rural communities. Scholars such as Cash and Swatuk (2010) reiterated that the act perceives the IDP As an implementation agent, it is essential to promote an integrated and participatory approach that legally consults all sectors and affected individuals. For instance, Section 25(1) of the *Local Government: Municipal Systems Act (2000)* establishes integrated development planning processes as a response to service delivery challenges and as a tool for developmental planning. This act requires all municipalities to adopt a developmental approach to overcome the centralised and fragmented planning practices of the past. In summary, the act mandates that the municipal council, within a specified period after the start of its elected term, adopt a single, inclusive, and strategic plan for the municipality's development. This plan must:

- Link, integrate, coordinate and consider development proposals for the municipality.
- Align the municipality's resources and capacity with the plan's implementation.
- Serve as the policy framework and general basis for annual budgets.
- Comply with the provisions of Chapter 5.
- Be compatible with the plans and planning requirements of national and provincial departments that are legally binding on the municipality.

Amid all these constitutional imperatives that support the planning and implementation of service delivery, municipalities are still inundated with challenges. The vast number of reports and scholarly publications has demonstrated that almost all municipalities are in serious distress or challenges in effectively delivering services to their constituents (Asha & Makalela, 2021). Despite the unrelenting challenges facing municipalities, the local municipalities' failure to deliver services is mostly attributed to a lack of capacity to implement, corruption, and political meddling. Hence, such challenges results in the poor implementation of the IDP (Beyers, 2015).

3.5.5. *Local Government: Municipal Finance Management Act 56 of 2003*

In the post-apartheid regime, it became clear that the financial management for most government entities has become the fundamental area of focus for effective planning and implementation of service delivery particularly in local government. In a nutshell, financial management became a pivotal doctrine within which to ensure effective accountability from government entities (Mlambo & Maserumule, 2024). For example, accountability regarding how government entities utilize their finances to public and other stakeholders is crucial. Therefore, the act aims to ensure sound and sustainable financial management in municipalities and further enhance the budgeting process within those municipalities (Mlambo & Maserumule, 2024). The act protects municipalities by ensuring they adhere to proper financial guidelines and procedures. Scholars such as Asha and Makalela (2021) revealed that, as part of the challenges facing local municipalities, “the lack of financial management and budgeting takes a leading role”. On this basis, the act aims to modernize budgeting, accounting, and financial management practices by ensuring that local government finances are placed on a sustainable footing, maximizing the capacity of municipalities to deliver services to their communities (Mlambo & Maserumule, 2024). Municipalities must exercise their power and capacity to ensure that the institution delivers on its mandate of ensuring the effective delivery of services to communities in their areas of jurisdiction. For example, the capacity in terms of their human capacity, financial capacity, resources, and technology to implement policies and services that benefit the people (Mlambo & Maserumule, 2024). Hence, it is important for MFMA in municipalities to avoid wasteful expenditures and ensure efficient and transparent governance. Moreover, because the local municipalities are premised on consultative governance as outlined in the Constitution of the Republic of South Africa 1996, the MFMA is one piece of legislation

that also enforces public consultation regarding budgeting in the local sphere of government. Scholars such as Magwasha (2018), assert that many municipalities in South Africa experience challenges in implementing the act due to the abrupt increase in levels of corruption and poor managerial oversight in the local government. In South Africa, many municipalities face significant challenges, including inadequate financial systems, ineffective repository mechanisms, improper budgeting protocols, weak revenue collection systems, and mismanagement of funds. These issues contribute to inefficient service delivery within the municipalities.

3.6. The South African Government Response to Previous Pandemics

In South Africa, disasters are managed by the Department of Cooperative Governance through the promulgated Disaster Management Act of 2002. At the national level, the government established the National Disaster Management Centres across the eight provinces. The centres play an important role in advising and determining the path for reducing the risk of disasters and severity. Therefore, South Africa is not immune to disaster. The country has experienced a multiplicity of devastating disasters over recent years. On the other hand, the government's response to disasters has changed in the last two decades (Van Riet, 2009). Disasters such as floods, mudslides, snow and MPOX outbreaks are familiar and can be as common as annual occurrences in some parts of the KwaZulu-Natal (KZN), Eastern Cape and Northern Cape. Other common disasters in the country include field fires and hailstorms in many parts of Gauteng province AND KZN. These disasters always result in consequent disruption that includes damages to properties, infrastructure, and loss of lives. Amid the role of COGTA in implementing the disaster management strategy, disaster management in South Africa has traditionally been the domain of individual government departments and voluntary organisations such as civil protection. However, it has been noted in the recent past that the government's response to such disasters was more of a reactionary approach as opposed to being proactive. The South African government was found wanting in responding to the disaster. The government adopted in most cases the end-of-pipe strategy, which is to wait for the problem to occur and respond. For example, the recent snow on N3 in KZN where the motorists were stuck on the road for more than 24 hours without assistance. The annual floods in KZN and mudslides because of rainstorm continues to demonstrate the lack of government capacity to manage disasters. The president of the Republic of South Africa, Cde Cyril

Ramaphosa visited several flood-affected areas in KZN where more than 2000 houses and 4000 informal homes or shacks have been damaged (News wire, 12/04/2022).

"This is a tragic toll of the force of nature and this situation calls for an effective response by the government," said Ramaphosa.

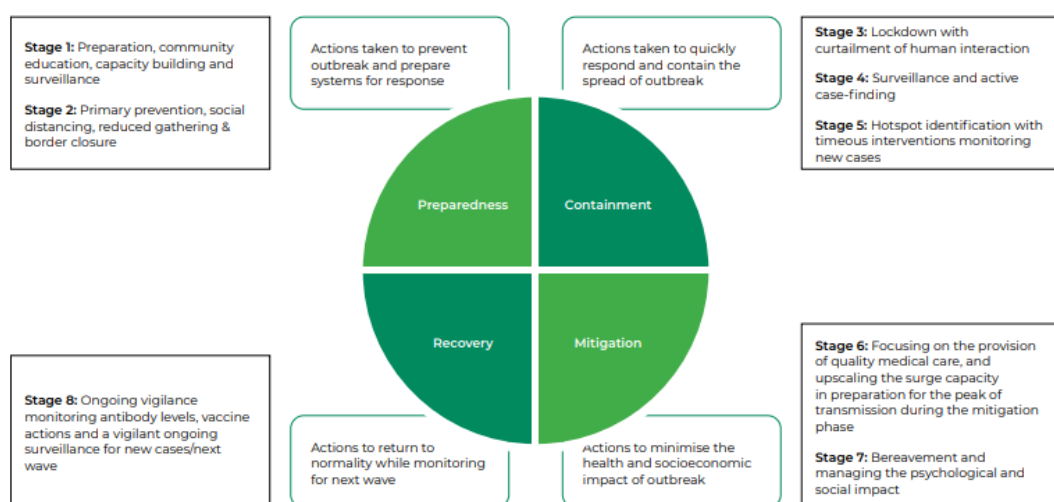
The case of the South African drought that occurred in the 1990s is also a typical example of the government's ability to manage disasters. The government has once again seen more of a reactionary approach rather than being proactive. Moreover, there are cases where early warnings are proposed after the incidences of disasters. However, these improvements tend to remain in the proposal stage and are seldom improved (Benson & Clay, 1994). The latter exposes the government's strategy to manage and respond to disasters. In the Disaster Management Act of 2002 early warning system improvements were proposed but were insufficiently implemented over the two years leading up to the 2003/04 drought. There was a great desire to improve many aspects of how drought was responded to and to improve preventative measures such as long-range weather forecasts. However, it appears that since the Disaster Management Act was proposed, nothing has yet been done about drought management in South Africa (Austin, 2008). The green paper calls for an expanded evaluation of risk environments and vulnerability assessments. It is strongly argued that disasters are events that occur because of poor risk management. Therefore, the overall assessments of the government response to disasters are not adequate. For example, an ample number of municipalities continue to react in their approach, whereas the handling of shocks and crises has evolved from reactive emergency response towards proactive, adaptive frameworks focused on long-term resilience and cross-sector coordination. In a nutshell, municipalities should be able to develop crisis preparedness and prevention plans that take into account risk assessments and capacity building, amongst others.

3.7. The South African Government's response to the Covid-19 pandemic

The National Department of Health led the South African government's response to the Covid-19 pandemic. To mitigate the spread of the virus, the government implemented several laws and measures under the National Disaster Management Act (Thabo, 2021). "The response aligned with the Covid-19 Strategic Preparedness and Response (SPAR) operational planning guidelines issued by the World Health

Organization (WHO) in February 2020” (WHO, 2020). The World Health Organization (WHO) provided comprehensive guidelines that urged nations around the globe to implement a range of strategies aimed at curbing the spread of the severe acute respiratory syndrome (SARS-CoV-2). In response to these recommendations, the South African government adopted a cohesive approach that involved multiple sectors of society. This strategy not only prioritised public health initiatives but also wove them into a broader national framework. To effectively manage this unprecedented crisis, the government established the National Coronavirus Command Council, a dedicated body tasked with overseeing the enforcement of lockdown regulations and ensuring a coordinated response to the pandemic (De Coning, 2020). However, difficulties hindered the governance response in effectively addressing the pandemic. The government implemented an eight-stage approach in its response to the pandemic.

Figure 3.1: Stages of the South African response to Covid-19



Source: Abdool Karim (2020)

The eight overlapping stages were developed as part of the national health response plan to curb the spread of the pandemic:

- **Stage 1: Preparation** – This stage focused on establishing national testing and surveillance capacities.
- **Stage 2: Primary Prevention** – Initiated 10 days after the first confirmed Covid-19 case in South Africa, this stage involved the government declaring a national

state of disaster. Measures included banning international travel, closing schools and universities, restricting gatherings, and promoting social distancing and handwashing.

- Stage 3: National Lockdown – Implemented on March 26, 2020, this stage enforced a national lockdown with regulations divided into five levels (Singh & Chauhan, 2020). These levels ranged from extensive restrictions on movement and economic activity (alert level 5) to the easing of nearly all restrictions (alert level 1).
- Stage 4: House-to-House Screening – Beginning on day 33 of the lockdown, the government deployed more than 28,000 community health workers to conduct active house-to-house screening and case identification, especially in high-risk communities like informal settlements. Workers used a mobile app to administer a symptom checklist, and the data collected for each household was uploaded with location coordinates to a central database for mapping purposes. Suspected Covid-19 cases were referred to mobile testing stations or health facilities for further assessment (Garba, Lubuma & Tsanou, 2020).
- Stage 5: Hotspot Identification – This stage focused on identifying hotspots and implementing preventive measures in areas experiencing localized outbreaks.
- Stage 6: Provision of Medical Care - This stage included investments in medical infrastructure, such as the establishment of field hospitals.
- Stage 7: Psychosocial Support – Addressing the psychosocial impacts, this stage focused on the deaths, burials, and mental health challenges associated with bereavement.
- Stage 8: Ongoing Vigilance – This final stage emphasises the importance of continued case finding and monitoring immunity levels, utilising surveillance in preparation for potential subsequent waves of the epidemic (Abdool Karim, 2020).

As part of the government response, the government of South Africa, through the disaster management plans, also promulgated the lockdown in order to limit in terms of the movement of people. The lockdown comprised five levels (see Table 3.1 below). The stages of the lockdown range from extensive restrictions on movement and economic activity (hard lockdown) to the easing of nearly all restrictions (soft lockdown).

Table 3.1: Covid-19 alert levels.

Alert level	Timeline
Level 5 (Lockdown)	The full national lockdown began at midnight on Thursday, 26 March, and continued until midnight on Thursday, 30 April. Its drastic measures helped contain the spread of the virus.
Level 4	Restrictions were then in place from 1 to 30 May 2020. Some activity was allowed to resume, subject to extreme precautions to limit community transmission and outbreaks.
Level 3	This level, in effect from 1 June to 17 August 2020, eased some restrictions, including on work and social activities. It was implemented again on 29 December 2020, with adjustments.
Level 2	From 18 August to 20 September 2020, alert level 2 further eased restrictions but maintained physical distancing and restrictions on some leisure and social activities.
Level 1	From 21 September to 28 December 2020, level 1 allowed most normal activity to resume, subject to precautions and health guidelines. It was implemented again on 1 March 2021.

Source: South African Government (2020)

The South African government's response to the pandemic followed the World Health Organization's guidelines for managing and containing Covid-19. When the nationwide lockdown was declared on March 26, 2020, the country had reported only 927 Covid-19 cases, primarily clustered in urban areas. The lockdown, which was initially intended to last for 21 days, mandated that the entire population stay at home, closed “non-essential services, schools, and institutions of higher learning, and advised the public to remain indoors and avoid unnecessary social contact” (Onyeaka, Anumudu, Al-Sharify, Egele-Godswill & Mbaegbu, 2021). In certain communities, the lockdown was strictly enforced by police and the military. The initial lockdown lasted for three weeks and was later extended for an additional two weeks, concluding on 30 April 2020. During this time, behavioural measures were implemented, including “restrictions on social gatherings, physical distancing, handwashing, and the mandatory wearing of mask”. Specific limits were placed on social gatherings during the initial lockdown, as detailed below:

- Schools and tertiary institutions across all provinces were closed starting from 15 March 2020. On 26 March 2020, the country entered a total lockdown, which resulted in the closure of restaurants, nightclubs, gyms, sports stadiums, and other venues that accommodate large gatherings.

- Places of worship, including churches, mosques and synagogues, were also closed, as these gatherings had been identified as “super spreader” events. Notably, a large church gathering in Bloemfontein led to a significant outbreak of Covid-19, with many attendees contracting the virus and spreading it to other provinces.
- Lastly, gatherings for funerals were restricted to a maximum of 50 people. Traditional funeral practices were banned and remain prohibited even during level 1 lockdown, as they pose a high risk for the transmission of the virus among attendees.

Regarding the government response to the pandemic was the adoption of social or Physical Distancing. Pedersen and Favero (2020:805) stated that the “approach was a key strategy for curbing the spread of the virus”. South Africa implemented physical distancing immediately after the first case of Covid-19 was reported in KwaZulu-Natal. The message to maintain distance in public spaces has remained consistent. However, there has been some confusion regarding the recommended distance needed to effectively prevent the spread of the virus, with varying suggestions of 1 metre, 1.5 metres, or 2 metres. On the other hand, wearing of masks was initially recommended to individuals directly caring for Covid-19 patients and frontline workers in healthcare settings. However, as more evidence emerged, the general public began to be encouraged to wear masks. South Africa officially adopted mask-wearing in public spaces on 10 April 2020. At that time, it was only recommended and not mandatory. Nevertheless, South Africans largely embraced this initiative, and most businesses enforced compliance with the regulations. Over time, adhering to mask regulations became increasingly common.

3.8. Covid-19 pandemic and service delivery in South African local municipalities

Municipalities have long struggled to ensure that all households have access to reliable and safe basic services. The Covid-19 pandemic brought this issue to the forefront, as households lacking running water, sanitation or electricity were likely at greater risk (Funke, De Wet, Mafunda, Schaefer & Le Roux, 2024). For example, many households had difficulties primarily in maintaining hygiene practices. “A household without access to running water, for example, would have to source water from a communal source, creating a transmission risk” (Funke et al., 2024). “As of 2019,

approximately 12% of the South African population lacked access to a basic water supply, and around 21.3% did not have access to basic sanitation services”, according to the Department of Human Settlements (DHS) and the Department of Water and Sanitation (2020). Providing water and sanitation to vulnerable communities to help curb the spread of Covid-19 must go beyond just access and supply. It is also essential to consider the overall management of water resources (Giné-Garriga, Delepiere, Ward, Alvarez-Sala, Alvarez-Murillo, Mariezcurrena & Jiménez, 2021). This approach can “help prevent disease and ensure that vulnerable groups do not face additional dangers when securing water”. In its initial response to the pandemic, the “Department of Water and Sanitation rolled out water tankers to communities without access to potable water, with a focus on rural areas”. On the other hand, Mthethwa, Ndebele and Thusi (2023) also highlighted that ‘the pandemic could have reduced households’ ability to afford municipal services and that municipal revenues may have decreased’. On the other hand, the pandemic perpetuated the already-stretched local government into more financial pressure. The reallocation of infrastructure investment funds for short-term disaster responses and operational expenses may undermine vital long-term infrastructure investments and decrease capital budgets (Butler, Pilotto, Hong & Mutambatsere, 2020).

Service delivery continues to pose a formidable challenge for municipalities across South Africa (Makalela, 2021). The ongoing issues surrounding inadequate service provision have emerged as a critical concern throughout the nation, resulting in heightened pressure and scrutiny on local municipalities (Masipa, 2021). This crisis has catalysed a significant rise in community protests, with a staggering total of approximately 14,740 such protests recorded in the year 2015 alone (Mbeki, 2016). This surge indicates a growing discontent among residents, reflecting their urgent demand for improved services and accountability from their local authorities. The research study conducted by Patience and Nel (2022) on “Governance, democracy, and accountability from a network governance perspective within the city of Ekurhuleni” revealed that “many municipalities have worked hard over the past years at creating a democratic and accountable government”. However, many rural communities in South Africa continue to face a slow pace in service delivery (Masipa, 2021). In addition, the existing governance framework is falling short in its ability to effectively provide the essential social and economic services that are crucial for

addressing the needs and aspirations of the population. This inadequacy in service delivery hampers the community's overall well-being and progress, highlighting a significant gap in the current system (Masilo & Gershwin, 2020). Scholars such as Zweni, Yan and Uys (2022) highlight a significant gap between the policies established by the government and the effective implementation of service delivery in certain municipalities in South Africa. Service delivery across the country has faced significant backlogs and challenges. This situation is often marked by insufficient access to water, poor road conditions, and electricity shortages (Beyers, 2015). Additionally, the Integrated Development Plan (IDP) report from the municipality highlights that more progress is needed in various villages to provide basic services, ensuring a better quality of life for community members (Masilo & Gershwin, 2020).

3.9. Covid-19 pandemic and Service delivery challenges

Municipalities have always faced the challenge of ensuring that all households have access to reliable and safe basic services (Gbedemah, Eshun, Frimpong & Okine, 2022). The Covid-19 pandemic has brought into sharp focus the vulnerabilities faced by households that lack essential utilities such as running water, sanitation facilities and electricity. These fundamental resources are crucial for maintaining health and hygiene, and their absence likely subjected these households to increased risks during the crisis. Without reliable access to clean water for handwashing and sanitation, as well as electricity for cooling and lighting; these communities faced significant challenges in safeguarding their wellbeing amidst a global health emergency (Makalela & Molepo, 2025). For example, many households had difficulties primarily in maintaining hygiene practices. Households without access to running water are at risk of contracting the virus. “As of 2019, about 12% of the South African population did not have access to a basic water supply, while about 21,3% did not have access to basic sanitation services” (Department of Human Settlements & Department of Water and Sanitation, 2020). On the other hand, the pandemic perpetuated the already-stretched local government into more financial pressure. Moreover, “the diversion of infrastructure investment resources to fund short-term disaster responses and operational costs could also undermine critical longer-term investment in infrastructure and reduce capital budgets” (Butler, Pilotto, Hong & Mutambatsere, 2020).

It is evident that the current governance system designed to facilitate efficient delivery of both social and economic services, which are essential for fulfilling the aspirations of the populace, is falling short of expectations (Nnadozie, 2011). Throughout the country, there has been a significant backlog and numerous challenges in service delivery. This situation is often marked by a troubling scarcity of basic necessities such as clean water, poorly maintained roads that hinder transport, and frequent electricity shortages that disrupt daily life (Beyers, 2015). Furthermore, “the IDP report of the municipality also indicated that more noticeable progress still needs to be made in the different villages of the municipality in providing basic services to ensure a quality living standard in communities” (Masipa, 2021). Since it is expected by the local sphere of government to play a pertinent role in ensuring effective service delivery and basic infrastructure. The developmental role accorded to the local government faces a lack of administrative capacity, and implementation of sound strategies remains a scorching concern (Asha & Makalela, 2020). In practice, “local authorities have been struggling with the ineffective implementation of IDP even before the Covid-19 pandemic, and that resulted in service delivery upheavals and backlogs” (Asha & Makalela, 2020; Herdiana, Mukhlis & Madya, 2020). Poor services such as water, electricity, sanitation, and refuse removal continue to characterize almost all South African municipalities. These municipalities had difficulties primarily in delivering expected services to communities (Dikotla, Mahlatji & Makgahlela, 2014). Consequently, as part of the output of the delivery agreement mandated the Department of Cooperative Governance was mandated to develop and implement a differentiated approach to municipal financing, support, planning, and forecasting. Municipalities are required to develop focused interventions that respond to and keep abreast of contemporary issues (Talabis, Babierra, Buhat, Lutero, Quindala & Rabajante, 2021). However, based on several considerations, the local government’s role in tackling Covid-19 is still challenged (Herdiana, Mukhlis & Madya, 2020).

In the past decade, there have been several interventions by the national and provincial governments to address this dysfunctionality in local government; however, there has not been any substantial improvement in service delivery (Reddy, 2016). Furthermore, in terms of Schedules 4 and 5 of the Constitution, municipalities are expected to detail their functions and operational plans for a specific period. However, it would appear that ever since their establishment, they have continued to discharge

their functions with limited funds. It is in most cases, because of municipalities' inability to collect revenue adequately or be creative about additional sources of revenue.

3.10. Conclusion

In conclusion, the development of literature revealed that poor planning and implementation of service delivery in the local municipalities is still a subject of contention. It has emerged from this chapter that the municipalities are still in service delivery planning and implementation distress. On the other hand, the advent of the Covid-19 pandemic perpetuated the challenges facing municipalities. It has been highlighted that as much as the pandemic was a new phenomenon, municipalities were found wanting in the mechanisation of their responses to the pandemic. The municipalities must develop a comprehensive plan to respond adequately to unforeseen circumstances such as the Covid-19 pandemic. The disaster management plan must be adequately operationalised in the municipal integrated development plans as opposed to being used as a compliance tool. The prevailing argument in this chapter is that the Covid-19 pandemic negatively impacted the planning and implementation of service delivery in the municipality.

The next chapter presents the research design and methodology adopted for this research.

CHAPTER 4: RESEARCH DESIGN AND METHODOLOGY

4.1. Introduction

The previous chapter explored the literature on the South African government's response to the Covid-19 pandemic and the evolution of local government. This chapter presents a detailed account of the research design and methodology used in collecting both empirical evidence and secondary research. To address the main research question and objectives, a mixed-methods approach was employed, combining quantitative and qualitative techniques for data collection and analysis. The chapter begins with a thorough overview of the study area and a justification of the research philosophies and approaches. It also discusses the rationale for using mixed-method strategies, the integration of quantitative and qualitative data, measures for ensuring data quality, and ethical considerations related to the research.

4.2. Description of the study area

This research was undertaken in Lepelle-Nkumpi Local Municipality. The municipality is a vibrant and predominantly rural municipality situated within the Capricorn District Municipality (CDM) in the Limpopo Province of South Africa (Lepelle-Nkumpi IDP, 2021–2026). The municipality has a population of approximately 233,925, 61,305 households, and is divided into 30 wards. The municipality faces significant challenges in providing essential services, including reliable access to water, electricity supply, sanitation facilities, and regular refuse collection. These shortcomings have been further intensified by the impact of the Covid-19 pandemic, which disrupted both governance and planning for service delivery. As a result, existing backlogs in service provision have grown more severe, leading to heightened difficulties in meeting the community's needs. Moreover, the pandemic has significantly diminished community engagement in governance activities, leaving many residents feeling disconnected and uninvolved in the decision-making processes that affect their daily lives.

4.3. Classification of research paradigm

Scholars such as Alghamdi (2015) explain a research philosophy as a principle that guides the research process. In a nutshell, research philosophy serves as a roadmap that provides extensive details of how a particular study should be undertaken. It is commonly understood that the community of scholarship articulates research

philosophies to curtail how a particular topic should be studied (Anney, 2014). Mokone (2023:114) alluded that “by understanding and engaging with different research paradigms, researchers can navigate the scientific landscape more effectively and contribute to knowledge in their field”. According to Saunders, Lewis, and Thornhill (2009:108), research philosophy complements the research design and methodology, as they provide a philosophical view that underpins and provides for a comprehensive understanding of the study variables and makes considerable assumptions. In practical terms, these assumptions underpin one’s research strategy and the methods one chooses as part of that strategy, and the philosophy one adopts will be influenced by practical considerations. Furthermore, research philosophies are important as they help in shaping the research process, from formulating research questions to collecting and analysing data and interpreting findings. Moreover, the research philosophy, as articulated by Creswell (2003), can also be “understood as one of the three fundamental interrelated dimensions of research design, such as the research problem and research question; the philosophical worldviews (ontology) and strategies of inquiry (epistemology); and the research methodology”.

According to Creswell (2013), the literature on research philosophies indicates multiple philosophies that are deemed important and are to be considered in any research project. However, the multiplicity of scholars cannot agree on how many categories should be used to describe them. The multiple philosophies, as discussed by scholars such as Blumberg, Cooper, and Schindler (2014), include, among others, positivism, participatory, pragmatism, constructivism, interpretivism, and transformative. For a comprehensive operationalisation of this research, the following classification of philosophies was explained:

4.3.1. Positivism

Scholars such as Creswell (2018:9) stated that “positivism holds a deterministic philosophy in which causes probably determine effects or outcomes”. Positivism is a philosophical approach that is premised on the importance of gathering empirical evidence and uses scientific methods in understanding the world. Thus, the problems studied by positivism reflect the need to identify and assess the causes that influence outcomes, such as those found in experiments. Succinctly, the philosophy is reductionistic in the sense that it intends to reduce the ideas into a small, discrete set

of ideas to test, such as the variables that comprise the hypothesis and research questions. Therefore, the knowledge that develops through a positivist lens is based on a considerable amount of observation and measurement of the objective reality that exists. Positivism philosophy asserts that the social world can be studied in the same way as the natural world and that there is a method used to understand the social world that is value-free (Sekaran & Bougie, 2014). In the context of this research on the implications of the Covid-19 pandemic on service delivery, positivism was used to achieve the objective of this research: To determine the impact of the Covid-19 pandemic on service delivery in the municipality. The objective involved used positivist research methods such as quantitative surveys to collect data on the impact of the Covid-19 pandemic on service delivery. The data on the impact of the Covid-19 pandemic on service delivery were collected and analysed using descriptive and inferential statistics to identify the relationship between Covid-19 and service delivery in the municipality. Moreover, the questionnaire also consisted of questions on the demographic profile of respondents.

4.3.2. Interpretivism

Interpretivism philosophy is premised on the aspects of individuals' persona and involvement in societal and cultural spheres (Elster, 2007; Walsham, 1995). This philosophical approach is used mainly in social science research because it seeks to ascertain the understanding of human behaviour from the perspective of those being studied. In a nutshell, the philosophy focuses on understanding human experience from the natural environment where the participants are located (Saldana, 2015). It recognises that people's interpretations of reality are shaped by their experiences, values, beliefs, and culture. Therefore, Interpretivism was particularly relevant when studying complex social issues such as service delivery in Lepelle-Nkumpi municipality. Service delivery is considered one of the most important dimensions of poverty in rural areas. Lack of services such as adequate provision of water, electricity, sanitation, and refuse removal collection affects the well-being of communities in many ways. Therefore, in this context, interpretivism was used to achieve the objective of understanding the community's perceptions of service delivery in the municipality as well as the challenges of service delivery in the municipality. Research approaches such as qualitative interviews with key informants and focus group discussions helped the researcher understand the subjective experiences of individuals and communities'

views regarding the provision of services by the municipality. Those interviews and focus group discussions were important as the respondents provided valuable information on the state of service delivery in the municipality.

Service delivery is a subject of change as it has been stated in both the theory of social change and Kurt Lewin's theory of change management, as adopted theoretical frameworks for this study. Service delivery requires continuous monitoring as the needs of the communities evolve. In a nutshell, the needs and priorities of the community are not static. It is important to note that for enhanced and comprehensive understanding of this research would not have been reached using a single philosophy (Interpretivism) to study the Covid-19 pandemic and service delivery in Lepelle-Nkumpi municipality. Therefore, it was important for the study to adopt multiple philosophies (positivism) to permit a comprehensive understanding of the phenomenon under study. For example, collecting data on the impact of Covid-19 on service delivery provided a broader insight into understanding the importance of this study. Therefore, the positivist approach was useful for that reason. For instance, the use of descriptive and inferential statistics, such as chi-squared and coefficient of correlation, to ascertain the relationship between variables under study.

4.4. Paradigm guiding this research

This study utilised the pragmatic paradigm as its theoretical foundation, offering a framework for the qualitative and quantitative methods used in the study's execution. The selection of the research paradigm was influenced by the researcher's use of a theoretical and conceptual framework, as suggested by Varpio, Paradis, Uijtdehaage, and Young (2020). The philosophy allows the study to probe Covid-19 and service delivery using a combination of quantitative and qualitative approaches (Creswell & Creswell, 2018). Scholars such as Park, Konge and Artino (2020) elucidated that understanding research paradigms is crucial as they guide scientific discoveries through their assumptions and principles. That is precisely because philosophies are so fundamental in providing a clear direction within which the study is undertaken. Cherryholmes, (1992) describes pragmatism as the paradigm for conducting mixed-methods research. Conversely, scholars like Makumane, Khoza and Piliso (2021) describe pragmatism as a philosophical perspective that emphasizes the importance of completing tasks and learning from past mistakes to make more informed decisions

in the future. The philosophy of pragmatism posits “that the world we inhabit is not static but rather dynamic, constantly changing” (Kaushik and Walsh, 2019). Therefore, change is a derivative of action (Pansiri, 2005). The justification for the use of pragmatism is accepted precisely because of the methodological nature of this research.

This research adopted the pragmatism paradigm due to its alignment with the mixed-method research approach utilised in this study. The study adopted a pragmatist approach to explore the implications of the Covid-19 pandemic on service delivery. This research integrated both qualitative and quantitative research methods to examine the research problem. Simply put, the data collection process involved two distinct phases: one for quantitative data and another for qualitative data. Each type of data was collected and analysed separately. Later, these findings were integrated to provide a comprehensive understanding of the variables related to this study (Johnson & Onwuegbuzie, 2004; Tashakkori & Creswell, 2007). It is intended that by integrating these elements, a deeper grasp of the study issue was achieved, allowing for the provision of more thorough and accurate answers to research questions (Creswell & Plano Clark, 2011). The data collection tools, such as the questionnaire, interviews and focus group discussions, are integrated into this research (McKenzie & Knipe, 2006). It is for that reason that the pragmatism philosophy was used as an appropriate paradigm to achieve the outcomes of this study and form a base for understanding Covid-19 and service delivery in the context of a mixed methods approach.

Additionally, the pragmatist paradigm was used to anticipate practical solutions for service delivery in Lepelle-Nkumpi municipality. The advantages of using a pragmatism-based approach lie in the collaborative efforts required to find solutions from various stakeholders. For effective service delivery, it is essential to involve key stakeholders, such as communities, the government, the private sector, and civil society organizations. Additionally, combining elements of positivism, interpretivism and pragmatism can help this study develop practical strategies and recommendations for the effective planning and implementation of service delivery, especially in the context of crises such as the Covid-19 pandemic.

4.5. Research approaches for this study

In every research study, it is crucial to determine whether the research will rely on empirical data, non-empirical data, or a combination of both to test the hypothesis or answer the research questions. Scholars such as Babbie (2013) and Creswell (2018) note that empirical data consists of firsthand information collected from respondents, and it is based on observations and experiences. In contrast, non-empirical data involves the use of existing knowledge to support the research argument. This study adopted the following approaches.

4.5.1. The deductive and inductive approaches

The process of testing the hypothesis or answering the research questions can be found by either the process of deduction or induction, or by a combination of the two (Sekaran, 2016). The determination to use either a deductive or inductive approach is attributed to the researcher's desire to achieve the study and the nature of the research questions to be satisfied (Bryman, 2012). Simply put, on the one hand, a deduction is a process by which the study arrives at a reasoned conclusion by the logical generalisation of a known fact, while, on the other hand, induction is a process where we observe certain phenomena to make conclusions. In other words, in induction, we logically establish a general proposition based on observed facts. Both of these approaches were used in the study to gather empirical and non-empirical data on the implications of the Covid-19 pandemic and service delivery in Lepelle-Nkumpi municipality.

4.6. Methodology

Researching comprehensively on the implications of the Covid-19 pandemic on service delivery in the Lepelle-Nkumpi municipality required a mixed-method approach that combined the strengths of quantitative and qualitative techniques. The mixed-method approach permitted the study to use deductive and inductive approaches to collect and analyse numerical and non-numerical data to provide a thick description of the research findings. In this research, both quantitative and qualitative approaches were combined to provide a comprehensive understanding of the relevant variables. This integration enables researchers to effectively address both objective and subjective measurements. Moreover, adopting a mixed-method approach facilitates a holistic understanding of Covid-19 and service delivery by collecting data from multiple

sources (Shorten & Smith, 2017). This approach was deemed important and necessary for addressing the study's research questions and objectives. The mixed-method strategy is crucial for theoretically supporting this study from a pragmatism perspective.

It is important to note that the mixed method is more than simply collecting and analysing both kinds of data. However, it involves the use of both in tandem so that the overall strength of a study is greater than either qualitative or quantitative research (Creswell, Hanson, Clark Plano & Morales, 2007). Scholars such as Chen (2006) describe mixed methods as an approach that "systematically integrates both qualitative and quantitative research in a single study to obtain an in-depth picture and understanding of the phenomenon under investigation". Similarly, Onwuegbuzie and Leech (2005b) emphasized the use of a mixed-method approach as marred with flexibilities, enabling the researchers to collaborate with multiple epistemological stances, and view research as a holistic endeavour that requires prolonged engagements. On the other hand, Johnson, Onwuegbuzie and Turner, (2007); Leech, Dellinger, Brannagan and Tanaka (2010), emphasised that the "main purpose of the mixed-method approach is to combine the beliefs of qualitative and quantitative research methods while at the same time reducing the weakness in a single research study". Kumar (2007) and Chen (2006) reiterated and echoed similar sentiments that the mixed methods exploratory design is a systematic combination of diverse research methods-qualitative and quantitative.

According to Byrne and Humble (2007), the study of a social phenomenon is often marred with the sophistication that permits different kinds of methods to best understand these social complexities. Therefore, the mixed methods approach provides room for researchers to answer confirmatory and exploratory questions at the same time. For instance, the research articles published by Adjetey, Obiri-Yeboah, & Dornoo, (2019), explored the differentiation and access to service delivery in Ghana. The researcher looked at the phenomenon using a purely qualitative method to interpret the findings of the research. Although Adjetey, Obiri-Yeboah and Dornoo's (2019), research comprehensively developed solids arguments and findings, the subject under investigation has not been quantitatively explored. In short, the subject has not been statistically tested. On the other hand, Alice, Giuditta and Cavalieri (2018) researched the assessment of service delivery processes: an application of hybrid

simulation modelling. The researchers quantitatively provided solid and sound arguments that were statistically tested. Therefore, the qualitative component in Alice, Giuditta & Cavalieri's research is missing. Makalela and Asha (2019) conducted a mixed-method study on rural households' satisfaction with access to basic services. The findings of their research were deemed to be comprehensive as they fully explored the subject matter at different levels of qualitative and quantitative. The latter provides a reasonable justification for the adoption of a mixed-methods approach in this research project, as it provides substantial data that can be verified at the different levels of collection and analysis.

4.6.1. Mixed-method strategies of inquiry

The mixed-method strategies of inquiry include the following: concurrent mixed methods, transformative mixed methods, and sequential mixed methods.

4.6.1.1. Concurrent mixed methods design

The concurrent mixed method is a procedure in which the researcher converges or merges quantitative and qualitative data to provide a comprehensive analysis of the research problem (Teddlie & Tashakkori, 2006). In this design, the researcher collects both forms of data at the same time and then integrates the information into the interpretation of the overall results. Also, in this design, the researcher may embed one smaller form of data within another larger data collection to analyse different types of questions (Creswell, 2018).

4.6.1.2. Transformative mixed method design

The transformative mixed method design is a procedure in which the researcher uses a theoretical lens as an overarching perspective within a design that contains both quantitative and qualitative data (Creswell, 2018). This lens provides a framework for topics of interest, methods for collecting data, and outcomes or changes anticipated by the study. In this design, the lens could be a data collection method that involves a sequential or concurrent approach.

4.6.1.3. Sequential mixed methods design

A sequential mixed-method design is a procedure in which the researcher seeks to elaborate on or expand on the findings of one method with another method (Creswell,

2018). This may involve either beginning with a qualitative interview for exploratory purposes or following up with a quantitative survey method with a larger sample so that the researcher can generalise results to a population. Alternatively, the study may begin with a quantitative method in which a theory or concept is tested, followed by a qualitative method involving a detailed exploration of a few cases or individuals.

Therefore, the sequential design was carried out as follows:

QUAN	→	QUAN	→ Qual	→ Qual	→ Interpretation/analysis
Data collection		Data analysis	Data collection	Data analysis	

Notational used in mixed method design
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- QUAN or QUAL – abbreviations used to indicate whether the method is quantitative or qualitative.
- The plus sign (+) indicates a simultaneous or concurrent form of data collection, with both qualitative and quantitative data collected at the same time.
- The arrow (→) indicates a sequential form of data collection, with one form (e.g., quantitative data) building on the other (e.g., qualitative data) (Creswell et al., 2013, p 209).

A mixed-methods sequential exploratory design and its application is explained in detail in the section below.

4.7. Research design: A mixed-methods sequential exploratory design

This study used a mixed-methods sequential exploratory design. An exploratory sequential design uses qualitative and quantitative approaches to gain a comprehensive understanding of the research phenomenon under investigation (Fetters, Curry & Creswell, 2013). The sequential exploratory design was utilized because the researcher gathered both quantitative and qualitative data in two distinct phases. In the first phase, the researcher collected and analysed quantitative data. Then, in the second phase, qualitative data was collected and analysed to help explain or elaborate on the findings from the quantitative phase. Given the nature of the quantitative data, the data is characterised by factual and statistical tests to derive an explicit meaning of a particular phenomenon. Therefore, the qualitative data was then

used to corroborate the quantitative findings. The sequential exploratory design was important for this study because it allowed the researcher to integrate quantitative and qualitative methods in exploring and answering the research questions. The integration allowed the researcher to answer the research questions from multiple perspectives and obtain a more comprehensive understanding of Covid-19 and its implications on service delivery in Lepelle-Nkumpi municipality (Creswell, Plano & Clark, 2017). The quantitative data was collected using a questionnaire for the objectivity of the data collected, followed by the qualitative data, which was collected using interviews with key informants and focus group discussions to capture their perceptions (subjectivity), and the data to support the quantitative findings.

The quantitative and qualitative data sets were analysed separately to derive the research findings from each. The researcher then compared the results of the quantitative and qualitative analyses and subsequently merged them to create a comprehensive understanding of the Covid-19 pandemic and its impact on service delivery in the municipality. Finally, a triangulation process was employed to validate the research findings. Triangulation involved using various data sources and methods to confirm the findings (Heale & Forbes, 2013). It was also used to enhance and strengthen the validity and reliability of the research findings by comparing the findings with the literature review, key informants and findings from the household survey.

4.8. Quantitative research methods

The nature of this study allowed for a mixed-methods approach, a combination of both qualitative and quantitative approaches for purposes of data collection and analysis. Moreover, this study adopted a sequential exploratory design. The researcher collected and analysed quantitative data and complemented the results with qualitative data, which was collected in phase two (Kelle, 2006). The quantitative research method was adopted as a primary method because of the exploratory nature of the research topic. The exploratory design enabled the researcher to explore Covid-19 and its implications on service delivery in the municipality. Quantitative research was important for this study because it generated factual data and validated the data collected through qualitative means (Bowen, Rose & Pilkington, 2017). The quantitative data was collected to statistically explain the relationship between the Covid-19 pandemic and service delivery in the municipality. The relationship between

variables was established using Pearson's chi-squared and the coefficient of correlation test to determine the direction of the association. When the quantitative approach is used in qualitative studies, it helps by strengthening the deeper understanding of the phenomenon under investigation (Kelle, 2006). The researcher's method in this study relied on measurement to compare and analyze the relationship between Covid-19 and service delivery (Bless et al., 2013; Kelle, 2006).

The use of qualitative and quantitative methods in research is important, unlike using solely qualitative methods, which cannot always yield comprehensive results due to their conformity to smaller sample sizes (Kaplan & Duchon, 1988). Consequently, the quantitative research method was chosen for its ability to engage larger sample sizes, allowing the findings and conclusions to be generalised to both the entire population and the subpopulation (Rahman, 2016). Lastly, the quantitative approach was used to rely on measurement to compare and analyse different variables that can be interpreted statistically, and the results were interpreted in numbers, percentages, frequencies, and ratios (Harwell, 2011). Quantitative data was used to generate factual data for descriptive analysis.

4.8.1. Quantitative sampling methods: simple random and systematic sampling

Sampling refers to the “process of selecting a subset of individuals from a statistical population to estimate the characteristics of that entire population” (Van Haute, 2021). It is also a way of collecting data when the population of interest is infinite (Bless & Higson-Smith, 2000). The advantage of using sampling in any research project is that it helps to save time and cost. Bless et al. (2013) state that the quality of research depends on the adequacy of sampling procedures, techniques and sample size. By contrast, researching the entire population would yield comprehensive and credible findings (Bless et al., 2013; Oppong, 2013). However, due to constraints such as limited time and budget, this study utilised a sample from the target population as a key component. Quantitative research is associated with probability sampling, which is a procedure where every segment of the population stands a probable chance to form part of the sample frame (Etikan & Bala, 2017; Bless et al., 2013). Therefore, within probability sampling, simple random and systematic sampling procedures were selected.

4.8.1.1. Simple random sampling

Simple random sampling is a sampling design in which k distinct items are selected from the n items in the population in such a way that every possible combination of k items is equally likely to be sampled (Meng, 2013). For this study, a simple random sample was used to select 50% of the 30 wards in the municipality, ensuring adequate representation of the entire population. The researcher employed a lottery technique, where a list of all the wards in the municipality was placed in a bucket, and then a draw was conducted to ensure a fair chance for the wards to be selected. The researcher then sampled 15 in the Lepelle-Nkumpi local municipality to form part of the sample frame.

4.8.1.2. Systematic sampling

The research adopted systematic sampling. This is a method that selects potential participants based on a specific equal interval starting with a random selection of the population (Etikan & Bala, 2017). In this research, this sampling method was chosen because it is a “convenient method to conduct and tends to select more evenly across the population” (Berndt, 2020: 225). For the sample to be representative or a reflection of the entire population, it had to be sufficient to allow the researcher to do sound statistical analysis and generalize the findings to the population (Berndt, 2020). Therefore, to achieve the desired sample size with a 95% level of confidence, the researcher adopted Slovin’s formula to calculate the quantitative research sample. Thus, according to the latest statistics, Lepelle-Nkumpi has a population of 233,925 (Lepelle-Nkumpi IDP, 2021–2026). The research used Slovin’s formula to calculate the sample size. Slovin’s formula indicates the following equation:

$$n = N / (1 + Ne^2)$$

where:

- n : Sample size needed
- N : Population size
- e : Acceptable margin of error

This formula calculates the required sample size for a study based on the study population, ensuring the results are accurate (Yende, 2021). The researchers used a sample size of 399, including an allowance of 50 which was meant to stand for the

spoilt questionnaires. Thus, in total the study used a sample size of 449. As indicated above, this strategy allowed a 95% level of confidence, and the research findings were representative of the entire population (Du Plooy, 2009). The sample size for this research was:

$$n = N / (1 + Ne^2)$$

- Therefore, $n = N / (1 + Ne^2)$
 $n = 233\,925 / (1 + 233\,925(.05)^2)$
 $n = 399.31 + 50$ (spoilt questionnaires)
 $n = 449$

The sample size had to be distributed equally among 15 wards. The researcher divided 449/15 selected wards in the municipality. Therefore, the researcher interviewed 29 households in each ward for a fair and probable chance for members of the community to participate in the research. The researcher developed a sampling interval to ensure the frequency of the households to be sampled. It is important to note that Lepelle-Nkumpi had a total of 61 305 households which was divided by the required sample (449), which produced a sample interval of 137. The frequency interval was calculated as follows:

$$K \text{ (frequency interval)} = N / n$$

Where:

N: total number of households
n: required sample

Therefore

$$K = 61\,305 / 449$$

$$K = 137$$

The above equation means that the researcher approached 137 households until the desired sample of 449 was reached with a random start from the first household. In cases where the household was locked and researchers could not have access, adjustments were made, and the next household was approached (Rahi, 2017). Participants were selected from the age of 19, and in instances where there were more eligible sample units to participate, it was explained to them that only one household sample unit could participate. This was important to help achieve the total number of potential participants based on the total number of households in the Lepelle-Nkumpi local municipality. A such, the researcher interviewed 449 households in the municipality, and the findings were used to generalise the entire population.

4.8.2. Quantitative data collection: questionnaire

The study employed a semi-structured questionnaire that was divided into four sections. Section A focused on the demographic profiles of respondents, including questions about their gender, age, level of education, and employment status. The subsequent sections included: Section B, which gathered information on the communities' perceptions of service delivery during the Covid-19 pandemic; Section C, which examined the challenges of service delivery in the municipality; and Section D, which discussed ways to enhance service delivery during the Covid-19 pandemic. The researcher used a questionnaire as the primary quantitative data collection instruments. A questionnaire is commonly used in social sciences and entails a method of posing a series of oral or written questions to address a certain phenomenon (Creswell, 2013). Thus, in this research, quantitative data were collected using a questionnaire. One of the strengths of a questionnaire is that it provides an efficient way to collect data and yield results that are easy to tabulate and score (Patten, 2016).

The respondents were asked to rate the importance of various factors related to the Covid-19 pandemic and service delivery in the Lepelle-Nkumpi municipality using a Likert scale or to provide a yes/no response to gauge their level of agreement or disagreement. The Likert-scale responses were subjected to factor analysis using the Statistical Package for the Social Sciences (SPSS) to eliminate unreliable data and identify interrelated variables across a broad range of factors. Different questions were formulated to solicit the views and opinions of community members on issues of service delivery planning and implementation in the municipality during the Covid-19 pandemic. The survey was distributed across the targeted wards in Lepelle-Nkumpi municipality. The responses collected were then consolidated and analysed. To gather information relevant to the study's objectives, a total of 449 questionnaires were distributed to respondents. The respondents completed these questionnaires to provide the necessary data to answer the research questions. The results showed a 100% response rate for the entire study. The response rate was satisfactory and aligned with the number of participants in the survey. To ensure accuracy, the questionnaire was validated and reviewed by two supervisors, who provided constructive feedback to enhance the tool. It was also submitted to the Postgraduate Research Ethics Committee (PREC) and the University Research Ethics Committee

(UREC) for additional validation. Furthermore, the questionnaire underwent a pilot test with a small sample to identify ambiguities and to anticipate any necessary adjustments (refer to section 4.8.4).

4.8.3. Quantitative data analysis: descriptive and inferential statistics

Quantitative data analysis is one of the most important options in conducting research. Therefore, it was important for this research to analyse quantitative data to produce sound, comprehensive and statistically tested research findings. According to scholars such as Blanche, Blanche, Durrheim and Painter (2006), data analysis is the process of presenting, analysing and interpreting research data using specific statistical techniques and tools based on the kind of data collected. The data analysis in quantitative research entails the systematic breakdown of the data collected from the questionnaires to test the hypothesis. Data analysis involves using statistical methods to describe and interpret raw data to derive meaning and make sense of it (Fink, 2015). The process of analysing data was necessary to ensure that this research answers the research questions and achieves its intended objectives. A quantitative research analysis was conducted to investigate the impacts of the Covid-19 pandemic on service delivery within the Lepelle-Nkumpi local municipality. The data analysis involved both descriptive and inferential statistics. The Statistical Package for Social Sciences IBM (SPSS) version 29, along with Microsoft Excel (MS Excel), was utilised to perform the statistical analysis. Before the analysis, the researcher adhered to the procedure outlined by Hawtin and Percy-Smith (2007), as described below.

The data analysis procedure included the following: data preparation, storage, analysis, and presentation. In the preparation phase, the questionnaire was first developed and administered to the respondents. After completion, all the questionnaires were assigned codes to facilitate the data coding process. This process was necessary for ease of reference and to be able to capture the questionnaire into Microsoft Excel. All the questionnaires were checked to see if the questions were answered correctly to ensure effective recording of the responses in Microsoft Excel. Moreover, the open-ended questions were specified and assigned numbers to ensure that the responses were converted into numbers for statistical analysis. Thereafter, the storage phase commenced. In this phase, the data was entered into Microsoft Excel, and the data was arranged into a spreadsheet. The data was then transferred to SPSS

software to produce a descriptive analysis. The data was mostly categorical, such that the data was provided as counts, frequencies and percentages to produce pie charts and multiple bars. The inferential statistics helped to produce categorical variables that can be tested using the Chi-Square and coefficient of correlation tests to determine the associations and the magnitude or direction of the association between the Covid-19 pandemic and service delivery. It is important to note that the statistical analysis was performed to derive a generalisation of the entire population under study.

4.8.4. Pilot study

According to van Teijlingen and Hundley (2001:35), a pilot study is “a mini version of a full-scale study (also called ‘feasibility studies’) and the specific pre-testing of a particular instrument such as a questionnaire or interview schedule”. Therefore, the data collection instruments, participant recruitment and other important research techniques were developed before pilot testing the research. It is further important to note that the research instruments were developed in line with the literature review and the research objectives. In piloting the questionnaire, the first step is that the researcher develops the questionnaire and sends it to the two supervisors for scrutiny, and constructive feedback was given to improve the tool. In the second step, the questionnaire was further sent to the Postgraduate Research Ethics Committee (PREC) and the University Research Ethics Committee (UREC) to strengthen the tool. The two committees consist of researchers with experience in the field. Consequently, these steps were necessary to construct a questionnaire that adequately captures the essence of the research questions and objectives. After all the feedback on the questionnaire was carried out, the questionnaire was then translated into Sepedi. This was a necessary step because Sepedi is the dominant language used in the Lepelle-Nkumpi municipality.

Different researchers conduct pilot studies for a variety of reasons. For this research, pilot testing was conducted for two reasons. The first was to check if there were vague questions that were impossible and difficult to answer. That was necessary to ensure that the vague questions/problems were addressed before the commencement of the data collection. The next was to test the adequacy of the instrument (Van Teijlingen & Hundley, 2002). Finally, the pilot study was conducted to familiarise the research team with research protocols and questionnaire administration. The pilot study was

conducted in all the selected wards in the same municipality. The study used a sample size of (n=449) participants to inform the confidence level of 80%. Moreover, for pilot testing purposes, this research adopted and shared similar sentiments with scholars such as Cocks and Torgerson (2013) and Lancaster, Dodd, and Williamson (2004). The scholars articulated that for a reasonable amount of pilot testing of the research instrument, at least 9% of the total sample size must be chosen. Therefore, in this research, 40 (9% of 449) households were randomly selected across all 15 selected wards for pilot testing of the instrument.

4.8.5. Actual data collection

The development literature clearly indicates that many researchers find quantitative data collection to be a challenging task (Kelle, 2006). This complexity often arises due to the involvement of a large number of participants. In this study, a sample size of 449 respondents was achieved, as detailed in section 4.8.1.2. Given the high number of participants, the researcher enlisted a team of four assistants to aid with data collection alongside the principal researcher. A briefing session was conducted on 9 July 2023 with all assistants/research team to familiarise them with the questionnaire and other essential data collection forms. The data collection process commenced with the household survey across selected wards on 10 July 2023, using a questionnaire to solicit the perceptions of communities on the impact of the Covid-19 pandemic on service delivery. Followed by the focus group discussion that took place at Moletlane tribal offices on 17 July 2023. Lastly, the process concluded with the one-on-one interviews with key informants that took place at the municipality on 18 July 2023. Therefore, the following forms were explained in detail to the research team:

Field Work Plan

A field work plan is a form that all assistants were required to complete every day after the collection of data. The form consists of the following:

Table 4.1: Fieldwork plan

Research Project Name	
Fieldwork Description	
Departure Date and Time	

Return Date and Time	
Researcher Details	
Team Leader details	
Expected questionnaires per day (Minimum)	15
Questionnaire Achieved	
Approval by the Back Office	

Daily Movement Plan and Challenges

The daily movement form was also developed and distributed to all the research assistants. This form was necessary to help trace the movement of assistants. All research assistants were required to fill in the everyday challenges during the data collection process. This was necessary to record all the challenges they encountered daily. The daily movement plan consists of the following:

Table 4.2: Daily Movement Plan

Depart from	Depart date	Depart time	Arrive at	Arrival time

The research team, consisting of four members including the principal researcher, was expected to administer 15 questionnaires each per day over a span of six days. This resulted in a total of 75 questionnaires administered daily. This approach allowed team members to reflect on their work and plan effectively for the following day. In total, 449 questionnaires were administered across 15 selected wards during the data collection period. Each of the four assistants was assigned a maximum of two wards to ensure adherence to the systematic sampling interval, with every 137 households being selected. The participation and response rates were satisfactory, as nearly all respondents completed the questionnaire, with only a few declining to answer the open-ended questions.

4.9. Qualitative research methods

The qualitative research approach was adopted to explore and capture the subjective experiences of communities regarding the planning and implementation of service delivery in the context of the Covid-19 pandemic. This research aimed to look at the extent to which the Covid-19 pandemic affected the municipality in planning and delivering services to communities. Therefore, it was important for this study to solicit the perceptions, opinions and experiences of participants on how the Covid-19 pandemic affected service delivery in the Lepelle-Nkumpi local municipality. Moreover, the qualitative approach helped the researcher to collect first-hand information about the subject under investigation. The qualitative approach was employed to provide in-depth insights into understanding the planning and implementation of service delivery during the Covid-19 pandemic. The approach provided subjective thick descriptions to understand participants' views and experiences of Covid-19 and its implications on service delivery. In summary, the qualitative approach was meant to stimulate the experiences of the people in the community on how the delivery of services was affected by Covid-19.

4.9.1. Qualitative research design

Scholars such as Creswell (2013) explain research design as a plan and procedure for research that spans the decisions from broad assumptions to detailed methods of data collection and analysis. The overall decision involves which design should be used for the study topic. Informing this decision should be the worldview assumptions the researcher brings to the study, procedures of inquiry, and specific methods of data collection, analysis, and interpretation. According to Kumar (2014), the research design is a plan, structure and strategy of investigation that is conceived to obtain answers to the research questions or problems. Research design includes the procedure and outline of the way the project unfolds from writing the hypothesis and the operational implications to the final analysis of data. Therefore, this research project adopted a case study design. Thus, the case study approach is a valuable method of research for social sciences to evaluate programmes and permit the development of strategic interventions. Stake (1995) described a qualitative case study as an approach that facilitates the exploration of a phenomenon within its context using a variety of data sources. This is to ensure that a subject is not explored through

only one lens. Lepelle-Nkumpi local municipality was used to solicit and probe the understanding and the perceptions, attitudes and behaviours of people in their locality.

4.9.2. Qualitative sampling methods

It is impossible for research to engage the entire set of populations to be studied. The researchers resort to engaging in sampling procedures to reduce and limit the number of participants under study. The researchers selected a specific segment of the population to represent the entire population group (Vehovar, Toepoel & Steinmetz, 2016). Qualitative research focuses mainly on non-probability sampling. Bless et al. (2013), for example, describe non-probability as the sampling technique in which units are included in the sampling frame with unknown probabilities. This study adopted purposive sampling. The purposive sampling technique, which can be referred to as judgment sampling, is the deliberate choice of a participant due to the qualities the participant possesses. A non-random technique that does not need underlying theories or a set number of participants. Simply put, the strength of purposive sampling is that the researcher decides what needs to be known and sets out to find people who can and are willing to provide the information by virtue of knowledge or experience (Bernard, 2002; Parkinson & Drislane, 2011).

Participants were selected based on their knowledge and understanding of municipal planning and implementation of service delivery. The purposive sampling was used to solicit information from the municipal officials (key informants). Municipal officials were purposively chosen to be part of this research because of their knowledge and expertise in local government planning and implementation. The municipal officials were selected because they are involved daily with the affairs and administration of the municipality. The development of literature is explicit in the fact that service delivery is the custodian role of the municipality, in which municipal officials play a role in administration to ensure the effective delivery of services in municipalities (Makalela & Asha, 2019).

To produce a credible research study, it is important for the researcher to define the scope of this research study by specifying inclusion and exclusion criteria. The inclusion refers to the specific demographic and geographical characteristics of the study population that will be used by the researchers as a basis for concluding their research question (Patino & Ferreira, 2018). In contrast, exclusion criteria refer to

characteristics that could compromise the study's ability to collect data, keep participants safe, or both (Kamangar & Islami, 2013). In this study, the inclusion sampling criteria comprised all households listed in their respective wards, while the exclusion criteria included offices, hotels, hospitals, clinics and schools. Moreover, those who participated in the household survey were automatically excluded from the focus group discussions. The latter was simply to avoid a double response, which would compromise the findings of the research.

4.9.3. Qualitative data collection: Focus group discussion

A focus group is a form of qualitative research. A focus group involves people examining their views on certain issues. A focus group is "a general term given to a research interview conducted with groups. It is typically a group of people who share a similar type of experience, but a group that is not 'naturally' constituted as an existing social group" (Kelly, 2006:304). Similarly, Babbie (2010) describes a focus group as a qualitative group interview method that allows for interviewing several individuals systematically and simultaneously. Focus groups usually involve a small group of respondents composed of a minimum of six (6) to twelve (12) people, which usually lasts for one and a half hours (Bless et al., 2013; Kelly, 2006; Diccio-Bloom and Crabtree, 2006). The researcher appointed the moderator, and the role of the moderator was firstly to keep members of the focus group on track, secondly to ensure that all intended members of the focus group were included, to keep an eye on the time, and lastly to ensure full coverage of all decided questions in the list of focus group guide. This means it was the role of the moderator to ensure that all decided questions are addressed. It is important to highlight that the aim of the focus group discussion is conducted primarily to obtain data from a purposely selected group of individuals rather than a statistically representative sample of a broader population, and to engage in a dialogue with specific individuals at a time.

The researcher took further steps to ensure all the necessary prerequisites for the focus group discussion were met. The steps detailed in the following sections were observed before the focus group discussion.

4.9.3.1. Preparation of interview guide questions and ethical considerations

It is important to note that, based on the research design adopted for this research, the researcher prepared a list of interview guide questions for discussion in line with the aim and objectives of the research. Furthermore, the fact that the voices of the respondents were recorded, the researcher explained to the participants the research's ethical considerations. For example, confidentiality and anonymity were upheld and explained in detail to the respondents. The researcher further produced an ethical clearance certificate for all respondents.

4.9.3.2. Identification and recruitment of participants

For this research, the respondents for the focus group discussion included three segments of people, namely community representatives (ward committee members), across the identified wards in the municipality, the Moletlane Tribal Authorities, and a certain number of community members who did not participate in the survey. The researcher personally identified and recruited a Ward 12 councillor who then referred the researcher to other members of the ward committee to form part of the discussion. The respondents were recruited according to their expertise, based on the nature of the study. It is further important to note that the Moletlane Tribal Authority (head) was invited to form part of the focus group discussion. However, he was not available on the day of the meeting due to attending to other pressing community issues. The composition of people recruited was able to participate and answer the questions with satisfaction. The table below indicates the number of participants together with their portfolios at the Ward level.

Table 4.3: Members of the focus group composition (Lepelle-Nkumpi Local Municipality)

Ward executive member/ Portfolio.	Quantity.
Ward leader (Councillor)	1
Secretary	1
LED, Land and Planning	1

Housing	1
Budget and Treasury	1
Water and Sanitation	1
Members of the Public.	1 (2 absent)
Total Respondents	7

The above focus group discussion respondents were recruited purposely through Snowball sampling. Scholars such as Bougie & Sekaran (2019) described snowballing as a non-probability sampling technique as a technique where current research participants recruit or identify participants with relevant knowledge from their social networks. The first person to be identified was the secretary of the ward, who then recruited all the participants. Ward 12 was selected mainly because is it considered to be the one of the main wards in the municipality. An ample number of municipal functions are found it the ward, simply because of its tie with the tribal authorities. All the respondents were willing and available for the focus group discussion. The ward councillor provided opening remarks and deployed the secretary to take minutes as he had to attend to urgent community issues on the day of the discussion.

4.9.3.3. Selection of the location

The researcher selected a suitable location for the focus group discussion. The focus group discussion took place at Moletlane Tribal Authority offices. The location was convenient and accessible to all respondents. An office was identified with a closed door and used to avoid noise and distractions. Furthermore, all the discussions were recorded using a tape recorder device and with permission obtained from all the respondents. Therefore, for ease of reference and identification, the researcher used the acronym FGR1 to denote focus group respondents for anonymity, and that was also to enable direct transcription of the responses for analysis purposes.

4.9.3.4. During the discussion and concluding the session

It is important during every session conducted with people to introduce yourself. It is on that basis that the researcher introduced himself, and in the process explained to the respondents the rules and regulations of the discussion. The researcher further explained the confidentiality policy. During the initial stage of the discussion, respondents were asked to introduce themselves together with their respective portfolios. Before the start of the session, the researcher checked to ensure that the recording device was ready and properly placed to effectively capture responses. The researcher asked the questions in full to ensure adequate comprehension of the question by the respondents. As a result, the questions were asked in a time frame to allow for follow-up and to reflect on the question. During the session, the researcher kept on observing non-verbal gestures and taking notes. To sum up the session, the researcher concluded the meeting with acknowledgements and announcements for refreshments.

4.9.4. Qualitative data collection: One-on-one interviews

The researcher conducted in-depth interviews with a total of three (3) knowledgeable (key informants) employees in the municipality to enhance the results obtained from the survey. Their perspectives and insights collected were comprehensive and adequately answered the research questions. The development of literature continues to be debated about the sufficient sample size in research. For example, Creswell (2013) proposes a minimum sample size ranging from 5 to 25, while Hagaman and Wutich (2017) argue that 16 or fewer interviews are sufficient. Due to the lack of consensus among scientists regarding sample size determination in qualitative studies this research relied on the perspective put forth by Ryan and Bernard (2003). They assert that the significance lies not in the quantity or number of participants, but rather in the relevance of the data. The three key informants provided adequate responses to the questions. They are knowledgeable in different areas within the municipality. For anonymity, the researcher created pseudonyms given to the respondents who participated in this study through one-on-one interviews. Specifically, KI1 is knowledgeable in integrated development planning, KI2 is knowledgeable on community engagement issues, and KI3 is knowledgeable on municipal administration. To validate and reinforce the findings obtained from the interviews, the

data from these participants were imported into NVivo 14, a software used for qualitative analysis. Interviews are one of the most important qualitative data collection techniques. Kelly, Bourgeault and Dingwall (2010) describe qualitative interviews as a valuable method that allows researchers to access the knowledge, experience and perspectives of research subjects. Creswell (2013) asserts that qualitative interviews typically involve unstructured and open-ended questions, which are few in number and designed to elicit participants' views and opinions. The data collected from interviews were then categorised into different thematic groups based on perceived benefits.

The interview helped to obtain additional data, clarify vague statements and permit further exploration of Covid-19 and service delivery in the municipality. The researcher used a tape recorder to adequately capture the participants' responses, subject to the signed consent form from the participants. A notebook was used for other pertinent information that could not be accurately captured using the voice recorder. The research facilitated the interview process to ensure that participants answered in line with the set research questions of the study. Scholars such as Creswell (2013) assert that qualitative interviews involve unstructured and generally open-ended questions that are few and intended to elicit views and opinions from the participants.

4.9.5. Qualitative data analysis: Thematic analysis

After completing the qualitative data collection phase, the data analysis commenced. Kumar (2014) describes data analysis that the "process of bringing order, structure, and meaning to the mass of collected data analysis is a fundamental and sensitive stage in the research process. During this phase, researchers strive to interpret the vast amounts of information they have gathered, aiming to extract meaningful insights and patterns. It is essential to handle this data thoughtfully, as the goal is to accurately reflect the voices and experiences of the participants without distortion or loss. By doing so, researchers can maintain the integrity of the original perspectives while drawing valuable conclusions that honour the stories behind the data (Saunders et al., 2018). Effective data analysis relies on the systematic application of logical reasoning to guide research. This process involves interpreting data in a way that draws meaningful conclusions and insights, ultimately enhancing our understanding of the subject at hand (Kumar, 2014). The author also posits that the analysis and interpretation of data represent the application of deductive and inductive logic to the

research. Bailey (2008:127) contends that “transcription is the first step in qualitative data analysis”. Therefore, data transcription was prioritised as the first step during the data analysis phase. The data transcription phase permits the researcher to ensure a systematic writing of the responses from the respondents.

The data analysis also included data cleaning (see figure 4.1), which involves removing any information that can be used to identify the identity of research respondents. Data cleaning is a subset of data preparation, which includes scoring tests and matching data files in preparation of data for analysis. This was given priority in this phase. For example, the actual names of the respondents were replaced with pseudonyms to maintain confidentiality (Thorne, 2000). Therefore, the researcher cleaned the data to remove the missing and erroneous data precisely because it could pose a significant problem for the reliability and validity of the study outcomes (Davis, 2001).

Scholars such as Creswell (2013) describe qualitative data analysis as the process of making sense of research participants’ views and opinions of situations, corresponding patterns, themes, categories and regular similarities. Creswell aptly points out that qualitative data analysis is a process of transformation of collecting qualitative data, done by employing analytic procedures, into a clear, understandable, insightful, trustworthy, and even original analysis. Marshall and Rossman (1999:150) state, “Qualitative data analysis is a search for general statements about relationships amongst categories of data”. In contrast, quantitative methods examine cause and effect.

In the context of this study, thematic analysis was adopted. This analysis procedure focuses on systematically identifying relevant and common themes and patterns of meaning across a dataset concerning research questions and objectives (Braun & Clarke, 2008). The advantages of using thematic analysis in qualitative research studies are that it is flexible and allows for an extensive range of analytical options. Therefore, the themes were identified as follows: first, to make sense of the data, preliminary and provisional themes were developed; second, the researcher engaged with the data to confirm and verify the themes; and lastly, after the final themes were created, a thematic analysis proceeded with a series of organised phases (see Table 4.4).

Table 4.4: Thematic analysis for qualitative data

Activity.	Description of Activity.
1. Getting familiar with the data	During this phase, the researcher engaged widely with the raw data that was collected using an interview schedule with members of the focus group discussion and key informants. This process was conducted to explore data patterns and meaning to identify data that can be separated into themes before the coding process begins.
2. Generating initial codes	In this phase, the data was organised into relevant, interesting groups systematically. This activity comprised the production of initial codes from the data and codes to identify the data features that appear appealing.
3. Searching for themes	In this phase, the researcher started thinking about establishing the relationship between codes, themes, and various levels of themes.
4. Reviewing themes	The themes which were coded in this step were then reviewed with the sole purpose of identifying themes that can be merged and separated.
5. Defining and naming themes	In this phase, definitions, themes and the meaning it attempts to portray was prioritised.
6. Producing report	This phase entails producing a report on how the themes identified addresses the research objectives through analysing and interpreting the responses from the respondents. See chapter 5.

Source: Braun and Clarke (2008)

Furthermore, scholars such as Scott and Usher (2011) indicated that a typical qualitative analytical approach may include the following aspects:

- Coding or classifying field notes, observations or interview transcripts by either inferring from the words being examined what is significant, or from the

repeated use of words or phrases whether a pattern is developed that all activities which have been recorded are being understood similarly.

- Examining the aforesaid classifications to identify relationships in general terms, so that they have credibility beyond the boundaries of the case being examined.
- Making explicit patterns, commonalities and differences to make sense of the data, and making these by more developed theoretical constructs into the field to test or refine them.
- Elaborating a set of generalisations, which suggest that certain relationships hold firm in the setting being examined and affirm that these cover all the known eventualities in the data set.
- Lastly, formalising these theoretical constructs and making inferences from them to other cases in place and time.

Figure 4.1: Data analysis process



Source: Author's illustration

In this study, thematic analysis was adopted. This analysis procedure focuses on systematically identifying relevant and common themes and patterns of meaning across a dataset concerning research questions and objectives (Braun and Clarke, 2008). Javadi & Zarea (2016) described thematic analysis as an approach that includes the extraction of meanings and concepts from data and includes pinpointing, examining, and recording patterns and themes. Thematic analysis was selected for this study due to its ability to explore the meanings individuals assign to events within a pragmatist framework.

4.9.6. Data transcription and translation

According to Widodo (2014), data transcription has played a central role in spoken language analysis and representation. It is dominantly used in qualitative studies designed to capture and unpack the complicatedness and meanings of naturally occurring phenomena (e.g., values, beliefs, feelings, thoughts, experiences) in social encounters. In qualitative studies, individual or group interviews are transcribed and are generally written word by word (verbatim) (Sheppard, 2021). There is no denying that transcribing interview data becomes the norm in most qualitative research studies. Literally, transcription is a useful means for turning digitally recorded interview data (findings) into transcripts, but methodologically speaking, transcription is the act of representing original spoken text (recorded talking data) in written discourse as well as analysing and interpreting instances of these data (Bird, 2005). According to Perez (2002: 24), “all social scientists doing qualitative research must carefully attend to the phase of setting down the verbal research material in writing by means of transcription”. Therefore, in the context of this study, the transcription of data started with the first set of interviews conducted with focus group members. The researcher used an audio recording device to capture sufficiently accurate or detailed raw data from the respondents. The audio device was used to ensure that the data collected was consistent and accurate for the purposes of transcription. The researcher transcribed the data from the focus group discussion the same day for a clear recollection of what transpired during the interview. The researcher also appointed five research assistants to assist with the household survey.

The majority (7) members of the focus group discussion hold different directorates or portfolios which include, among others, local economic development planning, construction and infrastructure, electricity, financial management, water infrastructure and a community representative. They are therefore considered to be key informants because of their knowledge and experience in different directorates. The members responded to the interview questions mostly in English, except for a few cases where they used their local language (verbatim). In cases of verbatim during the analyses, the researcher translated their response to English, using direct quotes.

The household survey questionnaire was written in both community members' local language (Sepedi) and English. The researcher hired a professional teacher in the

department of languages to translate the questionnaire. Translation is done mostly in cases where more than one language was used during the data collection. Before the data collection commenced, the researcher conducted a questionnaire briefing session with the research team to ensure they had a similar understanding of what was expected from them during data collection. Therefore, all the responses that were captured using local language, the researcher translated them for the purposes of analysis. The latter was important because the study was written in English. Scholars such as Fitria (2024) conducted a study on “The Roles of Translators and Interpreters: Opportunities and Challenges in Translation and Interpreting Activity”. The study revealed that translation may be a challenging exercise simply because of the cultural differences and linguistic complexities, which include words with multiple meanings, idioms that do not translate directly, a lack of equivalent terms in the target language, and understanding of context and nuances. While O’Neil (2019) posits that some challenges of translation include having bilingual people translate from the source language to the target language while retaining most of the grammatical forms of the source. In dealing with the anticipated challenges, the researcher used a decentring process to ensure the quality of the data transcribed would be improved, improve trustworthiness, and accuracy. Decentring also allowed the use of synonyms to depict the exact meaning of study items so that they could be translated from Sepedi to English. Lastly, because of the mixed methods approach for this study, the qualitative approach allows for flexibility in the sense that the researcher may opt to use short and simple sentences to capture the exact meaning from the respondents.

4.10. Review of existing documents

A review of existing documents serves as a secondary source of information and acts as a supplement to a literature review on the subject being studied (Parkinson & Drislane, 2011). The primary aim of this documentation process is to examine a variety of existing sources in order to gather independently verifiable data and information. The data was collected from relevant materials, such as:

- IDP documents, municipal annual reports;
- Service delivery reports;
- Service Delivery and Budgetary Implementation Plan (SDBIP);
- Household Survey;

- Statistics South Africa reports;
- Masters dissertations and PhD theses produced by students in universities; and
- Online sources of information.

Parkinson and Drislane (2011) state that secondary data or existing documents are complementary and should be combined with other data collection and analysis methods. This suggests the use of multiple sources of data to make informed generalisations and to enhance the validity of secondary data.

4.11. Integration of quantitative and qualitative data

The integration of quantitative and qualitative data in a single study is the most important aspect of mixed-method research. Scholars such as Coxon (2005) state that mixing the two sets of data in a single study maximises the strengths of the research. This is because mixing quantitative and qualitative approaches enables the researcher to explore the variables in a multifaceted approach for a comprehensive understanding. The integration in this study entails combining the numeric data with the thick descriptions of the qualitative data to provide solid arguments for understanding Covid-19 and service delivery. The researcher utilised both quantitative and qualitative data to gain a comprehensive understanding of Covid-19 and its impact on service delivery within the Lepelle-Nkumpi municipality. By integrating these two approaches, the researcher was able to compare the findings and validate them against the literature review. This combination of methods enhanced the credibility of the research results. As mentioned earlier, the research involved collecting and analysing quantitative and qualitative data in separate phases before integrating the findings. The researcher examined the impact of the Covid-19 pandemic on service delivery to determine whether there is a significant statistical association between Covid-19 and service delivery. Additionally, the study aimed to quantify the strength of this association using chi-squared analysis and correlation coefficients. Moreover, qualitative data offered contextual insights and explanatory narratives. The section concluded by synthesizing the findings from both quantitative and qualitative data to create a more comprehensive understanding of Covid-19 and its impact on service delivery in the Lepelle-Nkumpi municipality.

4.12. Ensuring data control and quality

Data control includes ensuring adequate application of validity and reliability. In a feasible research study, consideration must be given not only to the results of the study but also to the rigor of the research. Rigor refers to the extent to which the researchers worked to enhance the quality of the studies. In quantitative research, this is achieved through the measurement of validity and reliability (LoBiondo-Wood, Haber, Cameron & Singh, 2014).

4.12.1. Validity

Validity refers to a situation where a specific instrument provides information related to the commonly accepted meaning of a particular concept (Babbie & Mouton, 2001). Validity encompasses whether the results achieved fulfil all the requirements of scientific research methods and the accuracy of the findings (Mokone, 2023). Therefore, it is important to note that there are various strategies to ensure the validity of data in research, and such include pilot studies, triangulation, respondent validation, constant comparison, and evidence (Gibbs, 2007; Silverman, 2006). Accordingly, the study used the following validity checks:

- The questionnaire was pilot tested in the field with 40 households from 15 selected wards, and the feedback gathered was used to adjust the tool.
- Triangulation was employed by comparing various types of data, including qualitative and quantitative sources, along with different research methods. This involved data collected from questionnaires, interviews and literature reviews. Additionally, the study gathered information from key informants and household members. The results from both the quantitative and qualitative research were corroborated by the literature review.
- The study used comparisons whereby the research findings will be compared with other studies tackling similar variables.

4.12.2. Trustworthiness

Creswell (2018) stated that in qualitative research studies to test the trustworthiness, authenticity and accuracy of the research, it is important for research to pass through four criteria such as credibility, transferability, dependability and conformability. Therefore, in qualitative research studies, credibility refers to the extent to which a

particular study is believable and suitable in terms of the degree of agreement between those being studied and the researcher (Adams, Khan & Raeside, 2014; Blumberg, Cooper & Schindler, 2014). The current study ensured credibility by linking the results with what is happening in the realities of the world. The triangulation process helped to authenticate the credibility of this study. The triangulation included the data from the literature review, the survey and interviews to corroborate the findings of this research with the reality. The process helped the researcher build realistic arguments relating to the pragmatic implications of Covid-19 pandemic on service delivery.

The second aspect to test the credibility includes transferability. Transferability is a process of abstraction used to apply information drawn from specific persons, settings and eras to others that have not been directly studied. Transferability is often linked with generalisation. Transferability and generalisation also refer to the ability to apply findings and/or concepts from one research study to other persons, contexts and times. Therefore, the methodological underpinnings for this research permit the study to achieve transferability. The latter includes the use of sampling, common methods of data collection and analysis. The researcher ensured that relevant respondents were targeted to provide adequate information that answered the research questions.

The third aspect entails dependability. Dependability refers to the steadiness and reliability of the study results and the extent to which research methods used are documented, allowing other researchers from outside to follow the study, audit and critique the research process (Creswell, 2018). This was achieved by ensuring that the different segments of this, as a build-up for a complete project, are consistently checked and critiqued to ensure the results and findings are reliable. The last aspect of this is conformability. Conformability refers to how the study findings could be confirmed or corroborated by other researchers (Leavy, 2017). Therefore, for this, the researcher consistently engaged with an extensive review of literature to support the findings of this study. The findings of this research are corroborated to check if they conform to the literature review.

4.12.3. Reliability

According to Golafshari (2003), reliability refers to the extent to which results accurately represent the total population under study. It refers to a condition where the given instrument yields consistent results upon repetition (Babbie & Mouton, 2001). On the other hand, Asha (2014) states that reliability assesses whether an instrument produces consistent results over specific periods. The issue of reliability is contentious in qualitative field research. Therefore, in an endeavour to ensure the reliability of the data:

- The entire transcribed text and field notes were thoroughly interpreted to obtain an overall and comprehensive impression of the content and context.
- Themes and sub-themes were included to identify meaningful connections, relationships, and trends, and apply the coding process of the data for easy inferences.

4.13. Ethical considerations

Any research needs to uphold or take into account ethical issues. According to Bless (2013), ethics in any research entails ensuring that knowledge and skills are used to improve people's socioeconomic situation and contribute constructively to societal development, in addition to not violating the human rights of those who participate in research. In essence, ethics are there in research to safeguard the interests of research participants. Ethics in any research helps the participants to understand in terms of their roles, responsibilities and expectations (Maphazi, 2012). Therefore, research participants serve as important components, and their adequate participation ensures the success of any research.

This research followed the ethical standards outlined in the research code of ethics. The researcher was made aware of their ethical responsibilities regarding intellectual honesty and professional integrity throughout the study. Additionally, the researcher considered the expectations of various participants who were approached during the information gathering and survey process.

- First, the Lepelle-Nkumpi municipality was consulted regarding the collection of data. Thereafter, the proposal, together with the data collection instruments,

was sent to the municipality to request permission to conduct research. The permission was granted (see Appendix I).

- Participants were guaranteed that their information would remain confidential and that the study's purpose was solely for academic research. Consequently, the researcher did not disclose any information obtained from participants to any external authority without their consent.
- The study also adhered to the plagiarism policy prescribed by the University of Mpumalanga in a way that the researcher gave credit or duly acknowledged the work of others, and quotation marks were used when quoting the exact words of other scholars or academics.
- The anonymity of the respondents was guaranteed. The participants were told that their responses could not in any way be identified by anyone else. During the data analysis, the names of the respondents were replaced with codes (for example, focus group respondents 1) (FGR1 and Key Informants 1 (KI2).
- Respondents were informed before the collection of data that their participation is voluntary, and they were given the right to decline or withdraw from taking part in the study at any time.
- An application for a clearance certificate was conducted in this research, and it was submitted to the following two committees: the Postgraduate Research Ethics Committee and University Research Ethics Committee. Permission to conduct this research was granted as REF: UMP/Makalela/PhDDev/2023 (see appendix A).
- During the collection of data, a copy of the consent form was given to the respondents to obtain the willingness of participants in this research (see appendix B). The consent form was also explained in detail to the participants to ensure that they adequately understand what is expected of them in participating in this research. Furthermore, to ensure that they fully understand the content of the consent form, the consent form was translated into the local language (Sepedi) and English. That was necessary for respondents to have language choices.

4.14. Conclusion

This chapter provides a comprehensive overview of the research design and methodology utilised in this study. A mixed-method sequential exploratory design was employed to examine the implications of the Covid-19 pandemic on service delivery in the Lepelle-Nkumpi municipality. The research was guided by the pragmatism paradigm, which served as a theoretical framework. This paradigm aligns well with studies that incorporate mixed methods approaches. This research began with the collection and analysis of quantitative data, which was then complemented by qualitative data to provide further explanation and synthesis of the quantitative findings. To gather data from participants, quantitative sampling techniques such as simple random sampling and systematic sampling were employed. The quantitative research utilised descriptive and inferential statistics to analyse the data using Microsoft Excel (MS Excel) and the Statistical Package for the Social Sciences (SPSS) version 29.0, producing data frequencies, means and standard deviations. Qualitative data analysis focused on gathering participants' opinions and views through interviews with key informants and focus group discussions using thematic analysis. To enhance the validity and reliability of the results, the study integrated both quantitative and qualitative findings. A sample size of 449 participants was determined using the Slovin equation, which facilitated a 95% confidence level and established a margin of error. This sample size effectively represented the entire population, allowing for meaningful generalisation of the findings. The chapter discussed data control and quality measures, which included pilot testing, triangulation process, data preparation and storage, validity, and reliability of data. Lastly, the ethical consideration was explained for this research.

The subsequent chapter presents the findings and analysis of the study.

CHAPTER 5: FINDINGS AND ANALYSIS

5.1. Introduction

The previous chapter provided a thorough overview of the research design and methodology used in this study. It outlined the paradigm that shaped the study's development. In this chapter, the first section presents and interprets the quantitative findings obtained from the household survey conducted in selected wards of the municipality. Through systematic sampling, a questionnaire was administered to 449 households across 15 selected wards in the Lepelle-Nkumpi local municipality. The analysis was conducted using Pearson's correlation test to examine the relationship between the independent and dependent variables. The correlation coefficient (r) was used to determine the strength and direction of the association between the variables. The Statistical Package for Social Sciences IBM (SPSS) version 29, along with Microsoft Excel, was utilised to perform the statistical analysis. This chapter presents the findings from the qualitative research conducted in this study. As previously mentioned, the research used thematic analysis to interpret qualitative data, utilising NVivo 14 software. The qualitative data was gathered through interviews and focus group discussions. The interview data was collected from three key informants who possess extensive knowledge of planning and implementing service delivery. The focus group discussion included seven participants, although ten members were initially identified for the study; only seven were available on the discussion day. The researcher was satisfied with the information provided, as it was essential for addressing the research questions.

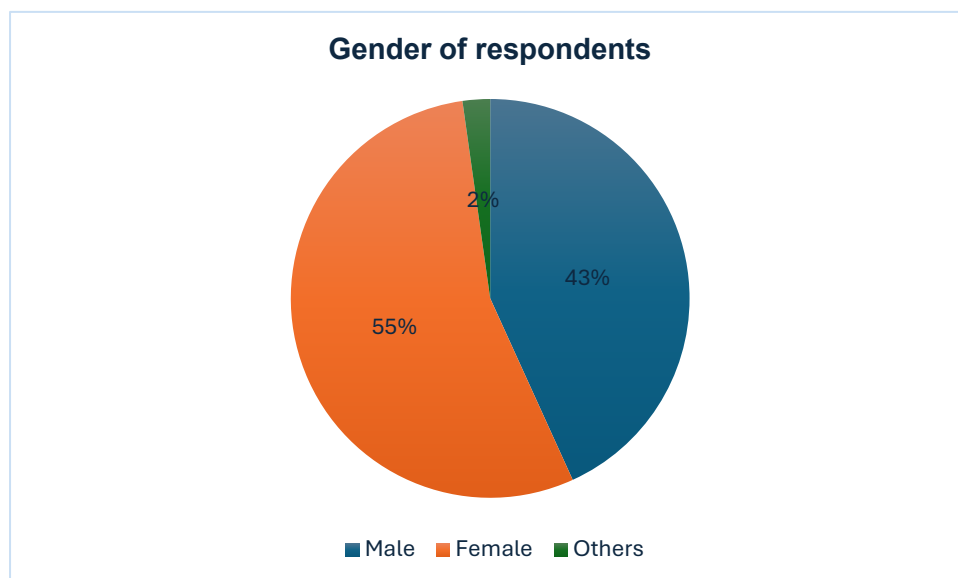
5.2. Section A: Demographic profile of respondents

This section outlines the demographic profile of the respondents, categorised by gender, age, level of education and employment status. Understanding the demographic profile of respondents in research is crucial as it offers valuable insights into the characteristics and various aspects of the studied population. A clear demographic profile helps to clarify the purpose of the research and aids in generalising the findings.

5.2.1. Gender of respondents

The gender of respondents is indicated in the figure below:

Figure 5.1: Gender of respondents



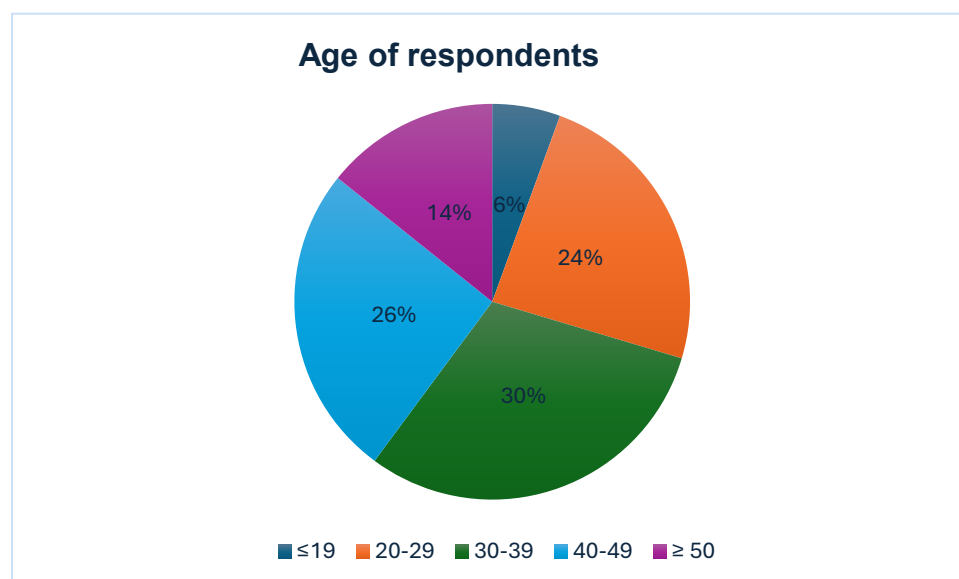
In South Africa and other developing countries, there is a strong belief in the significant role that gender plays in nation-building and society (Mangaliso, 2014). Additionally, gender is crucial in the implementation of research. Scholars like Tannenbaum, Greaves and Graham (2016) have noted that gender influences decision-making, communication, stakeholder engagement and preferences for adopting interventions. This perspective stems from the underlying belief that women are less important or deserving of power compared to men. The exclusion of women in the development discourse places women in society at a socioeconomic disadvantage. It is on that basis that it was important for the researcher to understand the gender of respondents in this research. The majority 55% (n=245) of the respondents surveyed in this study were females. Gender power relations influence the way decisions are formulated both at the household level as well as within the community (Mbugua & Njoroge, 2018). As part of African customs and value systems, the role of women is mostly to ensure stability in households. Studies indicated that for local government to be effective and transparent, there is a need for the government to consider gender power relations in the design of service delivery reforms, particularly if they are betting on women as important agents of accountability (Mbugua & Njoroge, 2018; Logan & Taylor, 2017). The latter calls for an increase in women's participation in matters of local governance

because their interests and views are considered to be important in shaping the community development trajectory. Simply put, women face power relations within the household and within the community that constrain their ability to voice household needs or exercise the best choices in service delivery (Mbugua & Njoroge, 2018). It can be deduced from the analysis that the participation of women in this study is higher as compared to men. It is important to include women at the centre of local government decision-making processes. The minority, 43% (n=194) of the respondents who participated in this study were males, and a mere 2% (n=10) selected other (non-binary option). This situation is largely due to the family structures in rural areas, where many households are headed by women while the men are away seeking opportunities or for other reasons. The apartheid planning regime marginalised women. These findings are supported by a study conducted by Huq (2016) on women's participation in local government as a tool for sustainable development. The article revealed that the underrepresentation of women at any level of governance leads to a democratic deficit. In the current study, women were found to be available and interested in participating in the survey.

5.2.2. Age of respondents

The age of respondents is indicated in the figure below:

Figure 5.2. Age of respondents



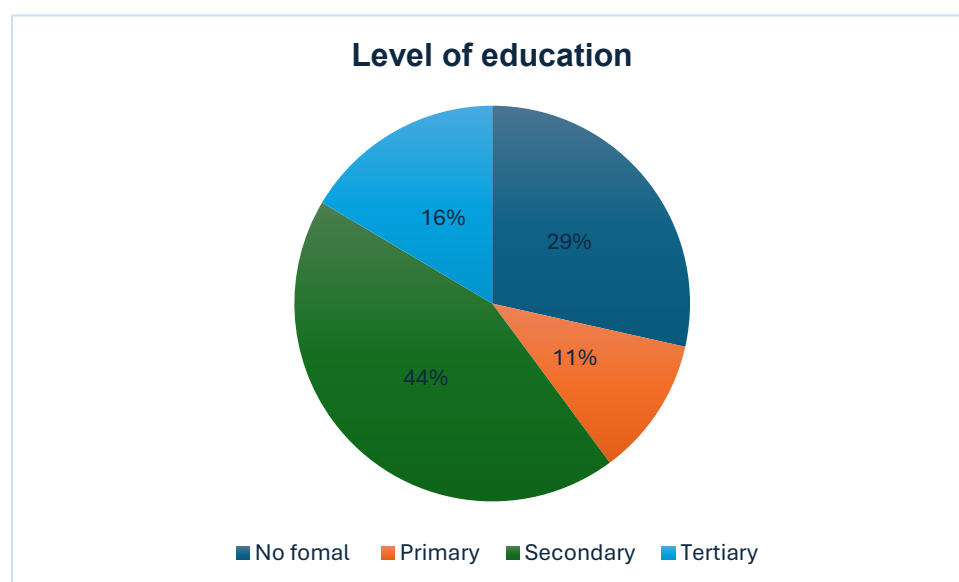
Age is an important factor in research because it plays a crucial role in different phases of individual development. Additionally, it significantly influences the validity of the results. Age can affect research outcomes positively or negatively, as it is often linked to varying levels of experience, knowledge and cognitive abilities. Figure 5.2 shows that from the 449 respondents who participated in the study, the majority 30% (n=137) of the respondents were between the ages of 30 and 39, followed by 26% (n=115) belonging to the ages of 40–49. The least represented are those who are 19 years or less, 2% (n=25). The disparity in terms of age has implications for the results of this study. Understanding Covid-19 and its implications on service delivery requires a particular level of cognitive skills. A significant proportion of respondents were between the ages of 30 and 39 who belong to the youth group, and they are considered to have an understanding of issues that affect the local government. The age group between 30 and 39 is considered to be individuals with family and community responsibilities, which may translate into expected participation in service delivery issues and providing education on Covid-19. Of the respondents belonging to the ages of 20–29, 24% (n=108) also contribute to a significant proportion. This age group typically includes young adults who are mostly in colleges and tertiary education. They are important as they possess the necessary knowledge of the governance of municipalities and Covid-19. Because they are in their youth, some of them are either working and others still looking for job opportunities, they were interested in participating in the study by sharing their knowledge and experiences on matters of local governance. Overall, the findings corroborate with the article published by Christopher (2017) on “Statistics as news: South African newspapers and the release of the Community Survey 2016”. It was revealed that the municipality is dominated by 71% of the youthful population. The latter is affirmed by the picture painted by the significant proportions of respondents belonging to the ages of 40–49 and 20–29, which confirms the high number of the youthful population in the municipality. However, a substantial amount of research documents the increased likelihood of maltreated youths engaging in delinquency (Herz, Ryan & Bilchik, 2010). The shows that mostly these youths are often referred to as crossover youth or dually involved youth, and based on a growing amount of research, it appears these youths face many challenges. They have significant educational problems, and high rates of substance abuse and mental health problems (Herz, Ryan & Bilchik, 2010). The lowest representation comes from the respondents,

14% (n=64), who are 50 years + and a mere 2% (n=25) who were 19 years or less. This is mostly attributed to the fact that the older population is less interested in issues affecting the communities because most of them have lost hope in the capacity of the municipality to deliver services. The majority do not attend community meetings, citing their health conditions and mobility as most meetings are organised without transportation to community halls.

5.2.3. Level of education

The educational levels of respondents are indicated in the table below:

Figure 5.3. Level of education



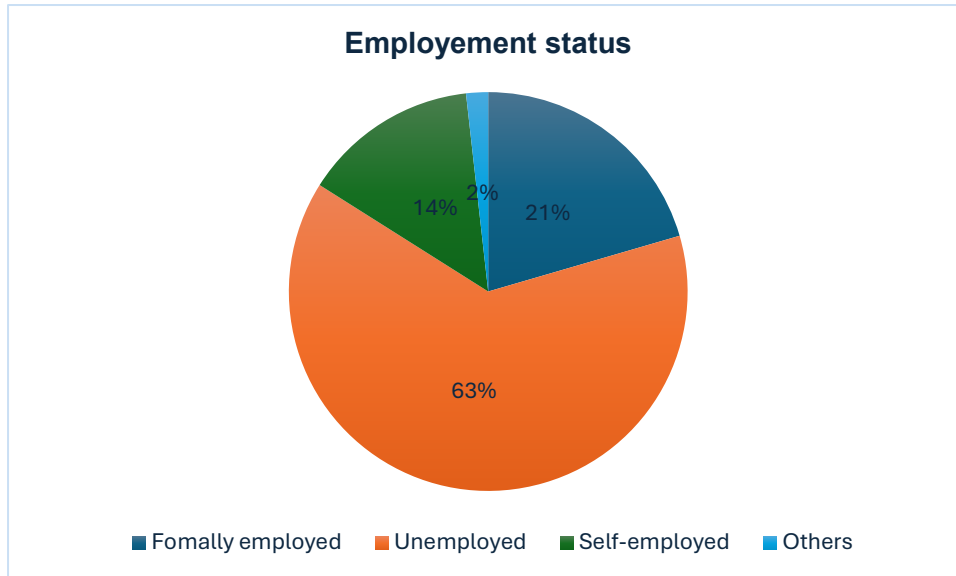
The findings presented in this section provide insights into the employment status of the respondents who participated in the survey and its implications on the emergence of the Covid-19 pandemic and service delivery in the municipality. Out of the 449 respondents, the majority, 44% (n=196) of the respondents had secondary education, while 29% (n=128) had no formal education. The analysis indicates that low levels of illiteracy characterise the municipality because of lack of formal education as indicated by the respondents. The lack of formal education by many of the respondents in the municipality is linked to the high number of poverty-stricken individuals and households. The findings are confirmed by the General Household Survey (2016) which confirmed that the municipality consists of 67% of the population with no matric

– having left school at primary or secondary level. However, the lack of formal education could not prevent communities from taking part in the survey simply because of their knowledge and experience on issues of service delivery. The questions that were asked related to their day-to-day experiences. *Inter alia*, questions on water provision, electricity, sanitation and refuse removal services by the municipality. A significant proportion of respondents, 16% (n=74) indicated tertiary education. Therefore, the municipality is characterised by a low-skilled community with only a small proportion of the population (16%) with tertiary education. The small proportion of respondents with tertiary education mostly possess specialised skills and knowledge of governance issues. Their skills can contribute to communities by providing awareness and education on issues such as Covid-19 and water, electricity, sanitation, and refuse provision and their related challenges. Only 11% (n=51) had primary education, which included mostly the aged who showed to be knowledgeable on the subject matter. As stated, the researcher recruited respondents who demonstrated a high level of comprehension of issues of Covid-19 and service delivery. The questionnaire was administered step by step with the respondents, and provided in both languages, English and Sepedi. A professional translator was hired to translate the questionnaire into the local language for ease of reference. Stats SA (2022) revealed Sepedi is the dominant language used in the municipality is Sepedi. Therefore, it was easy for the respondents to relate to the questions.

5.2.4. Employment status

The employment status of respondents is indicated in the figure below:

Figure 5.4. Employment status of respondents



The employment status of respondents is crucial, as it influences the type of research conducted and the data required to address the research questions. The researcher used this category to exclude individuals who were directly affiliated with the municipality during the data collection process. Out of the 449 respondents, the majority, 63% (n=285), of the respondents are unemployed, while 21% (n=92) are formally employed. The many unemployed household members indicated they mostly depend on remittances and social grants for survival. According to Stats SA (2016), the municipality is sitting at a 46% level of unemployment. The results from both the findings of this research and the census (2016) corroborate the high level of unemployment facing the country (32.9%). The analysis highlights the potential influence shaping the role of the municipality in service delivery. The municipality with most of the unemployed population is likely to be affected by a lack of service delivery. Moreover, due to a lack of financial resources, the population is bound to be unable to cope and be resilient in the wake of a pandemic. Scholars such as Tedds (2019) conducted a study on "Who pays for municipal governments? Pursuing the user pay model". It was stated that municipalities with the majority of the population in the workforce receive adequate services, as most of them can pay for services. However,

it is important to note that income is not the sole determinant for access to services because municipalities are required by legislation to deliver services to communities. Only 14% (n=64) of the respondents are self-employed, and a mere 2% (n=8) selected 'others', which indicated that they rely on disability grants and pensions for survival. It can be concluded that a high percentage of respondents do not participate in formal employment.

5.3. Section B: Communities' perceptions of service delivery during the Covid-19 pandemic

5.3.1. Service delivery during the Covid-19 pandemic

The below section indicates the degree of responses carried out using the Likert scale to evaluate statements B1, B2, B3, and B4 to check statements with more or less agreement. The statements were carried out to check the perceptions of communities about service delivery during the Covid-19 pandemic. The construct of the perceptions of communities' perceptions during the pandemic consists of the following:

Statement B1: Adequate provision of water during Covid-19

Statement B2: Adequate provision of electricity during Covid-19

Statement B3: Adequate provision of sanitation during Covid-19

Statement B4: Adequate provision of refuse removal during Covid-19

Table 5.1. The degree of responses related to service delivery during the pandemic (n=449)

Items	Frequency (%)						Mean	SD
	Strongly Disagree	Disagree	Undecided	Agree	Strongly Agree			
Statement B1	333 (74%)	81 (18%)	4 (1%)	22 (5%)	9 (2%)	1.43	0.894	
Statement B2	193 (43%)	77 (17%)	30 (7%)	125 (28%)	24 (5%)	2.35	1.404	
Statement B3	163 (36%)	77 (17%)	43 (10%)	102 (23%)	64 (14%)	2.61	1.509	

Statement	227	63 (14%)	105 (23%)	49	5 (1%)	1.98	1.131
B4	(51%)			(11%)			

As indicated in the above table 5.1. the mean of statement B3 (2.61) which was related to the adequate provision of sanitation services in the community during the Covid-19 pandemic is high compared to other items. This statement is a clear indication that the sanitation service played an important role in curbing the spread of the pandemic. As part of the Covid-19 protocols communities were expected to constantly wash their hands and sanitise. The second item with a high mean is statement B2 (mean=2.35), which suggests that a consistent cut-off on the provision of electricity had a negative bearing on Covid-19. Moreover, the third highest mean emanates from statement B4 (mean=1.98), which indicated that the lack of collection of refuse removal services during the pandemic had an impact on the management of the pandemic. The standard deviation (SD) indicated the multiplicity of data variance around the mean. Therefore, statement B1 (SD=0.894) confirms the lowest SD with the variance of data clustered around the mean (1.43). the subsequent section explains the degree of responses, indicating that Lepelle-Nkumpi municipality was overwhelmed and had difficulties in implementing service delivery during the pandemic. The available resources and the development plans had to change to curb the spread of the pandemic. The results can further be explained by considering the items/statements from B1–B4 as follows:

5.3.1.1. Statement B1 – adequate provision of water during the Covid-19 pandemic

The Covid-19 pandemic has shone a light on handwashing as an inexpensive, widely applicable response measure. In consequence, most governments have taken action to promote access to water and sanitation services for all. Combatting this virus has forced countries to recognise the importance of foundational measures of disease control (Howard, Bartram, Brocklehurst, Colford, Costa, Cunliffe, Dreibelbis, Eisenberg, Evans, Girones, Hrudehy, Willetts & Wright, 2020). The respondents were asked to indicate whether the municipality was able to adequately provide water during the Covid-19 pandemic. A significant proportion of the respondents, 74% (n=333), strongly disagreed with the statement, while 18% (n=81) disagreed with the statement. The municipality was found to have experienced challenges in water provision during

the pandemic, despite the use of water as part of the government's strategy to prevent the spread of the pandemic. On the other hand, a small proportion of respondents, 5% (n=22), agreed; 2% (n=9) strongly agreed and a mere 1% (n=4) of the sampled respondents were undecided. A significant proportion of the respondents stated a lack of adequate water provision by the municipality during the pandemic. The resultant literature is clear on the fact that the government's efforts to prevent the spread of the pandemic were largely dependent on access and availability of water by the municipality (Desye, 2021). As part of the Covid-19 regulations, the government recommended washing hands as part of the mechanisms to prevent the spread of the virus. However, water provision remains one of the biggest challenges in the Lepelle-Nkumpi municipality. Communities cried foul due to a lack of water provision during the pandemic. The findings are also confirmed by a larger proportion (18%) of the respondents who disagreed with the statement that the municipality failed to provide water. There is a small proportion of those who agreed (2%) that the municipality was able to provide water during the pandemic. A small proportion agreed on the basis that they benefitted from the municipal water tankers programme during Covid-19. A mere 1% of the respondents were undecided and did not want to either confirm or deny the statement. The findings also resonate with the literature released regarding the general challenges of water provision during the pandemic. Scholars such as Chamberlain and Potter (2022) indicated that the Covid-19 pandemic illuminated the widespread lack of access to adequate water in many informal settlements and rural areas in South Africa. On the other hand, scholars such as Makalela (2021) revealed that out of a population of 40 million in South Africa are those without access to basic water services. It can be concluded that the municipality struggled with water provision during the pandemic.

5.3.1.2. Statement B2 – adequate provision of electricity during the Covid-19 pandemic

The respondents were asked to indicate whether the municipality was able to adequately provide electricity during the Covid-19 pandemic. Table 5.1 shows that the majority of the respondents, 43% (n=193) and 17% (n=77), strongly disagreed and agreed with the statement, respectively. Some electrification projects had to stop in some areas due to the restrictions on the movement of people, and that resulted in an ample number of communities without access to electricity during the pandemic. The

service delivery protests due to a lack of clear demarcation in some wards before the pandemic contributed to ongoing electricity challenges in the municipality. On the other hand, 28% (n=125) and 5% (n=24) agreed and strongly agreed with the statement, respectively. The latter includes a small fraction (28%) of communities that did not suffer and were not affected by power interruptions during the pandemic. These included those who installed power inverters in their households, whereas 7% (n=30) were undecided. Communities were locked down during the pandemic to avoid the movement of people as a way to curb the spread of the pandemic. Government intervention such as the lockdown increased the demand and consumption of energy due to restrictions on the movement of people (Bahmanyar, Estebarsari & Ernst, 2020). The findings of this study corroborate the findings of the article published by Snow, Bean, Glencross & Horrocks (2020), who conducted a study on the 'Drivers behind residential electricity demand fluctuations due to Covid-19 restrictions'. The study findings identify significant increases in certain aspects of household electricity use directly related to Covid-19, including increased cooking and digital device use. In the current study, the majority of the respondents, 43% and 17% respectively, demonstrated their dissatisfaction regarding the provision of electricity by the municipality during the pandemic. Load-shedding, dilapidated electric infrastructure, and stolen cables were among other reasons for power interruptions during the pandemic. Scholars such as Bielecki, Skoczkowski, Sobczak, Buchoski, Maciąg and Dukat (2021) share similar sentiments with Bahmanyar, Estebarsari and Ernst (2020) who stated that the Covid-19 lockdown contributed to the high demand for electricity due to the compulsion to stay and work from home and limiting of social activities. Scholars such as Snow, Bean, Glencross and Horrocks (2020) resonate with the findings of Bielecki, Skoczkowski, Sobczak, Buchoski, Maciąg and Dukat (2021) and the qualitative findings that the Covid-19 reoriented the lives of many communities across the globe toward working, learning and subsisting from home, thus increasing the demand for use of electricity.

5.3.1.3. Statement B3 – adequate provision of sanitation during the Covid-19 pandemic

Inadequate water, sanitation and hygiene (WASH) in healthcare facilities (HCFs) have an impact on the transmission of infectious diseases, including the Covid-19 pandemic (Berihun, Adane, Walle, Abebe, Alemnew, Natnael & Berhanu 2022). In the current

study, the respondents were asked to indicate whether the municipality adequately provided sanitation services during the Covid-19 pandemic. A significant proportion of the respondents, 36% (n=163), strongly disagreed with the statement that sanitation was adequately provided by the municipality during the pandemic. The disagreement was largely attributed to non-functional water pipes, the absence of water-quality monitoring systems, and frequent water interruptions were the major problems with water supply, which occurred primarily in clinics and health centres in many municipalities (Berihun, Adane, Walle, Abebe, Alemnew, Natnael & Berhanu 2022). On the other hand, a small fraction of the respondents, 23% (n=102), agreed with the statement. On the contrary, 17% (n=77) disagreed; 14% (n=64) strongly agreed, and 10% (n=43) were undecided. The results show that a significant proportion, 53% (n=240/449), confirmed the statement. In summation, the overall provision of sanitation was found to be a challenge for the municipality. The qualitative findings revealed that the sanitation backlog was exacerbated by the pandemic. The large proportion of respondents who disagreed with the statement indicated that there is an urgent need for the municipality to improve sanitation services. The findings further revealed that the inability of the municipality to provide adequate sanitation resulted in difficulties in curbing the spread of the pandemic. The findings resonate with the findings of the study conducted by Purnama and Susanna (2020) on the hygiene and sanitation challenge for Covid-19 prevention in Indonesia. The study revealed that low personal hygiene and poor sanitation were found to be the main factors that inhibit the management and control of the pandemic. However, the latter is despite the undisputed contestation of the proportion of the response from the respondents – 37% (n=166/449) – who agreed with the statement that the municipality adequately provided sanitation during the pandemic.

5.3.1.4. Statement B4 – adequate provision of refuse removal service during the Covid-19 pandemic

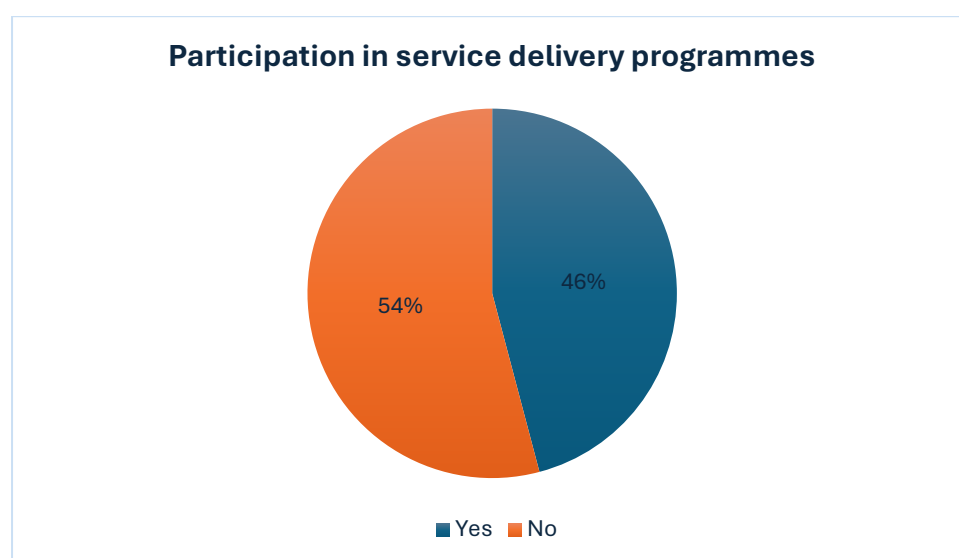
The Covid-19 pandemic has caused a global emergency and has raised social and economic concerns, which also spilled over to environmental issues (Kulkarni & Anantharama, 2020). The pandemic has posed major environmental challenges, including municipal solid waste (MSW) and hazardous biomedical waste management. Solid Waste Association of North America (SWANA) has reported potential changes in the volume and source of solid waste generated due to the

enforcement of lockdown by the authorities to contain the disease outbreak (Pinto, Jalloul, Nickdoost, Sanusi, Choi & Abichou, 2022).

Respondents were asked to indicate whether the municipality adequately provided refuse removal services during the Covid-19 pandemic. Table 5.1 shows that the majority of the respondents, 51% (n=227), strongly disagreed with the statement that the municipality provided adequate refuse collection during the pandemic. This signals the difficulties experienced by communities during Covid-19. The lives of the communities had to be exposed to the virus simply because of unhygienic living conditions. On the other hand, while 23% (n=105) remained undecided, a small fraction of the respondents, 14% (n=64), disagreed with the statement, with a mere 1% (n=5) of the respondents strongly disagreeing with the statement. In summation, the finding of the study highlights some levels of dissatisfaction regarding the management of refuse by the municipality. The implication is that the municipality failed to provide refuse removal services in many rural communities during the pandemic. The development of literature revealed that the Covid-19 pandemic has had a deleterious impact on the environment. The latter was accelerated by the change in consumption and waste disposal patterns during the lockdown period (Glenn, Rice, Primeau, Hollen, Jado, Hannan & Gaither, 2020). Scholars such as Richter, Ng, Vu and Kabir (2021) share a similar view with Glenn, Rice, Primeau, Hollen, Jado, Hannan and Gaither (2020) that the Covid-19 pandemic has had unprecedented effects on consumer behaviours and waste disposal habits. Therefore, from the literature and qualitative findings, it can be concluded that the municipality failed to provide refuse removal services in many rural communities during the pandemic, although a small proportion of respondents, 12% (56/449), agreed with the statement.

5.3.2. Participation in service delivery programmes during the Covid-19 pandemic

Figure 5.5. Participation in service delivery programmes



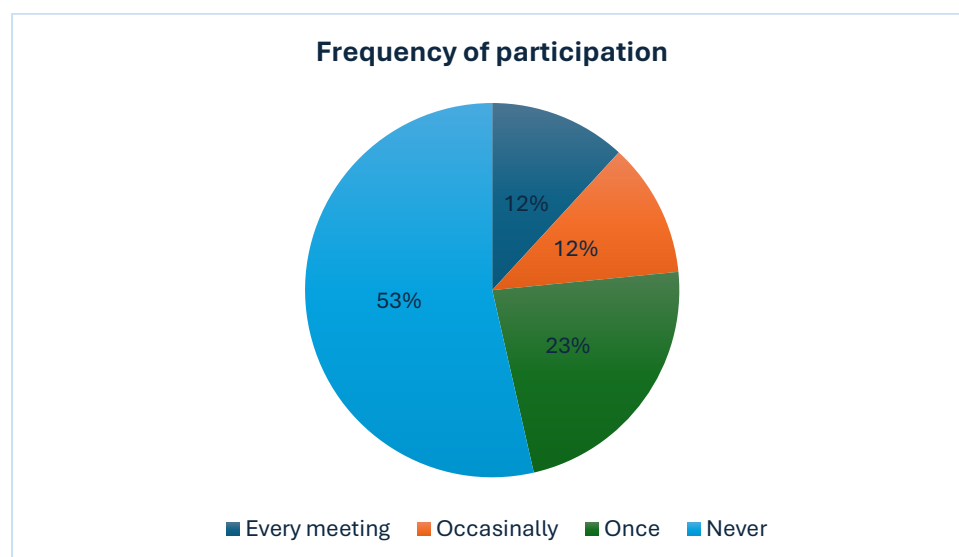
The respondents were requested to indicate whether they participated in service delivery programmes during the pandemic. Out of 449 responses secured from the respondents, the majority, 54% (n=243), indicated that they never participated in service delivery programmes during the pandemic, while 46% (n=206) indicated that they participated. A significant proportion of respondents cited the fear of contracting Covid-19 as part of their reason not to participate in service delivery programmes. The development of literature stated the need for municipalities to devise new mechanisms such as virtual service delivery models to be used during crises such as Covid-19 (Mehta, Ahrens, Abu-Jurji, Marrocco, Upper, Loh & Wolfe, 2021). Due to the traditional nature of public participation in municipalities, they were not well-equipped to support community involvement in addressing service delivery backlogs during the pandemic. The Covid-19 regulations, particularly during alert levels 5 and 4, hindered community participation. These regulations allowed only a limited number of individuals to gather in one location as a measure to prevent the spread of the virus, making it impossible for communities to express their needs. Of those who participated, 46% (206/449), indicated that, amid the fact of the promulgated regulations, they participated virtually using radio platforms and social media to raise their inputs and concerns about their community development needs during the pandemic. The study resonates with the literature review on the changes in the effects of social media due to the Covid-19

pandemic (Kaya, 2020). Scholars such as Abbas, Wang, Su and Ziapour (2021) reaffirmed their stance on the important role of social media in the advent of the Covid-19 pandemic.

The literature and qualitative research findings indicate that social media significantly facilitated community participation in service delivery programmes during the pandemic, despite differing opinions among respondents. However, it is important to highlight that there were financial implications and constraints associated with this participation, such as the costs of data usage and airtime. As a result, many individuals were unable to engage in service delivery programmes during the pandemic.

5.3.3. Frequency of participation in service delivery during the pandemic

Figure 5.6. Frequency of participation

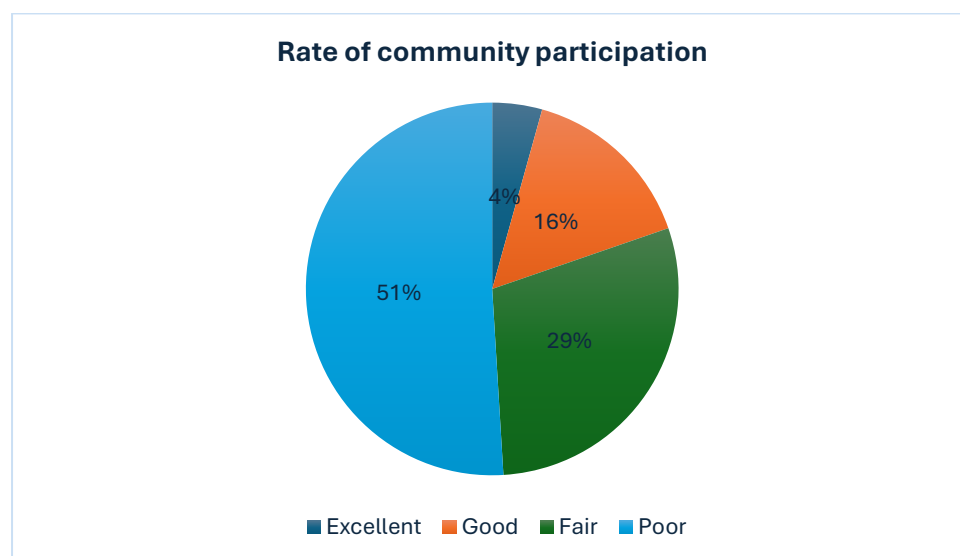


The frequency with which communities attend meetings for consultations with the municipality affects the quality of services delivered. These meetings provide an opportunity for community members to express their views and opinions about service delivery. Respondents were asked to indicate how often they participated in service delivery programs during the pandemic. Therefore, Figure 5.6 shows that out of 449 responses secured from the respondents, 53% (n=240) indicated that they never participated, while 23% (n=103) participated once, 12% (n=53) participated in every meeting, and 12% (n=52) participated occasionally. Scholars such as Kakuhikire, Satinsky, Baguma, Rasmussen, Perkins, Gumisiriza and Tsai (2021) stated that apart from the emergence of the pandemic and its regulations, communities are reluctant to

attend community meetings for service delivery because they have lost hope in municipalities. An indication of lost hope was confirmed by a small proportion of 12% (n=53) and 12% (n=52) of those who participated once and occasionally in service delivery programmes. Municipalities are perceived to have neglected their primary responsibilities. The findings are confirmed by the majority of people who never participated in service delivery programmes. In the current study, the majority of the respondents (240/448) who never participated were a result of the government's efforts to curb the spread of the pandemic through regulations. Only 103/448 indicated that they participated only once during the pandemic. They indicated their participation in a physical meeting after the relaxation of the regulations by the government, while some participated in virtual meetings and social media platforms. Those who participated in using social media were not satisfied because of connectivity challenges, and a lack of data and gadgets. The findings of the research resonate with the literature review on the Utilization of Microsoft Teams 365 as an alternative to improve service delivery amid the Covid-19 pandemic (Wijayanto, Andayani & Sumarwati, 2021). Despite the variation of responses from the respondents, and drawing the qualitative findings, the level of participation during the pandemic was extremely difficult.

5.3.4. The rate of community participation in service delivery during the pandemic

Figure 5.7. The rate of community participation

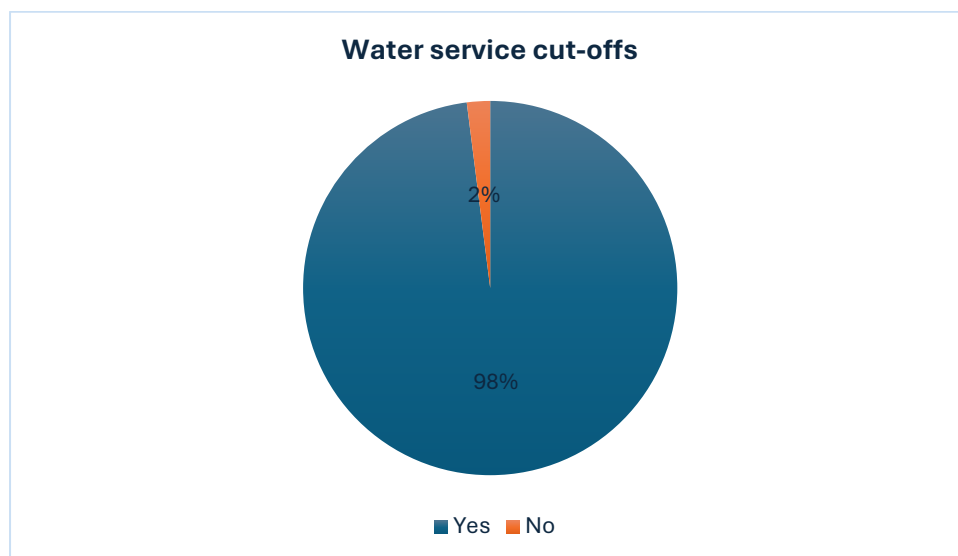


The respondents were asked to indicate their rate of community participation during the pandemic. The figure above shows that out of 208 responses obtained from the respondents, 51% (n=106) indicated that the rate of community participation during the pandemic was 'poor', while 29% (n=61) indicated 'fair', 16% (n=32) indicated good. The disproportion of the responses is evident that the communities have lost hope in the municipality. As previously indicated, the Covid-19 pandemic and its regulations also contributed to poor attendance of community programmes and consultation meetings. Social media became the custodian in the distribution of information by the municipalities during the pandemic (Qutishat, Obeidallah & Qawasmeh, 2022). It is for that reason that many communities missed some of the communications due to a lack of data and gadgets. Out of 16% (n=32) of the respondents who indicated 'good', and a mere 4% (n=9) indicated 'excellent'. These included mostly those who had radios and cell phones with social media access to receive communications from the municipality on Covid-19 and service delivery issues during the pandemic. From the analysis, the majority of the respondents – 51% (106/208) – were not happy about their level of participation during the pandemic. Among other challenges raised, there were internet challenges to participate in virtual platforms, a lack of airtime and data to participate in sharing their views and opinions on the radio platforms and Facebook as most of the engagements were done using radio and social media platforms. This study revealed that the level of participation during the pandemic was not adequate. The study resonates with the literature review on factors driving citizen engagement with government TikTok accounts during the Covid-19 pandemic (Chen, Min, Zhang, Ma & Evans, 2021). Scholars such as Manikam, Allaham, Zakieh, Bou Karim, Demel, Ali and Heys (2021) echoed online community engagement in response to the Covid-19 pandemic. The participation of communities in service delivery programmes in the municipality during the pandemic was poor, despite a small proportion of respondents who participated in service delivery programmes.

5.4. Section C: Challenges of service delivery during the Covid-19 pandemic

5.4.1. Water service cut-offs during the pandemic

Figure 5.8. water service cut-offs

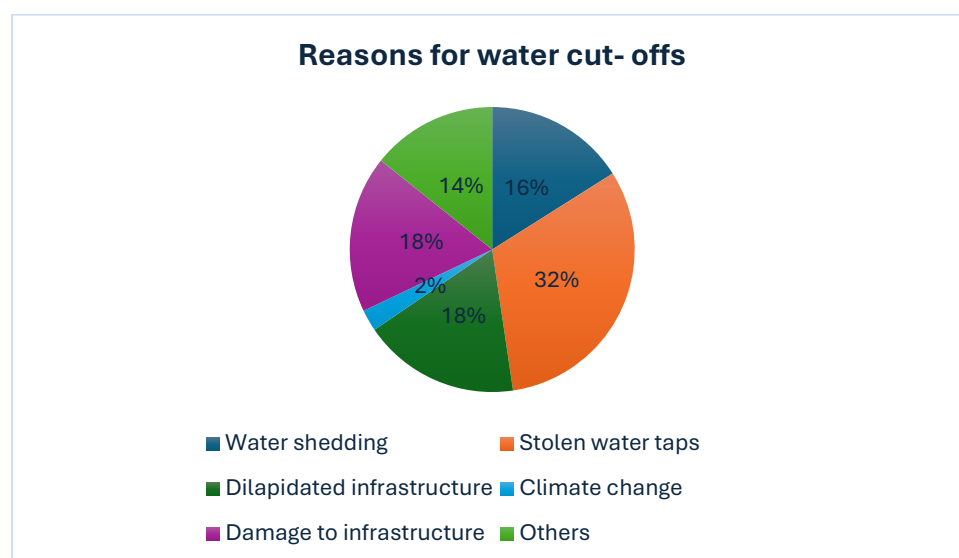


The respondents were asked to indicate if they experienced any water service cut-offs during the pandemic. The above figure shows that of the 449 responses from the respondents, 98% (n=440) indicated that they experienced water service cut-offs during the pandemic, while a mere 2% (n=9) indicated 'no'. The development of literature indicated that the government's efforts to tackle the spread of the pandemic have led to a perpetual increase in the demand for water across communities and most cases worsened the water quality, leading to additional challenges in water planning and management (Sivakumar, 2021). Moreover, washing hands during the pandemic was recommended as part of the strategy to contain the spread of the virus. This is because, according to the WHO (and governments around the world), one of the most effective ways to reduce one's chances of being infected or spreading Covid-19 is to regularly and thoroughly wash one's hands with soap and water or clean them with an alcohol-based hand rub (WHO, 2020). Washing one's hands with soap and water or using an alcohol-based hand rub kills viruses that may be on one's hands. Therefore, the availability and accessibility of water can significantly influence the extent of the spread of Covid-19 across communities (Sivakumar, 2011). In this regard, the supply of adequate water across many municipalities is still a challenge, which

places communities at risk of contracting the virus. This is confirmed by the majority of the respondents, 98% (440/449), who indicated that they experienced water service cut-offs during the pandemic. The respondents cited old or damaged water taps, damaged water infrastructure and water shedding amongst other reasons for water service cut-offs. On the other hand, a small proportion of respondents indicated that they never experienced water service cut-offs during the pandemic. The respondents cited that they use their boreholes inside the yard. According to Lepelle-Nkumpi IDP (2021–2026), the municipality has made significant strides to ensure adequate access to water without interruptions although there is still much to be done to fix water problems in communities. Scholarly such as Tortajada and Biswas (2020), revealed that the pandemic heightens water problems around the world. Moreover, a significant proportion of the members of the community are still without adequate provision of water and, as a result, experience continued water cut-offs. Therefore, drawing from the literature review and qualitative findings, it can be concluded that the continued water cut-offs lead to more people being exposed to the pandemic as they are unable to wash their hands consistently to curb the spread of the pandemic.

5.4.2. Reasons for water cut-offs

Figure 5.9. Reasons for water cut-offs

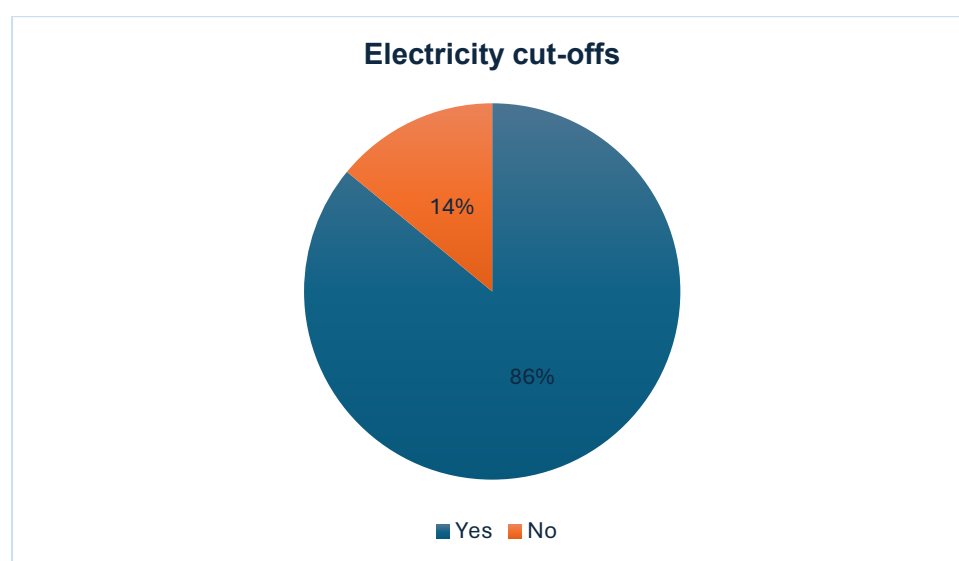


The respondents were asked to indicate the reasons for water cut-offs in the municipality. The figure above shows that, of the 449 responses solicited from the

respondents, 32% (n=142) identified stolen water taps as the main reason for water cut-offs in the municipality, while 18% (n=80) believed that damaged water infrastructure was the primary reason for water cut-offs. An ample number of local municipalities are inundated with an increase in theft particularly on the water infrastructure, leading to consistent water interruptions in communities (Diem, Pangle, Milligan & Adams, 2022). On the other hand, some municipalities are also using either old or damaged water infrastructure with a lack of maintenance leading to water interruptions. A significant proportion of respondents – 18% (n=80) – identified dilapidated water infrastructure as the primary reason for water cut-offs, 16% (n=72) indicated water shedding. The culmination of these factors continuous to contribute to ongoing water challenges in the municipality. A small fraction of respondents, 14% (n=64), indicated issues such as national water scarcity, rampant corruption and incomplete water projects as contributing reasons for water cut-off in Lepelle-Nkumpi municipality, while a mere 2% (n=11) stated the results of climate change. Therefore, the findings on stolen water taps, and damaged and dilapidated water infrastructure are the key reasons for water cut-offs in Lepelle-Nkumpi municipality. In most cases, the consistent water cut-offs lead to service delivery dissatisfaction that often results in protests that are characterised by vandalism and unrest (Asha & Makalela, 2020). The development of literature is vehemently explicit on the fact that local municipalities in South Africa have been implementing the IDP as a tool to enhance service delivery. However, challenges such as uninterrupted water provision remain unresolved. Without deeply overlooking the reasons for the lack of service delivery in general, water service cut-offs undermined the government's efforts to prevent the pandemic. Scholars such as Aregu, Kanno, Ashuro, Alembo and Alemayehu (2021) emphasised that proper hygiene practices are crucial for preventing and controlling diseases, including the spread of the Covid-19 pandemic. However, global reports indicate that three million people lack access to basic hand-washing facilities, such as soap and water, in their homes. Therefore, it can be concluded that interruptions in water supply have had a negative impact on efforts to prevent the spread of the pandemic.

5.4.3. Electricity cut-offs during the pandemic

Figure 5.10. Electricity cut-offs

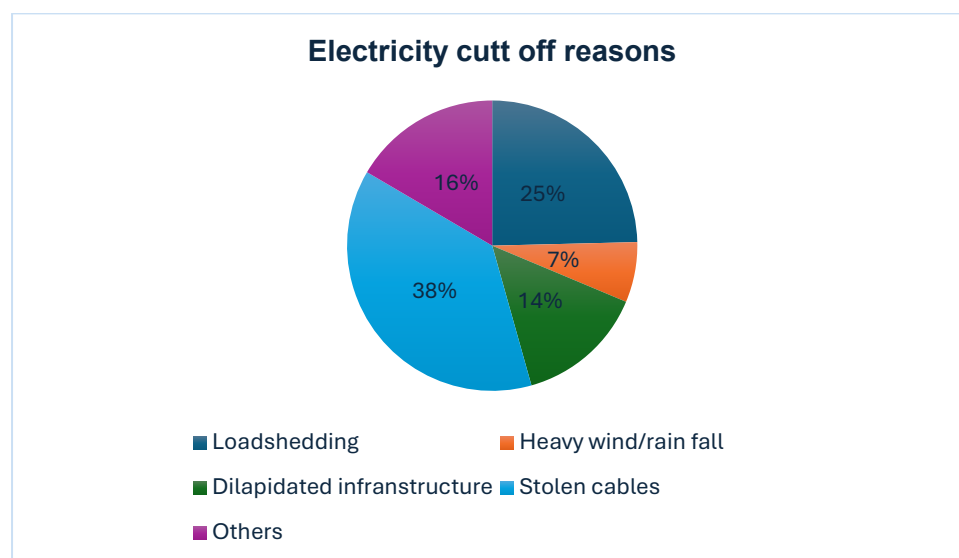


In terms of the electricity cut-offs in Lepelle-Nkumpi municipality, the data from Figure 5.10 shows that 86% (n=386) of the respondents indicated that they experienced electricity cut-offs during the pandemic, while 14% (n=63) indicated they never experienced electricity cut-offs. The United Nation's Sustainable Development Goals objectives are clear on the provision of electricity. The objectives are to ensure safe, affordable and energy-efficient amenities to local communities by 2030 (Hussain, Xuetong & Maqbool, 2023). It is for that reason that access to an uninterrupted power supply is considered a fundamental and significant milestone for any national economy, closely linked to sustainable community development (Kosai & Unesaki, 2017). However, the realities are that communities on the ground are subjected to prolonged periods of power cuts. The majority of respondents in the municipality, 386 out of 449 experienced electricity cut-offs. The findings resonate with the qualitative research that the electricity cut-offs were perpetuated by the lockdown which compelled communities in a confined space, resulting in the increased consumption of electricity. Stolen electric cables and load shedding were cited as the primary contributors to the electricity cut-offs. Consistent power cuts also have the potential to undermine the government's efforts to curb the spread of the pandemic. For example, a study conducted by Gehringer, Rode and Schomaker (2018), "The effect of electrical load shedding on pediatric hospital admissions in South Africa", indicated that the

consequences of power cuts in health facilities include affecting operations in theatre leading to various electrical equipment not working, an increase in admissions, and computer systems becoming temporarily unstable. The combination of these factors affected the communities and further exposed them to the pandemic.

5.4.4. Reasons for electricity cut-offs

Figure 5.11. Reasons for electricity cut-offs

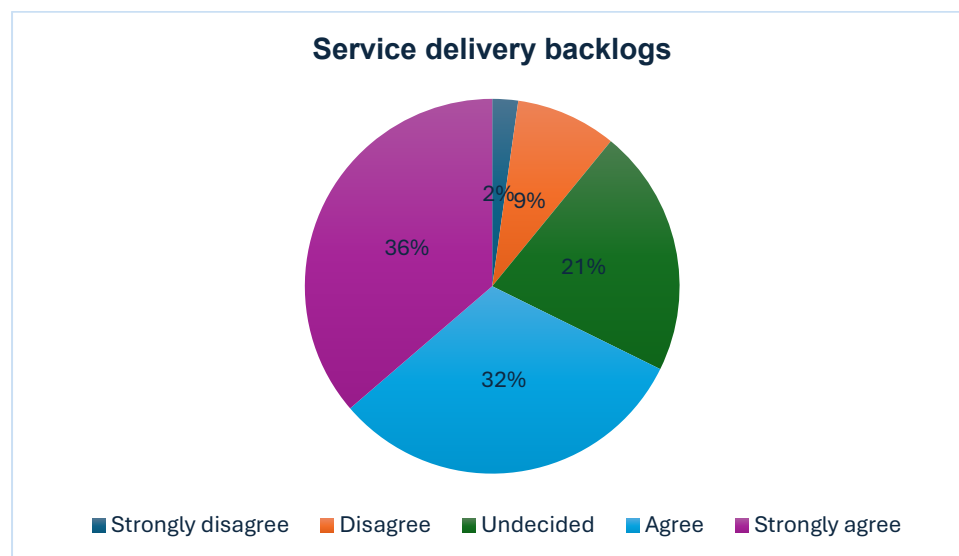


In terms of the reasons for the electricity cut-offs in Lepelle-Nkumpi municipality during the pandemic, the data from the figure above shows that 38% (n=169) identified stolen cables as the primary reason for electricity cut-offs, while 25% (n=110) believed that load shedding was the main cause. As previously indicated, the municipality is faced with a problem of theft especially on the infrastructure. A research study conducted by Geldenhuys (2024) revealed that a lot of cable thefts that occur in communities are mostly used for illegal connection by the members of the community. On the other hand, scholars such as Nawaz, Kayani and Aysan (2024) stated that cable theft and vandalism have made the sector's problems worse by resulting in significant income losses and electrical supply disruptions. A small fraction of the respondents – 16% (n=74) – selected 'others' in which some cited embezzlement of funds by the service providers leading to incomplete electrification projects, while 14% (n=64) identified dilapidated electric infrastructure and 7% (n=30) cited heavy winds/rainfall. It was discovered that several projects for electrification were left incomplete because of corruption. Some infrastructure projects require intensive maintenance, and some

require upgrading due to their dilapidated state. The majority of the respondents indicated stolen cables and load shedding as key reasons for power cuts in the municipality. However, with power challenges, the municipality has made tremendous efforts to provide electricity to almost all households (Lepelle-Nkumpi-IDP, 2021–2026). Therefore, Navon, Machlev, Carmon, Onile, Belikov & Levron (2021) support the assertion that there is a correlation between the Covid-19 pandemic and power cuts. The literature revealed that the energy industry reacted very quickly and effectively to the pandemic. There was a clear understanding that delivering reliable electric power is an essential service and that interruptions would have huge impacts that should be avoided at all costs, in which the lack of power supply had the potential to cause harm to the communities during the pandemic (Navon, Machlev, Carmon, Onile, Belikov & Levron, 2021).

5.4.5. Service delivery backlogs during the pandemic

Figure 5.12. Service delivery backlogs

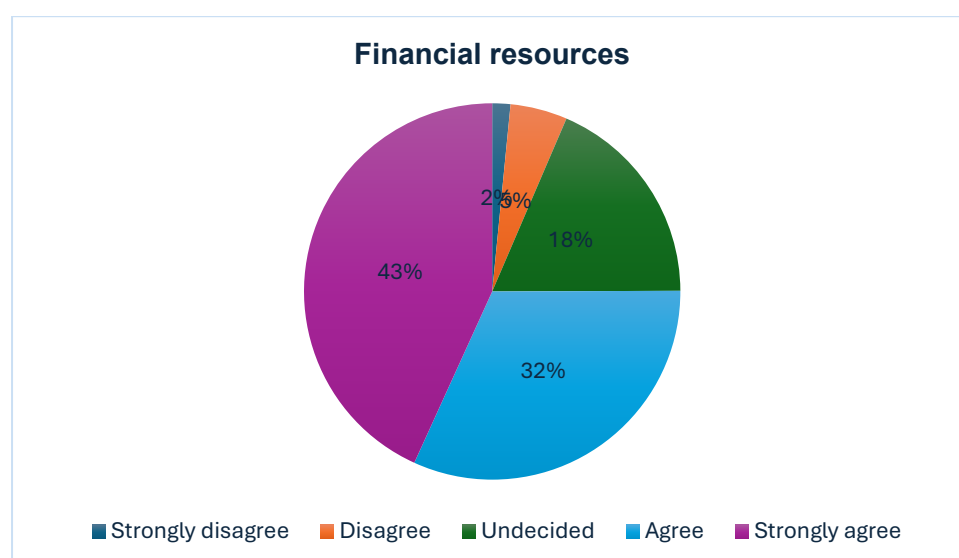


This unprecedented Covid-19 pandemic caused immense human suffering and loss of life and triggered a shock to the economy and labour markets around the world, with huge socioeconomic impacts (van Ginneken, Siciliani, Reed, Eriksen, Tille & Zapata, 2022). According to Makalela (2021), Lepelle-Nkumpi municipality has been characterised by water, electrification, sanitation, and refuse collection backlogs even before the advent of the pandemic. Therefore, the Covid-19 pandemic has particularly exposed and perpetuated service delivery backlogs in the municipality. The respondents were requested to indicate whether the Covid-19 pandemic contributed

to service delivery backlogs in the municipality. Out of 449 responses collected from the respondents, the majority, 36% (n=163) and 32% (n=141), respectively, stated that the pandemic contributed immensely to the service delivery backlogs in the municipality. It is evident that, during the pandemic, an numerous services were not delivered. The pandemic delayed service delivery because some municipal operations were halted due to government regulations to prevent the spread of the virus. A small proportion of respondents, 21% (n=96), were undecided, 9% (n=39) disagreed, and only 2% (n=10) strongly disagreed. The findings revealed that the majority of respondents, 32% (163/449), strongly agreed that the pandemic contributed significantly to the service delivery backlogs, whereas 21% (96/449) did not want to comment on the statement. This includes a proportion of the respondents who were not sure of the question and opted not to comment. Scholars such as Reddy (2016) and Bikam, Rapodile and Chakwizira (2015) write that many municipalities in South Africa had a backlog in terms of service delivery even before the advent of the pandemic. Many municipalities still grappled with challenges in the provision of adequate water, sanitation, electricity and refuse removal collection. This is despite the fact that some municipalities are Water Service Authority (WSA). Scholars such as John, Selaelo and Lavhelani (2022) argued that the pandemic perpetuated service delivery backlogs in many municipalities as most services were not implemented as planned. Despite the variation of responses from the respondents, it can be confirmed that the Covid-19 pandemic contributed to service delivery backlogs in the municipality.

5.4.6. Financial resources during the pandemic

Figure 5.13. financial resources

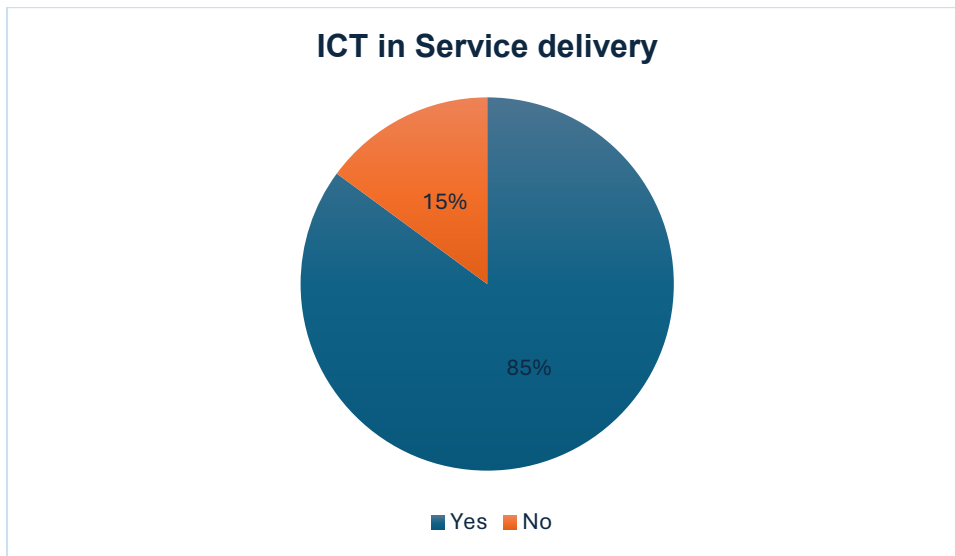


The Covid-19 pandemic has undeniably placed an immense burden on the financial resources of both state and local government, as observed through various accounts and studies (Gordon, Dadayan & Rueben, 2020). The fiscal stability of municipalities has faced significant challenges, primarily due to a substantial decline in their revenue base, which has been severely impacted by widespread non-payment for services. Compounding this issue, municipalities have encountered significant obstacles in their attempts to collect necessary revenues from residents and businesses that rely on their service delivery during this challenging period (Maher, Hoang & Hindery, 2020). The fiscal effects of the Covid-19 pandemic revealed that the local municipalities were hit fastest and hardest by the pandemic, and many of those local municipalities were still trying to figure out their financial condition moving into the next budget cycle (Maher, Hoang & Hindery, 2020). The respondents were asked to indicate whether the Covid-19 pandemic affected the municipal financial resources. Therefore, the figure shows that out of the 449 responses solicited from the respondents, 43% (n=194) strongly agreed with the statement, whilst 32% (n=143) agreed with the statement. The pandemic was found to have contributed to the loss of revenue by the municipalities particularly Lepelle-Nkumpi. The Covid-19 regulations restricted the movement of people as a strategy to curb the spread of the virus. Moreover, Covid-19 put an end to planned state and local tax cuts and programme expansions whilst at the same time the government set aside a budget for Covid-19 response. A small

proportion of respondents, 18% (n=83), were undecided – they did not want to comment – while 5% (n=22) disagreed, and 2% (n=7) strongly disagreed with the statement. Those who disagreed did so on the basis that municipalities are allocated MIG to support and accelerate service delivery. The findings revealed that the majority of the respondents strongly agreed that Covid-19 affected municipal finances. The findings resonate with the qualitative findings from both key informants and members of the focus group. The respondents cited the fact that certain projects' budgets had to be cut to accommodate programmes that deal with curbing the spread of the pandemic. They vehemently indicated that certain community development projects had to be put on hold and the budget redirected to preventing the spread of Covid-19. It is clear from the development of literature that the pandemic challenged governments of all levels across the globe (Čajková, Šindleryová & Garaj, 2021; Li & Lu, 2020). A notable number of municipalities were facing financial difficulties even before the advent of the pandemic. Moreover, the pandemic placed a lot of municipalities in financial distress (Toskaa, Nikolovb, Andonovac & Trajkovd (2020). Therefore, from both qualitative and quantitative findings and a literature review, it can be concluded that the pandemic contributed deleteriously to the shortage of municipal finances based on the significant proportions of respondents who strongly agreed with the statement.

5.4.7. ICT in service delivery during the pandemic

Figure 5.14. ICT during the pandemic

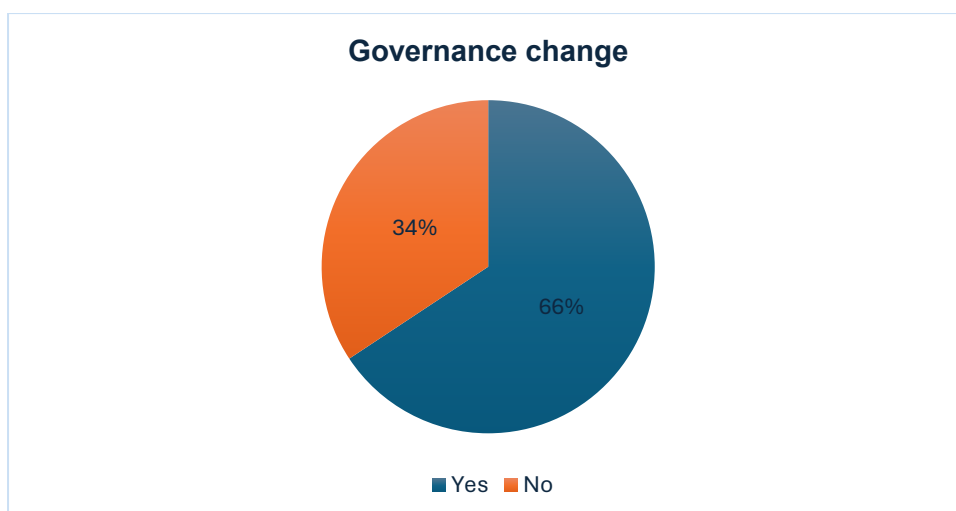


The Covid-19 pandemic has prompted significant and widespread apprehension regarding governance challenges that affect municipalities around the world. In response to this crisis, local government have undertaken myriad reforms aimed at enhancing the planning and execution of essential services to their communities. Among these reforms, there is a notable emphasis on fostering innovation and harnessing technology to advance the frameworks that facilitate improved service delivery. This shift reflects a commitment to not only adapt to the evolving needs of populations during and after the pandemic but also to create more resilient and efficient systems for the future (Joseph & Williams, 2022). The service delivery approach and strategy in many South African municipalities are still more traditionally oriented and focused predominantly on face-to-face or on-site approaches to deliver services in communities (Agostino, Arnaboldi & Lema, 2021). The respondents were requested to indicate whether there is a need to embrace ICT to ensure effective planning and implementation of service delivery during the pandemic. Therefore, the figure shows that out of 449 responses collected from the respondents, 85% (n=382) there is a need to embrace ICT in service delivery, while 15% (n=67) selected 'no'. There is an understanding that there is a need for a change in service delivery strategy and approach. The approach to service delivery requires the inclusion of technology and innovation as the traditional delivery methods are subjected to challenges. The Covid-19 pandemic succeeded in halting service delivery simply because of the lack

of use of innovation and technology at the local level. The current study revealed that municipalities are supposed to embrace technology for effective planning and implementation of service delivery. The current study conducted a goodness of fit test using the Chi-squared to test the significant level of association between service delivery and technology. A small proportion of respondents who disagreed with the statement cited the uncertainties. The municipality does not have the technological infrastructure and adequate access to ICT facilities. The findings from the qualitative research indicated that the use of ICT for service delivery in the municipality is marred with challenges related to the lack of ICT facilities to facilitate service delivery during the pandemic. South African municipal service delivery has been an area of highly debated concern, with many citizens lacking access to basic service delivery, such as water, sanitation, refuse collection and electricity. The pandemic on the other side bombarded and amplified concerns over municipal service delivery across municipalities around the globe. The article published by Joseph and Williams (2022), on ICT for improved municipal service delivery amidst Covid-19, the findings of the study revealed that for effective delivery of services, there is a probable need for the adaptation of new methods and technologies. Drawing from the literature and qualitative results, it can be concluded that embracing ICT was important for service delivery during the pandemic in Lepelle-Nkumpi municipality, based on a significant proportion of respondents who articulated the need for municipalities to embrace ICT in service delivery.

5.4.8. Governance challenges in the municipality during the pandemic

Figure 5.15. Governance change



Governance plays a crucial role in the functioning of local government, acting as the foundation for effective planning and execution of public services (Kronsell & Mukhtar-Landgren, 2018). Municipalities operate within a complex array of governance structures that guide their actions and decision-making processes. This involves taking on organisational responsibilities that ensure accountability and transparency in their operations. Furthermore, they employ various forms of information and knowledge management to make informed decisions and improve service delivery. Municipalities also strategically allocate economic resources to meet the needs of their communities and engage in active fundraising efforts to support local projects and initiatives. Additionally, in times of crisis, they play a vital role in safeguarding communities, providing support, and coordinating responses to mitigate the impact of challenges faced by residents (Kronsell & Mukhtar-Landgren, 2018). Through these diverse functions, local governance not only enhances the quality of life for citizens but also fosters resilience within communities. The respondents were asked to indicate whether there is a need for governance change in the municipality because of the pandemic. Therefore, the figure shows that out of 449 responses collected from the respondents, 66% (n=295) indicated 'yes', the pandemic led to the need for governance change in the municipality, while 34% (n=154) selected 'no'. The communities felt that the current governance structures and mechanisms were not adequate to respond to the pandemic. This is precisely because the municipality is still using traditional methods of engagement with communities for service delivery identification and consultation. The small proportion of respondents who selected 'no' to the question of governance change demonstrated confidence in the use of traditional methods of engagement with communities. For example, the use of physical meetings was found to be the most effective despite the reluctance of some community members. The current study revealed that the Covid-19 pandemic led to the need to bring governance change in the municipality. The qualitative findings concur with the quantitative findings. It is important to note that the concept of 'governance' in the study refers to the manner of doing things. It includes the methods of engagement and leadership and management, and storage of documentation in the municipality during the pandemic. Scholars such as Kusumasari, Munajat and Fauzi (2023) explained that Covid-19 represents an unprecedented crisis that has impacted and threatened many governments around the world. The pandemic has caused significant changes in government work cultures, financial management, and the implementation of good

governance practices. Based on the literature and qualitative findings, it can be concluded that the pandemic necessitated a change in governance within the Lepelle-Nkumpi municipality, as indicated by a statistically significant proportion of respondents who agreed with this statement.

5.5. Analysis of correlation among variables using the Chi-Square test (Pearson's Chi-Square) and coefficient of correlation test

According to McHugh (2013), the Chi-Square is a tool that is designed to analyse group differences when the dependent variable is measured at a nominal level. The test is used to check if two categorical variables are related or independent. Scholars such as Franke, Ho and Christie (2012) indicate that the Chi-Square test is a method that is used to judge the goodness of fit between expected and observed results. Unlike most statistics, the Chi-square (χ^2) can provide information not only on the significance of any observed differences but also provide detailed information on exactly which categories account for any differences found. The test uses a P-value (≤ 0.05) to indicate an acceptable level of statistical significance between variables. Therefore, in this study, the coefficient of reliability test (χ^2) was conducted to check the correlation between variables. Furthermore, the coefficient of correlation (r) – $-1 \leq r \leq +1$ was used to check the magnitude and the direction of the relationship among variables. The questionnaire consisted of items depicted as follows:

5.5. Descriptive and Inferential Statistics Using Pearson's Chi-squared (χ^2) test and the Coefficient of Correlation (r) test

5.5.1.1. Covid-19 pandemic and Water service provision

Table 5.2. P-value for the Covid-19 pandemic and water service provision

Dependent variable.		Covid-19					
Independent Variables	categories	Strongly disagree	disagree	Undecided	agree	Strongly agree	P-value
Water service provision	Strongly disagree	6 (1.8%)	21 (6.3%)	68 (20.4%)	102 (30.6%)	136 (40.8%)	0.014
	disagree	2 (2.5%)	14 (17.3%)	21 (25.9%)	26 (32.1%)	18 (22.2%)	
	Undecided	0 (0%)	0 (0%)	2 (50%)	2 (50%)	0 (0%)	

	agree	2 (9.1%)	4 (18.2%)	4 (18.2%)	7 (31.8%)	5 (22.7%)
	Strongly agree	0 (0%)	0 (0%)	1 (11.1%)	4 (44.4%)	4 (44.4%)

The above table was used to determine the association between Covid-19 and water service provision. The results from the table show a significant statistical association between Covid-19 and water service provision. The latter is confirmed by the p-value ($p \leq 0.014$), which is less than 5% significance level. The findings from this research revealed that 44.4% ($n=4$) strongly agreed with the statement, while 30.6% ($n=30.6\%$) agreed. The highest frequency of the respondents who agreed with the statement is precisely because during the pandemic, it was a requirement for people in communities to constantly wash their hands. Using water to wash hands was scientifically proven to curb the spread of the pandemic. it is important to note that the daunting challenge of water provision in the municipality is not a new phenomenon (Makalela, 2021). The literature argued that for the effective management of the pandemic, adequate and effective hand hygiene requires sufficient water from reliable sources, preferably accessible on-premises, and access to handwashing facilities (with water and soap) that enable hygiene behaviours (Howard, Bartram, Brocklehurst, Colford Jr, Costa, Cunliffe, D & Wright, 2020). The coefficient correlation (r) was used to determine the magnitude of the relationship between Covid-19 and water service provision in the municipality. The findings also revealed a negative coefficient correction $-(0.1194)$. The implication is that during the pandemic many rural communities were left without adequate water supply. The lack of adequate water supply contributed to the inability of the municipality to curb the spread of the pandemic. On the other hand, interrupted water supply led to more Covid-19 cases. The imprecision is that more people were unable to conform to the promulgated regulations on hand washing to curb the spread of the pandemic.

5.5.1.2. Covid-19 pandemic and electricity service provision

Table 5.3: P-value for Covid-19 pandemic and electricity service provision

Dependent variable		Covid-19					P-value
Independent Variable	categories	Strongly disagree	disagree	Undecided	agree	Strongly agree	
Electricity service provision	Strongly disagree	3 (1.6%)	3 (1.6%)	51 (26.4%)	57 (29.5%)	79 (40.9%)	0.001
	disagree	1 (1.3%)	0 (0%)	11 (14.3%)	21 (27.3%)	44 (57.1%)	
	Undecided	3 (10%)	2 (6.7%)	8(26.7%)	3 (10%)	14 (46.7%)	
	agree	3 (2.4%)	26 (20.8%)	25 (20%)	47 (37.6%)	24 (19.2%)	
	Strongly agree	0(0%)	8 (33.3%)	1 (4.2%)	13(54.2%)	2(8.3%)	

The above table shows the association between Covid-19 and electricity service provision. The table revealed there is a significant statistical association between Covid-19 and electricity service provision. The table is confirmed by the p-value ($p \leq 0.001$), which is less than 0.05. The proportion of the respondents 57.1% ($n=44$) and 54.2% ($n=13$) respectively, agreed that there is a significant relationship between Covid-19 and electricity service provision, while 26.7% ($n=8$) did not want to comment on the statement. Therefore, the significant association ($p \leq 0.001$) is precisely because the pandemic necessitated a lockdown to curb the spread of the virus. This means the movement of people was not permitted, which resulted in the high electricity demand. Scholars such as Bielecki, Skoczowski, Sobczak, Buchoski, Maciąg and Dukat (2021) conducted a study on the impact of the lockdown during the Covid-19 pandemic on electricity use by residential users. Their study revealed that, on average, residential users staying practically the whole day in their homes increased their energy consumption. Similarly, scholars such as Akrofi and Antwi (2020), indicated that the compulsion to stay at home, limiting professional and social activities as part of the Covid-19 regulations, has significantly caused changes in the load profiles in all

groups of energy users. Therefore, the results from the respondents and the literature reviews show that the Covid-19 pandemic had a detrimental impact on the provision of electricity. The present study also used a coefficient of correlation to determine the direction and the level of correlation between two variables of interest. The coefficient of correlation between Covid-19 and electricity service provision was (-0.2623). The coefficient shows that there is a negative correlation between the variables. The negative correlation shows that a lack of electricity negatively affects the government's response to Covid-19. This is because during the pandemic, electricity consumption was high, especially in hospitals that received a lot of Covid-19 patients, coupled with load shedding.

5.5.1.3. Covid-19 pandemic and sanitation service provision

Table 5.4: P-value for Covid-19 pandemic and sanitation service provision

Dependent variable		Covid-19					P-value
Independent variable	categories	Strongly disagree	disagree	Undecided	agree	Strongly agree	
Sanitation service provision	Strongly disagree	2 (1.2%)	4(2.5%)	53 (32.5%)	44 (27%)	60 (36.8%)	0.001
	disagree	0 (0%)	16(20.8%)	10 (13%)	39(50.6%)	12(15.6%)	
	Undecided	1(2.3%)	7(16.3%)	10(23.3%)	13 (30.2%)	12 (27.9%)	
	agree	6 (5.9%)	11 (10.8%)	19 (18.6%)	39 (38.2%)	27(26.5%)	
	Strongly agree	1(1.6%)	1(1.6%)	4(6.3%)	6(9.4%)	52(81.3%)	

Table 5.4 shows the association between the Covid-19 pandemic and sanitation service provision in the municipality. The table shows a significant statistical relationship between Covid-19 and sanitation service provision. The relationship is confirmed by the p-value ($p \leq 0.001$), which is less than 0.05. A high proportion of respondents – 81.3% ($n=52$) – strongly agreed that there is a significant statistical relationship between Covid-19 and sanitation provision, while 23.3% ($n=10$) did not want to comment on the statement, and a small proportion, 1.2% ($n=2$), strongly

disagreed with the statement. Therefore, the significant statistical relationship ($p \leq 0.001$) is because sanitation services were not adequately provided during the pandemic. The findings resonate with the findings from the qualitative data collected from the members of the focus group discussion, that the municipality had difficulties in collecting refuse during the pandemic. According to Stats SA Community Survey (2016), 78% of households in the municipality do not have access to solid waste disposal services. Lepelle-Nkumpi IDP (2021/2026) revealed that 57% of all wards in the municipality indicated the need to provide sanitation services as part of their community development needs. Therefore, it can be concluded that Covid-19 exacerbated the sanitation backlog in the municipality. The study also used a coefficient of correlation to determine the direction and the level of correlation between Covid-19 and sanitation service provision. The coefficient of correlation between Covid-19 and sanitation service provision was (0.1149). The study revealed a positive correlation. This is because adequate provision of sanitation services during the pandemic was associated with ways to reduce the spread of the pandemic. Communities were constantly washing their hands and sanitizing, which led to a reduction in Covid-19 cases.

5.5.1.4. Covid-19 pandemic and refuse removal service provision

Table 5.5: P-value for Covid-19 and refuse removal service provision

Dependent variable		Covid-19					P-value
Independent Variable	categories	Strongly disagree	disagree	Undecided	agree	Strongly agree	
Refuse removal service provision	Strongly disagree	4 (1.8%)	28 (12.3%)	55 (24.2%)	80 (35.2%)	60 (26.4%)	0.001
	disagree	0 (0%)	3 (4.8%)	9 (14.3%)	34 (54%)	17 (27%)	
	Undecided	2 (1.9%)	3 (2.9%)	21 (20%)	12 (11.4%)	67 (63.8%)	
	agree	3 (6.1%)	5 (10.2%)	11(22.4%)	14 (28.6%)	16 (32.7%)	
	Strongly agree	1 (20%)	0 (0%)	0(0%)	1 (20%)	3 (60%)	

Table 5.5 illustrates the connection between Covid-19 and refuse removal services in the municipality. It indicates a significant statistical relationship between Covid-19 and refuse removal. The relationship is confirmed by the p-value ($p \leq 0.001$), which is less than 0.05. A high proportion of respondents 63.8% ($n=67$) strongly agreed with the statement, while 20% ($n=21$) were undecided and only 1.8% ($n=4$) strongly disagreed with the statement. Therefore, the significant statistical relationship ($p \leq 0.001$) confirms the qualitative findings and literature review that the municipality was overwhelmed regarding refuse collection during the pandemic. The findings further revealed that the lack of adequate refuse removal services is marred with unhygienic living conditions which had the potential to expose people to the pandemic. The study also used a coefficient of correlation to determine the direction and the level of correlation between Covid-19 and refuse collection service provision. The coefficient of correlation between Covid-19 and refuse collection service provision was (0.1272) and therefore shows a positive correlation. This is because adequate collection of refuse collection during the pandemic was associated with proper hygiene and a clean environment. The more there is proper hygiene and a clean environment, the less the spread of the pandemic.

5.5.1.5. Covid-19 pandemic and Water service cut-off

Table 5.6: P-value for Covid-19 and water service cut-off

Dependent variable		Covid-19					
Independent Variable	categories	Strongly disagree	disagree	Undecided	agree	Strongly agree	P-value
Water service cut-off	Yes	9 (2.1%)	39 (8.9%)	94 (21.4%)	136 (31%)	161 (36.7%)	0.236
	No	1 (10%)	0 (0%)	2 (20%)	5 (50%)	2 (20%)	

Table 5.6 illustrates the relationship between water service cut-offs and the Covid-19 pandemic. It indicates that there is no statistically significant correlation between the two. This finding is supported by the p-value of 0.236, which exceeds the threshold of

0.05. However, a high proportion of respondents – 36.7% (n=161) – indicated that the municipality faces a water service cut-off, while only a few, 20% (n=2), were undecided, and 10% (n=1) strongly disagreed. The implication is that the water service cut-off has no bearing on Covid-19. Water service cut-off has always been a daunting challenge in the municipality, attributed to many reasons besides the pandemic. The published literature is explicit on the fact that the provision of water has continued to be a major challenge affecting an array of communities across the globe (Nandozie, 2011; Asha, 2014; Municipal IQ, 2020). On the other hand, the South African government implemented a policy of free basic water to ensure adequate and effective uninterrupted water supply in rural communities. Despite the implementation of the policy, it is noticeable that a significant proportion of the rural population is reported to have limited or poor access to improved water services (Sambo, Senzanje & Mutanga, 2021). Therefore, it can be concluded that there is no significant statistical evidence from the research that the Covid-19 pandemic contributed to the water service cut-off in the municipality. The coefficient of correlation between the Covid-19 pandemic and the water service cut-off was (r=0.0897). The study revealed a positive coefficient of correlation simply because the consistent water interruptions had the potential to expose communities to the pandemic. Precisely because the availability of water played a pivotal role during the pandemic.

5.5.1.6. Covid-19 pandemic and reasons for water cut-off

Table 5.7: P-value for Covid-19 and reasons for water cut-off

Dependent variable		Covid-19					P-value
Independent Variable	categories	Strongly disagree	disagree	Undecided	agree	Strongly agree	
Reasons for water cut-off	Water shedding	3 (4.2%)	5 (6.9%)	27 (37.5%)	19 (26.4%)	18 (25%)	0.004
	Old/damaged water taps	3 (2.1%)	19 (13.4%)	22 (15.5%)	45 (31.7%)	53 (37.3%)	
	Dilapidated infrastructure	2 (2.5%)	2 (2.5%)	19 (23.8%)	21 (26.3%)	36 (45%)	
	Climate change	0 (0%)	0 (0%)	1 (9.1%)	3 (27.3%)	7 (63.6%)	

	Damage to infrastructure	1 (1.3%)	8 (10%)	18 (22.5%)	34 (42.5%)	19 (23.8%)	
	National water scarcity/other	1 (1.6%)	5 (7.8%)	9 (14.1%)	19 (29.7%)	30 (46.9%)	

Table 5.7 illustrates the connection between the Covid-19 pandemic and the reasons for water cut-offs, indicating a significant statistical relationship. The relationship is confirmed by the p-value ($p \leq 0.004$), which is less than 0.05. The majority of the respondents, 37.3% ($n=53$), indicated old or damaged water taps as the main reason for water cut-offs in the municipality during the pandemic, while 45% ($n=36$) indicated dilapidated water infrastructure; 46.9% ($n=30$) indicated national water scarcity as the other reasons for water cut-off; 42.5% ($n=34$) indicated damaged to infrastructure; 26.4% ($n=19$) indicated water-shedding and 63.6% ($n=7$) indicated climate change. The findings revealed that the use of old or damaged water taps and damaged water infrastructure are among the leading causes of water cut-offs, leading to consistent water interruptions in many communities within the municipality. The findings of this research corroborate the findings of the study conducted by Machete (2011) on the causes and impact of water shortage on households. The findings revealed that there is a need for the municipalities to spend a reasonable amount of resources on fixing water infrastructure.

5.5.1.7. Covid-19 pandemic and electricity cut-off

Table 5.8: P-value for Covid-19 and electricity cut-off

Dependent variable		Covid-19					P-value
Independent variable	categories	Strongly disagree	disagree	Undecided	agree	Strongly agree	
Electricity service cut-off	Yes	9 (2.3%)	21 (5.4%)	91 (23.5%)	109 (28.2%)	157 (40.6%)	0.001
	No	1 (1.6%)	18 (29%)	5 (8.1%)	32 (51.6%)	6 (9.7%)	

Table 5.8 demonstrates a significant statistical relationship between the Covid-19 pandemic and electricity cut-offs. The relationship is confirmed by the p-value ($p \leq 0.001$), which is less than 0.05. A high proportion of 40.6% ($n=157$) strongly agreed with the statement, while 28.2% ($n=109$) agreed, and 23.5% ($n=21$) did not want to comment on the statement. The findings revealed that there is a relationship between Covid-19 and electricity cut-off. The implication is that during the pandemic, the government, as part of the Covid regulations, restricted the movement of people to curb the spread of the pandemic. The restriction of movement resulted in a high proportion and demand for the use of electricity. The findings resonate with the study conducted by Bielecki, Skoczowski, Sobczak, Buchoski, Maciąg and Dukat (2021) on the impact of the lockdown during the Covid-19 pandemic on electricity use by residential users. The study revealed that, on average, residential users staying practically the whole day in their flats increased their energy consumption. This research also determined the coefficient of correlation between Covid-19 and power cuts. The study showed a positive coefficient of correlation ($r=0.0019$). The implication is that during the pandemic, a larger proportion of the increase in Covid-19 cases, with some admitted to hospitals, increased the electricity demand. For example, the government of Limpopo had to create quarantine sites and isolation facilities, which contributed precipitously to the high demand for electricity (Masipa, Ramoshaba, Mabasa, Maponyane, Monnye, Mampa & Motloutse, 2022). Therefore, it can be deduced that Lepelle-Nkumpi municipality was subjected to consistent power cuts during the pandemic.

5.5.1.8. Covid-19 pandemic and reasons for electricity cut-off

Table 5.9: P-value for Covid-19 and reasons for electricity cut-off

Dependent variable		Covid-19					
Independent Variable	categories	Strongly disagree	disagree	Undecided	agree	Strongly agree	P-value
Reasons for the electricity cut-off	Loads shedding	3 (2.7%)	7 (6.4%)	33 (30%)	31 (28.2%)	36 (32.7%)	0.029
	Heavy wind/rainfall	0 (0%)	5 (16.7%)	1 (3.3%)	9 (30%)	15 (50%)	

	Dilapidated infrastructure	1 (1.6%)	7 (10.9%)	10 (15.6%)	26 (40.6%)	20 (31.3%)
	Stolen cables	3 (1.8%)	11 (6.5%)	38 (22.5%)	45 (26.6%)	72 (42.6%)
	Corruption/other	3 (4.1%)	9 (12.2%)	14 (18.9%)	29 (39.2%)	19 (25.7%)

Table 5.9 shows the relationship between the Covid-19 pandemic and the reasons for electricity cut-offs. The table shows a significant statistical relationship between Covid-19 and the reasons for electricity cut-offs. The relationship is confirmed by the p-value ($p \leq 0.029$) which is less than 0.05. The majority of the respondents, 42.6% ($n=72$), indicated stolen electric cables were the main reason for cut-off in the municipality; while 39.2% ($n=29$) indicated corruption; 32.7% ($n=36$) indicated load shedding; 31.3% ($n=20$) indicated dilapidated infrastructure; and 50% ($n=15$) heavy wind and rainfall as the other reasons for electricity cut-off. Therefore, the statistical evidence shows that stolen electric cables and corruption in the municipality are among the leading reasons for electricity cut-off in the municipality. The development of literature also supported the notion of cable theft as the main contributor to the electric cut-off. Scholars such as Dzansi, Rambe and Mathe (2014) conducted a study on cable theft and vandalism by employees of South Africa's electricity utility companies. Their study revealed that the escalation of cable theft and vandalism in South African rural communities has deleterious effects on the adequate provision and financial base of electricity generation. To that end, the lack of effective, public interventions for addressing these challenges is widely documented in the literature (Pretorious, 2012; Solomon, 2013; Peters, 2014).

5.5.1.9. Covid-19 pandemic and financial resources

Table 5.10: P-value for Covid-19 and financial resources

Dependent variables		Covid-19					P-value
Independent variable	categories	Strongly disagree	disagree	Undecided	agree	Strongly agree	
Financial resources	Strongly disagree	1 (14.3%)	0 (0%)	2 (28.6%)	4 (57.1%)	0 (0%)	0.001
	disagree	1 (4.5%)	6 (27.3%)	2 (9.1%)	9 (40.9%)	4 (18.2%)	
	Undecided	2 (2.4%)	6 (7.2%)	34 (41%)	14 (16.9%)	27 (32.5%)	
	agree	2 (1.4%)	27 (18.9%)	18 (12.6%)	78 (54.5%)	18 (12.6%)	
	Strongly agree	4 (2.1%)	0 (0%)	40 (20.6%)	36 (18.6%)	114 (58.8%)	

Table 5.10 shows the relationship between the Covid-19 pandemic and municipal financial resources. The table shows a significant statistical relationship between Covid-19 and financial resources. The relationship is confirmed by the p-value ($p \leq 0.001$), which is less than 0.05. A high proportion of respondents – 58.8% ($n=114$) – strongly agreed with the statement, while 41% ($n=34$) did not want to comment on the statement, and 27.3% ($n=6$) disagreed with the statement. The implication of the above table confirms the magnitude of the relationship between Covid-19 and financial resources. The findings of the qualitative research solicited from members of the focus group and key informants revealed that the municipality was in financial distress during the pandemic. The municipality had to channel its financial resources towards curbing the spread of the pandemic. Furthermore, no municipality nor any government in the world was prepared to cope with the Covid-19 pandemic. Many municipalities had to reprioritise their service delivery budget for Covid-19. Scholars such as Nemec and Špaček (2020) conducted a study on Covid-19 and local government finance in the municipalities of both Slovakia and Czechia. The study revealed that because of Covid-19, many municipalities faced problems on both the revenue and expenditure

sides of their budgets. Scholars such as Gordon, Dadayan and Rueben (2020), explicitly indicated that the Covid-19 pandemic put enormous strain on the state and local government budget because of the need to finance specific anti-pandemic measures. Therefore it can be concluded that the municipality suffered financially because of Covid-19. The study also used a coefficient of correlation to determine the direction and the level of correlation between Covid-19 and financial resources. The coefficient of correlation between Covid-19 and financial resources was (0.2870). The study shows a positive correlation coefficient. This is because, during the pandemic, municipalities had to rearrange and reprioritise their budget programmes that support curbing the spread of the pandemic. Many municipalities had to commit financially to deal with the spread of the pandemic.

5.5.1.10. Covid-19 pandemic and ICT

Table 5.11: P-value for Covid-19 and ICT in service delivery

Dependent variable		Covid-19					
Independent Variable	categories	Strongly disagree	disagree	Undecided	agree	Strongly agree	P-value
ICT	Yes	5 (1.3%)	28 (7.3%)	87 (22.8%)	120 (31.4%)	142 (37.2%)	0.001
	No	5 (7.5%)	11 (16.4%)	9 (13.4%)	21 (31.3%)	21 (31.3%)	

Table 5.11 shows the relationship between the Covid-19 pandemic and ICT. The table shows a significant statistical relationship between Covid-19 and ICT. The relationship is confirmed by the p-value ($p \leq 0.001$), which is less than 0.05. The majority of respondents 37.2% ($n=142$) strongly agree with the statement, while 31.4% ($n=120$) agreed; 22.8% ($n=87$) did not want to comment on the statement and 16.4% ($n=11$) disagreed with the statement. The above table confirms the association between Covid-19 and ICT. The qualitative findings also emphasised the importance of ICT during the pandemic. Lepelle-Nkumpi municipality did not use ICT facilities adequately for effective planning and implementation of service delivery during the pandemic. Yang, Fichman, Zhu, Sanfilippo, Li and Fleischmann (2020) argue that using ICT

during the Covid-19 crisis intervention was prevalent among governments and societies to cope with the pandemic. The government promulgated regulations that inhibited community gatherings to manage the spread of the pandemic. The latter necessitated the use of virtual platforms such as MS Teams and Zoom, social media, and digital platforms for news. Scholars such as Lee, Malcein and Kim (2021) argued that, because of the 4th Industrial Revolution, many municipalities in developing countries have had to invest in ICT infrastructure for effective planning and implementation of service delivery. Therefore, it can be concluded that the ICT of the municipality played a significant role during the pandemic with an acknowledgment of challenges related to the lack of facilities to support ICT in rural areas of the municipality. The study also used a coefficient of correlation to determine the direction and the level of correlation between Covid-19 and ICT services. The coefficient of correlation between Covid-19 and ICT was -0.117. The study shows a negative correlation coefficient. This was precipitated by the fact that the municipality was not readily equipped to use technology to promote service delivery during the pandemic.

5.5.1.11. Covid-19 and governance in the municipality

Table 5.12: P-value for Covid-19 and governance change in the municipality

Dependent variable		Covid-19					P-value
Independent variable	categories	Strongly disagree	disagree	Undecided	agree	Strongly agree	
Governance change	Yes	2 (0.6%)	27 (8.4%)	74 (23%)	109 (33.9%)	110 (34.2%)	0.001
	No	8 (6.3%)	12 (9.4%)	22 (17.3%)	32 (25.2%)	53 (%)	

Table 5.12 shows the relationship between the Covid-19 pandemic and the need for governance change. The table shows a significant statistical relationship between Covid-19 and governance. The relationship is confirmed by the p-value ($p \leq 0.001$) which is less than 0.05. The majority of the respondents, 34.2% (n=110) strongly agreed with the statement on the need for municipal governance to change. A small proportion of respondents – 6.3% (n=8) – indicated ‘no’, in which they strongly disagreed with the statement. Therefore, the majority of respondents alluded to the

need for governance to change to respond to the current circumstances. The qualitative findings also alluded to the need to change in terms of various methods of engagements such as committee meetings to be held virtually and the management and storage of documentation. The respondents highlighted the need to change their traditional governance systems because of the pandemic. The pandemic strengthened the importance of agility, resilience, and effective decision-making in response to crises. The pandemic necessitated the municipality to develop policies on risk allowance and employee substitutes to respond adequately to the pandemic. Scholars such as Schmidt (2020) emphasized theorizing the institutional change and governance in European responses to the Covid-19 pandemic.

5.6. Findings from focus group discussions

As a point of departure, it is important to reiterate that during the analysis of the focus group discussion data, different themes and sub-themes that form an integral part of this study emerged. The themes were identified using the process defined by Scott and Usher (2011). The scholars defined the identification of themes for thematic analysis as follows: data arrangements, coding, data classification, creating patterns, data generalisation and theoretical constructs. The thematic analysis involves a process that focuses on a series of steps for the identification of recurring themes or ideas in textual data. Therefore, organising information into themes is the process that forms the core of many qualitative approaches. In the current study, the researcher first became familiar with the data to provide data coding. Scholars such as Braun and Clarke (2024) define data coding as a process that breaks down the data into meaningful units, looks for recurring patterns, and groups similar codes to form overarching themes that capture the central ideas and meanings within the data set for analysis and interpretation. After data coding, the researcher then began the process of searching for themes, followed by reviewing the themes to check their relevance with the current research using software. The focus group discussion comprised of seven (7) members. A total of ten (10) members of the focus group discussion were initially identified to form part of the study, and only seven (7) were available on the day. The researcher was satisfied with the information provided, as it was important to answer research questions. Therefore, this chapter begins with the demographic profile of respondents from the focus group discussion, and they are all given pseudo names such as FGR1, FGR2, FGR3, FGR4, FGR5, FGR6, and FGR7.

The rationale behind the use of pseudo-names was solely to guarantee the anonymity of the respondents. The researcher also used pseudonyms to ensure the confidentiality of their personal data. The first section of this chapter discusses the word cloud, main and sub-themes that emerged from the coded data using NVivo 14 software. The presentation of qualitative findings started with the identification of the main theme followed by the five emerging themes.

As indicated, the researcher used NVivo 14 software to code and generate themes- and sub-themes or emerging themes for qualitative findings. The data in this section is presented and unfolded into two (2) segments. The first section presents the data from the focus group discussions, and the second part presents the data from the key informants from the municipality.

5.7. Demographic profile (focus group respondents)

The demographic profile of respondents is depicted in Table 5.13. The table shows the information about the profile of the focus group respondents. The abbreviation seen below as FGR is a pseudo-name given to the respondents who participated in this study through focus group discussion. Therefore, the abbreviation denotes “focus group respondent” followed by a number. This is in line with the anonymity part of the ethics that the researcher promised the respondents as they were recruited to take part in the study.

Table 5.13: shows the focus group respondents, pseudo names and expertise

Respondents.	Pseudo name.	Expertise/experience.
1.	FGR1	Secretariat
2.	FGR2	Local economic development planning
3.	FGR3	Construction and infrastructure
4.	FGR4	Electricity infrastructure
5.	FGR5	Financial management
6.	FGR6	Water infrastructure
7.	FGR7	Community representative

The focus group was made up of various community members holding different portfolios. These respondents were knowledgeable in various aspects of community activities. For example, FGR1 held a secretariat experience. Other respondents such as FGR2 had exposure to local economic development matters while FGR3 was more knowledgeable on construction infrastructure. FGR4 was more exposed to electricity infrastructure, meanwhile, FGR5 was more experienced with finances, FGR6 was more exposed to water infrastructure and FGR7 represented ordinary members of the public or community. Initially, three (3) members of the public were recruited and only one (1) member was available on the day the focus group discussions were held.

5.8. Presentation of qualitative findings (focus group respondents)

Figure 5.16: Word cloud (focus group respondents)



Word clouds are visual representations of frequently occurring words in a dataset, aiding researchers in identifying key themes, identifying trends, summarising text and serving as effective communication tools (Uitdenbogerd, 2019). They provide a concise summary of the text, making it easier to grasp the main ideas. Word clouds can also be used to generate new hypotheses or research questions, leading to deeper insights into the research topic. Themes featured words like challenges, municipality, support, water, portfolio, communities, and finance. The main feature of these words illustrates the concepts concerning the extent to which the Covid-19 pandemic ravaged community services and further destabilised the municipality's quest for rendering community services. The primary focus for this research was on Lepelle-Nkumpi local municipality; therefore, the font size of the word 'municipality' is larger compared to words such as communities and provision. The featured words

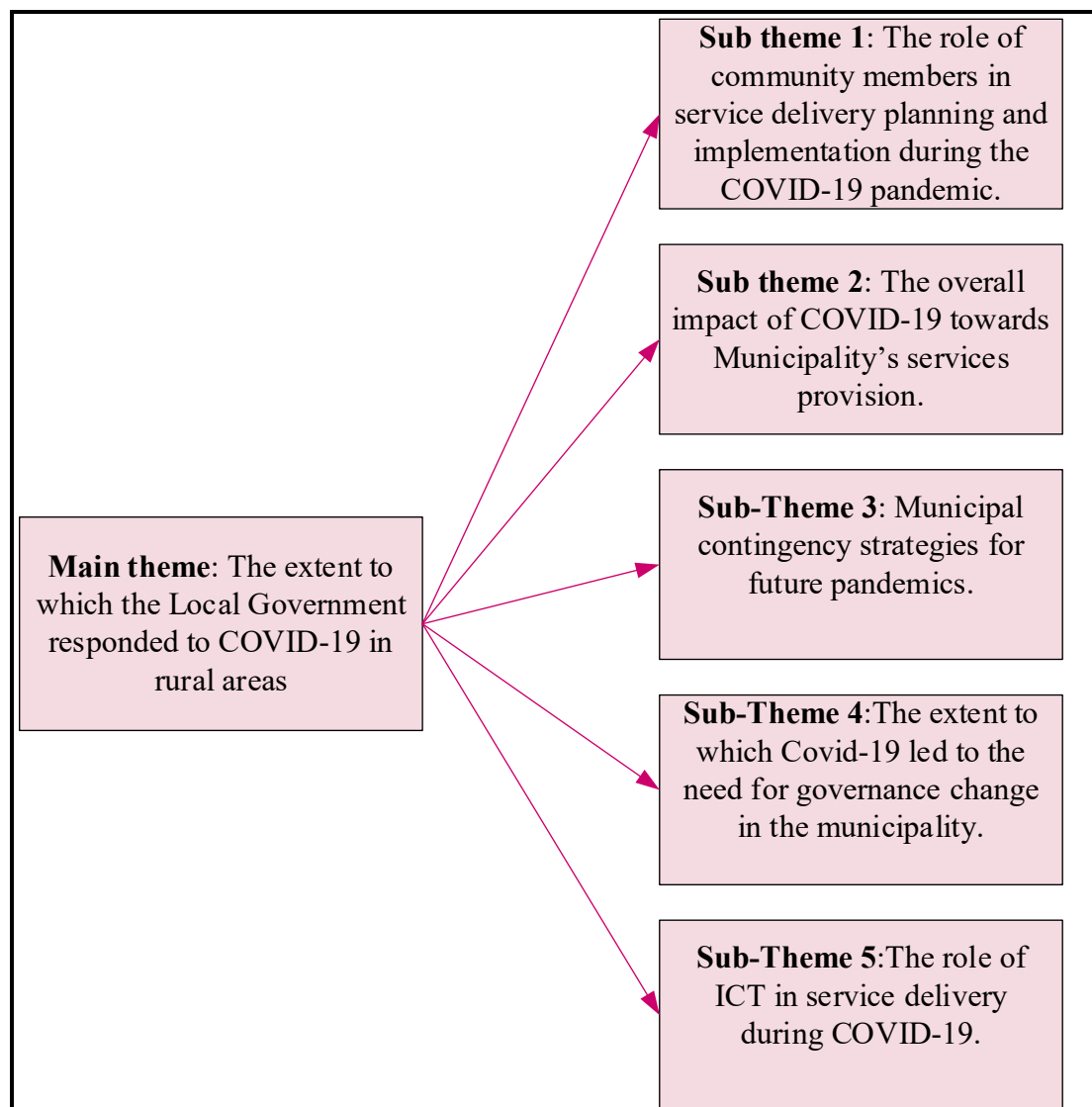
depicted in Figure 5.6. include municipality, water, communities, pandemic, provision, refuse, and Covid. The main featured word vehemently supports the argument of this research that service delivery planning and implementation were affected by the Covid-19 pandemic.

5.9. Theme and sub-themes that emerged from the study

The below diagram indicates the questions that were asked during the focus group discussion, and it shows how the researcher created sub-themes from the main theme using NVivo 14. The researcher used the cluster and exploratory strategy for clear visualisation of data from the source or nodes that connect to share comparable words or values. Figure 5.13 demonstrates a diagrammatic representation of the source or nodes for ease of reference to see the differences and similarities. The diagram was created to visualize the following:

1. The role of community members in service delivery planning and implementation during the Covid-19 pandemic
2. The overall impact of Covid-19 towards the Municipality's services provision
3. Municipal contingency strategies for future pandemics
4. The extent to which Covid-19 led to the need for governance change in the municipality
5. The role of ICT in service delivery during Covid-19

Figure 5. 17: Main theme and sub-themes emerging from focused group discussion



Source: Author's own illustration

5.9.1. Main theme: The extent to which the local government responded to the Covid-19 pandemic in rural areas

In this theme, the researcher asked the respondents about the approaches that the municipality adopted to reach out to the communities regarding service delivery during the Covid-19 pandemic. The researcher observed and recorded the variation in the responses from the respondents. All the respondents from their different portfolios demonstrated an insight into answering the question. Therefore, from the discussion from the focus group discussion, it emerged that the municipality was overwhelmed by the Covid-19 pandemic. The services delivered did not match the expectations of the communities. The latter is demonstrated by the sentiments shared by the members

of the focus group as follows: FGR1 echoed the following sentiments concerning the local government's response to service delivery during the pandemic:

“For me, I noticed that the municipality did not respond adequately to the Covid-19 pandemic in rural areas because we continued to experience a lack of water even during this time. You can imagine being told by the government to wash your hands, yet their taps are dry with no running water. The municipality promised to deliver to the communities and that only happened once. So, I can simply say that in rural areas we suffered too much as a community.”

According to FGR1, it is clear that the municipality did not respond adequately to the delivery of services during the pandemic, as many rural communities suffered a lack of essential services such as water and that made it impossible or sometimes difficult for the municipality to curb the spread of the pandemic.

FGR3 also added the following:

“ Covid – 19 e ile ya ama ditirelo ka mokgwa wa go se kgahliše.”

Translated version: “Covid-19 affected service delivery in a way that is not good. The delivery of services to the rural communities hit a dead stop because of the pandemic. Services such as the provision of houses, roads, and sanitation were not delivered properly because of the pandemic.”

FGR3 echoed the same sentiments as FGR1 in the sense that they all agree that the Covid-19 pandemic affected the delivery of essential services such as houses, sanitation, and roads, among other services. Many development projects have had to stop because of the pandemic.

The views of FGR1 and FGR3 resonate with what has been echoed by FGR4. FGR4 stated the following:

Ke dumelelana le bašomimmogo ka nna ka se ba se boletšego gore Covid – 19 e sentše dilo tše dintši. Mmasepala o ile wa palelwa ke go aba diterelo ka mokgwa wa tshwanelo. Le nna ke le wa tša Kabelo ya mohlagase ke ka gare ga kgakanego, mmasepala o ile wa palelwa ke go aba tirelo ya mohlagase.”

Translated version: “I would like to agree with what my colleagues have said that Covid-19 affected the delivery of services. As the head of the electricity

portfolio, I can say that the municipality had difficulties in delivering electricity to the communities. The rural communities are the ones that suffered the most during Covid-19, the issue of water shortage made things worse for rural communities.”

FGR5 provided an elaborate response and stated:

“The local municipality did not do well in delivering water to the communities during the pandemic. We were given recommendations according to different wards to suggest water tanks during the pandemic to assist with water supply to communities. However, water was only supplied once and not in all the wards. We had an engagement with municipal management, and even the mayor attended the engagement. But he only gave us the political lecture with no solutions for the communities facing them. We even developed a Community Work Program (CWP) to help each other as a community. We also wrote reports on service delivery challenges, as the local council submitted them to the municipality without luck or feedback from the municipality. Also, our municipality neglects ward committees, and there is a huge gap between the municipality and the ward committees. For example, the only person who gets paid for work is the councillor. The municipality did not prioritize some of the projects identified by the communities. The municipality does not have a disciplinary procedure to deal with underperforming portfolios. Therefore, the Lepelle-Nkumpi municipality is an example of a dysfunctional municipality.”

The study's findings indicate that the municipality neglected many of its development plans during the pandemic. Communities suffered from the non-delivery of services even though local municipalities are the delivery arm of the state. Important to note is the fact that municipalities were found to be in planning and implementation distress because of Covid-19. The study conducted by Nemec & Špaček (2020), revealed that no government in the world was fully prepared to cope with the Covid-19 pandemic. many development projects in many communities were halted. The development of the literature is explicit on the fact that municipalities are constitutionally mandated to develop a comprehensive disaster management plan to respond adequately to disasters such the Covid-19. However, many municipalities were found wanting in planning and implementing service delivery during the pandemic. it can be deduced

from the respondents that the municipality did not have a plan to manage the pandemic effectively. Service delivery beneficiaries were left stranded with no plan from the municipality.

5.9.1.1. Sub-theme 1: The role of community members in service delivery planning and implementation during the pandemic

In terms of the sub-theme, the researcher asked the members of the focus group discussion about different ways in which the community members played a role in service delivery planning and implementation during the Covid-19 pandemic. Community involvement is essential for planning and executing service delivery at the local level (Mokgwankgwa, 2024). Municipalities are constitutionally mandated to ensure effective and authentic participation. It is vehemently clear from the engagements with members of the focus group that the advent of the Covid-19 pandemic deleteriously affected community participation. The different responses emerged from the respondents on the role of community participation during the pandemic. For example, respondent FGR1 stated the following:

“I am also going to respond to this question as a community member because in 2020, I was not selected as a secretary. However, the municipality did not invite members of the community for community meetings during the Covid-19 pandemic. However, it is understandable because the government announced strict regulations that reduced the number of people who can be in one meeting.”

The respondents (FGR4) shared similar sentiments with FGR1, and indicated the following:

“On my side, I can say that the municipality used to conduct their meetings using Zoom, and only ward councillors were invited to participate without calling for community members to form part of their meetings. On the part of using Zoom, some of us could not attend those meetings because we did not have access to the internet. In addition, with Covid-19 regulations in most cases, there were only a few people permitted to attend meetings and for that, you find that the municipality is not adequately representing the needs of the community.”

The observation of the respondents FGR6 is not contrary to the views of the latter. FGR6 comprehensively stated that:

“Ke nyaka gore le tsebe gore ka nako ya leuba la Covid – 19 ditšhaba di be di sa bitšwe dikopanong tša setšhaba, ke eng seo seilego sa ahlaahlwa..”

Translated version: “What I want you to know for now is that during the Covid-19 pandemic communities were not invited to community meetings, what is it that was discussed?”

FGR6 continues to state that “it is surprising that they were holding online meetings but up to so far as the community we were never briefed about the outcomes of those meetings. It was unfair of the municipality to use communication mechanisms that disadvantaged the rural communities mostly. Urban communities are better than those in rural communities because their services are provided nonstop. Since we did not attend the meeting on Zoom, we do not even know what they were planning about service delivery.”

The respondents seemed to be agitated by the fact that the Lepelle-Nkumpi municipality continued with their service delivery plans and implementation in alienation from the community members. Members of the community were sidelined. Some respondents seem to suggest that the municipality tried to engage the communities through the online platform for consultation. However, it did not yield the intended outcomes. FGR5 and FGR4 alluded to the fact that online platforms for consultations during the pandemic were created, although they catered to only a limited number of people including the ward councillors. Moreover, the municipality failed to provide feedback on the outcomes of the meetings. Furthermore, FGR5 stated that:

“The municipality did not deliver anything during the pandemic, and we experienced a lot of service delivery backlogs. Demarcation of wards also contributed to service delivery backlogs. Some wards had their project budget approved, and services were not delivered because they were incorporated with other wards. The incorporation of Ward 10 into 11 made them lose the RDP housing project and that /contributed to the backlog. So, they forfeited a lot of budgets as a result of the new planning. In summary, the municipality did not

do much to unlock the role of community members in the planning and implementation during the pandemic.”

FGR2 provided a concise response on the factors that contributed to the lack of community participation during the pandemic. The respondents indicated that lack of participation led to a lot of incomplete and abandoned projects and the return of funds to the national treasury because communities did not have a platform for project identification and prioritization during Covid-19. FGR2 indicated that:

“During the pandemic, a lot of service delivery projects had stopped without being completed and we were told the money was returned to the treasury. So, the municipality must get that money back to come and complete abandoned water projects.”

FGR3 indicated the following:

“Covid-19 stopped many things. Meetings were conducted, however, with a limited number of people. Covid-19 has destroyed a lot of service delivery planning and implementation.”

Similarly, the perception of FGR1 and FGR4 seems to suggest that the municipality was in a dilemma of not being able to exercise its constitutional mandate to ensure the participation of communities in matters that affect their development. However, their views seem to understand the fact that the pandemic brought in a different ball game altogether. During the pandemic service delivery beneficiaries were not given a platform to play a role in the identification and prioritisation of services. FGR1 indicated that the latter was because of the promulgation of the Covid-19 regulations which restricted the gathering of the people. Moreover, it emerged that there was a disparity in terms of the mechanisms to participate in service delivery from both the rural and urban municipalities. The findings seem to suggest that Polokwane as it falls under an urban municipality services were delivered better compared to Lepelle-Nkumpi municipality as it falls under a rural municipality. It can also be deduced from the focus group responses that in as much as the municipality was not prepared for the pandemic, the use of online platforms for consultation purposes was ineffective in responding to the needs of the communities because only a few were invited.

The findings from the respondents also revealed that half the time, virtual meetings were conducted between municipal officials and ward councilors during the pandemic. However, the problem remains a lack of feedback to the communities. The promulgation of the Covid-19 regulations also contributed deleteriously to the lack of participation. The regulations permitted only a few people to be gathered in one place to try to curb the spread of the pandemic. Therefore, the views of the respondents concur with the findings of the study conducted by Bhusal (2020) on the citizens' participation in times of crisis. Bhusal (2020) revealed that the Covid-19 pandemic has played a significant role in limiting ordinary people's democratic right to participate in local decision-making.

5.9.1.2. Sub-theme 2: The overall impact of Covid-19 towards municipality's service provision

In this sub-theme, the researcher was interested in finding out in terms of the overall impact of the Covid-19 pandemic on the provision of services in the municipality. From the engagements with the focus group respondents, they seemed very dissatisfied. Some indicated challenges of service delivery dates as far back as before the pandemic. However, the pandemic contributed to the ongoing challenges in the Lepelle-Nkumpi municipality. Because the focus group included members holding different portfolios in the municipality, they recorded a variation in terms of the responses regarding their understanding of the impact of the pandemic on service delivery. In this regard, FGR1 stated:

"So, water provision has always been challenging, even before the Covid-19 pandemic. We have a lot of areas in our wards that are affected by the water challenges. So, my issue is that even when the Covid-19 pandemic might return, we will still lose a lot of our communities. When it comes to electricity, some projects were supposed to have been implemented in 2020, but they were not implemented because of the arrival of Covid-19. When it comes to sanitation, a lot of our communities are still without toilets. On refuse removal, the municipality only put one (1) skip bin at Moletlane Disco, which is far and making it difficult for all communities to access it. So, it would be better if they put refuse dustbins street by street. Even the large dustbin at Moletlane Disco fills up quickly, and the municipality takes a long time to collect and dump it.

According to the respondents, almost all the essential services in Lepelle-Nkumpi municipality were adversely affected by the pandemic. Essential services such as water, electricity, sanitation, and refuse removal collection were not adequately provided during the pandemic.

Also sharing the same views, FGR7 indicated that:

“In my area, there was a water provision challenge; we do not have access to water. We still travel long distances to get water. As for electricity is better apart from when we have load shedding, and we also complement that with using firewood. I will skip the sanitation provision. Then, as for refuse removal, we just throw refuse on the street because we do not have street plastic bags and dustbins. So, the municipality needs to provide us with refuse bags and dustbins, and they must do a weekly collection.”

FGR2 also elaborated on the services affected by the pandemic and demonstrated what should have been done by the municipality to help fast-track service delivery.

“The municipality struggled and continues to struggle with refuse collection. We suggested to the municipality before Covid-19 to consider putting refuse collection bins at all the clinics. They must also consider putting refuse bins at the traditional leadership house because it is at the centre and where most of the government departments are located, we have Home Affairs, SASSA, Local Clinic, Rural Development, etc. Water provision remains a major challenge; the municipality provides water tanks at the local clinics, SASSA offices, and the tribal house; however, the water does not reach communities. So, we pleaded with the municipality to prioritize communities.”

The delivery of essential services seems to be moving at a snail's pace, although the municipality made significant and noticeable progress. On the other hand, the advent of Covid-19 served as a stumbling block. The provision of water during the pandemic was found to be a key service because washing hands was one of the mechanisms to curb the spread of the pandemic. Therefore, FGR3 stated that:

“Taba ya meetse masepaleng wa rena ke hlobaboroko, leuba la Covid – 19 le dirile gore re hloke meetse le go feta. Ba ile re hlape matsogo kgafetšakgafetša, mara re hlape matsogo bjang go sena meetse.”

Translated version: "Water provision in the municipality is a challenge, and Covid-19 worsened it. They said we need to constantly wash our hands, but how do we wash our hands if there is no water? Refuse collection is even worse; people are dumping anywhere on the street. The municipality must come up with a plan to provide communities with reusable plastic bags and the refuse collection truck must enter every street to collect refuse, because where people are dumping now is far, and that makes people dump anywhere."

"Mohlagase ke hlobaboroko ka lebaka la mohlagase wa go tšhaba kgafetšakgafetša."

Translated version: "Electricity is also challenging because of the load shedding."

FGR4 comprehensively added that:

"Concerning the collection of refuse we tried, there was a time we went to the municipality offices to complain about the collection of refuse and the amount of littering on the streets, and we asked them to provide us with the skip bins. In their response, the municipality said they do not have skip bins. However, we found out that there were a lot of skip bins being put in the bushes for refuse, not in public, where everyone can have access to it. The municipality later promised to provide us with 8 of the skip bins, which they never provided. Because of the lack of refuse collection, our health is always at risk. As water is a major challenge, even during Covid-19, the water tanks were only provided to a few."

FGR1 added and shared the views of FGR4 and indicated that:

"As part of our community engagements efforts (Mandela Day), we had 67 minutes with the office of the Public Protector in Polokwane, so we ended up writing a complaint about the lack of water provision by Lepelle-Nkumpi municipality. That is because as ward committee members we had a lot of meetings with the municipality and the mayor's office concerning water provision challenges. So, the mayor came to meet with the communities, but till today we do not have water. So, we are hopeful that the Public Protector's office will intervene because they promised to file papers with the mayor's office."

FGR5 also added that:

“Electricity provision is a major challenge. As we speak, there is a community strike because there are still a lot of people without electricity in our wards. There is currently an electrification project of 2.7 million, which was stopped by the communities because the project did not go according to the map. As for water provision, we have complained and written petitions to the municipality with no luck. Sanitation, we do not have. As for the refuse collection, we were told that the skip bins are expensive. For that, we suggested digging a hole (semi-dumping) for refuse where the municipality can only come to collect, and they refused. Our health is compromised because of the lack of refuse collection. For water provision, we have agreed as communities to be billed for water service, and still, they have not responded.”

The respondents emphasised the issue of prioritisation as the cornerstone of the intended delivery of services to the community. Lack of prioritization in most cases leads to white elephant projects in many communities. Most projects are left to be completed or abandoned because communities were not consulted. Therefore, FGR1 shared the same views with FGR5 and emphasised that mostly when communities protest it is then that services are delivered. The following was the response from the FGR1 on the issue of the service delivery protest:

“As for water provision, there was a community strike where roads were blocked and during that time, we were able to get water for a week. So, the municipality is always reactive, they wait for the community to strike before providing water. The municipal water infrastructure is dilapidated and there are communal taps without running water for some years.”

Picture 5.1: A dilapidated communal water tap



Source: Own source (2024)

FGR6 provided similar views to those of FGR1 and comprehensively emphasised protesting as a way to unlock service delivery in many communities. The member expressed the views as follows:

“I also share similar sentiments with other speakers. It is not like the municipality cannot provide water to communities because whenever there is a community strike, water is always provided. We even requested the municipality to increase the volume of water to other sections of the wards to have access to water. So, as the head of water and sanitation, there is no way I can sit back whenever there is a community strike because they have the right to access to water. Another thing is that during Covid-19 the municipality was unable to provide water to communities because they only brought the water truck once. Before the community went on strike, they promised them that for the time being, they would provide them with water tanks. Unfortunately, the

person who received our memo died because of Covid-19. Even as the head of water and sanitation, I do not know what to tell the community anymore because I report water challenges without getting help. Sanitation services are also a challenge; they do not provide when we ask for them, and we are told there is no budget. Refuse removal is a big problem. When you go to Moletlane and Matladi sides, the streets are full of diapers (disposable nappy). They only provided one skip bin at the centre, which many wards are expected to use. We suggested to the municipality to bring more skip bins, but there was no luck. Here, the issue is that the removal of refuse requires many people, so the municipality should consider hiring all those who lost their jobs due to Covid-19.”

FGR3 suggested that Lepelle-Nkumpi do the following to address refuse collection challenges:

“For refuse removal, the municipality needs to hire more people. In Moletlane, which is one of the biggest sections in terms of population density, the municipality only hired six (6) people to deal with refuse collection. Up to date, the municipality is still unable to cope with refuse removal.”

Picture 5.2: the picture shows an uncollected communal skip bin



Source: Own source (2024)

The focus group members' research findings on the impact of Covid-19 on the municipality's service provision revealed that the Covid-19 pandemic deleteriously affected the provision of services. The respondents highlighted several issues related to water, electricity, sanitation and refuse removal collection services. Respondents indicated that at the helm of service provision, the delivery of essential services continued to be challenging even before the pandemic. The pandemic perpetuated service delivery backlogs in the municipality. Specifically, the respondents highlighted water provision as the main service affected by the pandemic. The respondents further indicated their dissatisfaction with the municipality regarding water provision. The latter is because as one of the mechanisms to curb the spread of the pandemic, washing hands was a requirement. The communities were found to be in a dilemma of complying with the Covid-19 regulations and experiencing the consistent unavailability of water and for that communities feared for their lives. Moreover, the focus group members revealed that to try to address the water challenges, they had written a petition to the municipality and lodged a complaint with the public protector. However,

the situation is still the same. They also revealed that there is a need to draft a memorandum of understanding with the municipality to be billed for water provision. Where they introduce the principle of user pay with the hope that to a certain extent, water will be provided. The implication is that adequate provision of water during the pandemic could have prevented the spread of the pandemic. Moreover, the water tanker programme was also found to be not sustainable as the municipality only provided it once.

The findings revealed that the provision of electricity was affected by the pandemic. The focus group members indicated that many of the electrification projects had to stop because of the pandemic which contributed to the electricity backlog in the municipality. Load shedding was found to be a scorching concern – focus group members revealed that they had to experience consistent electricity cut-offs during the pandemic which left them frustrated. Moreover, their frustrations led them to engage in protests and unrest that are associated with vandalism as a way for the municipality to listen to their grievances. This implies that some communities had to resort to other alternatives, such as the use of firewood, to complement their energy sources. Due to a lack of planning and prioritisation, the community stopped a R2.7 million project for electrification during the pandemic. It has been stated that lack of prioritisation is the main contributing factor towards white elephant projects in many communities. To this end, many of the community development projects are left incomplete. On the sanitation provision, it was revealed that a lot of community members are still without or not receiving sanitation facilities, and there is a huge backlog in the provision of toilet facilities in many rural areas. The municipality continues to cite budget constraints. However, as per the development plans, the municipality envisages improving sanitation service provision by 58.6% to 65% in 2025 (IDP, 2021-2026).

On refuse removal, the findings revealed that the municipality is not doing well. The respondents indicated that, currently, Moletlane, which is the second largest in population density in Lepelle-Nkumpi municipality, has only one skip bin for refuse, where communities travel long distances to access the dumping bin. When the bin is full, it takes the municipality a lot of days to collect the bin for dumping. It has been revealed that the lack of refuse removal services contributed negatively to the health hazard in communities. Some respondents indicated that half the time refuse is dumped on the streets as it was suggested to the municipality to provide refuse bags

and bins street by street. Some respondents suggested semi-site dumping to deal with the refuse collection backlog and hiring local unemployed community members to collect refuse every week.

5.9.1.3. Sub-theme 3: Municipal contingency strategies for a future pandemic

In this sub-theme, the researcher aimed to identify strategies that municipalities can adopt to plan for and respond to future pandemics. By nature, pandemics are viewed as unexpected or unplanned events, and Covid-19 is no exception. Many local governments around the globe did not anticipate Covid-19. Although municipalities are constitutionally mandated to inculcate Disaster Management Plans in their integrated development plans that focus on preventing and reducing the risks and severity of disasters. Therefore, in terms of the strategies for disasters, FGR1 stated:

“I think all municipalities must have a stand-by budget used to respond to unforeseen pandemics. There must be a heavy budget set aside to respond to the disasters. The budget must also accommodate the post-recovery in terms of dealing with disasters. For example, it must accommodate those who are directly affected by the disaster.”

FGR6 also shared similar sentiments with FGR1 regarding strategies to deal with Covid-19 pandemic: FGR6 stated that:

“I think Covid-19 must serve as a revelation. All municipalities must have a budget set aside for pandemics. Municipalities must never repeat what happened with Covid-19. The municipality must always be ready to provide communities with adequate water, masks, and sanitizers to limit the spread of the pandemic.”

In support of the latter respondents, FGR2 stated the following:

“I agree and share the same views with my colleagues that the municipality should have a budget set aside for pandemics. The municipality must also have short- and medium-term relief measures in place, such as providing necessities such as food packages, water, and shelter.”

The study findings revealed that for municipalities to manage disasters such as the Covid-19 pandemic effectively, municipalities must develop mechanisms that are

proactive in responding to the pandemic. The responses from the focus group members also revealed that such measures must be provisioned to respond to post-recoveries. The development of literature published by the World Emergency Covid-19 Pandemic Ethics Committee (2020) revealed that the government has a role to play in global health emergencies. In many previous pandemics, governments across the globe have been resilient and decisive in the management of the pandemic. However, the Covid-19 pandemic revealed a lack of resiliency, crisis preparedness and leadership in managing the pandemic. Many local municipalities were found wanting in their response to the pandemic. It was highlighted from the responses that municipalities must have short to medium-term relief measures in place, and that includes setting up an emergency budget in their development plans. It was revealed that in any pandemic, service delivery must remain a priority.

5.9.1.4. Sub-theme 4: The extent to which Covid-19 led to the need for governance change in the municipality

The researcher in this sub-theme wanted to find out whether Covid-19 necessitated a change in the municipal systems and mechanisms for improved decision-making by the municipal managers for effective delivery of services during the pandemic. Therefore, in terms of the governance change, the following was stated by FGR5:

“Yes, I agree that in their governance systems, there is a need to prioritize Research and Development (R&D), and that would help in understanding the operations at the municipal level. The municipality must also have a way to understand the needs and priorities at the grassroots level. I also think that the municipality should give the local committees some power. The culture of the motion of no confidence must be reviewed at the local level, as it contributes to a lack of continuity in governance. The municipality must also have proactive plans as part of its governance systems to help anticipate and plan for unexpected misfortunes. Municipalities must also have a system to train their officials for better and more effective governance.”

FGR1 shared the same views with FGR5 and agreed that indeed the Covid-19 pandemic necessitated a need to change its systems of governance to ensure effective delivery of services to communities. The findings revealed explicitly that for effective planning and implementation of service delivery during the pandemic.

municipalities needed to adapt to new ways of doing things. As other respondents have already alluded to, the pandemic was unexpected and has contributed to the need to change governance systems. It has been revealed that, in managing pandemics such as Covid-19, research and development portfolios should be established at the local level to fast-track the planning and implementation of service delivery. It can also be deduced that municipalities need to comprehensively understand in terms of community development needs and put in place systems to ensure that identified and prioritized services are delivered as such. Local representatives in the form of ward committee members must also play a leading role in facilitating service delivery. Similarly, a study conducted by Charles and Beatrice (2013) on strategies to improve service delivery to local authorities revealed that local authorities, such as ward councillors, play a pivotal role in fast-tracking service delivery at the local level. Therefore, it has been highlighted by the respondents that municipalities should give and transfer some powers to the ward committee members. The other key finding is reviving the culture of motion of no confidence at the local level as it contributes to service delivery delays and lack of continuity in governance.

5.9.1.5. Sub-theme 5: The role of ICT in service delivery during Covid-19

It is clear from the survey and literature that Covid-19 halted the operations of all the municipalities across the globe. Service delivery was delayed as certain projects had to be stopped. Community members had to suffer the consequences of the pandemic. The role of ICT was important for this study to help the researcher uncover the severity of the pandemic on service delivery. Therefore, the focus group members recorded a variety of responses regarding the role of ICT in service delivery during Covid-19. FGR1 stated that:

“When it comes to ICT, the municipality failed; they did not utilize technology adequately to deliver services during the pandemic. When it comes to the internet, especially in rural areas, it does not help us because we do not have facilities, we do not work, and we do not have money. To access the internet, you need to have data, so I suggest the provision of free Wi-Fi in rural areas. However, I understand that technology is very important in delivering services, especially during the pandemic.”

FGR6 articulated the views on the role of ICT and shared similar views with FGR1 and stated that:

“Technology is a challenge in rural areas because we do not have WIFI facilities, we do not have gadgets. So, when you take it to a pandemic, a lot of people lost their jobs. So, the only people who benefited from technology during the Covid-19 are those with facilities, because they were able to keep track of the developments in the municipality. But as in rural areas, we did not benefit as much because whatever the municipality was discussing, we still did not know. But I agree that technology played a role in helping deliver services during the pandemic.”

FGR5 shared a different view from those of FGR1 and FGR6 and stated that:

“Yes, technology played a role in helping to accelerate service delivery during the Covid-19 pandemic. Councilors were able to participate in virtual meetings. Municipalities need to build technological facilities that can allow people to participate, such as the provision of gadgets and free data to communities.”

The study findings indicate that ICT is important in the planning and implementation of service delivery, especially during a pandemic. It has been revealed that ICT played a role in service delivery, even though there were some challenges. There is a noticeable number of communities without ICT facilities, such as Wi-Fi connectivity and gadgets, especially in the deep rural areas of the municipality. It is for that reason that community participation during the pandemic was not effective. It was limited to those with access to internet facilities. For example, countries such as Sri Lanka have embarked upon a path towards digitalisation of most of the government functions and the process of public service delivery in the country. The digitisation of government functions was to speed up service delivery during the pandemic. The government established the Information Communication Technology Authority (ICTA) and infrastructure development entities such as the Lanka Government Network (LGN) (Alahakoon & Jehan, 2020). However, many of the municipalities in developing economies lagged both in time, scale, and lack of knowledge, training, initiatives and resources to adapt to the new digitalization of services in local government. The respondents suggested a comprehensive approach to the use of ICT to deliver

services in Lepelle-Nkumpi municipality and that includes universal access to ICT facilities to communities.

5.10. Presentation of qualitative findings (key informants)

The section below provides a qualitative analysis of the data collected from the municipal officials in Lepelle-Nkumpi municipality. The study included three (3) officials from the municipality.

5.10.1. Demographic profile of respondents

This section includes the presentation of results from the three (3) key informants with comprehensive knowledge on issues of planning and implementation of service delivery. They possess qualifications ranging from a masters, a diploma, and a bachelor's degree. The demographic profile of respondents is depicted in Table 5.2. The table shows the information about the profile of the key informants' respondents (municipal officials). The abbreviations seen below as KI1, KI2, and KI3 are pseudo-names given to the respondents who participated in this study through one-on-one interviews. Therefore, the abbreviation denotes the key informant's respondents. This is in line with the anonymity part of the ethics that the researcher promised the respondents as they were recruited to take part in the study. The key informant's table is as follows:

Table 5.14: The table illustrates key informant respondents, expertise, and Qualifications

Respondents.	Pseudo name.	Expertise.	Qualifications
1.	KI1	Expertise in Integrated Development Planning.	BA (Bachelor of Arts)
2.	KI2	Expertise in community engagement.	National Diploma
3.	KI3	Experience in municipal administration.	Masters Degree

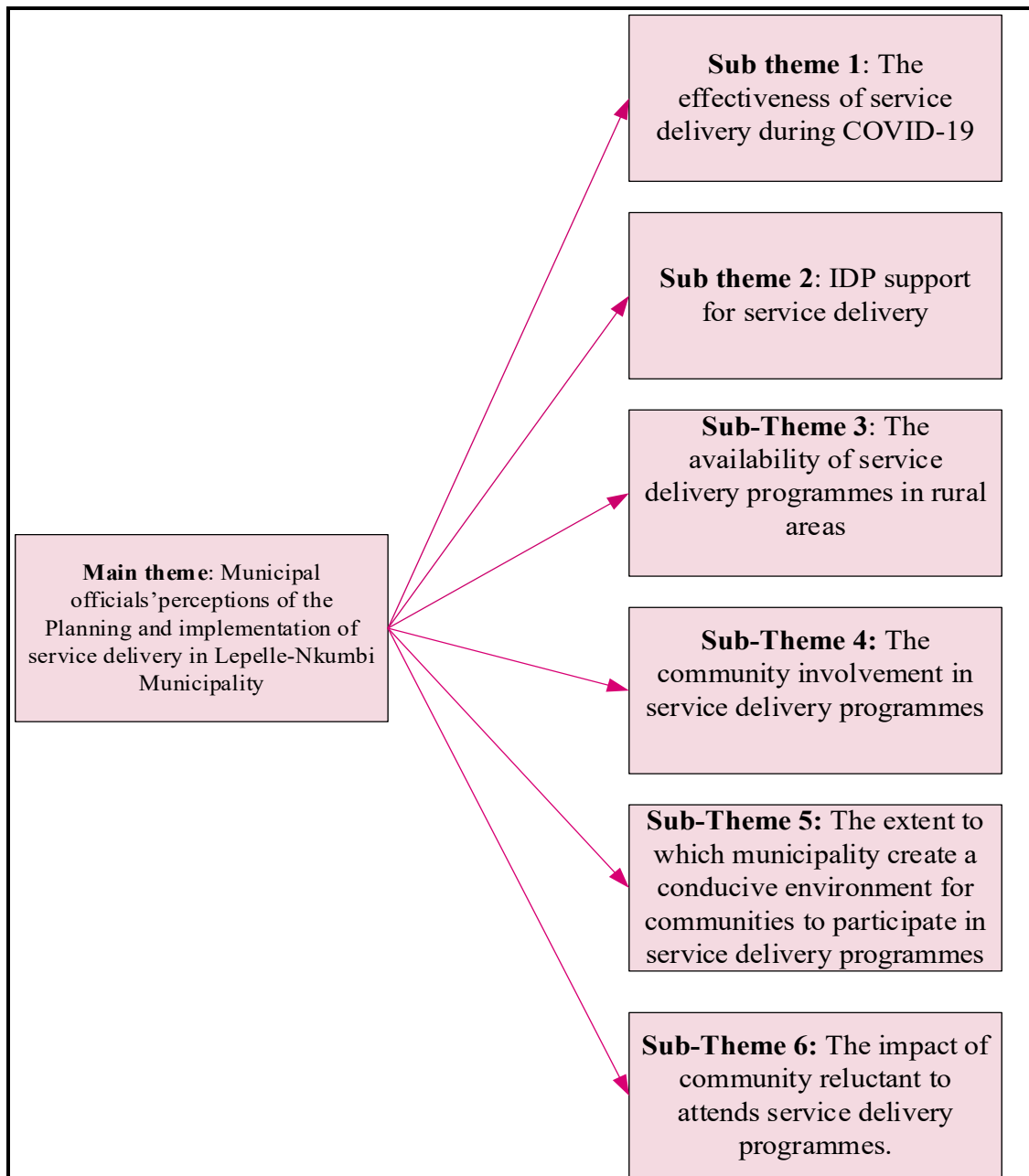
The researcher conducted one-on-one interviews to solicit data from the key informants on issues of planning and implementation of service delivery during the

5.11. Theme and sub-themes emerged from the study

Figure 5.19 below indicates the questions that were asked during the one-on-one interview with the key informants in Lepelle-Nkumpi municipality. The researcher created sub-themes from the main theme using NVivo 14. Figure 5.3 demonstrates a diagrammatic representation of the source or nodes for ease of reference to see the differences and similarities. The diagram was created to visualize the following:

1. Municipal officials' perceptions of the Planning and implementation of service delivery in Lepelle-Nkumpi Municipality
 - 1.1. The effectiveness of service delivery during Covid-19
 - 1.2. IDP support for service delivery
 - 1.3. The availability of service delivery programs in rural areas
 - 1.4 The community involvement in service delivery programmes
 - 1.5 The extent to which the municipality creates a conducive environment for communities to participate in service delivery programmes
 - 1.6 The impact of a community reluctant to attend service delivery programmes

Figure 5.19: Main theme and sub-themes from key informants.



Source: Author's own illustration

5.11.1. Main theme: Municipal officials' perceptions of the planning and implementation of service delivery in Lepelle-Nkumpi Municipality

In this theme, the researcher asked the respondents about their perceptions of planning and implementation of service delivery in the municipality in the context of the Covid-19 pandemic. The researcher observed and recorded the variations in the responses from the respondents. Because of their expertise in municipal administration, they adequately answered the question. Therefore, from their

response, it emerged that generally, the municipality did not do well in planning and implementing service delivery during the Covid-19 pandemic. KI1, KI2, and KI3 stated the following regarding planning and implementation of service delivery in Lepelle-Nkumpi municipality: KI1 stated that:

“In terms of planning and implementation of service delivery during the Covid-19 pandemic, I can say that as the municipality, we did not do well. First and foremost, our planning was done without public participation. Another thing in terms of planning, there were a lot of uncertainties emanating from our construction sector in the sense that we were not sure as to whether they would continue to operate or not and that made us not to be sure as to whether we would be able to meet our service delivery targets. Covid-19 affected all the operations of the municipality; nothing was moving.”

The respondent (KI1) is very articulate and clear that the Covid-19 pandemic disrupted the operations of the municipality in the sense that service delivery planning and implementation were done without soliciting inputs from the communities. KI2 also shared similar sentiments with KI1 and that:

“The planning and implementation by the municipality during the Covid-19 pandemic was not effective because, as part of the planning, we needed to consult with the communities. After all, all the development plans are for them. So public participation became very difficult during the pandemic because we were unable to gather people for community meetings. So, it was difficult to plan. However, to some extent, we tried to consult with the public using platforms such as radio, where the mayor will go there and share with the public the plans that the municipality has as part of service delivery. So Covid-19 affected us very much. For example, we used radio to get input from the public about their plans, but the challenge was that they needed to have airtime and access to radio, which led to the minimum level of participation. Therefore, we were not effective in implementing services.”

Respondent three (KI3) also added that:

“Municipal Planning was based on the adopted IDP, Budget, and SDBIP coupled with the Performance Agreements of each Director in the respective

Directorates. As much as we had the IDP there was a challenge to reach the communities.”

The findings from the main theme revealed that community participation forms an integral part of the planning and implementation of service delivery. Planning without inculcating the views and opinions of those who are affected does not lead to quality development. It has also emerged that the construction sector is at the helm of service delivery in local municipalities. However, part of the delay in planning and implementing services was a result of the uncertainties brought about by the Covid-19 pandemic because construction companies had to stop their operations. The latter became a stumbling block for the municipality to reach its service delivery targets. It has also been revealed that the municipality did not entirely halt its operations because of the pandemic. the respondents indicated that to some extent they tried to reach out to communities using platforms such as radio, where the municipal mayor will engage and share the municipal service delivery plans. However, the radio platform as a means for community participation did not yield the intended results because of the barriers to participating using airtime. The Covid-19 pandemic was the greatest crisis to ever confront and destabilize municipalities across the globe (Plimakis, 2023). The crises had a significant negative impact on service delivery and implementation. Therefore, at the core of both central and local government response to the pandemic was the promotion of organisational change and strategic planning resilience to ensure the effective delivery of services to beneficiaries.

5.11.1.1. Sub-theme 1: The effectiveness of service delivery during Covid-19

In terms of this sub-theme, the researcher asked respondents to describe the effectiveness of service delivery during the Covid-19 pandemic. Different responses emerged from the respondents; for example, respondents (KI1) stated that:

“On that one, our hands were tied, I feel like the way COGTA was handling the way municipalities should deal with Covid-19, I think was good, it was only that most sectors were closed, most of our project required cement, and still, and based on that we experienced a shortage of cement and steel, so there was not much we can do in that regard but as a municipality, I think we tried. To fast-track service delivery, we developed the District Covid Command Council (DCCC).”

As a follow-up, the researcher asked the respondent (K11) about the responsibility of the District Covid Command Council. The respondent stated that:

“It was responsible in terms of ensuring that our municipality, together with communities, complied with Covid-19 regulations. The Council was always on the ground to ensure enforcement and a coordination role. It dealt with issues of District Food Banks (DFB) for donations.”

K12 also added a response on the effectiveness of service delivery during the pandemic. K12 stated that:

“No one was ready for Covid-19, I think maybe had we trained our councilors in time about ICT, I don’t think Covid-19 would have disrupted our meetings the way it did. Now that we have trained our people to know that things can be done on virtual platforms, we don’t have to gather physically. We made our communities rely on the radio platform because means of communication do not necessarily mean filling up the hall; we can still communicate by sending emails and through virtual meetings. You see, by the time Covid-19 started, when they said people must not gather, we were not going to have problems at all. I think for planning purposes, we should have familiarised our officials with technology. However, for implementation purposes, it is difficult to implement without stakeholders and the beneficiaries involved.”

As a follow-up, the researcher asked the respondent (K12) if there was any point during the Covid-19 pandemic when they had a virtual meeting with community members. The respondents stated that:

“No, we communicated with them through radio. Local councilors will, from time to time, announce their service delivery plans on the radio, which was also difficult for communities to participate in sharing their views because they had to buy airtime.”

The respondent K13 shared similar sentiments and stated that:

“Most of the actions taken were novice as the pandemic was new. With the benefit of hindsight as a municipality, we should have developed and regularly updated comprehensive emergency response plans that outline roles, responsibilities, and protocols for service delivery continuity during crises.

Secondly, there should have been increased investment in digital infrastructure and technology to enable remote work and virtual service delivery. Thirdly, clear communication channels should have been established to keep residents informed about changes to service delivery and safety guidelines. Additionally, municipalities could have collaborated with other levels of government, non-profit organizations, and private sector partners to share resources and expertise. Finally, there should have been a focus on flexibility and adaptability in service delivery approaches to respond quickly to changing circumstances during the pandemic.”

In the same breath, it is important to note that the effectiveness of service delivery is dependent on the effective use of Information Communication and Technology (ICT). It is for that reason that the researcher wanted to find out about the effective use of ICT for service delivery during the pandemic. In this regard, KI1 stated that:

“It was very effective; my view is that we managed to navigate the Covid-19 pandemic due to ICT, whereas there were challenges here and there. For example, I never had challenges in terms of using ICT, but other officials were still behind in terms of using technology, and some had challenges in terms of connecting to the virtual meetings. But in general, I think our ICT was very effective. We were very quick to get Microsoft Teams. During the same period of Covid, we had a functional Facebook page. We had to work from home using the systems; even in terms of public participation, we used the same platforms, the municipality consulted with stakeholders virtually and held virtual meetings. I also think that if the municipality was 40% in terms of the usage of ICT, but now, because of Covid-19 we have gained a lot on how to use technology, I say that we are now at 80% on the use of technology. Although we acknowledge that Covid-19 resulted in negative things, in terms of using technology, we have learned a lot.”

The respondent (KI2) also provided an elaborative response and stated that:

“Because right now, as I said earlier, in response to the challenges brought by the pandemic, we had to learn and adapt to the use of technology. Do you remember that council meetings used to collapse because of not having adequate means to hold meetings, then we came up with a strategy to provide

electronic gadgets, which cannot be effective without having functional ICT. So, service delivery starts in a meeting where the council must sit down, plan, and deliver. Therefore, ICT was effective because we were able to hold service delivery meetings. Now, all council members have tablets, and they can use Microsoft Teams to hold meetings. For every virtual service delivery meeting, the ICT division is always close by to deal with any glitches. For example, as we speak, there is an electricity protest in Moletlane, so I can schedule a Microsoft Teams meeting with the service provider, mayor, technocrats, and managers, and be able to unlock those service delivery issues. So, in short, that is the impact of ICT on service delivery.”

In support of the latter, the respondent (KI3) stated that:

“Yes, the use of ICT was very effective for those who had access to technology. In essence, for those who did not have technology, getting information for them was not easy.”

The findings revealed that the municipality was found wanting during the pandemic. It is clear from the responses that the COGTA played a salient role in assisting municipalities with developing a framework envisaged to respond adequately to the pandemic. The introduction of the development of the District Command Council played an important role in helping municipalities to fast-track service delivery. However, on the other hand, it has been revealed that the closure of certain sectors or companies that provide municipalities with cement and steel contributed deleteriously to service delivery delays and backlogs during the pandemic.

The ability of the municipality to respond adequately to the pandemic includes the effective use of ICT in service delivery. It has been revealed that Lepelle-Nkumpi conducted some of its service delivery programmes virtually using Microsoft Teams during the pandemic. The MS teams played an important role in engaging with various stakeholders. However, it has become prevalent that their participation using MS Teams was minimal. Social media platforms such as Facebook pages were used for participatory purposes. It has been highlighted that before Covid-19 the municipality was at 40% on the use of technology compared to 80% since the emergence of the pandemic. The municipal council and officials were provided with gadgets such as tablets during the pandemic to continue with the work of the municipality.

5.11.1.2. Sub-theme 2: IDP support for service delivery

Regarding this sub-theme, the researcher asked respondents to describe the importance of IDP for service delivery during the Covid-19 pandemic. Different responses emerged from the respondents; for example, respondents (KI1) stated that:

“Yes, I can say the IDP process did assist in that regard. The IDP process helped a lot in my view because it provided us with an opportunity to receive funding from the National Treasury to effectively deal with the Covid-19 pandemic and other disasters. Therefore, we had to allocate that funding to the intended projects, and even internally, we had to reprioritize projects through the IDP process so that those that were implementable would then be able to implement them. Then those that we were not going to deliver their funding were then allocated to other pressing priorities.”

The respondents provided an articulate response, which further necessitated a follow-up question. The researcher asked the respondent (KI1) to share an example of the projects that were reprioritized. KI1 stated that:

“Let me give you a practical example, when we allocate the budget for our planning activities in the IDP, Let's say we allocate 2 million, we make sure that more than a million goes to the public participation activities, so in that regard, it means that 2 million half of it would not have been used and for that, it would mean that the money should then return to the national treasury. So, to avoid that, we would reprioritize projects. For example, we can buy skip bins for waste removal. But when you budget without Covid-19, it means that the allocated 2 million is used solely for its intended purpose without reprioritizing. Also as the municipality, we run awareness programmes to constantly talk to our consumers and to report back on service delivery issues, so because of Covid-19, those activities had to stop. Their allocated budget was then redirected to areas where we can improve service delivery.”

KI2 also provided an elaborate response on the use of IDP for service delivery. The respondents stated that:

“As far as I am concerned, the IDP is always effective, be it before the pandemic or post-pandemic. It becomes difficult to deliver services when you do not have

a plan. The importance of having a plan is such that the services you are going to deliver address the challenges of the community. You cannot just decide to build, let us say, a road or a hall without having that IDP. You can only have the IDP if you know that this speaks to the challenges of the people. So, it is very important to have a plan, whether it is during Covid-19 or not, you need to have a plan on how to deliver services to avoid misrepresenting the development needs and priorities of the community.”

KI3 also added that:

“The IDP is a strategic planning document for the implementation of municipal programs with Key Performance Indicators, Budget allocations, Service Delivery, Budget, and Implementation Plan (SDBIP). The IDP serves as the pillar for municipalities towards delivering community services.”

The findings of the study revealed that the IDP is the most important tool for service delivery planning and implementation in municipalities. It was because of the IDP process that the municipality was able to receive funding from the National Treasury to support the implementation of various community development projects during the pandemic. Furthermore, the IDP process played a vital role as it enabled the municipality to reprioritize projects that support service delivery during the pandemic. A study published by Asha and Makalela (2020) on the challenges in the implementation of the Integrated Development Plan and service delivery in Lepelle-Nkumpi municipality revealed that the local sphere of government remains an important role player through the IDP to ensure effective delivery of services and basic infrastructure. The study further revealed that the IDP assists local authorities in executing their developmental mandate. However, in practice, local authorities continue to face poor implementation of the IDP (Mamokhere, 2022). Continually, another study conducted by Thusi and Selepe (2023) on the impact of poor governance on public service delivery shared similar sentiments with Asha and Makalela (2020) that the local municipalities are in distress regarding the planning and implementation of the IDP.

5.11.1.3. Sub-theme 3: The availability of service delivery programmes in rural areas

In this sub-theme, the researcher wanted to find out whether the municipality was able to deliver services during the pandemic. According to the variation of responses from

the key informants, there has been a precipitous decline in service delivery during the pandemic. KI1 stated that:

“On this one, as the municipality, we had a huge problem of underspending as the municipality, which makes our rate of delivery very low. Our service delivery went down during the pandemic, and some projects had to drag on for some time before being implemented because of the Covid-19 pandemic. Our plans were affected by the pandemic. After all, we had to shift our funds towards emergencies because we cannot neglect our communities when they are faced with natural disasters. For example, if rural communities lose their home due to fire, we must provide temporary relief measures.”

KI2 provides an elaborate response regarding the availability of service delivery during the pandemic. The response shared the same views as those of KI1. The latter is because they share similar expertise on issues of service delivery. KI2 stated that:

“We had many compromises as far as service delivery was concerned during Covid-19. One can understand that the whole world came to a halt. So, our municipality was not immune to that. So, it was difficult. So, we had a work roster in which we had to cut down as far as human resources are concerned due to the Covid-19 protocols. Some people were coming to work, and some were not. So, when the municipality must deliver services that require 10 employees to patch potholes, you can imagine that we would not be able to reach our target because we resort to using 2 people due to the adherence to the disaster regulations. The example shows that the targets were unable to be met, which led to service delivery being compromised. Due to disaster regulations, you find a situation in which communities are coming to consult only to find that most officials are not at work. Another example is that if there is a need to pave the road, you find that there is only one grader because the municipal manager did not want to converge a lot of people at the same time. It leads to a limited staff composition that compromises the delivery of services. Therefore, in summary, the level of service delivery was low.”

KI3 was also added in the same vein as other respondents. KI3 stated that:

“The municipality was overstretched by the effects of Covid because financial resources as planned in the IDP were diverted to the demands and dictates of

the Covid-19 pandemic. Therefore, through the diversion of funds, some services suffered greatly, and the communities are still complaining even today.”

In the same breath, the researcher wanted to find out if the municipality was able to conduct any service delivery programmes during the pandemic. The question was necessitated by the responses from the focus group discussion, in which they indicated that the Lepelle-Nkumpi municipality was found wanting during the pandemic. The development of literature is explicit in the fact that many local municipalities were affected by the pandemic. It was stated by the respondents that the rate of service provision was low during the pandemic. Therefore, KI1 stated that:

“Yeah, we did, we did not close as the municipality during the Covid-19 pandemic. Major operations had to continue. For instance, construction sides were affected by the Covid-19 pandemic, but some projects had to continue. In the provision of waste management, the municipality did not stop collecting refuse because it is our function as the municipality. Eh...even in terms of planning COGSTA gave us guidelines in terms of implementing public participation and the IDP. In that regard, we continued to do our IDP planning and budgeting. So yeah, we did not stop. Everything we did during Covid-19 was done in line with government provisions.”

In response to the service delivery programmes, the researcher asked KI1 a follow-up question. The researcher wanted respondents to share some of the guidelines developed by COGSTA regarding IDP planning and public participation. The respondent (KI1) stated that:

“like we were provided a guideline on the use of technology to conduct our council meetings internally, and guidelines on the use of radio talk shows by the mayor to talk to our communities, we had to use Facebook and WhatsApp messages to interact with our communities and newspaper articles simply because we could not go to community forums.”

Respondent KI2 also stated that:

“Yes, we did conduct service delivery programs because I was part of a technical team called the Local Command Council (LCC) to facilitate service

delivery programs during Covid-19. We also had a district bank in Polokwane where we would distribute food parcels to local communities. Then we often liaise with our local councillors to identify destitute households. You remember that Covid-19 came with a lot of job losses. But in terms of our core mandate as a municipality, such as the provision of water, electricity, sanitation, roads, and refuse removals, we were not able to deliver them during Covid-19. Even appointed service providers had to stop some of the major projects during Covid-19.”

On the other side, KI3 also alluded to the fact that service delivery programmes were conducted even though it was not satisfactory. The respondents indicated that:

“Yes, but it was minimalistic since we diverted funds based on the exigencies caused by Covid-19. Most of the effort was made to ensure that communities survived the pandemic; even though things were like that, water in rural areas remained a thorny issue even to date.”

The findings of the study revealed that the municipality had a huge underspending of the funds for service delivery during the pandemic. Furthermore, the underspending of the funds contributed deleteriously to the low rate of service delivery. The promulgated Covid-19 regulation also on the other side contributed to the low rate of service delivery because some projects were halted. Additionally, it is highlighted that the municipal funds had to shift towards emergency funds. The availability of service delivery was affected because of the limited staff personnel during the pandemic and that was because of the municipal adherence to Covid-19 regulations. The municipality was overstretched because of the diversion of funds to support immediate challenges brought by the pandemic.

The findings also revealed that conducting service delivery programmes during the pandemic was difficult. The COGTA provided municipalities with guidelines for planning in terms of public participation, IDP, use of technology, and social media platforms to ensure effective participation. The municipality's Facebook page, WHATSAPP and newspaper articles were used to keep communities updated during the pandemic. As part of the COGTA guidelines, the municipality was urged to develop the Local Command Council as a programme to facilitate service delivery during the pandemic.

5.11.1.4. Sub-theme 4: The community involvement in service delivery programmes

In this sub-theme, the researcher solicited information from municipal officials on the importance of community involvement in service delivery. Generally, there is an outcry about the fact that municipalities are not doing well in ensuring that the views and opinions of communities are considered when preparing for development. Therefore, the lack of community involvement has always been a challenge way even before the Covid-19 pandemic. The development of literature also indicated that the inculcation of communities in the service delivery programmes influences the quality and quantity of services delivered in the municipality.

Therefore, KI1 stated the following regarding the involvement of communities in service delivery programs during the pandemic.

“that one is tricky because there were restrictions on how many people could be in one place and how they should interact. Noticeably, most community members were confined in their homes, and there were few movements of people within our municipal jurisdiction area. As a result, we did not receive any negative responses from our communities. I think from time to time, whenever we had to do something, we succeeded in my view. The only challenge was with the Covid-19 regulations. Covid-19 regulations restricted or limited the use of resources. However, I think our communities responded well under the circumstances. As a way of involving people, we came up with a strategy to source labor from the community to help in implementing various projects. We also appointed some temporary people to assist us internally in the municipality. So yeah, I think the community interaction was good.”

The follow-up question was asked to KI1 to share the duties and responsibilities that were assigned to the people who were employed by the municipality to assist during the Covid-19 pandemic: KI1 indicated the following:

“Mostly were serving as assistants for food security relief programs during the pandemic, responsible for the distribution of food parcels to different households in the municipality.”

The respondent KI2 shared similar views with KI1 on the involvement of communities in service delivery programmes during the pandemic. KI2 stated that:

“Maybe one would need to understand what community involvement means, but I would say this because we were classified as an organ of the state, and we were forced to comply with Covid-19 regulations put down by the president. So, we were not doing anything that would put us in contact with the public. Because our platform for involving communities is mainly through gathering them. Therefore, we did not want people to gather, which made the participation level low. As part of the Local Command Council, we selected some to be responsible for ensuring that communities do not gather in large numbers. Radio was found to be a means of involving communities during the pandemic. but due to the rural nature of the municipality, some people did not have airtime to participate in raising their opinions. So, I can say that the level of involvement was low.”

A follow-up question was also asked to KI2 to share the level of community involvement after the lifting of the Covid regulations. KI2 responded as follows:

“Their level of involvement has improved, and I am saying this because I have witnessed the huge number of communities attending the ward committee meetings. I was also part of the committee that plans the mayoral Imbizo, and the meetings were always packed. I remember in Zebediela we had a mayoral Imbizo, and we targeted to have 1200 people, and we exceeded the number that we planned for.”

KI3 also indicated that community involvement in service delivery was low, citing the Covid-19 protocols on the restriction on gatherings. KI3 stated that:

“The community was somewhat restricted by the Covid-19 regulations, and therefore involvement was reduced to non-contact means such as virtual sessions, radio, etc. The municipality was not functioning normally during this time.”

The findings of the study revealed that the municipality suffered extensively in involving communities in service delivery programs during the pandemic. It has been highlighted that the lack of involvement was predominately a result of the Covid-19 regulations. The regulations restricted the gathering and movement of people to curb the spread of the pandemic. The findings also revealed that social media and radio shows were used as means to involve and solicit the views of communities during the

pandemic. important to note is that after the relaxation of the Covid-19 regulations, the municipality recorded a high number of people attending the ward committee meetings and mayoral imbizos.

5.11.1.5. Sub-theme 5: The extent to which the municipality creates a conducive environment for communities to participate in service delivery programmes

In this sub-theme, the researcher wanted to find out the magnitude to which the municipality created various mechanisms and means for communities to participate effectively in service delivery programmes during the pandemic. It is vehemently clear from the variation of responses from the respondents that during the pandemic, the municipality struggled to create a conducive environment for communities to participate in service delivery programs. The respondent (KI1) already stated above that the municipality tried to engage with communities during the pandemic although the level of engagement was minimal. The respondents indicated that the minimal level of engagement was out of the fear of contracting Covid. On the other hand, the Covid-19 regulations served as a stumbling block because large gatherings were not permitted as a way to curb the spread of the pandemic. However, respondent KI1 stated that:

“I think as a municipality we were able to create a good environment for communities to participate in service delivery programs even though it was difficult. Most of the time we were concerned about service delivery in the communities, and we did whatever possible as a municipality to ensure that our communities participated. But remember the Covid-19 restrictions, that’s why I’m saying whenever we had an opportunity to involve our communities the relationship was always cordial and conducive.”

A follow-up question was asked to the respondents (KI1) to share some of the mechanisms the municipality employed to involve community members during the Covid-19 pandemic

“We tried all we could for instance we were mostly communicating with community members using the radio at first when things were tight in terms of people's movements. Ward-based meetings had to be different, so we opted for village meetings with blocks or sections of the ward to ensure that we were within the required number of people attending as per the Covid-19 regulations.

Because it required not more than 50 people as an example. In addition, these were not ordinary meetings, they were more like ad-hoc meetings conducted when the municipality needed the labor for our projects, or they could be meetings for identifying beneficiaries for food security or Expanded Public Work programs (EPWP)."

The respondent (KI2) provided an elaborative response and stated that:

"Yeah, I think we created a conducive environment for communities to participate because the council of Lepelle-Nkumpi promulgated a Ward-Based Plan (WBP) into law that expects all their councilors to invite communities monthly for them to air out their development needs and the things that the municipality is doing correctly. Therefore, this adopted plan ensures that there is a platform between the community and the municipality to exchange views on issues of service delivery. Ideally, if all the councilors were to comply with their Ward-Based Plan, we would not have service delivery protests because people would have been updated and aware of all the programs in their wards. Another measure to ensure the participation of communities in service delivery is inviting communities to attend council meetings in community halls so that they can observe how the business of the council is conducted. Immediately after the council meeting is adjourned, the speaker then opens a platform for a community meeting where the progress of the councillor is discussed and to get opinions from members of the community. So, we would have created a conducive environment for communities to participate."

Respondent KI3 stated that:

"Yes, because structures for them to participate are there, ward committees, mayoral imbizo, and IDP processes."

The finding of the study revealed that the main reason for the lack of conducive mechanisms for communities to participate during the pandemic was that the municipality used online platforms to call for community meetings in most cases. Most of the meetings were held virtually, and communities needed access to the internet to

participate in those meetings. The latter limited their level of participation on issues of identification and prioritisation of services. Therefore, the municipality could not create the environment that is envisaged through the implementation of the IDP. However, the municipality resorted to shying away from the use of Ward-Based Planning to village meetings as a way to manage the number of people attending as per the Covid-19 regulations.

5.11.1.6. Sub-theme 6: The impact of community reluctance to attend service delivery programmes

Regarding this sub-theme, the researcher asked respondents to describe the reason for the community's reluctance to attend service delivery backlogs during the pandemic. Different responses emerged from the respondents; for example, respondents KI1 stated that:

“Mo ke nagana gore ke ka lebaka la kokwanahloko ya Covid ka bo yona. “ le gopole gore ba molao ba be ba le gona go netefatša gore batho ba obamela melao yeo e beilwego ke ba mmušo. Le lengwe e be le ka lebaka la go tšhaba go fetelwa ke twatši, seo se ile sa dira gore batho ba itulele ka magaeng.”

Translated version

“I think is because of the Covid-19 disease itself and also remember that law enforcement was also there to ensure that people comply with the regulations. I think out of fear of contracting the disease, people were more comfortable staying safe in their homes than attending meetings. Consequently, communities resorted to staying home as a way of trying to adhere to Covid-19 regulations.”

The respondents (KI2) provided a different view from that of KI1. The respondents stated that:

“I am going to respond to this from the observation I have made, that the main reason for the community's reluctance to attend service delivery programs is political associations. For example, in a community where people are contesting and prefer Candidate X to govern a ward, if it happens, they lose to Candidate Y from another political party, then they no longer have an interest

in the affairs of the municipality. But also, the issue of internal squabbles and fights between council members is a major problem, as it often can delay service delivery, and for that community members resort not to attending community meetings. For example, we were supposed to construct a road in Mogoto village instead of implementing the project, council members fought among themselves on where the project should be delivered, and all the fights occurred while community members were waiting for the project as prescribed in the IDP. Therefore, the delivery turnaround time ultimately makes people to be reluctant to attend meetings.”

The respondents (KI3) shared similar views to that of KI1 and stated that:

“There were government restrictions on meetings, therefore nothing was feasible. Many people were afraid of the consequences of the pandemic.”

The key findings concerning the reason for community reluctance to attend service delivery programmes are twofold. First, it can be revealed from the variation of responses from the key informants that communities were reluctant because of the fear of contracting Covid-19. As part of the Covid-19 protocol, the government published regulations on the number of people permitted to gather for meetings. Community members were restricted to gathering in larger numbers as a way to curb the spread of the pandemic. The development of literature revealed that many countries developed strict anti-pandemic measures to curb the spread of the pandemic. For example, the governments of Czechia and Slovakia banned all cultural and sporting events of more than 100 people (Nemec & Špaček, 2020). The government of South Africa also declared a state of emergency on Covid-19 and adopted similar measures. Second, the findings revealed that the centre of reluctance to attend service delivery programmes is the political associations in rural areas. The finding revealed that there is a culture of attending meetings or service delivery programmes according to who oversees the ward, and from which political party. If a particular preferred candidate from political X loses a ward, the other constituency loses interest in municipal affairs, and that deleteriously affects service delivery.

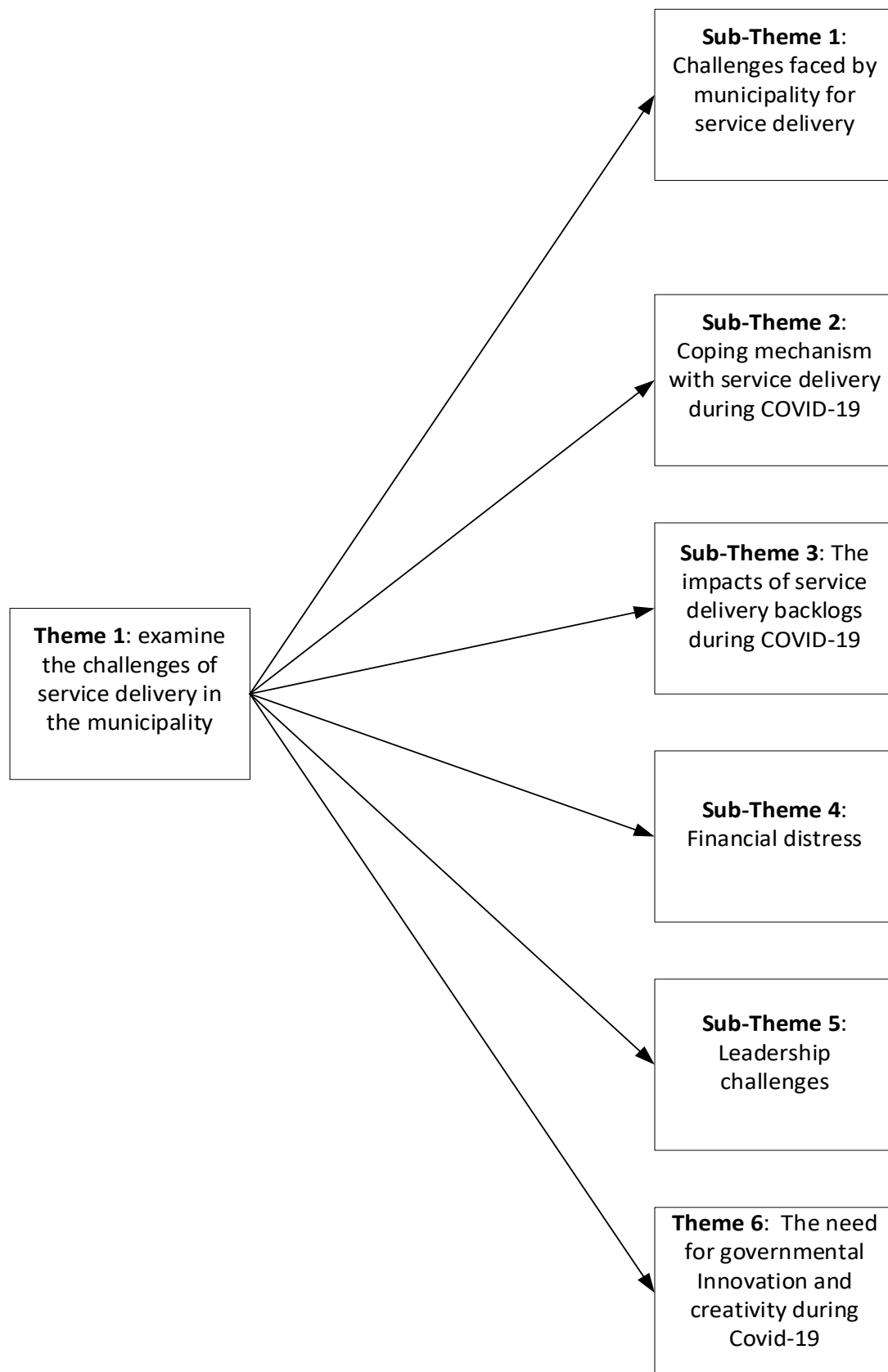
5.12. Emerging challenges of Service delivery in the municipality

The below diagram indicates the questions that were asked during the one-on-one interview with the officials in the municipality. The researcher used NVivo 14 software

to create emerging themes. Figure 5.20 provides a diagrammatic representation of the sources of data generated on the challenges of service delivery in the municipality. The diagram was created to visualize the following sub-themes:

1. Challenges faced by the municipality for service delivery.
2. Coping mechanism with service delivery during Covid-19
3. The impacts of service delivery backlogs during Covid-19
4. Financial distress
5. Leadership challenges
6. The need for governmental Innovation and creativity during Covid-19

Figure 5.20: Emerging sub-themes on Service delivery challenges



Source: Authors own illustration

5.12.1. Main theme: Examining the challenges of service delivery in the municipality

The contemporary government through the developmental approach effectively aims to ameliorate the local government planning and implementation distress. The latter is premised on the fact that the provision of service delivery continues to be a daunting challenge affecting almost all municipalities. This section focuses on examining the challenges of service delivery in the municipality during the Covid-19 pandemic. The following emerging sub-themes are examined in detail.

5.12.1.1. Sub-theme 1: Challenges faced by the municipality for service delivery

In this theme, the researcher asked the respondents to indicate the challenges facing the municipality regarding service delivery. Moreover, it has been noted from both the qualitative findings and the literature review that the municipality experienced planning and implementation challenges even before the advent of the pandemic. However, the Covid-19 pandemic perpetuated the inability of the municipality to plan and implement service delivery. The results from the members of the focus group discussion and key informants illustrated that the municipality had difficulties primarily in delivering services during the pandemic. The responses from the focus group discussion also indicated that Covid-19 led to challenges and delays in service delivery. Therefore, it is on that basis that the researcher asked the municipal officials or key informants regarding the extent to which Covid-19 affected the delivery of services in the municipality. KI1 stated that:

“During the time of Covid-19, most of our projects were delayed. Another thing I noticed was that during Covid-19, there was poor or non-spending, our spending was very low. Again, our visibility to the community was low if not non-existent, in essence, Covid-19 created a space between us (the municipality) and the community, even when they would want to complain, it was hard for them. As employees of the municipality, we were equally afraid to contravene the government’s regulations.”

Respondent KI2 echoed sentiments on the delivery of services during the pandemic. The respondent stated that:

“You know it extremely affected service delivery; it affected service delivery in a manner that is not desirable because as I have already cited when you were

with skeleton staff, we will not reach the target. Because during Covid-19 not all staff members were permitted to come to work, and for that service delivery was compromised. Remember that for services to be delivered effectively, municipal managers hold meetings to deliberate on the appointment of service providers. Therefore, since Covid-19 meetings were not effectively held, that delayed service delivery. Remember service delivery is driven by authentic community consultation. So, yeah, service delivery was affected.”

Respondent KI3 also added that:

“It adversely affected service delivery because in some instances workers were directed to stay at home, while only essential services workers were expected to report to work on a limited scale to avoid or mitigate the spreading of the disease.”

The findings revealed that the municipality was overwhelmed with the delivery of services during the pandemic. They have indicated that the pandemic contributed to the delay in implementing some projects. The latter caused the communities to be aggrieved and lose hope in the municipality. The municipality had experienced poor or low spending on the Municipal Infrastructure Grant (MIG) because of the advent of the pandemic. It is also revealed that the pandemic created a vacuum between the municipality and communities. Community consultation meetings were not effectively held during the pandemic.

5.12.1.2. Sub-theme 2: Coping mechanism with service delivery during the Covid-19

From the challenges in delivering services during the pandemic, the researcher further asked the respondents to share how Lepelle-Nkumpi municipality coped with service delivery during the Covid-19 pandemic. This question was asked to understand if the municipality had any strategy to deliver services during the pandemic. Various and similar responses emerged from the key informants in the municipality. The respondents (KI1) stated that:

“This was a time when we learned how important electronic gadgets are to aid one in having simple communication with municipal stakeholders. Covid-19 forced us to use many electronic media, but our management team was coming to work because certain urgent decisions had to be made. Furthermore, certain

departments were on-site or working during the pandemic although we had to accede to Covid-19 regulations. At times, it was impossible to deliver urgent services such as water by sending water cans, but we tried all that we were able to deliver at that time although it was little.”

Also sharing the similar views, respondent KI2 stated that:

“It was tough because we were only able to provide the bare minimum of services. It was difficult for the municipality to fix broken water pipes. For example, you find that 6 broken water pipes need to be fixed and there are only two people at work. There were no consultation meetings and ward committee meetings held because of Covid-19.”

Respondent KI3 stated that:

“The municipality had to come up with the Covid-19 Recovery Plan. During the Covid-19 pandemic, municipalities around the world faced significant challenges in maintaining service delivery while ensuring the safety of their employees and communities. Overall, municipalities adopted a range of strategies to cope with service delivery challenges during Covid-19, with a focus on ensuring the safety of their employees and communities while maintaining essential services.”

Therefore, the municipality tried to cope with the pandemic. Services were delivered although it was not enough. The issue of the regulations and restrictions served as impediments for the municipality to effectively deliver services. It has been revealed that the provision of electronic gadgets played a vital role in ensuring effective means of communication amongst municipal stakeholders to fast-track service delivery. On the other hand, establishing site offices was key to providing immediate and pressing community issues during the pandemic. It has also been revealed that the development of the Covid-19 recovery plan played a huge role in ensuring the delivery, and safety of both officials and communities during the pandemic.

5.12.1.3. Sub-theme 3: The impacts of service delivery backlogs during Covid-19

The researcher asked the respondents to indicate whether the Covid-19 pandemic contributed to service delivery backlogs. The municipal officials responded adequately to this question. The officials to a larger extent agreed with the statement that indeed

the impacts of the pandemic exacerbated the service delivery backlogs in the municipality. For example, KI1 stated that:

“Here the issue is that we could not implement our projects on time and that means we postponed some of our service delivery projects. That implied that they were no spending on identified or planned projects”.

Respondent KI2 illustrated that indeed the pandemic contributed negatively to the service delivery backlogs in the municipality. KI2 stated that:

“Covid-19 contributed enormously to the service delivery backlogs because we already had a backlog before the pandemic. Our turn-around strategy to deliver services is poor and that caused the backlogs. Then the Covid-19 regulations drastically contributed to the backlog because we were not able to deliver properly.”

Respondent KI3 also added that:

“It greatly affected the municipal service delivery plans as funds were diverted to emergency products such as sanitizers, masks, etc. Covid-19 had a significant impact on service delivery backlogs in municipalities all over the world. The pandemic led to disruptions in operations, staffing challenges, increased demand for certain services, and financial constraints, all of which contributed to backlogs in service delivery.”

The findings on Covid-19 and its impact on service delivery corroborate both the findings from the members of the focus group discussion and the literature review. The findings revealed that the pandemic adversely affected and contributed deleteriously to service delivery in the municipality. Some of the budgeted project funds had to be diverted to support the municipality in curbing the spread of the pandemic. Some service delivery projects had to stop due to the pandemic. It is evident that diverting funds puts pressure on the planning and implementation of service delivery. Writes such as van Ginneken, Siciliani, Reed, Eriksen, Tille and Zapata (2022), in the study on addressing backlogs and managing waiting lists during and beyond the Covid-19 pandemic, revealed that the detrimental impact of the Covid-19 pandemic on service delivery.

5.12.1.4. Sub-theme 4: Financial distress

It has been illustrated from this research that the pandemic did not only exacerbate service delivery backlogs. There is overwhelming evidence that indicates the detrimental impact of Covid-19 on municipal financial resources. The qualitative findings also highlighted that the pandemic put pressure on the municipal financial bases precisely because an ample number of services were not paid during the pandemic and that some more funds were needed to assist the municipality in curbing the spread of the pandemic. Therefore, respondents were asked to indicate whether the pandemic impacted the finances of the municipality. Respondent KI1 stated:

“Yeah, it did in the sense that we were not collecting revenue as we should our collection rate declined, for example for 2019-2020 we collected 9 million, and for the period 2020-2021 we collected 8 million.”

Respondent KI2 provided an elaborative response that:

“Yes, I would say this because they are services that we sell to communities as a municipality, so we were unable to sell them during the pandemic. For example, in the provision of water, we were not able to monitor water meter readings so that we could charge them, as they are the consumers of water because of Covid-19 we were not able to do it. The communities that were supposed to have been billed for water consumption did not happen, as we were understaffed due to Covid regulations. So, the municipality if you don’t spend the money received from the Department of Treasury on service delivery, the municipality does not spend that money, they do not receive any money, instead, they take it back for not spending. Therefore, we were able to attract money from the Treasury because inability to spend the allocated funds, and that caused a lot of financial distress.”

Respondent KI3 also shared similar sentiments with the views of both KI1 and KI2 and stated that:

“Yes, Covid-19 significantly contributed to financial distress in municipalities worldwide. The pandemic led to economic disruptions, including business closures, job losses, and decreased economic activity, which in turn affected municipal revenues. Many municipalities rely on sources such as property

taxes, local business taxes, and fees for services, all of which were impacted by the pandemic. Additionally, municipalities incurred unplanned expenses for Covid-19 response efforts, including healthcare, sanitation, and other essential services. The combination of decreased revenue and increased expenses strained municipal budgets, leading to financial distress and challenges in maintaining service levels and addressing backlogs.”

The findings revealed that the pandemic contributed to the decline in the collection of revenue by the municipality. Because the pandemic restricted movements, the municipality could not collect service rates for a large proportion of the number of communities who are eligible to pay because of the pandemic. It has further been revealed that the municipalities were subjected to unplanned expenses because of the mechanization of strategies and responses to curb the spread of the pandemic. The quantitative findings also highlighted that there is a significant statistical association between the Covid-19 pandemic and financial resources. Scholars such as Ichsan, Suparmin, Yusuf, Ismal and Sitompul (2021), stated that the Covid-19 pandemic contributed gravely to the financial uncertainties in the realm of local government. Therefore, it can be concluded that the pandemic negatively affected the financial revenues of the municipality.

5.12.1.5. Sub-theme 5: Leadership challenges

Effective leadership is of paramount importance for the success of any organisation. The development of literature is explicit in the fact that effective delivery of services is also dependent on effective and quality leadership at the local level (Zvavahera, 2013). It is for this reason that the researcher wanted the respondents to describe the leadership challenges in the municipality during the Covid-19 pandemic. In this regard, respondent KI1 stated that:

“Covid-19 took some of our councillors and officials I think we lost a manager in the mayor’s office, we lost a councilor on the ward councilor, and we also lost general workers. So, at the leadership level, many people were scared to perform their duties. The other challenge was that we were not able to hold our regular meetings because priority was given to managing the spread of Covid-19. For example, most of the time, the mayor, chief whip, and speaker were running around as the face of the municipality in terms of dealing with the

challenge of Covid-19. Also, they spend too much time participating in the war rooms for Covid-19, intergovernmental meetings. So yeah, they had to focus on such issues whereas most of the work that they know is their responsibility by virtue of occupying those offices that they could not perform them because of Covid-19.”

KI2 provided a comprehensive response and stated that:

“I would say we had challenges because remember that Covid-19 in South Africa and most of the world was a new phenomenon, especially given the regulations that caused lockdown. With this being a new phenomenon, there was no one with experience handling the pandemic. Therefore, the leadership had to comply, when the regulation said that you must not gather people even in the offices, so as a leader it is a setback because you now need to prioritize how officials should execute their duties and affects your mandate as a manager to deliver with a limited staff complement. You may recall that the IDP development unfolds in different stages, so with a limited staff capacity, it becomes difficult to plan and implement the IDP. On the note of leadership, the council was unable to hold council meetings due to the pandemic. How is the mayor or the speaker going to make decisions without consulting the councilors because the Covid regulations did not permit gatherings? Due to Covid-19, we introduced virtual meeting platforms; however, some council meetings collapsed because many councilors were not able to use technology and were unable to participate in Microsoft Teams (MS). As I said, we were not ready to deal with Covid-19. So yeah, the leadership indeed had a lot of challenges on how to effectively use technology. In the initial stages of Covid, we were told to work from home without the provision of data eventually the municipality was able to provide work-from-home data to all officials.”

KI3 also shared similar sentiments and stated that:

“The municipality faced various leadership challenges such as health dynamics of leaders, restrictions of movements of staff until special permits were issued.”

Effective leadership forms an integral part of ensuring effective service delivery. Therefore, it has been revealed that the leadership of the municipality did not adequately prevail during the pandemic. However, in cases where the leadership tried,

they were restricted by the Covid-19 regulations. Moreover, the leadership of the municipality was side-tracked by the pandemic. Many municipalities were unable to deliver services effectively because of poor governance. Therefore, it has been revealed from the findings of the study that there are mixed emotions on the need for governance change. In times of a pandemic such as Covid-19, municipalities must be flexible and adopt other governance approaches and structures such as making changes in various methods of engagement that can respond to the needs of the communities during the pandemic. The findings also revealed that municipalities must adopt new or modern governance approaches and policies that support and address challenges that are posed by the pandemic. The governance change includes the machination of an emergency response plan, employee standby and risk allowance policy.

5.12.1.6. Sub-theme 6: The need for governmental Innovation and creativity during Covid-19

At the core of the local government for improved and effective delivery of services is governance. According to Ibok (2014), governance at the local level plays a crucial role in ensuring the effectiveness and provision of public goods to the vast rural population. The study revealed that many local municipalities were unable to effectively deliver services to rural communities due to issues of bad governance. It is for this reason that the researcher posits that the efficacy of service delivery at the local level is marred by effective governance in municipalities. Therefore, the researcher wanted to find out if the Covid-19 pandemic led to the need for governance change in the municipality. In this regard, respondent KI1 stated:

“Eh... the issue of governance I would not say necessarily led to a need, but in terms of the structure yes, what I have seen is that tools or various methods of engagements, for example, ex-committees meetings were held virtually, the issue of documentation had to be uploaded such as the agenda for meetings and shared using emails. However, governance in terms of the structure per se, I would not say there was a need to change just a need to change on the approaches.”

Respondent KI2 stated that:

“Yeah, I think it did because, as I said, we had to change several systems from the old ways of doing things. Now, due to Covid-19, the municipality is obligated to provide data to all officials every month to support their work. We developed new policies due to the pandemic; we now have a risk allowance. It was introduced simply because people were expected to work under dangerous circumstances during the pandemic. We also introduced a policy on employee standby where we had a team of officials on standby to assist during the pandemic. Therefore, yeah, the pandemic led to a change in governance and there was a need for that change.”

Respondent KI3echoed similar views with those of KI1 and KI2. KI3 stated that:

“Yes, Covid-19 has led to the need for governance change in municipalities. The pandemic highlighted the importance of agility, resilience and effective decision-making in response to crises. As the municipality, we had to quickly adapt our governance structures and processes to address the challenges posed by the pandemic, such as implementing emergency response plans, ensuring transparency and accountability in decision-making, and engaging with stakeholders to mitigate the impact of the crisis.”

The findings of the study also revealed that because Covid-19 came as a shock and was unexpected, many municipalities did not have a plan in place to address it. Many officials in Lepelle-Nkumpi municipality were not adequately equipped or trained to use ICT facilities. The latter made it difficult for the municipality to deliver services. On the other hand, a lack of stakeholder engagement contributed to a lack of service delivery. Lepelle-Nkumpi also lacked in terms of devising proactive measures such as a comprehensive emergency response plan for dealing with service delivery continuity during the pandemic. Lack of investment in digital infrastructure and technology was found to be a major issue. The municipality did not develop adequate communication channels to keep residents abreast of service delivery plans and Covid-19 safety regulations and lacked flexible and adaptable service delivery approaches that respond effectively to changing circumstances during the pandemic.

5.13. Presentation and analysis of data from existing documents

The purpose of this section is to present the findings from existing documents. The section included a review of the documents such as the municipal IDP reports,

Household survey, Census report, and service delivery reports regarding the planning and implementation during the Covid-19 pandemic. The findings revealed that municipalities play a significant role in providing services to the local communities. Furthermore, they are also constitutionally mandated to create an environment for communities to participate in the identification and prioritisation of community development needs through the IDP process. However, the Covid-19 pandemic emerged as an unprecedented phenomenon that contributed deleteriously to service delivery delays. The findings from the review of the IDP document revealed that, to a greater magnitude, the pandemic disrupted service delivery plans, community participation meetings, and effective stakeholder engagement meetings. To that end, many municipalities had to make a deliberate decision to reprioritise their service delivery plans to support programmes that are channelled toward curbing the spread of the pandemic. Some municipalities had to evaluate their development plans to support immediate and urgent services such as water and sanitation. The findings also revealed that under the Covid-19 hardship, the municipal budget had to be compiled to provide access to basic services to all local communities.

Lepelle-Nkumpi municipality IDP (2021–2026) highlighted that the municipality experienced difficulties in delivering services to communities during the pandemic. The municipality revealed that the IDP is a product of a consultative process through stakeholder consultation. The advent of the Covid-19 pandemic deprived the municipality of an opportunity to interact with the communities because of the fear of contracting the virus. The municipality also had difficulties in compiling the budget as some projects had to be reprioritised to respond to the pandemic. Respondent KI3 also indicated that the municipal planning is based on the adopted IDP, budget, and SDBIP coupled with the performance agreements of each director in the respective directorates. However, the municipality experienced difficulties in reaching the communities for the IDP process because of the pandemic.

The findings show that local municipalities are playing a significant role in ensuring the adequate delivery of services to rural communities. The findings further show that there is a considerable number of efforts by the municipalities to improve in terms of access to services such as water. Although the municipality is not a water service authority (WSA), respondent KI2 indicated that the municipality distributes the water that they receive from the district to rural communities of the municipality. However,

the municipality suffered with the provision of water during the pandemic mostly because of the broken and dilapidated water infrastructure in the municipality. It has also been revealed that the municipality did not have enough workforce to fix broken water pipes because of the Covid-19 restrictions. Scholars such as Chamberlain and Potter (2022) conducted a study on the analysis of South Africa's provision of emergency water supply during the Covid-19 pandemic: Accountability and expiration. The study revealed that the Covid-19 pandemic highlighted the widespread lack of access to adequate water and sanitation in South African informal settlements and rural areas.

Regarding electricity provision, there is a growing demand for electricity in the municipality. This can be confirmed by the community development needs as captured in the IDP document. Electrification of households is captured in almost all the 30 wards of the municipality. Respondent KI2 also stated that although the municipality works around the clock to provide households with electricity, the demand is increasing with speed. According to the Lepelle-Nkumpi IDP (2021–2026), there is a plan to increase the proportion of households with access to electricity across rural communities and indigent households. This research also revealed that the lack of ward demarcations is contributing largely to the lack of access to electricity. Electrification projects are mostly stopped because of the lack of proper demarcation. The findings highlighted challenges related to electricity provision, including stolen electric cables, load shedding and deteriorating electrical infrastructure.

The effective management of the Covid-19 pandemic was dependent on the adequate provision of sanitation services. This research statistically proved the significant association between Covid-19 and sanitation service provision. The provision of adequate sanitation falls within the realm of local government as mandated by various pieces of legislation. Adequate provision of sanitation is marred with adequate hygiene, safe environments and dignity. The respondents KI1 also stated the need to accelerate sanitation provision in rural communities. However, the findings revealed a lack of adequate sanitation provision during the Covid-19 pandemic. The general households survey conducted by the Census also revealed a steep decline in sanitation in the municipality. The census and CDM reports indicated a low sanitation backlog in Polokwane municipality compared to other municipalities in the district. On the provision of refuse collection, it has been highlighted that the municipality is on a

path to expand the programme. Respondent KI2 also stated that the municipality does not have enough budget to undertake the refuse collection programme. The municipality is still sitting with a huge refuse collection backlog. The findings from the focus group discussion also indicated that the municipality did not adequately collect refuse during the Covid-19 pandemic. Communities were subjected to having to travel long distances to access skip bins. The respondents highlighted that refuse collection trucks are always not in operation due to a lack of maintenance. The municipality used to hire local communities to collect refuse under the EPWP programme. However, the programme collapsed since the advent of the Covid-19 pandemic. Respondent KI2 indicated that plans are underway to revive the programme to cover all the municipal areas so that the municipality can collect revenue.

5.14. Integrating quantitative and qualitative findings

This section presents an integration of the research findings derived from both quantitative and qualitative studies. To clarify, a sequential exploratory design was employed, whereby the researcher gathered quantitative and qualitative data in two distinct phases. Initially, the quantitative data was collected and analysed. Subsequently, qualitative data was used to elaborate on and support the quantitative findings. The quantitative data consisted of information that was factually and statistically tested to explain the relationship between Covid-19 and service delivery, while the qualitative data provided further insights and explanations for the quantitative results.

5.14.1. Service delivery and Covid-19 pandemic interface

Service delivery in South Africa is a crucial factor in measuring and alleviating poverty within communities. Municipalities play a vital role as custodians, ensuring the effective planning and implementation of services. As the level of government closest to the people, local government is entrusted with the essential responsibility of upholding democratic principles, providing accessible and affordable essential services, and rebuilding local communities in partnership with residents (RSA, White Paper on Local Government, 1998). They are legally mandated to ensure uninterrupted and reliable basic services such as water, electricity, sanitation, and refuse removal services to rural communities. Lepelle-Nkumpi municipality committed itself to the implementation of the IDPs to address the service delivery challenges and

backlogs (Municipal IDP, 2021). However, despite all the concerted efforts to address the challenges, the research findings illustrate continued service delivery challenges. The findings reveal that the emergence of the Covid-19 pandemic contributed deleteriously to service delivery backlogs, especially in rural areas of the municipality communities. Effective planning and implementation of service delivery relies on proper mechanisms and the magnitude of consultation by the service delivery beneficiaries or community members. It became apparent from the findings that the magnitude of consultation was not effective during the pandemic. As a result, the municipality had difficulties primarily delivering basic services.

5.14.2. The overall implications of Covid-19 on service delivery

5.14.2.1. Adequate provision of water during the pandemic

The literature clearly indicates that the Covid-19 pandemic has significantly impacted municipal service provision (McFadden, Flood, Shepherd & Gilleece, 2022). Research by Seyed, Alinaghi, Mirzapour, Pashaei, Afzalian, Tantuoyir, Salmani and Dadras (2023) reveals that the pandemic has severely affected service delivery, especially in relation to water services. The literature on the impact of the Covid-19 pandemic on water provision is supported by the quantitative data collected in this study. The data reveal a significant statistical association between Covid-19 and water service provision, with a p-value of $p \leq 0.014$. The negative impact of Covid-19 on water provision is shown by the negative coefficient correction $r = (-0.1194)$. The quantitative findings revealed that many of the respondents – 74% ($n=333$) – strongly disagreed that the municipality provided adequate water during the pandemic. In the case of water cut-off during the pandemic, the study revealed a small proportion of the respondents, 2% ($n=9$), agreed with the statement, and this is simply because the current study proved that statistically there is no significant association between Covid-19 and water service cut-off p-value ($p \leq 0.236$). Water cut-off has always been a challenge in the municipality attributed to various reasons except for the pandemic. Lack of maintenance, theft and dilapidated water infrastructure are among other reasons for water cut-off in the municipality. On the other hand, the research respondents in this study demonstrated variation of responses and mixed emotions on the overall impact of Covid-19 on municipal service provision. The research findings on this statement are collected from focus group members, key informants, municipal

officials, and community members. The qualitative findings revealed that even though the municipality had a water service backlog before the pandemic, the pandemic contributed negatively to the continued water service delivery backlogs and challenges in the municipality. Communities are still subjected to a lack of access to uninterrupted water supply from the municipality. They are in most cases expected to travel long distances to fetch water for consumption and household use. The government promulgated regulations that include proper hygiene through sanitising and hand washing. As a result, it became difficult for communities to comply simply because of the lack of water supply by the municipality. The challenges related to the lack of continuous water supply are primarily due to ageing and deteriorating water infrastructure. Many of these systems have reached the end of their useful life and need refurbishment or replacement. Additionally, large dams are experiencing capacity issues and require urgent repairs. There are also significant concerns about funding for maintenance, as well as the rapid deterioration of farm dams due to inadequate upkeep. Furthermore, pollution problems have increased, highlighting the need for better maintenance of existing infrastructure and addressing the skills shortage in the field.

The results are also consistent with the findings from the key informants. They revealed that the municipality did not adequately plan and deliver services during the pandemic. They cited the fact that in most cases their planning was done without public consultation. However, the municipality used other communication channels such as radio and social media to engage and solicit input from the communities. It has been revealed that the use of radios and social media for engagement was marred with challenges such as lack of airtime and data by some community members which led to low levels of participation. The other issue that relates to the lack of water provision was uncertainties and the closure of many construction sites because of the fear of the pandemic. The latter delayed the municipal development plans. The findings further revealed that some water projects had to be stopped because of the pandemic. Therefore, drawing from the quantitative and qualitative findings, as well as the literature review, it can be concluded that there was a noticeable lack of water provision in Lepelle-Nkumpi during the pandemic. The literature highlights that ensuring a safe and reliable water supply became increasingly critical during the Covid-19 pandemic, particularly for implementing preventative measures. In response, the government

attempted to address the historical access gap by providing emergency supplies, such as water storage tanks, water trucks, and sanitisers, to communities facing water stress in the short term (Mudombi & Montmasson-Clair, 2020; Chamberlain & Potter, 2022).

5.14.2.2. Adequate provision of electricity during the pandemic

During the Covid-19 pandemic, the government implemented a lockdown to prevent people from moving around and to curb the spread of the virus. This confinement led to sudden changes in socioeconomic behaviours, which directly impacted electricity systems and consumption. Additionally, there were varying responses concerning the provision of electricity during the pandemic. This study proved that there is a significant statistical association between electricity service provision and Covid-19. The association is confirmed by the p-value ($p \leq 0.001$). The study also tested the magnitude of the association by using a coefficient of correction. The research revealed a negative $r = (-0.2623)$ coefficient correlation which shows that lack of electricity impacts negatively on the government response to Covid-19. Electricity cut-offs impacted the government's efforts to curb the spread of the pandemic. This research proved the association between Covid-19 and electricity cut-off p-value ($p \leq 0.001$). The quantitative findings indicated that the majority of the respondents – 86% ($n=386$) – stated that they experienced electricity cut-off in Lepelle-Nkumpi during the pandemic, while a small proportion of respondents indicated otherwise. Amongst other reasons for the power cut, stolen cables – 38% ($n=169$) – and load-shedding – 25% ($n=110$) – have been cited as the leading reasons for power cuts in the municipality. The stealing of electrical infrastructure has undermined the efforts by the municipality to reach the household electrification target by the municipality (Municipal IDP, 2021). The qualitative findings revealed that electrical service provision during the pandemic was marred by a lot of challenges related to electricity cut-offs and interruptions during the pandemic. The qualitative findings revealed that planned electrical projects had to stop because of the arrival of the pandemic. For that matter, the Covid-19 pandemic created a huge backlog, leading to the consistent electricity cut-off in the municipality. The quantitative findings resonate with the qualitative findings. It can be concluded that the municipal inability to ensure uninterrupted power cuts undermined the government's efforts to curb the spread of the pandemic. However, the government of South Africa tried to salvage the situation by sustaining

the provision of electricity to many hospitals across the country (Santiago, Moreno-Munoz, Quintero-Jiménez, Garcia-Torres & Gonzalez-Redondo, 2021). Electric provision was further given a priority to reduce the likelihood of death from Covid-19 (Lewis & Hebner, 2020).

5.14.2.3. Adequate provision of sanitation during the pandemic

The Covid-19 pandemic necessitated that, for effective management of the spread of the pandemic, it was important to ensure that sanitation service was provided adequately. The results from quantitative findings revealed that there is an association between sanitation provision and Covid-19. To that effect, this research statistically proved the relationship between Covid-19 and sanitation service provision. The association was confirmed by the p-value ($p \leq 0.001$). The association signals the fact that a lack of sanitation services led to more exposure to the virus. The study also used a coefficient of correlation to test the magnitude of the significance between Covid-19 and sanitation service in the municipality. The study revealed a positive coefficient of correlation $r = (0.1149)$ precisely because the adequate provision of sanitation is significantly associated with the reduction in the spread of the pandemic. For instance, statement B3 revealed out of 449 responses obtained from the respondents 36% ($n=163$) strongly disagreed with the statement on the adequate provision of sanitation during the pandemic, while a small proportion of the respondents agreed – 14% ($n=64$). It can be deduced from the quantitative findings that the provision of sanitation was a major challenge that inhibited the municipality from curbing the spread of the pandemic. Writes such as Purnama and Susanna (2020) elucidated that the low levels of hygiene coupled with poor sanitation served as impediments to the effective management and control of the pandemic.

According to the municipal IDP (2021), the municipality envisaged improving sanitation provision from 58.6% to 65% in the next financial year. The quantitative findings corroborate with results obtained from the qualitative findings. The qualitative findings revealed that the lack of sanitation service provision is no exception from other important municipal services. There is still an ample number of communities in the municipality without proper sanitation facilities. The respondents of the qualitative research revealed that basic important services in the municipality were adversely affected by the pandemic. At the helm of the adverse impact, sanitation services were

affected, which is closely related to Covid-19. It was further discovered that the municipality experienced budget constraints, which contributed immensely to the continued sanitation backlogs in the municipality. Scholars Purnama and Susanna (2020) share similar sentiments with scholars such as Howard, Bartram, Brocklehurst, Colford Jr, Costa, Cunliffe and Wright (2020), who also revealed that a significant number of households across municipalities suffered from the lack of sufficient water and soap to maintain adequate hygiene during the pandemic.

5.14.2.4. Adequate provision of refuse removal during the pandemic

The development of literature indicated that infectious control through hygiene has a long erratic history. Furthermore, proper and effective personal hygiene and hand washing were less appreciated in the recent past (Stanwell-Smith, 2003). Therefore, the emergence of the Covid-19 pandemic placed the refuse removal services in communities in the spotlight. Effective management of refuse removal is directly linked to proper management and containment of the spread of the pandemic. This research proved that there is a statistical association between the Covid-19 pandemic and refuse removal services in the municipality. The association is statistically confirmed by the p-value ($p \leq 0.001$). This implies that a significant proportion of respondents – 63.8% ($n=67$) – strongly agreed that there is a statistically significant association between the two variables. The quantitative findings also proved the direction, level and magnitude of the correlation by applying the coefficient of correlation between Covid-19 and refuse removal during the pandemic. This research revealed a positive coefficient correlation $r = (0.1272)$. The majority of the respondents – 51% ($n=227/449$) – from the household survey also revealed that the municipality failed to adequately provide refuse removal to communities during Covid-19. The demand for the collection of refuse increased during the days of the lockdown period as communities experienced an increased change in consumption and waste disposal patterns. Scholars such as Glenn, Rice, Primeau, Hollen, Jado, Hannan and Gaither (2020), articulated the increased demand for refuse collection during the pandemic. The qualitative research respondents shared mostly similar views regarding the ability of the municipality to provide adequate refuse removal services during the pandemic. The respondents mostly demonstrated their dissatisfaction. For instance, respondent FGR7 indicated that communities throw refuse on the street because the municipality did not provide them with either refuse bags or refuse bins. In the same vein, FGR4

indicated the health of community members was always compromised and exposed to risk simply because of the lack of refuse removal during the pandemic. As a result, it became difficult for the municipality to manage and prevent the spread of the virus. So, it is clear from the qualitative findings that the municipality did not adequately provide refuse removal services during the pandemic. Furthermore, the findings revealed that communities were subjected to long distances of travel to access skip bins (dumping bins). It was further indicated that even after long distances of travel to access the skip bins, in most cases they found the skip bin full to its capacity without being collected by the municipality (see picture 5.2). The quantitative findings are consistent with the qualitative findings in the sense that they all confirmed the inadequacy in the collection of refuse service by the municipality during the pandemic. Therefore, drawing from both quantitative and qualitative findings, it can be concluded that the communities suffered from a lack of collection of refuse by the municipality during the pandemic.

5.14.2.5. Community participation and service delivery during the Covid-19 pandemic

The role of community members in service delivery has always been a subject of contention despite the promulgation of various policies and legal prescripts that enforce participatory governance and development. A study conducted by Masiya, Mazenda and Davids (2019), on effective public participation in municipal service delivery revealed that many South African municipalities unrelentingly experience a decline in public participation at the local level and that results in poor service delivery. It is important to note lack of effective participation of communities in matters of local government was a challenge even before the Covid-19 pandemic. Consequently, the pandemic trivialised all the government efforts to ensure effective participation simply because of the promulgated Covid-19 regulations. For example, the respondents were asked to indicate their participation, frequency and rate of participation in service delivery programmes during the pandemic. Therefore, in terms of their participation in service delivery programmes during the pandemic, the findings revealed that 54% (n=243/449) never participated in any service delivery programmes during the pandemic, citing the Covid-19 regulations which permitted a limited number of people to gather in one space to prevent the spread of the pandemic. As has already been mentioned, lack of community participation in development is directly linked to poor service delivery (Masiya, Mazenda & Davids, 2019). Respondents indicated the fear

of contracting Covid-19 as their lack of participation in service delivery. Therefore, social media and local radio stations were used as channels for communities to raise their views and concerns about their development during the pandemic. The use of social media and radio proved to be effective even though they are associated with financial implications and constraints such as the need to have data and airtime to participate. Scholars such as Abbas, Wang, Su and Ziapour (2021) have reaffirmed the important role of social media in service delivery during the pandemic. Although some may have participated in service delivery programmes during the pandemic, their level of participation was not satisfactory. The proportion of respondents who participated 'once' during the pandemic is significantly small, 23% (n=103/448), as compared to those who participated in 'every meeting' – 12% (n=53/448). This includes a combination of those who participated in meetings that were called after the relaxation of the regulations by the government and those who participated using social media platforms. The findings of this research share similar sentiments with the views of Wijayanto, Andayani and Sumarwati (2021) on the use of Microsoft Teams as an alternative tool to improve service delivery in the context of the Covid-19 pandemic. However, the participation of communities using non-traditional methods of engagement such as social media and local radio stations was not adequate in terms of promoting and instilling community participation during the pandemic. Their level of inadequacy was statistically proven by the rate of community participation in Lepelle-Nkumpi municipality during the pandemic. The quantitative findings on the rate of community participation revealed that out of 208 responses solicited from the respondents, the majority, 51% (n=106), revealed that the rate of community participation during the pandemic was poor. The municipalities are mandated by the constitution to ensure views of the communities form an integral part of the planning and implementation of the IDPs (Asha & Makalela, 2021). In this instance, the principles of active community participation were compromised because of the pandemic.

The findings of the respondents from the quantitative research phase concur with the findings from the qualitative research. The qualitative findings revealed that the pandemic played a role in perpetuating a lack of community participation in service delivery issues. The pandemic deleteriously affected all the structures and mechanisms for communities to share their opinions and views regarding their

development. For instance, FGR1 alluded that the municipality did not have adequate structure to invite community members to participate in service delivery programmes during the pandemic. The lack of participation affected the development of many communities across the municipality. However, FGR4 indicated that only ward councillors were invited using virtual platforms such as Zoom without community members taking part in such meetings. To a certain extent community members are not vehemently opposed to the Covid-19 regulations which permitted the gatherings of only a few people. They alluded to the need for feedback on the outcomes of the meetings on matters discussed by the municipal council. As a result, the lack of community participation has contributed to a huge number of incomplete and abandoned projects because of the lack of platforms for consistent consultation with community members. The qualitative data collected from the municipal officials also revealed that the participation or involvement of the communities in service delivery planning was affected by the pandemic. They indicated that community participation was prevented by the regulations which were promulgated by the government on restriction of movement and gathering of people in one space. The restrictions contributed to the low levels of participation. The findings also indicated that after lifting some of the regulations the levels of community involvement in the affairs of the community have increased. That was shown by an increase in the number of people attending ward committee and mayoral meetings.

5.14.2.6. The role of ICT in service delivery

Service delivery has always been a challenge affecting almost all municipalities across the globe. The contemporary literature on local government emphasises the importance of inculcating the culture of using ICT for improved governance and delivery systems in local government. Giri and Shakya (2018), for example, lament the use of ICT as a new way to coordinate, plan, formulate and implement service delivery. Scholars postulate that the use of ICT in local government is aimed to re-invent democratic governance through the embodiment of networked electronic facilities for improved service delivery at the local level. As can be seen, the Covid-19 pandemic has posed unprecedented challenges on the municipalities as they struggled to operate and deliver under extremely uncertain conditions. As a result, the Covid-19 pandemic reaffirmed the role of ICT in responding to the service delivery challenges facing local government. The pandemic has helped to instigate a long-overdue digital

transformation for inclusivity and equal access to information in local government. Coping with the pandemic required the local government to play a leading role in rebuilding equitable, sustainable resilient communities and to promote principles of digital inclusivity in the realm of governance.

The literature review revealed that generally the use of ICT for service delivery during the pandemic was found to have played a salient role in ensuring clear dissemination of information about issues affecting communities using social media and radio platforms (Joseph & Williams, 2022; Tiwari & Mondal, 2022). There is an acknowledgment of the fact that the use of ICT is important in the planning and implementation of service delivery, especially in times of crisis such as the Covid-19 pandemic. This research solicited information on whether there is a need to embrace ICT for planning and implementation of service delivery during the pandemic. Therefore, the quantitative findings revealed that out of 449 responses obtained from the respondents, the majority of the respondents – 85% (n=382/449) – agreed with the statement that there is a need for the municipality to embrace ICT in service delivery. As has been noted, the study proved that there is a significant statistical association between Covid-19 and ICT. The association was confirmed by the p-value ($p \leq 0.001$). The coefficient of correlation was used to determine the direction of the correlation between Covid-19 and the use of ICT in service delivery. The quantitative findings revealed a negative coefficient of correlation $-(0.117)$ because the municipality was not receptive to the use of ICT facilities for service delivery during the pandemic. The quantitative findings are consistent and resonate with the qualitative findings. For example, FGR5 stated that technology played an important role in helping to accelerate service delivery during the pandemic precisely because ward councillors were able to participate in virtual meetings. However, there were a considerable number of challenges related to the use of ICT. The qualitative findings are not consistent with the literature review. The qualitative findings revealed that Lepelle-Nkumpi municipality failed in terms of utilising ICT facilities for service delivery during the pandemic. The respondents from the focus group discussion indicated that they did not benefit from the use of ICT during the pandemic. The rate of community participation during the pandemic was poor because of non-functional ICT facilities in the municipality. On the other hand, FGR6 indicated that technology is still a challenge affecting many rural communities in the municipality because of the lack of ICT

facilities. However, the qualitative findings assert that the municipality needs to embrace technology in its service delivery planning and implementation. For example, scholars such as Muridzi, Meyer and Masengu (2021) stated that urban municipalities in South Africa face various challenges in delivering services due to low uptake and usage of ICT initiatives by citizens. There is a slow response rate to citizen requests, a lack of customer service orientation from public sector staff, limited and inconvenient hours offered by government institutions, and long distances to reach government offices (Nkosi & Mekuria, 2010). The relevance of this level of governance may be seen in the recent wave of so-called 'Service Delivery Protests', which are largely against inadequate service delivery and local councillors' lack of responsibility (Alexander, 2010). Moreover, South African municipalities can trigger e-governance programmes that allow citizens as well as businesses to interact with the government using the full range of electronic media. It incorporates relevant measures in Growth and Development Strategies (GDS) and Integrated Development Plans (IDP) (Abrahams & Newton-Reid, 2008). Therefore, it can be argued that the local government that are closer to the communities are best poised to deliver on a vision of e-governance (Mawela, Ochara & Twinomurinzi, 2017). It is on that basis that the qualitative findings corroborate with the statistical evidence that the municipality failed to use ICT facilities to improve service delivery during the pandemic.

5.14.2.7. Governance in local government during the Covid-19 pandemic

Governance in local government forms an integral part of the systems and mechanisms that ensure effective planning and implementation of service delivery. The Covid-19 pandemic posed a detrimental threat to the delivery of services across municipalities. The development literature revealed that in most instances the failure of the municipalities to deliver is a result of bad governance (Ibok, 2014). According to Gao and Yu (2020) in their study on public governance mechanisms in the prevention and control of Covid-19 every public health emergency constitutes a significant test to the local government and its ability to handle it, which urgently requires the building of a public governance mechanism with the participation of multiple stakeholders. In response to such a sudden, specialised public health event involving multiple stakeholders, local government need to shift their role from dominance to the contemporary governance approach that responds adequately to crises. The quantitative findings resonate with the findings from the qualitative research phase on

the need for governance change as a result of the pandemic. For example, the majority of the respondents, 66% (n=295), indicated that indeed the Covid-19 pandemic led to the need for governance change in the municipality. This research also proved there is a significant statistical association between the Covid-19 pandemic and change in governance. The association is confirmed by the p-value ($p \leq 0.001$). This research is premised on Lewin's Change Management theory as the theoretical lens within which to understand the magnitude of change in governance. The theory advocates for forces of change in government and public sector reform for improved performance (Lewin, 1947b). Therefore, it can be concluded that the municipality must adopt modern governance approaches that allow for flexibility in managing and responding to crises.

This study posed a qualitative question to the key informants on whether the Covid-19 pandemic led to the need for governance change in the municipality. The qualitative findings from the respondents revealed that the municipality must do away with the traditional governance systems and adopt approaches and governance structures that are resilient and effective in responding adequately to the crisis. For example, KI3 stated that indeed the pandemic contributed to the need for governance to change by implementing crisis-driven mechanisms such as emergency response plans to deal effectively with the pandemic. The respondents further lamented that the change in governance must ensure transparency and accountability in making well-informed decisions and effective engagement with various stakeholders to mitigate the impact of the crisis. The findings also revealed that new governance policies were developed by the municipality in responding to the pandemic. The machination of new governance policies includes risk allowance. The latter was a result of the fact that there was a pragmatic fear of the employees contracting the virus. The municipality also developed a new governance policy called 'employee on standby'. The policy was meant to ensure effective rotation and substitute employees to support the work of the municipality during the pandemic. The respondents such as KI1 also elucidated the fact that the change in governance was important to ensure that the municipality devised various methods of committee engagement. The pandemic precipitated the use of virtual meetings as part of engagement mechanisms to be used for various community development plans during the pandemic. The change in governance also included the management and storage of municipal documents during the pandemic.

The development of literature indicated that the Covid-19 pandemic contributed significantly to the delay in decision-making precisely because of the lack of active citizen participation (Ncube, 2021). South Africa is a democratic state premised on the principles of participatory governance. The principles include promoting active and representative participation towards enabling all community members to meaningfully influence the decisions that affect their lives and to actively enhance the leadership capacity of community members, leaders and groups within the community (RSA, 1996). Therefore, the government's effort to curb the spread of the pandemic suppressed the active involvement of communities in local government affairs (Pantić, Cilliers, Cimadomo, Montaña, Olufemi, Torres & Van den Berg, 2021). Therefore, it can be deduced from the qualitative findings that in the quest for effective planning and implementation, the municipality must adopt new or modern governance approaches that can address challenges posed by the pandemic. On the other hand, scholars such as Yang, Deng, Zhang and Mao (2021) have written on the importance of social media to improve governance during crises such as the pandemic. They have alluded to the fact that social media has been playing an increasingly important role in modern society. For the government, these innovative applications based on this platform can release a large amount of information for a wide audience in real-time at a relatively low cost (Bonsón, Royo & Ratkai (2015), providing opportunities for dialogue between agencies and citizens. Social media can not only enhance the transparency of government departments but also improve public service delivery and public policymaking (Bonsón, Torres, Royo & Flores, 2012). Eltantawy and Wiest (2011) point out that providing support to the public and the public sector is the real potential source of social media. Therefore, social media can be seen as a communication tool to promote public engagement through effective feedback, coordination and discussions.

5.14.2.8. Covid-19 pandemic and financial implications

A vast number of studies were conducted on municipal financial support for service delivery during the pandemic. For instance, the study conducted by Li and Lu (2020), *Municipal Finance during the Covid-19 pandemic: Evidence from Government and Federal Reserve Interventions* revealed that 96% of US municipalities experienced a precipitous decline in revenue because of the emergence of the pandemic. In South Africa, several reports on local government revealed that many municipalities were

unable to collect revenue during the period of lockdown. The lack of revenue collection put municipalities into more precarious positions which in turn affected service delivery. Therefore, this research solicited information on whether the Covid-19 pandemic affected municipal finances. The respondents from the qualitative research phase revealed that the municipal finances were heavily affected because of the quest to deal with the pandemic. For example, respondent KI1 stated that because of the emergence of the pandemic, the money that was budgeted for other services had to be reprioritised through the IDP process to fund programmes that supported curbing the spread of the pandemic. The respondents emphasised the importance of the IDP process as a tool that enables the municipality to receive funding for service delivery from the national treasury. The quantitative findings corroborate the qualitative findings. The respondents of the quantitative research phase were asked to indicate whether the pandemic affected the financial resources of the municipality. The quantitative findings revealed that out of 449 responses collected from the respondents, 43% (n=194) and 32% (n=143) strongly agreed and agreed respectively with the statement that the pandemic affected the municipal finances. The quantitative findings also revealed that there is a significant statistical association between Covid-19 and financial resources. The association is confirmed by the p-value ($p \leq 0.001$). The quantitative findings also revealed a positive coefficient of correlation – $r = (0.2870)$. It is indicated from the findings that more financial resources were put in place to deal effectively with the pandemic.

The qualitative findings also revealed that the municipality experienced financial problems because of the pandemic. This is because certain budgeted projects could not be implemented as planned. The underspending is inextricably linked to the low rate of service delivery. It is highlighted that some municipal projects were affected by the pandemic in a manner that they had to stop. The respondents indicated that some financial resources had to be shifted towards emergencies to support communities in dealing with the pandemic. The qualitative findings also indicated that Lepelle-Nkumpi municipality was financially overstretched by the effects of Covid-19 because projects that were planned in the IDP were diverted to the demands and dictates of the pandemic. The latter placed the municipality in financial distress. The municipality was also not able to collect property rates.

5.15. Conclusion

This chapter presented and interpreted key findings collected using a questionnaire, focus group discussion, and key informants' interviews in Lepelle-Nkumpi municipality. For quantitative analysis and interpretation of results, the research used inferential and descriptive-analytical statistical tools such as Pearson's Chi-squared to test the association between variables and the coefficient of correlation to test the significance of the association between variables. In this chapter, three important sections were covered. Section B focused on the questions based on the presentation of findings on the community perception of service delivery during the pandemic. Section C focused on the presentation of findings on the challenges of service delivery in the municipality. The study used Pearson's Chi-squared to establish the association between variables. The coefficient of correlation (r) was used to determine the strength, the level, and the direction of the association between variables. It is well established from the findings that the hypothesis was supported by the collected data. The overall analysis from this chapter is that Lepelle-Nkumpi municipality was overstretched by the Covid-19 pandemic. The municipality had difficulties primarily in planning and implementing service delivery during the pandemic. The findings also revealed that the respondents were dissatisfied with the level of service delivery by the municipality during the pandemic.

Furthermore, the pandemic contributed to the delay and disrupted the traditional methods of engagement (physical community meetings) because of the promulgated government regulations that restricted gatherings. It was further discovered from this study that the Covid-19 pandemic perpetuated the widespread lack of access to adequate water, electricity, sanitation, and refuse collection services in many rural communities in the municipality. For example, on water service provision, it was discovered that 32% ($n=142$) of the respondents cited theft of water infrastructure as the primary reason for water cut-off in the municipality during the pandemic. Damaged and dilapidated infrastructure and water-shedding, corruption and incomplete water reticulation projects also contributed to the ongoing water cut-off in the municipality. On electricity provision, it was discovered that the lockdown created immense pressure on the demand for electricity during the pandemic, coupled with stolen electric cables and loadshedding which contributed to the electricity cut-off. The literature also revealed that consistent power cuts had the potential to undermine the

government's efforts to curb the spread of the pandemic. It is revealed that the municipality experienced water, electricity, sanitation and refuse collection backlogs even before the Covid-19 pandemic. However, the pandemic exacerbated the backlogs, which also affected the financial revenue base of the municipality because of uncollected property rates by the municipality during the pandemic. It was discovered that some budgets had to be redirected towards responding the pandemic.

It became apparent that the use of ICT by the municipality for service delivery was important. However, the municipality experienced problems due to a lack of ICT facilities and infrastructure in rural communities to support service delivery. Effective planning and implementation of service delivery is premised on the realm of participatory governance. However, it is prevalent that the municipality could not adequately conduct service delivery programmes during the pandemic. The latter is confirmed by the majority of the respondents – 53% (n=240) – who indicated that they never participated in any service delivery programmes during the pandemic and those who attended – 51% (n=106) – rated the participation as poor. This is a clear indication that communities were not adequately engaged on issues of service delivery during the pandemic. It was also discovered that the municipality reports and feedback meetings with communities were never conducted, and that made communities lose hope in the capacity of the municipality to deliver services. In cases where the engagement meetings were conducted using radio platforms and social media, the participation and engagement were not satisfactory.

The subsequent chapter presents the conclusion and recommendations.

CHAPTER 6: CONCLUSION AND RECOMMENDATION.

6.1. Introduction

The previous chapter focused on the discussion, interpretation and findings that arose from both the quantitative and qualitative research phases. The study employed a mixed-methods approach for data collection and analysis. This approach allowed the researcher to address both confirmatory and exploratory questions simultaneously, providing a comprehensive understanding of the phenomenon under investigation. This chapter begins with a summary of the chapters. It then delves into a detailed discussion of the key findings from both the quantitative and qualitative phases of the research, relating to the study's objectives. Additionally, the chapter outlines the theoretical and methodological contributions to understanding the emergence of the Covid-19 pandemic and its effects on the planning and implementation of service delivery in the municipalities. This chapter concludes with a summary of the research findings and a review of the literature. It includes recommendations for planning and implementing service delivery in the context of the pandemic. The chapter ends by proposing a framework aimed at enhancing the planning and implementation of service delivery.

6.2. Summary of key findings

6.2.1. Objective 1: To understand the community's perceptions of the planning and implementation of service delivery

This objective was achieved using the data collected from both the focus group discussion interviews and the household questionnaire. The findings revealed communities' dissatisfaction and frustrations about the delivery of the services by the municipality. The communities are of the view that the municipality failed to adequately deliver the services during the pandemic. A number of reasons were cited by the municipal officials during the one-on-one interviews. For example, the promulgated government regulations and the fear of contracting the Covid-19 pandemic were cited as the main reasons for the inadequate delivery of services during the pandemic. The study discovered that services such as water, electricity, sanitation and refuse removal were affected as a result of the pandemic. It had been revealed that some of the funds for service delivery projects were reprioritised to support the Covid-19 programmes.

Moreover, the study discovered that planning and implementation of service delivery were affected because of the inability of the communities to participate in service delivery programs because of the pandemic. Simply put, planning without the views and opinions of service delivery beneficiaries does not lead to quality development. The study also discovered that the communication channels and mechanisms of the municipality were disrupted by the pandemic. Therefore, the municipality resorted to using channels such as radios and social media to communicate municipal programmes, however, the channels were found not to be viable to rural communities. On the other hand, the closure of manufacturing companies during the pandemic contributed deleteriously to the lack of service delivery in the municipality

6.2.2. #Objective 2: To examine the challenges of service delivery in the municipality

A qualitative approach in the form of interviews was used to collect data that helps to examine the challenges of service delivery in the municipality. The data collected shows that the municipality is inundated with challenges in delivering services to communities. The data shows that the municipality has been faced with challenges even before the emergence of the Covid-19 pandemic. However, it was discovered that the Covid-19 pandemic exacerbated the challenges. The findings from both the focus group discussion and interviews with the key informants revealed the fact that the municipality was overwhelmed with meeting the service delivery targets during the pandemic. The latter is precisely because the government regulations delayed the implementation of service delivery projects. Among the key challenges discovered in the study was the lack of community consultation and low spending on the municipal infrastructure grant as result of the pandemic. It can be deduced from this research that the municipality did not cope primarily in delivering the services during the pandemic. It is discovered that the pandemic contributed to the ongoing service delivery backlogs and financial distress in the municipality. For example, overall, the municipality was not able to collect revenue, and economic disruptions such as the closure of businesses, job losses, and decreased economic activities also affected the municipal revenue base. The study also revealed that the development of the Covid-19 recovery plan played a huge role in trying to ensure continuity in service delivery and the safety of the officials and communities during the pandemic.

6.2.3. #Objective 3: To determine the impact of the Covid-19 pandemic on service delivery planning and implementation

The survey was conducted to collect data on the impact of the Covid-19 pandemic on service delivery planning and implementation from the household respondents. The survey findings also revealed that 92% (n=351) of the household respondents highlighted their dissatisfaction with the water service provision by the municipality during the pandemic. The provision of electricity was also affected by the pandemic. The latter is confirmed by 86% (n=386) of the respondents citing consistent electricity interruptions during the pandemic. The majority of the respondents indicated their dissatisfaction regarding the provision of sanitation by the municipality during the pandemic. Their dissatisfaction is confirmed by the 59% (n=265) of the respondents who agreed that the pandemic affected the provision of sanitation services in rural communities and refuse removal collection services during the pandemic. This study also discovered that the pandemic contributed to the service delivery backlogs, financial distress, and interruptions. The Chi-squared and coefficient of correlation tests were used to determine the relationship between variables. Overall, the study revealed a positive statistically significant relationship between the Covid-19 pandemic and service delivery. The relationship between the Covid-19 pandemic and service delivery was confirmed by the positive p-value.

6.2.4. Objective 4: To recommend measures in which Lepelle-Nkumpi local municipality can enhance service delivery planning and implementation during the Covid-19 pandemic

Based on the survey from the field and the literature, this research proposes the following recommendations:

- On water service provision, it is recommended that the municipality should provide temporary water tankers to respond to the immediate water crisis in rural areas. In the long run, the municipality must improve the existing water infrastructure, which includes fixing the existing communal water taps. The municipality must also resort to yard-to-yard connections to help minimise water tap theft. There is a need to impose a reasonable water tariff. This is to encourage rural communities to pay for the services to help improve the revenue base of the municipality. The municipality must also have efficient and

adequate water purification services for providing clean and portable water to communities. Lastly, there is a need for continuous monitoring and evaluation of all the water projects in the municipality to help fast-track potential water interruptions.

- On electricity service provision, the municipality must come up with a new electric meter system that prohibits bridging/tempering with electricity as currently, the system puts pressure on the supply of electricity, subsequently resulting in electric cut-offs/interruptions. The municipality must also establish efficient and effective mechanisms to report illegal connections and impose heavy fines on illegal connections. It is also recommended that the municipality needs to enforce the provision of free electricity to indigent households. The municipality must put a plan to prioritise renewable sources of energy to ease the pressure on the grid. The municipality must improve the existing electric infrastructure and resort to having underground infrastructure to avoid cable theft.
- On sanitation service provision, it is recommended that the municipality improve existing sanitation facilities coupled with quality building materials. The provision of free sanitiser and masks in cases of emergencies such as the Covid-19 pandemic to help curb the spread of the disease. RDP toilets must be provided to all the indigent households in the community. That is precisely because the ability of the municipality to effectively manage the spread of the pandemic is dependent on the effective and adequate provision of sanitation services in rural communities.
- On refuse removal collection service, it is recommended that the municipality make the provision of street-by-street skip bins and hire the local communities for the collection and dumping of refuse weekly and their services must be declared as part of essential services so that they can work during the pandemic. The municipality must enforce a charge on illegal dumping. At the main, there is a need for the municipality to create monthly-to-month environmental awareness campaigns and environmental competitions.

Therefore, this study aimed to investigate the implications of the Covid-19 pandemic on service delivery in Lepelle-Nkumpi local municipality. From this research, the following considerations and contributions were made.

6.3. Contextual, theoretical, and methodological considerations and contributions

6.3.1. Contextual consideration and contributions

The power dynamics in South Africa are structured within a unitary state, which is divided into three distinct and interrelated spheres of government: national, provincial, and local. According to Makalela (2018), these spheres work together to form a cohesive governance system. The local government, in particular, is recognised as the level of government closest to the people (Abraham, 2017). The local government is rooted in the cognitive convergence to the notion that the people shall govern. In essence, the planning and implementation of service delivery are premised on the realm of participatory governance (Vivier & Wentzel, 2013). This research is grounded in the context of local government in South Africa. Lepelle-Nkumpi Local Municipality is one of the municipalities within the Capricorn district municipality in the Limpopo province. The municipality has been inundated with service delivery challenges. Challenges such as the poor provision of water, electricity, sanitation and refuse removal characterise the municipality. From this context, the study notes that the challenges of service delivery in Lepelle-Nkumpi municipality have their roots in the period before the democratic dispensation, characterised by separate development of some sort. Planning was done in isolation from the service delivery beneficiaries through the macro-level development thinking and approach. The post-democratic dispensation, through the promulgation of the constitution and other policy prescripts, envisaged a new era of local government. The democratic government requires municipalities to be developmental in their approach to planning and implementation of service delivery (Mautjana & Mtapuri, 2014). Contemporary development planning and implementation leaned towards a micro-level people-centred development approach (Davids, Theron & Maphunye, 2009). The realisation of the contemporary approach was delineated in the realm of integrated development planning as a response to vehemently address the service delivery challenges. The IDP is now at the core in terms of the operationalization of municipal plans, and it is regarded as an instrument that seeks to bring about intergovernmental planning and coordination (Asha and Makalela, 2021). It is important to note that the IDP provides a plan through the Disaster Management Act, to respond to emergencies and pandemics. However, it has been observed from this research that disaster management plans are not adequately used. The emergence of the Covid-19 pandemic proved as much.

Scholars such as Matsuoka, Takeuchi and Shaw (2013), stated that in most instances when disasters occur, their impacts are immediately and intensely suffered at the local level. Therefore, the Covid-19 pandemic in South Africa was declared a disaster under the Disaster Management Act 57 of 2002. The act necessitated all the municipalities to develop comprehensive strategies and plans to respond swiftly to the pandemic. On the negative side, it has been observed from this research that disaster management and preparedness remain scorching concerns in many municipalities (Manyaka, Madzivhandila & Molepo (2021). The latter has been proven by the inability of Lepelle-Nkumpi municipality to adequately plan and implement service delivery during the pandemic. The research findings indicated that the municipality's response to planning and service delivery during the pandemic was inadequate. The findings further revealed that the municipality was overstretched by the pandemic. This research also tested and proved the significant statistical association that exists between the Covid-19 pandemic and service delivery.

This research observed that the level and the rate of community participation during the pandemic were low. Communities were reluctant to participate in service delivery programmes out of fear of contracting the virus. On the other hand, the government regulations restricted the regulations for movement and gathering. As a result, service delivery was affected. The municipality resorted to putting in place measures to solicit the views of communities during the pandemic. This research also statistically proved that the levels of community participation were not adequate during the pandemic. Measures include, amongst others, the use of social media and radio channels, which were found to not be adequate in terms of ensuring the genuine form of participation in service delivery programmes by communities during the pandemic. It is also important to highlight that no study on the planning and implementation of service delivery during the Covid-19 pandemic has been conducted before in the Lepelle-Nkumpi municipality.

6.3.2. Theoretical considerations and contributions

The two theoretical frameworks, the Theory of Social Change and Kurt Lewin's Theory of Change Management, were used as a lens for understanding and interpreting research findings from divergent theoretical positions and considerations. The two theoretical frameworks are slightly different in their application, however, with a greater

complement each other. For example, the Theory of Social Change was important in understanding evident features of the social reality of change in the realm of planning and implementation of service delivery in the Lepelle-Nkumpi municipality. In a nutshell, planning and implementation at the local government is a product that is subject to social change, in the sense that development needs and priorities continue to evolve. To this end, always, the circumstances dictate the direction within which planning and implementation at the local government level unfold. The theory of social change is generic in terms of explaining far-reaching processes of change in the past and present. However, the social change theory on its own could not explain in terms of the magnitude of change in the planning and implementation of service delivery. The development needs of communities are not rigid or static, they continue to change to accommodate their pressing priorities. They are affected by the change in the non-social environment that includes the manifestation of unplanned disasters such as pandemics, earthquakes, plagues and floods.

Kurt Lewin's Theory of Change Management was inculcated into this research to broaden research findings on the magnitude of change. The theory of change management embraces the fact that change management is of paramount importance for any organisation. The theory is premised on the fact that change in management is a continuous process. In the context of this study, the Covid-19 pandemic necessitated a change in the management of the municipality for effective planning and implementation of service delivery. Scholars such as Cummings, Bridgman and Brown (2016) elucidated on the Three-Step Change Model that advocates for government and public sector reform toward improved performance. Kurt Lewin's Theory of Change Management was explicit in explaining the magnitude of change in governance, infrastructure, socioeconomic and financial resources, and communication mechanisms because of the Covid-19 pandemic. The combination of the two theories offers a comprehensive understanding of how planning and service delivery are implemented in the Lepelle-Nkumpi municipality. Both qualitative and quantitative research findings indicated that the municipality's financial revenue base was negatively impacted due to the pandemic. As a result, a significant part of the budget had to be allocated to measures aimed at curbing the spread of the virus. The findings also highlighted the growing need for governance structures and approaches to evolve over time to address contemporary issues effectively.

The study's main contribution to the body of knowledge is using the theories of social realities and the magnitude of change in the planning and implementation of service delivery during the emergence of a crisis. The two theoretical frameworks adopted in this research played a crucial role in analysing and explaining the planning and implementation of service delivery during the pandemic. This research makes a theoretical contribution by applying the findings to enhance local government responses in planning and implementing service delivery during similar future pandemics. This research would contribute by serving as a benchmark for municipalities, policy, development practitioners and decision-makers in formulating feasible and concrete practical strategies to plan and implement service delivery in the context of pandemics. The results of this research will be presented and shared with various municipalities in the Capricorn District Municipality (CDM), with the expectation that the significant challenges in planning and implementing service delivery can be alleviated. Lastly, this research contributed to the body of knowledge in the form of a published book chapter on the "*perspective on responsive and responsible local government*" by the South African Association of Public Administration and Management (SAAPAM) in 2023, and a journal article published in the African Journal of Governance and Development (2025), on the "*The Impact of Covid-19 pandemic on Service Delivery: An empirical analysis of Lepelle-Nkumpi Municipality*".

6.3.3. Methodological consideration and contributions

This research is grounded in the idea that knowledge is relative, shaped by the diverse realities present in the world. A mixed-methods approach was used to explore both objective realities and subjective perspectives through scientific inquiry. This approach incorporated the philosophical assumption that integrating both quantitative and qualitative methods in a single study allows for a more comprehensive understanding of Covid-19 and service delivery in Lepelle-Nkumpi municipality. This study utilised a mixed-methods approach with an exploratory sequential design, which consisted of two interconnected phases. It began with a quantitative research phase and then progressed to a qualitative research phase. This progression allowed for a thorough analysis and interpretation of the findings (Reardon, Harvey, Baranowska, O'Brien, Smith & Creswell, 2017; Harwell, 2011; Salazar, Mantilla, Zambrano, Suárez & Ramírez 2023; Dehghani, 2024). Scholars such as Chen (2006) describe mixed methods as an approach that systematically integrates both quantitative and

qualitative research in a single study to obtain an in-depth picture and understanding of the phenomenon under investigation. The quantitative research phase was based on the positivist paradigm, while the qualitative research phase was developed within the constructivist paradigm. The intention of the use of both quantitative and qualitative approaches was solely to accommodate the subjective and objective realities in the construction of new knowledge.

The development of literature from the multiplicity of scholars such as Kanyane (2014); Ndebele and Lavhelani (2017), Ngcamu (2019); and Zerihun and Mashigo, (2022) represents new studies on local government and service delivery. Their studies adopted a purely qualitative research approach. In essence, their research was subjective on issues of service delivery in local government as they mostly solicited the views and opinions of the service delivery beneficiaries using mainly qualitative methods of data collection. Therefore, the inculcation of quantitative research permits a comprehensive exploration of the research problem. The quantitative research provided solid and sound arguments that were statistically tested. Ultimately, it was important to use a mixed-method approach to broaden the understanding of planning and implementation of service delivery from both subjective and objective perspectives.

The qualitative data collection instruments such as interview guides for key informants and members of the focus group discussion. The instruments were rigorously evaluated and approved by the Postgraduate Research Ethics Committee (PREC) and University Research Ethics Committee (UREC) members. A questionnaire was developed for quantitative research, and it was used to solicit data from the 449 respondents in the selected wards within the municipality. The questionnaire was tested in a pilot study using a small sample. After careful consideration and adjustment, the questionnaire was then translated into a local language by the language translator. The research findings revealed that Lepelle-Nkumpi municipality was in a planning and implementation conundrum because of the Covid-19 pandemic.

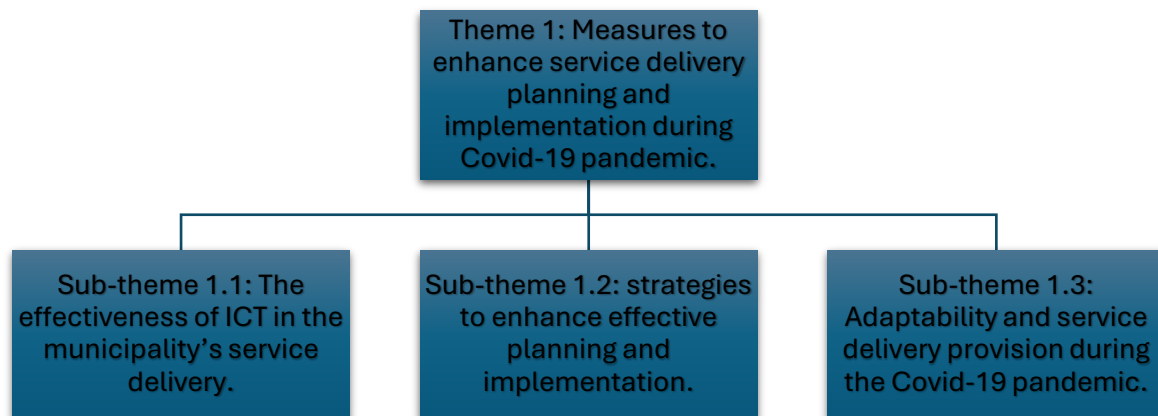
Scholars like Kumar (2014) describe data analysis as the process of organising, structuring and interpreting the vast amount of collected data. In contrast, Creswell (2013) defines qualitative data analysis as the process of understanding the perspectives and opinions of research participants regarding various situations, as

well as identifying corresponding patterns, themes, categories and recurring similarities. This research employed both descriptive and inferential statistics to enhance the understanding of the research problem. The quantitative phase began with an analysis of the demographic profile of respondents, which provided insight into the characteristics and various aspects of the population under study. The second phase examined the degree of responses, along with their means and standard deviations, concerning service delivery in the municipality during the Covid-19 pandemic. The final section analysed correlations among variables using descriptive statistical tests, including Pearson's Chi-squared test and the coefficient of correlation, to demonstrate the association between the Covid-19 pandemic and various aspects of service delivery. This level of analysis would not have been achievable had the study relied solely on qualitative research. The qualitative data was coded using NVIVO 14 software to generate emerging themes and sub-themes for qualitative data that respond adequately to the objectives of the study.

6.4. Proposed conceptual framework to enhance service delivery planning and implementation during the Covid-19 pandemic

Based on the empirical findings from both the qualitative and quantitative research phases and the literature review, this research proposes a framework to enhance service delivery planning and implementation for local municipalities to respond to the Covid-19 pandemic. The proposed conceptual framework encompasses the following four interrelated themes and sub-themes. (Theme 1) measures to enhance service delivery planning and implementation during the Covid-19 pandemic, (sub-theme 1.1) the effectiveness of ITC in the municipality's service delivery, (sub-theme 1.2) strategies to enhance effective planning and implementation, and (sub-theme 1.3) adaptability and service delivery provision during the Covid-19 pandemic.

Figure 6.1. Measures to enhance service delivery



Source: Author's own illustration

6.4.1. Theme 1: Measures to enhance service delivery planning and implementation during the Covid-19 pandemic

This research, subjectively and objectively, proved the deleterious impact of Covid-19 on the planning and implementation of service delivery in the municipalities. The pandemic overstretched municipalities in terms of finances, governance systems, and approaches and contributed to the change in communication mechanisms. A significant number of community development projects had to be stopped because of the pandemic. Moreover, various community engagement methods and mechanisms were disrupted because of the pandemic. The South African government had to devise measures to curb and prevent the spread of the pandemic. For example, the introduction of lockdowns, restrictions on movement, and the prohibition on large gatherings. The latter alienated community members from the affairs of the municipality. The findings from both the qualitative and quantitative research phases illustrated that Lepelle-Nkumpi municipality was greatly affected by the advent of the pandemic. The respondents indicated dissatisfaction with the rate of service delivery during the pandemic. Therefore, this research proposes the following measures to enhance service delivery planning and implementation.

6.4.1.1. Sub-theme 1.1: The effectiveness of ICT in the municipality's service delivery

From this research, it has been indicated that the pandemic caught many municipalities by surprise and affected the need that municipalities are mandated by legislation to always be proactive. Municipalities are expected to use the current legislation to anticipate and plan for disasters. However, the emergence of the Covid-19 outbreak disrupted the operations of all the local municipalities across the globe. Many rural communities suffered from the consequences of the pandemic. It is on that basis that the role of ICT in service delivery planning and implementation became pertinent (Abbas, Wang, Su & Ziapour, 2021). It is important to note that all the development efforts and projects are the subject of the consultative process. Communities are expected to share their views and opinions on a matter that affects their development. It became difficult during the pandemic for municipalities to utilize their traditional methods of engagement with communities, such as IDP forums, mayoral committees, etc., because of the Covid-19 regulations. The findings from both quantitative and qualitative research alluded to adopting new technological methods for effective planning and implementation of service delivery during crises such as the Covid-19 pandemic. It has been noted from the findings that there is a need for municipalities to develop universal functional ICT facilities in rural communities. An ample number of municipalities in countries such as Sri Lanka embarked on a path toward digitalsing government functions and processes for the efficacy of public service delivery. The digitalization of government is meant to speed up service delivery during the crisis. ICT is deemed to be used as a new way to coordinate, plan, formulate, and implement service delivery during the pandemic.

The qualitative findings of this research also highlight that the use of ICT during the pandemic played a pivotal role notwithstanding the unrelenting challenges related to the lack of adequate ICT infrastructure in communities. As a result, Covid-19 reaffirmed the role of ICT in responding to the service delivery challenges facing local government. Because many municipalities continue to lack ICT for service delivery, there is a probable need for intense training, initiatives and resources to support the digitalisation of service in local government. The latter is supported by the qualitative findings on the need to train local councillors on the use of technology in executing their roles and responsibilities. The overwhelming evidence enumerated that the advent of the pandemic pragmatically forced municipalities to rethink and re-design

their governance practices to manage uncertainties (Sharma, Luthra, Joshi & Kumar, 2022). The unpalatable Covid-19 regulations and protocols have necessitated changes in communication codes and methods. (Durugbo, Almahamid, Budalamah, Al-Jayyousi & BendiMerad, 2022). Methods such as MS Teams, Zoom and Webex were pertinent for virtual meetings to discuss service delivery issues. This research illuminated that the use of social media and radio were used as platforms to solicit the views and opinions of communities during the pandemic. Therefore, it has been revealed that with the advent of the pandemic, the municipality provided employees with working data and gadgets such as laptops and tablets. The municipality also provided officials with cell phones and mobile data allowance for them to be able to execute or perform their duties effectively from home. Scholars such as Nkgapele (2024) supported the inculcation of ICT as a cornerstone and a mechanism for enhancing service delivery, promoting transparency and citizen participation. It is believed that the use of ICT has the potential to eradicate service delivery challenges in municipalities. The World Bank report (2018) elucidated the fact that ICT facilities such as the Internet, mobile devices and digital platforms ameliorate the efficiency of government operations and the provision of services. Scholars such as Tejedo-Romero, Araujo, Tejada and Ramírez (2022) also lamented the role of ICT as a mechanism to enhance the participation of citizens and society in service delivery planning and implementation. The findings from both the qualitative and quantitative research recommend the provision of adequate ICT infrastructure in rural areas with access to WIFI, ICT training for local council members, and the provision of gadgets and data to officials.

6.4.1.2. Sub-theme 1.2: strategies to enhance effective planning and implementation

Municipalities must stay informed about both internal and external factors that drive change in their environments. This awareness helps municipalities maintain a competitive advantage in providing equitable access to services. Additionally, the Covid-19 pandemic compelled municipalities to rethink and redesign their planning and implementation strategies (Sharma, Luthra, Joshi & Kumar, 2022). In a nutshell, organisations and municipalities are confronted with a new set of challenges that requires a multifaceted new approach. Moreover, the change in management as alluded to by Kurt Lewin's Theory of Change Management is of paramount importance. Simply put, the change in management forms the basis to ensure effective planning

and implementation of service delivery in municipalities. This research through the adoption of social change and Kurt Lewin's Theory of Change Management advocated for the local government reform for improved service delivery in communities.

The Covid-19 pandemic has resulted in changes in the dynamics such as methods of engagement and acts of governance across the spheres of government (Agullah & Eyikorooha, 2021). It is on that basis that many municipalities had to change in terms of their governance systems and approaches, change in communication, change in management, and change in financial resources for improved service delivery. Consequently, the absence of planning and implementation by the local government perpetuated the community's frustrations, dissatisfaction and anger. As a result, more acts of service delivery protests and demonstrations are mostly marred with unrest and vandalism (Enwereji & Uwizeyimana, 2019). At the helm in terms of planning and implementation strategy is the ability of the municipality to devise fathomable methods of engagement with communities during crisis more so that municipalities keep abreast and deliver services. This research revealed that the use of technology was important in ensuring that communities are kept updated on the affairs of the municipality. However, the qualitative findings revealed levels of dissatisfaction regarding their engagement in service delivery issues during the pandemic. The findings illustrated that planning and implementation were not effective precisely because of a lack of community engagement.

Planning and implementation of service delivery is a product of effective leadership (Zvavahera, 2013). This research indicates that the leadership of the municipality prevailed in curbing the spread of the pandemic and ensuring service delivery. However, they were confronted with challenges such as having limited staff capacity in the office due to Covid-19 regulations, the inability to comprehend and use technology by some municipal officials, and the fear of contracting the virus. Continually, the municipal governance approach had to change because of the pandemic. Specifically, that included virtual ex-committee meetings, using emails, provision of data, risk allowance, employee standby policy, and emergency response plans that were developed because of the pandemic. This research recommends a change in governance systems and approaches such as the mechanisation of modern methods of community engagements, storage of municipal data and documentation, and prioritisation of Research and Development directorates to fast-track service

delivery. This research also recommends continuous training on effective governance for officials, and the development of systems in place to anticipate misfortunes.

6.4.1.3. Sub-theme 1.3: Adaptability and service delivery provision during the Covid-19 pandemic

Many local municipalities have historically struggled with providing essential services to their residents. Despite being democratic, these municipalities often face challenges in delivering basic services such as water, electricity, sanitation and refuse removal. As a result, many residents are losing faith in the municipality's ability to effectively meet their service needs. For example, the delivery and ongoing upkeep of these basic services have proved to be unreliable at times, greatly inconveniencing and endangering local communities (Reddy, 2016). The reluctant response to delivering basic services has often resulted in service delivery protests by communities. Important to realise is that the advent of the pandemic perpetuated the service delivery challenges and related backlogs. The pandemic disrupted the planning and implementation of service delivery across all municipalities. This research revealed that many service delivery projects have had to stop, some abandoned, and their budget reprioritised to curb the spread of the pandemic. The Covid-19 pandemic revived the use of technology in engaging with the communities on issues of service delivery by the municipality. This research illuminated that the provision of services such as water, electricity, sanitation and refuse removal services were not adequately delivered during the pandemic. This research revealed the need for an adaptable and resilient structured approach to deliver services during a crisis such as the pandemic.

For example, on the water provision, this research revealed that the municipality did not adequately provide water during the pandemic. It was highlighted that Lepelle-Nkumpi municipality is not a water service authority. However, they distribute and facilitate water provision as supplied by the district municipality. The respondents cited broken water pipes and limited capacity and manpower to deliver water during the pandemic. Therefore, this research recommends that the municipality should have fast-tracked the provision of water tankers during the pandemic, improve existing water infrastructure, including broken communal water pipes, and yard-to-yard water connections to prevent theft, and imposition reasonable tariffs to instill the use-pay principle. On the provision of electricity, this research revealed that the municipality

experienced challenges during the pandemic. Therefore, the research recommends that there is a need for the municipality to create mechanisms for underground connections to prevent stolen electric cable, impose heavy fines on illegal connections as they put pressure on the grid and cause power cuts and load shedding, provide free access to electricity for indigent households, and immediate prosecution on acts of corruption as it leads to incomplete project and to improve existing and dilapidated electricity infrastructure.

The provision of sanitation services was also found to be a major challenge during the pandemic. The sanitation backlog in Lepelle-Nkumpi municipality was exacerbated by the advent of the pandemic. The qualitative findings revealed that there is an urgent need to improve the provision of sanitation in rural communities. Therefore, this research recommends that the municipality must provide RDP toilets to all indigent households, improve dilapidated sanitation infrastructure, provide drainage systems, and continuous maintenance and monitoring of sanitation facilities. Lastly, the municipality should have provided free masks and sanitisers to communities during the pandemic and that would have greatly reduced the spread of the pandemic. The provision of refuse was also found to be a major concern during the pandemic. Communities were subjected to long distances of travel to access dumping sites. The municipality cited budget constraints and a lack of refuse collection equipment, such as trucks. However, there is an urgent need to revise the refuse collection programme in the municipality. This research recommends the provision of more skip bins and refuse bags, reviving the Expanded Public Work Programme (EPWP), creating semi-dumping sites, providing households with refuse bags, weekly refuse collection and imposing fines on illegal dumping sites.

6.4.2. Process and procedure for the model application

The model clearly outlines the measures that municipalities should adopt to improve planning and implementation of service delivery during crises. It emphasises that the core of effective planning and execution is the ability of municipalities to integrate ICT (Information and Communication Technology) into their processes. This necessitates a shift from traditional methods of service delivery towards the digitalisation of services for more effective planning and implementation. The digitalization of government can also accelerate service delivery, especially during crises such as the Covid-19

pandemic. However, this research emphasises making resources available for investments into ICT, training and revamping the ICT infrastructure. Second, the model prioritises putting in a service delivery plan and strategy that seeks to bring about a multifaceted approach to planning and implementation. The strategy must be aligned to change in the non-environment, meaning it must be responsive to uncertainties that might threaten the ability of municipalities to plan and implement services. Third, given that many municipalities struggled with the provision of basic services such as uninterrupted portable water, uninterrupted electricity, safe and reliable sanitation facilities, and refuse removal, municipalities must develop a well-structured, adaptable and resilient approach to development planning and implementation amid crises. For example, the municipal water provision services must be enacted to ensure the provision of water for emergency purposes, and the building of resilient water infrastructure, electricity and sanitation services during crises.

6.5. Overall research implications and contribution

This research thoroughly examined the impact of the Covid-19 pandemic on service delivery in Lepelle-Nkumpi municipality. The findings revealed that the municipality faced significant challenges in providing services to its communities due to the pandemic. As a result, the pandemic worsened existing service delivery backlogs within the municipality. This research also proved that there is a significant statistical association between the Covid-19 pandemic and service delivery. This research significantly established the relationship between Covid-19 and water service provision, electricity, sanitation, refuse collection, governance issues, financial resources and ICT, among others. Therefore, this research contributed to the knowledge base and a better understanding of how to plan and implement service delivery in the context of a crisis such as Covid-19. Since Covid-19 was a new phenomenon across the globe, this research theoretically contributed significantly to understanding the local government's response to planning and implementation of service delivery in the context of crises such as Covid-19. Consequently, this research illustrated that for improved and efficient planning and implementation, municipalities must adopt new methods and approaches such as the digitalisation of local government. This research also contributed to areas such as:

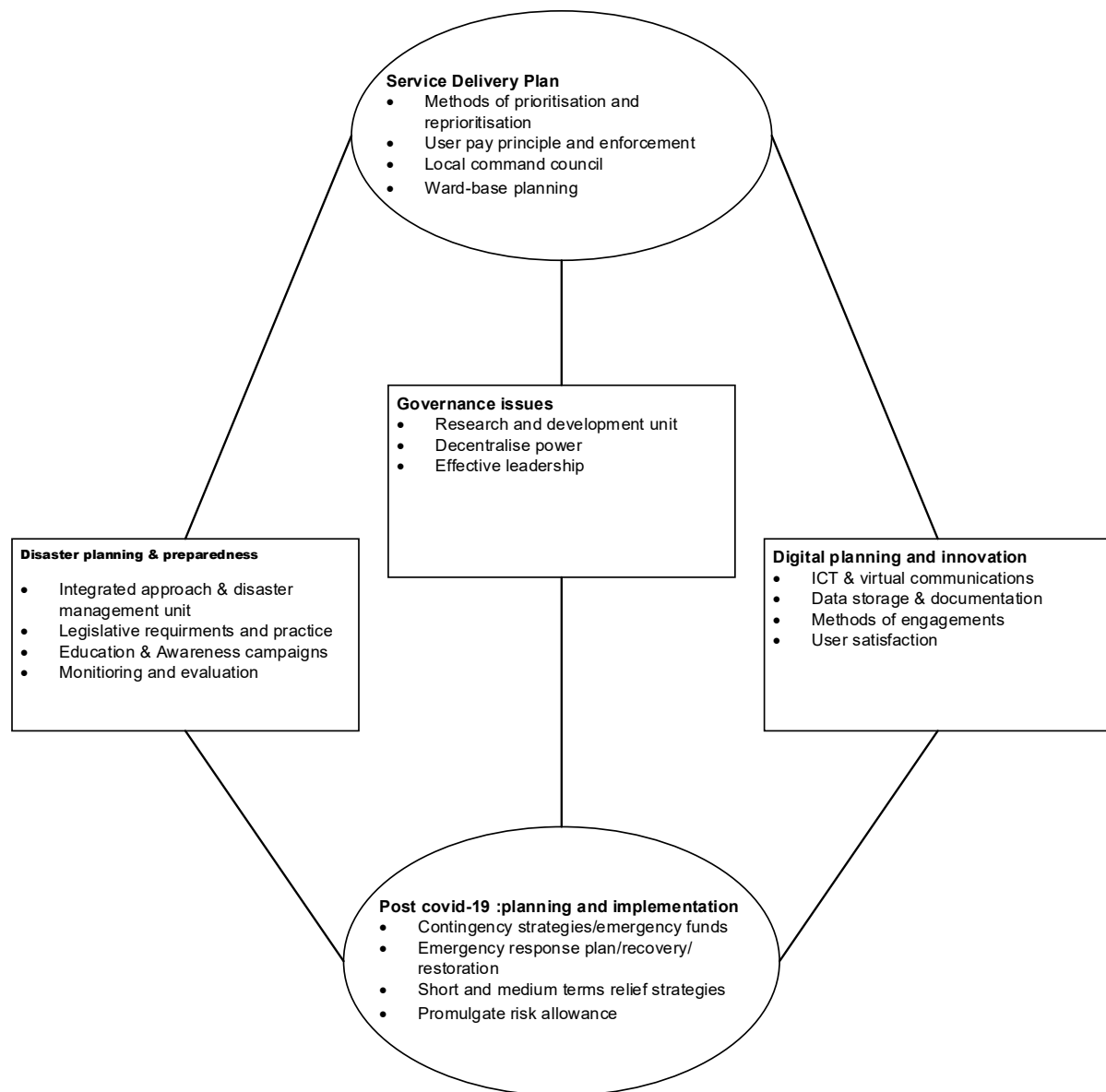
- An ample number of research studies were conducted on the planning and implementation of service delivery using a single research approach. Hence, this research focused on the implications of the Covid-19 pandemic on service delivery using a mixed-method approach.
- There is no study conducted to understand the implications of the Covid-19 pandemic on service delivery planning in Limpopo province. Hence, this research will contribute to improving the planning and implementation of service delivery in the context of a crisis in Limpopo province.
- The proposed conceptual framework and service delivery planning and implementation model will enable the municipality in terms of enhancing service delivery planning and implementation in the context of a crisis such as Covid-19. Furthermore, this research will fathom new methods that are deemed imperative to infuse into the municipal planning and implementation of service delivery post crises.
- Two articles have been extracted and published from this thesis. Two additional articles are expected to be presented at international and national conferences.

6.7. Proposed model for service delivery planning and implementation in the context of crises

Based on the literature review and both quantitative and qualitative findings, this research proposes a model for adoption by the municipality and other municipalities across the country. The aim is to improve the planning and implementation of service delivery in the context of emerging crises, such as the Covid-19 pandemic. Therefore, the proposed model encompasses five key elements for effective planning and implementation consideration. The elements are as follows: disaster planning and preparedness; digital strategies and innovation; service delivery planning; contemporary governance; and the future of local government/post-Covid-19 planning and implementation. The key elements are illustrated in Figure 6.2 and the subsequent detailed explanation. At the top of the model is service delivery planning, with the variables that support effective planning of service delivery in the municipality. On the left side is disaster planning and preparedness, which supports the work of the municipality in ensuring the delivery of services during crises such as the Covid-19 pandemic. The right side includes digital strategies and innovation, which must play an important role in ensuring the work of the municipalities continues even during

pandemics. The middle part includes contemporary governance and issues, and the bottom part includes the future of local government or municipalities post-Covid-19 pandemic.

Figure 6.2: Proposed model for service delivery planning and implementation in the context of crises



Source: Author's own illustration

6.7.1. Service delivery planning

To ensure effective service planning and implementation, municipalities must prioritise the needs of their communities. In summary, service delivery should adopt a consultative approach. Scholars such as Mathebula, Nkuna and Sebola (2016) have explained that the South African democratic local government system is built on the principle of consultation for prioritising and reprioritising the needs of communities. The findings of this study suggest that local municipalities should enhance their service delivery planning by empowering communities to take a leading role in identifying, prioritising and reprioritising services. This recommendation arises from the fact that, during the Covid-19 pandemic, the local municipality lacked a system to allow communities to prioritize and adapt their service needs. For example, the budget intended for the delivery of services was diverted to prioritise the management of the Covid-19 pandemic without accounting to the communities. In a nutshell, the municipality thumb sucked the decision to reprioritise.

Additionally, for effective planning and implementation of service delivery, the local municipality should play a role in encouraging and enforcing the user-pay principle to improve the revenue base. This principle in the municipality can apply to a variety of services such as water, waste management and recreation in affluent communities. The willingness and the ability of communities to pay for the services have the potential to help the municipalities eradicate the service delivery backlogs (Tedds, 2019). The findings of this study indicated the willingness of communities to pay a reasonable tariff for certain hard services such as water.

For effective management of crises such as the Covid-19 pandemic, at the national level, the establishment of the National Command Council played a critical role in ensuring the safety of communities at large. The National Command Council has been at the centre of decision-making in the government's response to curb the spread of the pandemic. Therefore, the findings of the study recommended the establishment of a permanent Local Command Council, which must play a role in ensuring the active participation of local stakeholders and the formulation of a local response strategy to deal with crises. In terms of effective service delivery planning in the context of crises, local municipalities should move away from ward-based planning to village-based planning based on a small group of people as opposed to the ward-based. The village-

based planning can best be suited to cases of the pandemic where gatherings of large numbers of people are prohibited.

6.7.2. Disaster planning and preparedness

The Disaster Management Act 57 of 2002 requires municipalities to create a comprehensive plan to address the impact of disasters. This act emphasises the importance of implementing prevention strategies and reducing the severity of disasters. However, many municipalities across the country are still lacking in their ability to plan and prepare for such events. The Covid-19 pandemic has underscored the limitations of these municipalities in disaster planning and in effectively delivering services to rural communities. Scholars such as Manyaka, Madzivhandila and Molepo (2021) asserted that disaster management planning and preparation remain a scorching concern for many municipalities. Therefore, this study recommends the establishment of a permanent and functional disaster management unit in all local municipalities. The unit must have permanent personnel with clear roles and responsibilities. Overall, the role and responsibilities of the personnel should include the development of a disaster management strategy for the municipality.

Additionally, this study advocates for an integrated approach to disaster management. An integrated approach calls for coordinated efforts between various municipalities in the district to work together for a common purpose guided by the legislation. In the coordinated efforts, there is a need for the municipality to ensure compliance and adherence to the legislative requirements and practices. Ishiwatari (2021) conducted a study on Institutional coordination of disaster management: Engaging national and local government in Japan. The study revealed that coordination of a wide range of organisations is crucial for effective disaster management. Moreover, the municipality must create education and awareness campaigns, conscientising and educating rural communities about disaster management. Furthermore, the local municipalities should be able to develop a framework for continuous monitoring and evaluation. Therefore, it is on that basis that the municipality would be able to identify loopholes in their response strategies.

6.7.3. Digital planning and innovation

The development of literature clearly shows that technology plays a significant role in improving service delivery in municipalities (Joseph & Williams, 2022). In the modern era of governance, there is an emphasis on adopting new methods and technologies. This study found that technology was crucial for effective service delivery in the Lepelle-Nkumpi municipality during the pandemic. To ensure effective planning and implementation of service delivery during the Covid-19 pandemic, the local municipality needs to have functional ICT facilities. This includes the installation of necessary ICT infrastructure and resources. Additionally, the municipality should develop technological methods for data storage and documentation to ensure that municipal information is effectively communicated to the community. Covid-19 disrupted the traditional community participation mechanisms such as physical community meetings, imbizo and IDP forums. It is for this reason that the municipality must develop virtual methods of engagement with communities. The municipality must use platforms such as Zoom, MS Teams, and social media platforms such as Facebook to engage and keep communities abreast of the latest developments. The municipality must provide officials and councillors with equipment such as tablets, laptops, and smartphones, as well as conduct training and workshops with the officials on the use of technology. The technological equipment must not only be provided to officials; however, the emphasis must be on user satisfaction and durability.

6.7.4. Contemporary governance issues

Good governance serves as the foundation for effective planning and implementation of service delivery during crises. This study finds that local municipalities should establish and prioritise a research and development (R&D) unit that operates on a daily basis. This unit would ensure effective service delivery, identify challenges and propose solutions to the municipal council. Additionally, the municipality needs to decentralise some of its power to local communities through the Local Command Council. The Covid-19 pandemic resulted in an unprecedented challenge in delivering services to municipalities across the globe; effective leadership played a critical role in the management of the pandemic (Agarwal, Ferdousi, John, Nalven & Stahl, 2020). Therefore, the findings of this study revealed that local municipalities need to strengthen their leadership capabilities and capacities. The municipality must have

proactive leadership and be focused. The local municipality must be able to develop a framework for monitoring and evaluation of service delivery targets, be able to foresee disasters, and also develop immediate response strategies and plans.

6.7.5. Post-Covid-19: Planning and implementation

Planning and implementing service delivery in the aftermath of the Covid-19 pandemic will require municipalities to be forward-thinking and prioritise the development of contingency strategies for managing crises. According to the findings of this study, local municipalities should establish emergency funds that must be authorised by the municipal council, in collaboration with the disaster management team. Additionally, municipalities should develop an emergency response plan that must be approved by the council. The response plan must include the post-recovery plan and restoration. In cases of a pandemic such as Covid-19, the local municipalities must develop short- and medium-term strategies to help communities cope with the severity and impact of the pandemic. The short- and medium-term strategies must include the development of local or district food banks to assist locally affected communities immediately. The findings of this study recommend that the local municipality promulgate a risk allowance for officials working in hard conditions.

6.8. Model application

The model for service delivery planning and implementation articulates ways in which the municipality should plan and implement service delivery in the context of crises such as the Covid-19 pandemic. The model emphasises the need to integrate the fundamental link between variables such as service delivery planning, disaster planning and preparedness, digital planning and innovation, contemporary governance, and planning and implementation post-crisis. Furthermore, the model offers a graphical representation of variables for effective planning and implementation of service delivery. The model solicited inputs from both primary and secondary data sources as part of a build-up framework that provides development planners with concrete, practical strategies for the effective delivery of services. The model charts a new era for planning and implementation of service delivery. For example, crises such as Covid-19 are well classified as a disaster that impedes service delivery. Therefore, the model calls for disaster planning and preparedness, governance, digital planning, and innovation to be effectively operationalised and find expressions in the municipal

IDP. Lastly, the model provides for effective planning and implementation of service delivery post-crisis. Therefore, with the adoption of the model, this study has contributed to enhancing the municipal planning and implementation of service delivery in the context of crises.

6.9. Implications for the findings

The implications and the result of this research contribute to the ongoing debate about developing effective ways to improve the continued challenges of service delivery across almost all municipalities. This research affirmed the assertion about the community's dissatisfaction regarding the provision of services by the municipalities. Simply put, the municipal service provision is in a state of despair. The results of this research corroborate the widespread community's dissatisfaction. Moreover, the results of this research provide both theoretical and practical implications, and they are deemed to ensure effective planning and implementation of service delivery in the context and post-crisis. The findings of this research also add to the existing body of knowledge.

The major practical implication is that this study developed a model for effective service delivery planning and implementation in the context of crises and further provided variables for post-crisis planning and implementation. The model provided a graphical integration of the relationship between variables that are important in explaining practical strategies to enhance service delivery. The main components of the model are crystallised into smaller variables to provide a complete picture of the application of the model. The model provides practical strategies to be adopted by policy makers towards effective service delivery and innovation. The model provides a structured approach to anticipate challenges that municipalities are facing in delivering services to communities. It is anecdotally clear that municipalities continue to experience challenges in delivering services to the communities, and mostly because of a lack of innovation. The model provides an alternative path towards improving the delivery of services. It is further clear that there is a lack of adequate provision of services such as water, electricity, sanitation and refuse removal collection in many rural communities. Therefore, the findings imply that the model offers a change in the service delivery framework. The change seeks alternative methods of prioritisation and reprioritisation of services and streamlining of the ward-based

planning to ensure effective service delivery in the context of crises. In summation, the findings of this research can be used by policymakers, academics and researchers, together with the model, to ameliorate service delivery challenges during crises such as the Covid-19 pandemic.

6.10. Conclusion

In conclusion, this research asserts that the emergence of the Covid-19 pandemic disrupted the planning and implementation of service delivery across the municipalities in South Africa and worldwide. Furthermore, the study demonstrated that the Covid-19 pandemic exacerbated the challenges faced by the municipalities delivering services to rural communities. Lepelle-Nkumpi local municipality was overwhelmed by the pandemic, leading to unrelenting service delivery backlogs and governance issues. In a nutshell, the municipality was not ready and adequately equipped to deal with the pandemic. This research significantly demonstrated that basic services such as water, electricity, sanitation and refuse removal were not adequately provided during the Covid-19 pandemic, resulting in communities' dissatisfaction. Furthermore, this study concludes that Covid-19 acted as a disruptive force that reshaped the patterns, processes and expectations of service delivery in Lepelle-Nkumpi Municipality. The pandemic not only overstretched the municipality's financial and operational capacity but also altered established channels of community consultation and engagement. Lockdown measures and other regulatory interventions accelerated shifts towards alternative modes of interaction, while simultaneously exposing institutional weaknesses and inequities in service provision. These changes generated dissatisfaction among service beneficiaries and highlighted the need for adaptive governance systems capable of responding to evolving social and environmental conditions

6.11. Recommendations

Specifically, municipalities should focus on the following:

6.11.1. Adaptability and service delivery provision during the Covid-19 pandemic

The findings of the study revealed that the municipality is currently grappling with considerable obstacles in its service delivery mechanisms. These challenges have been exacerbated by the Covid-19 pandemic, which has further intensified existing

issues and contributed to significant backlogs, especially in rural communities. To effectively enhance the delivery of vital services, including water supply, electricity, sanitation and waste removal, the municipality must devise a flexible and resilient structured approach. This strategy should be tailored to ensure the uninterrupted provision of these essential services during crises, such as pandemics, allowing the community to better withstand future disruptions. To address emergencies during crises, municipalities should prioritise fast-tracking water tankers and improving current water infrastructure. Additionally, opting for underground water and electrical systems can help prevent theft. It is essential to eliminate the sanitation backlog by providing RDP (Reconstruction and Development Programme) toilets to vulnerable households and ensuring the availability of skip bins for waste disposal. Municipalities should also impose and enforce fines for illegal dumping to maintain cleanliness and sanitation.

6.11.2. The use of ICT for service delivery in the municipality

The results of this study revealed that the municipality has a sufficient and operable array of Information and Communication Technology (ICT) facilities in place, which are essential for supporting effective service delivery. However, it appears that the municipality did not fully utilise virtual platforms such as Microsoft Teams, Zoom, social media channels, and various other digital tools as governance mechanisms to enhance or improve service delivery during the challenging circumstances of the pandemic. In light of these findings, it is strongly recommended that municipalities embrace and integrate innovative technological approaches that will facilitate more efficient planning and execution of services, especially in times of crises like the Covid-19 pandemic. Such adoption could significantly improve responsiveness and adaptability in future emergencies. Additionally, municipalities should develop universally functional ICT facilities in rural communities to facilitate engagement and information sharing. This research also suggests that social media should be more effectively utilised to support service delivery. Authors such as Lee, Malcein, and Kim (2021) advocate for the effective use of ICT facilities to improve service delivery by municipalities, emphasizing the necessity of investing in ICT infrastructure.

6.11.3. Strategies to enhance effective planning and implementation of service delivery

The results of this study indicated that the municipality continues to rely on traditional governance methods that fall short of effectively supporting the planning and execution of service delivery. Given this context, the study advocates for a transformative shift in governance systems and approaches. It emphasizes the need to incorporate modern strategies for community engagement. Specifically, these engagement methods should leverage digital tools and innovative technologies to enhance service delivery within the municipalities. By embracing such advancements, the municipality can foster more effective interactions with its constituents, ultimately leading to improved services and a more responsive governance framework. Furthermore, this research strongly advocates for enhancements in the virtual storage systems for municipal data and documentation. It is essential that communities and stakeholders directly impacted by municipal decisions have seamless, straightforward access to pertinent documents. This accessibility will foster genuine engagement and ensure that all parties remain informed about service delivery plans and priorities. Furthermore, this study emphasises the critical need for municipalities to establish dedicated research and development directorates. These directorates should be tasked with conducting in-depth research aimed at accelerating and improving service delivery, thereby better serving the needs of the community.

6.11.4. The establishment of the disaster management unit in the municipality

The results of this study revealed the urgent need for municipalities to create specialised disaster management units. These units should be staffed with dedicated officials who are tasked with the coordination of municipal strategies and the development of comprehensive response plans. Although many municipalities reference disaster-related topics within their Integrated Development Plans (IDPs), this inclusion often appears to be a checkbox exercise for compliance rather than a genuine effort to improve their crisis response capabilities. Moreover, the manner in which disaster issues are articulated within the IDP frequently lacks the clarity needed for effective implementation, leading to ambiguity in how these plans can be put into action during emergencies. Therefore, this research recommends that all

municipalities establish a permanent disaster management unit to effectively address these challenges.

6.11.5. Strengthen collaboration between various stakeholders in the municipality

This research recommends collaboration among various sectors within the municipality. Such collaboration is essential for fostering integrated approaches to effectively anticipate and respond to disasters. To achieve this, it is vital for sector departments to align their priorities, ensuring that they work cohesively. This alignment will enable municipalities to develop a unified development strategy that addresses the complexities of disaster management and enhances community resilience. By working together, these sectors can pool resources, share knowledge, and create a more robust framework for dealing with emergencies. The findings of this research clearly indicate that incorporating insights and contributions from community members, the district municipality and various sector departments can significantly impact the municipality's ability to tackle both current and emerging crises. This collaborative approach not only fosters a deeper understanding of local issues but also enhances the effectiveness of response strategies, ultimately leading to more resilient and adaptive municipal governance.

6.11.6. Policy reviews on the municipal spending and budgets

The results of this research uncovered a significant issue faced by municipalities: they frequently struggle to utilise the service delivery budgets allocated to them within the specified medium-term planning period. This inability to effectively deploy funds directly impacts the quality and availability of essential services in rural communities, which often rely heavily on these resources for their development and wellbeing. Alarmingly, each year, a considerable number of municipalities find themselves in a position where they must return a portion of their municipal infrastructure grants to the National Treasury, reflecting a systemic challenge in managing and executing critical budgetary allocations for infrastructure development and service provision. As communities grapple with persistent challenges related to the delivery of essential services, there has been a notable increase in service delivery protests. These protests, while often rooted in legitimate grievances, are frequently accompanied by instances of vandalism and civil unrest, further complicating the situation. In light of these ongoing issues, this research advocates for a comprehensive review of the

municipal spending policy concerning service delivery. The recommended revisions to the policy should include enforceable measures that deter non-compliance, incorporating punitive consequences for those who fail to adhere to the guidelines set forth. This approach aims to ensure accountability and promote more effective allocation of resources to meet the needs of the community.

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Appendix A: Research ethics clearance letter.



Ref: UMP/ Makalela/12/2025

Date: 17 December 2025

Kagiso Innocent Makalela [222423234]

School of Development Studies

FACULTY OF ECONOMICS, DEVELOPMENT AND BUSINESS SCIENCES

University of Mpumalanga

RE: APPROVAL FOR ETHICAL CLEARANCE FOR THE STUDY:

Implications of the Covid-19 Pandemic on Service Delivery: A Case Study of Lepelle-Nkumpi Local Municipality in Limpopo Province in South Africa

Reference is made to the above heading.

The Chairperson, on behalf of the Faculty Research Ethics Committee (Faculty of Economics, Development and Business Sciences) UMP, approved the ethical clearance of the above-mentioned study.

Any alteration/s to the approved research protocol i.e., Title of the Project, Location of the Study, Research Approach, and Methods must be reviewed and approved through the amendment/ modification prior to its implementation.

PLEASE NOTE: Research data should be stored securely in the school/division for a period of 5 years.

The Ethical Clearance certificate is only valid for a period of 3 years from the date of issue. Thereafter, Recertification must be applied for on an annual basis.

A handwritten signature in black ink, appearing to read "Ogujiuba Kanayo".

Prof. Ogujiuba Kanayo

Chairperson: FREC,

Faculty of Economics, Development and Business Sciences

University of Mpumalanga

Appendix B: Consent form.

A Consent Form for Participation in the Study

I agree to participate in a research project conducted by Mr KI Makalela who is doing his PhD in Development Studies at the University of Mpumalanga.

This participation form serves as permission that I am giving to the researcher regarding my full participation in this research.

The participation form also acknowledges the following aspects:

1. I have adequate information about the research topic, and I understand the study.
2. I understand that my participation is based on voluntary participation. Therefore, the role that I will play in the study has been clearly outlined to me and I understand the role.
3. I am fully aware that since my participation is voluntary there is no force used on me to participate in the study. I can withdraw at any stage of the research when I no longer feel comfortable sharing any information.
4. I understand that during the data collection process, the researcher will take written notes and use a tape recorder to record our conversation for the study. I give the researcher full permission to take written notes, and I am aware that I can choose to not be recorded by the researcher.
5. I am aware that my anonymity, privacy, and confidentiality will be respected in this study. Therefore, the researcher will only share information that I have fully agreed upon for the need of the study.

.....

Participants signature

.....

Researcher signature

.....

Date

.....

Date

Appendix C: Interview Guide (Focus Group Discussion)

Focus group discussion for participants in Lepelle-Nkumpi Local Municipality.

Ph.D. in Development Studies research project.

Research project title: ***IMPLICATIONS OF COVID-19 PANDEMIC ON SERVICE DELIVERY: CASE STUDY OF LEPELLE-NKUMPI LOCAL MUNICIPALITY IN LIMPOPO PROVINCE IN SOUTH AFRICA***. The information will be obtained solely for academic purposes, and your participation in the research project is voluntary. The focus group questions are structured based on the following questions:

1. To what extent do you think the local government responded to the Covid-19 pandemic in rural areas?
2. What do you make of the role of community members in service delivery planning and implementation during the Covid-19 pandemic?
3. How do you think Covid-19 affected the overall provision of services in the municipality? i.e water, electricity, sanitation, and refuse removal
4. What do you think can be done by municipalities to prepare for future pandemics?
5. Do you think Covid-19 led to the need for governance change in the municipality?
6. Any comment on the role of ICT and service delivery during Covid-19?
7. Is there anything you would like to mention about service delivery planning, implementation, and the Covid-19 pandemic that we have not discussed?

Appendix D: Interview Guide (key informants).

Research interview guide for key informants in Lepelle-Nkumpi Local Municipality.

Ph.D. in Development Studies research project.

Research project title: ***IMPLICATIONS OF COVID-19 PANDEMIC ON SERVICE DELIVERY: A CASE STUDY OF LEPELLE-NKUMPI LOCAL MUNICIPALITY IN LIMPOPO PROVINCE IN SOUTH AFRICA***. The information will be obtained solely for academic purposes, and your participation in the research project is voluntary. The interview schedule is structured based on the following questions:

SECTION A: Gender of Respondents.

A1. Gender

1.	Male	
2.	Female	
3.	Other	

A2. The highest level of qualification _____

A3. Position _____

SECTION B: Service Delivery Planning and Implementation

B1. How effective was the municipality in planning and implementing service delivery during the Covid-19 pandemic?

B2. Can you describe the importance of the IDP in responding to service delivery during Covid-19?

B3. How would you describe the level of services delivered by the municipality to rural communities during Covid-19?

B4. Did the municipality conduct any service delivery program during Covid-19?

B5. How would you describe the level of community involvement in service delivery programs during Covid-19?

B6. Do you think the municipality had done enough in creating a conducive environment for communities to participate in service delivery programs?

B7. What do you think made communities reluctant to attend service delivery programs during Covid-19?

B8. Do you think the participation of communities in service delivery programs influences the quality and quantity of services delivered in the community?

SECTION C: Challenges of service delivery in the municipality.

C1. To what extent do you think Covid-19 affected service delivery in the municipality?

C2. How did the municipality cope with service delivery during Covid-19?

C3. To what extent do you think Covid-19 contributed to the service delivery backlogs in the municipality?

C4. Do you think Covid-19 contributed to financial distress in the municipality?

C5. Can you describe the leadership challenges the municipality encountered during Covid-19?

C6. Do you think Covid-19 led to the need for governance change in the municipality?

SECTION D: Enhancing service delivery during the Covid-19 pandemic.

E1. How effective is the use of Information Communication and Technology in the municipality for service delivery?

E2. What do you think should have been done to ensure effective planning and implementation of service delivery during the Covid-19 pandemic?

E3. What changes would you say have occurred in the municipality because of Covid-19?

E4. How did you respond to the changes brought by Covid-19 in the municipality?

Appendix E: Household Survey Questionnaire.

This research is a part of my Ph.D. in Development Studies at the University of Mpumalanga. The research aims to investigate the “implications of the Covid-19 pandemic on service delivery in Lepelle-Nkumpi Local Municipality in South Africa”. This questionnaire is intended to collect data for the aforementioned purpose. The results of this project will be used exclusively for academic purposes. The anonymity of the respondents is guaranteed, participants’ responses cannot in any way be identified by anyone else. Participation in the project will be voluntary and respondents have the right to withdraw from the project at any time. Your participation in this research project is highly appreciated.

Sincerely,

Mr Makalela, Kagiso

SECTION A: Demographic profile of respondents.

1. Gender

1.	Male	
2.	Female	
3.	Other	

2. Age (years)

1.	19 or less	
2.	20-29	
3.	30-39	
4.	40-49	
5.	50 and above	

3. Level of education

1.	No formal education	
2.	Primary education	
3.	Secondary education	
4.	Tertiary education	

4. Employment status

1.	Formally employed	
2.	Unemployed	
3.	Self-employed	
4.	Other, specify _____	

SECTION B: Communities' Perceptions of service delivery during the Covid-19 Pandemic.

The list below is of various aspects for assessing factors that affect service delivery in the area. Please indicate your views by choosing an appropriate answer to the question.

Legend:
1=Strongly Disagree; 2= Disagree; 3= Undecided; 4= Agree; 5= Strongly Agree.

B1. The municipality adequately provided water service in the community during the Covid-19 pandemic.

1	2	3	4	5

B2. The municipality adequately provided electricity in the community during the Covid-19 pandemic.

1	2	3	4	5

B3. The municipality adequately provided sanitation services in the community during the Covid-19 pandemic.

1	2	3	4	5

B4. The municipality adequately provided refuse removal in the community during the Covid-19 pandemic.

1	2	3	4	5

B5. Participation in any service delivery program during the Covid-19 pandemic.

1.	Yes	
2.	No	

(Skip B7 if the answer is No)

B6. How often did you participate in service delivery programs during the Covid-19 pandemic?

1.	Every meeting	
2.	Occasionally	
3.	Once	
4.	Never	

B7. How would you rate the level of community participation in service delivery programs during the Covid-19 pandemic?

1.	Excellent	
2.	Good	
3.	Fair	
4.	Poor	

SECTION C: Challenges of service delivery in the municipality.

C1. Has the municipality experienced water service cut-offs during the Covid-19 pandemic?

1.	Yes	
2.	No	

C2. What were the reasons for the water service cut-off? More than one answer is permitted for this question.

1.	Water shedding	
2.	Old water taps	
3.	Dilapidated infrastructure	
4.	Climate change	
5.	Damage to infrastructure	
6.	National water scarcity	
7.	Other, please specify	

C3. Has the municipality experienced electricity cut-offs during the Covid-19 pandemic?

1.	Yes	
2.	No	

C4. What were the reasons for the electricity cut-off? More than one answer is permitted for this question.

1.	Load shedding	
2.	Heavy wind/rainfall	
3.	Dilapidated infrastructure	
4.	Stolen cables	
5.	Corruption	
6.	Other, please specify	

C5. Has Covid-19 contributed to service delivery backlogs?

1	2	3	4	5

C6. Has the Covid-19 contributed to the shortage of financial resources?

1	2	3	4	5

C7. Do you think Covid-19 led to the need to embrace Information Communication and Technology in service delivery?

1.	Yes	
2.	No	

If yes, please

explain _____

C8. Do you think Covid-19 led to the need to bring governance change in the municipality?

1.	Yes	
2.	No	

If yes, please

explain _____

Section D: Enhancing service delivery during the Covid-19 pandemic.

E1. Share your suggestions on what should have been done by the local municipality to improve water service provision during Covid-19.

E2. Share your suggestions on what should have been done by the local municipality to improve electricity service provision during Covid-19.

E3. Share your suggestions on what should have been done by the local municipality to improve sanitation service provision during Covid-19.

E4. Share your suggestions on what should have been done by the local municipality to improve refuse removal service during Covid-19.

E5. Going forward how would you like the municipality to respond to future pandemics?

Appendix F: Translated Household Questionnaire.

Batšeakarolo ba rategago

Nyakišišo ye ke karolo ya PhD ya ka ya Dithuto tša Tlhabollo Yunibesithing ya Mpumalanga. Nyakišišo ye e ikemišeditše go nyakišiša le go tsenywa tirišong ka Mabasepaleng ya selegae ya Afrka-Borwa nakong ya leuba la Covid-19 ka masepaleng wa selegae wa Lepelle-Nkumpi. Dipotšišo tše di reretšwe go kgoboketšwe go kgoboketša datha bakeng sa merero yeo e boletšwego ka mo godimo. Dipelo tša protšeke ye di tla šomišwa fela ka mabaka a thuto. Go se tsebje ga ba arabetšego go kgonthišetšwe gore dikarabo tša batšwasehlabelo di ka se hlaolwe ka tsela efe goba efe ke motho yo mongwe. Go tšea karolo mo protšekeng e tla bag a boithaopo gomme ba arabetšego ban a le tokelo ya go ikgogela morago mo protšekeng nako efe goba efe. Go tšea karolo gag ago mo protšekeng ye ya gago mo protšekeng ye ya nyakišišo go lebogwa kudu.

Wa lena

Mr Makalela Kagiso

Karolo A: Maemo a Mmotšišwa

1. Bong

1.	Monna	
2.	Mosadi	
3.	Tše dingwe	

2. Mengwaga

1.	19 goba ka tlase	
2.	20-29	
3.	30-39	
4.	40-49	
5.	50 le go feta	

3. Tsa thuto

1.	Ga go thuto	
2.	Thuto ya fase	
3.	Thuto ya gare	
4.	Thuto ya godimo	

4 Tša mošomo

1.	Ke a šoma	
2.	Ga ke šome	
3.	Moipereki	
4.	Tše dingwe, Hlaloša_____	

Karolo B: Pono ya setšhaba mabapi le kabo ya ditirelo nakong ya Covid 19

Tše di latelago di bontšha tshekatsheko ya tšeo di ilego tša ama ditirelo mo lefelong. Bontšha pono ya gago ka go kgetha karabo ya maleba.

Bagale	
1= Ke gana ka kudu; 2= Ke a ganetša; 3=Ga ka nagana 4= Ke a dumela; 5= Ke dumela kudu.	

B1. Mmasepala o ile wa kgona go fa batho meetse ao a lekanego nakong ya Covid-19.

1	2	3	4	5

B2. Mmasepala o ile wa kgona go fa batho meetse ao a lekanego nakong ya Covid-19.

1	2	3	4	5

B3. Mmasepala o ile wa kgona go thuša setšhaba ka tša maphelo le leago nakong ya Covid-19.

1	2	3	4	5

B4. Mmasepala o ile wa kgona go tloša kelelatšhila ka tsela ya maleba nakong ya Covid-19.

1	2	3	4	5

B5. O ile wa tšea karolo ka gare ga ditirelo nakong ya Covid 19?

1.	Ee	
2.	Aowa	

(Tshela B7 ge karabo ya gago e le Aowa)

B6. Na o tšeere karolo makga a makae nakong ya Covid-19 ?

1.	Kopano efe kapa efe	
2.	Go ya ka ditirelo	
3.	Gatee	
4.	Ga sa nka	

B7 Na karolo ya badudi e be e le bjang o lebeletše kabo ya ditirelo Nakong ya Covid-19?

1.	Maemong a godimo	
2.	Gabotse	
3.	Magareng	
4.	Gampe	

Karolo C: Ditlhotlo tša kabo ya ditirelo mmasepaleng

C1. Na mmasepala o ile wa itemogela kgaotšo ya meetse nakong ya leuba la Covid 19?

1.	Ee	
2.	Aowa	

C2 .Ke mabaka afe ao a hlotšego kgaotšo ye?

Kgaotšo ya meetse	
Dikrane tša kgale	
Tlhokego ya ditirelo	
Phetogo ya boso	
Tshenyo ya ditirelo	
Tlhokego ya meetse	
Tše dingwe{Tlhalosa	

C3. . Na mmasepala o ile wa itemogela kgaotšo ya mohlakgase nakong ya leuba la Covid 19 ?

1.	Ee	
2.	Aowa	

C4. Ke mabaka afe ao a hlotšego kgaotšo ye ya mohakgase?

Kgaotšo ya mohlakgase	
Dipula/Madimo a mabl	
Tlhokego ya ditirelo	
Go utswiwa ga dithapo	
Bosenyi	

Tše dingwe{tlhalosa	
---------------------	--

C5.Na leuba la Covid 19 le dirile gore kabo ya ditirelo e šalele morago?

1	2	3	4	5

C7 Naa o nagana gore leuba la Covid 19 le dirile gore re holoke didirišwa tša mašeleng.?

1.	Ee	
2.	Aowa	

C7.Naa o nagana gore leuba la Covid 19 le dirile gore tšhomišo ya tekhnolotši e šome.?

1.	Ee	
2.	Aowa	

Ga eba Ee
tlhaloša.....
.....
....

C8. Na o nagana gore leuba la Covid 19 le dirile gore pušo ya mebasepala e fetoge.?

1.	Ee	
2.	Aowa	

Ga eba Ee
tlhaloša.....
.....

Karolo D: Kabo ya mohlakgase nakong ya leuba la Covid-19 .

E1. Ntsha sa mafahleng a gago gore ke eng seo se bego se tshwanetšwe se dirilwe mabapi le kabo ya meetse nakong ya Covid-19.

E2.Mmasepala o be o swanetše go ba o dirile go kaonafatša seemo sa mohlakgase Nakong ya Covid-19.

E3.Ke eng seo mmasepala o bego o tshwanetše go ka se dira go bona gore mafelo a badudi a dula a hlwekile Nakong ya Covid-19.

E4. Go ya ka wena ke eng seo se bego se tshwanetšwe ke go dira ke mmasepala go bona gore keletatšhila e a sepetšwa.

E5. Go ya pele na o nyaka mmasepala o araba badudi bjang mabapi le malwetši.

Appendix G: Translated Consent Form.

Mametletšo A: FOROMO YA TUMELELO

Foromo ya tumelelelo ya go tšea karolo thutong.

Nna ke dumela go tšea karolo mo protšekeng ya nyakišišo yeo e dirilwego ke Morena K.I Makalela yo a dirago Ph.D ya gagwe ya Dithuto tša Tlhabollo Yunibesithing ya Mpumalanga.

Foromo ye ya go tšea karolo e šoma bjalo ka tumelelo yeo ke e fago monyakišiši mabapi le go tšea karolo g aka ka botlalo nyakišišong ye.

Foromo ya go tšea karolo e amogela gape dikarolo tše di latelago.

1. Ke na le tshedimošo ye e lekanego ka ga hlogotaba ya nyakišišo gomme ke kwešiša nyakišišo.
2. Ke kwešiša gore go tšea karolo g aka go theilwe godimo ga go tšea karolo ka boithaopo. Ka fao tema yeo ke tlogo go e kgatha thutong e hlalošitšwe gabotse go nna gomme ke kwešiša tema yeo.
3. Ke tseba ka botlalo gore k age go tšea karolo g aka e le ga boithaopo gomme go se na maatla ao a šomošitšwego go nna go tšea karolo thutong. Nka gogela morago mogatong ofe goba ofe wa nyakišišo g eke se sa ikwa ke lokologile go abelana tshedimošo efe goba efe.
4. Ke kwešiša gore nakong ya tshepidišo ya kgoboketšo ya datha, monyakišiši o tla tšea dinoutse tše di ngwadilwego gomme a šomiša theipi ya go rekhota poledišano y arena ka nepo ya nyakišišo. Ke fa monyakišiši tumelelo ye e tletšego ya go tšea dinoutse tše di ngwadilwego gomme ke a tseba gore nka kgetha gore ke se rekotwe ke monyakišiši.
5. Ke a tseba gore go se tsebje g aka, sephiri le sephiri di tla tlhompšha mo nyakišišong ye. Ka fao monyakišiši o tla abelalana fela tshedimošo yeo ke dumelelanago ka yon aka botlalo bakeng sa tlhokego ya nyakišiši

Batšwasehlabelo mosaeno

.....

Mosaeno wa monyakišiši

.....

Letšatšikgwedi

.....

Letšatšikgwedi

.....

Appendix H: Letter Requesting Permission

University of Mpumalanga
Private Bag X11283
Mbombela
1200
05 July 2022

The Municipal Manager
Lepelle-Nkumpi Local Municipality
Private Bag X07
Cheunespoort
0745

Dear Sir/Madam

I am a student registered for the Ph.D. in Development Studies at the University of Mpumalanga. I hereby request permission to conduct research in Lepelle-Nkumpi Local Municipality. The research is purely for academic purposes.

The proposed title of my research is “**IMPLICATIONS OF COVID-19 PANDEMIC ON SERVICE DELIVERY: CASE STUDY OF LEPELLE-NKUMPI LOCAL MUNICIPALITY IN LIMPOPO PROVINCE IN SOUTH AFRICA**”. With this letter, I have attached the data collection instruments that I will use to collect data from the participants of the study.

Should you wish to obtain more information or have questions related to the study, please do not hesitate to contact my promoter or me. Our contact details are as follows:

Promoters: Prof Vusi Gumede and Prof John Molepo

Email address: Vusigumede@dut.ac.za

Molepojn@tut.ac.za

Work phone: 031 373 2780

Researcher: Mr. KI Makalela

Email address: ikagiso700@gmail.com

Cell phone number: 079 3147 871

I hope my request will be in order to meet your set requirements.

Yours Faithfully,

Mr KI Makalela.

Appendix I: Permission Letter.

	LEPELLE-NKUMPI LOCAL MUNICIPALITY	
	Postal Address Private Bag X07 CHUENESPOORT 0745	Physical Address 170 BA Civic Centre LEBOWAKGOMO, 0737 Tel : (+27)15 633 4500 Fax : (+27)15 633 6896

Enquiry: Ms Mpho Mphahlele

12/04/2023

Mr. Kagiso Innocent Makalele
University of Mpumalanga
Private Bag X11283
Mbombela
1200

Dear Sir,

**SUBJECT: PERMISSION TO CONDUCT A RESEARCH STUDY FOR YOUR
DOCTORAL DEGREE STUDIES: STUDENT NO. 222423234**

Your email communicate dated 27 March 2023 bears reference.

Municipality hereby grants you permission to conduct research at Lepelle-Nkumpi Municipality for your Doctoral degree in Development Studies with University of Mpumalanga as requested. We hope that the research will be conducted with strict adherence to all the research ethics and that once published, it will also benefit our local community.

Wishing you all the luck in your academic endeavours.

Kind regards,


**MONYEPAO M.A (MS.)
MUNICIPAL MANAGER**

12/04/2023
DATE

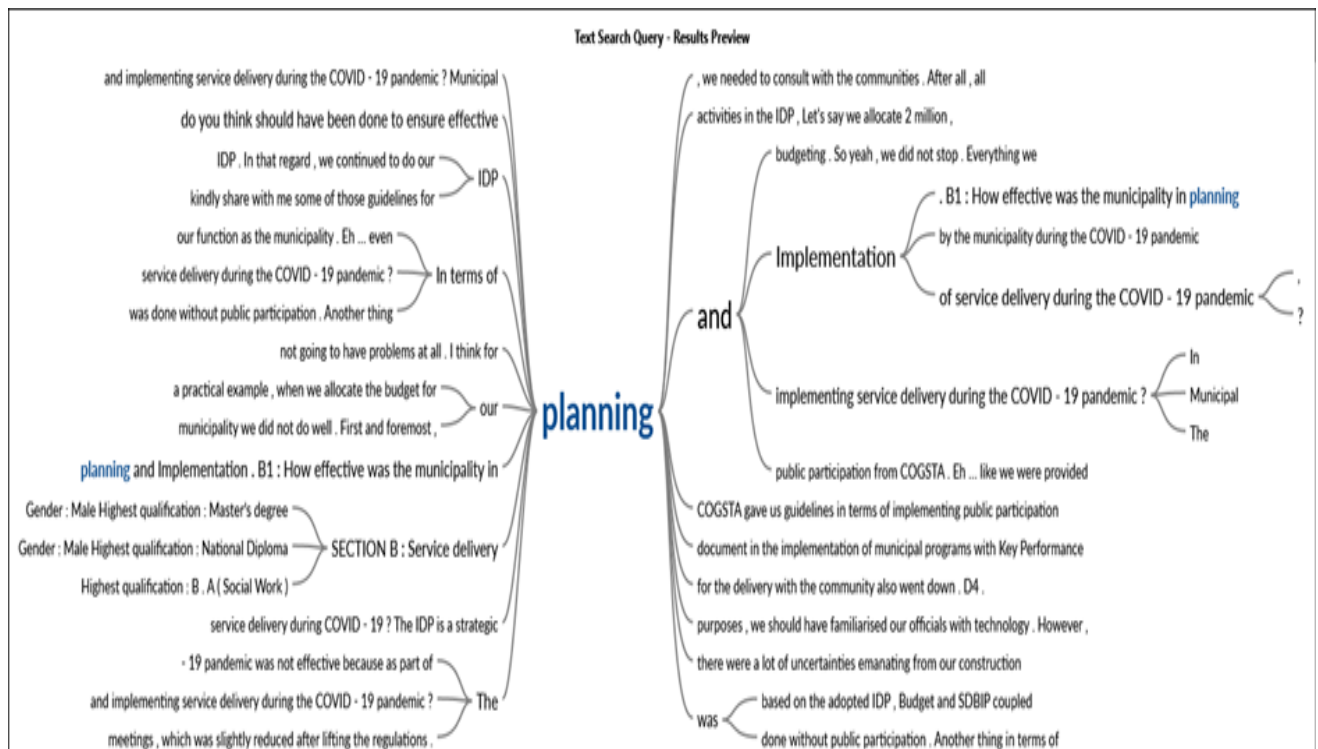
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HUMAN RESOURCE
12 APR 2023
TEL: 015 633 4500 FAX: 015 633 6896
PRIVATE BAG X07, CHUENESPOORT, 0745
LIMPOPO PROVINCE



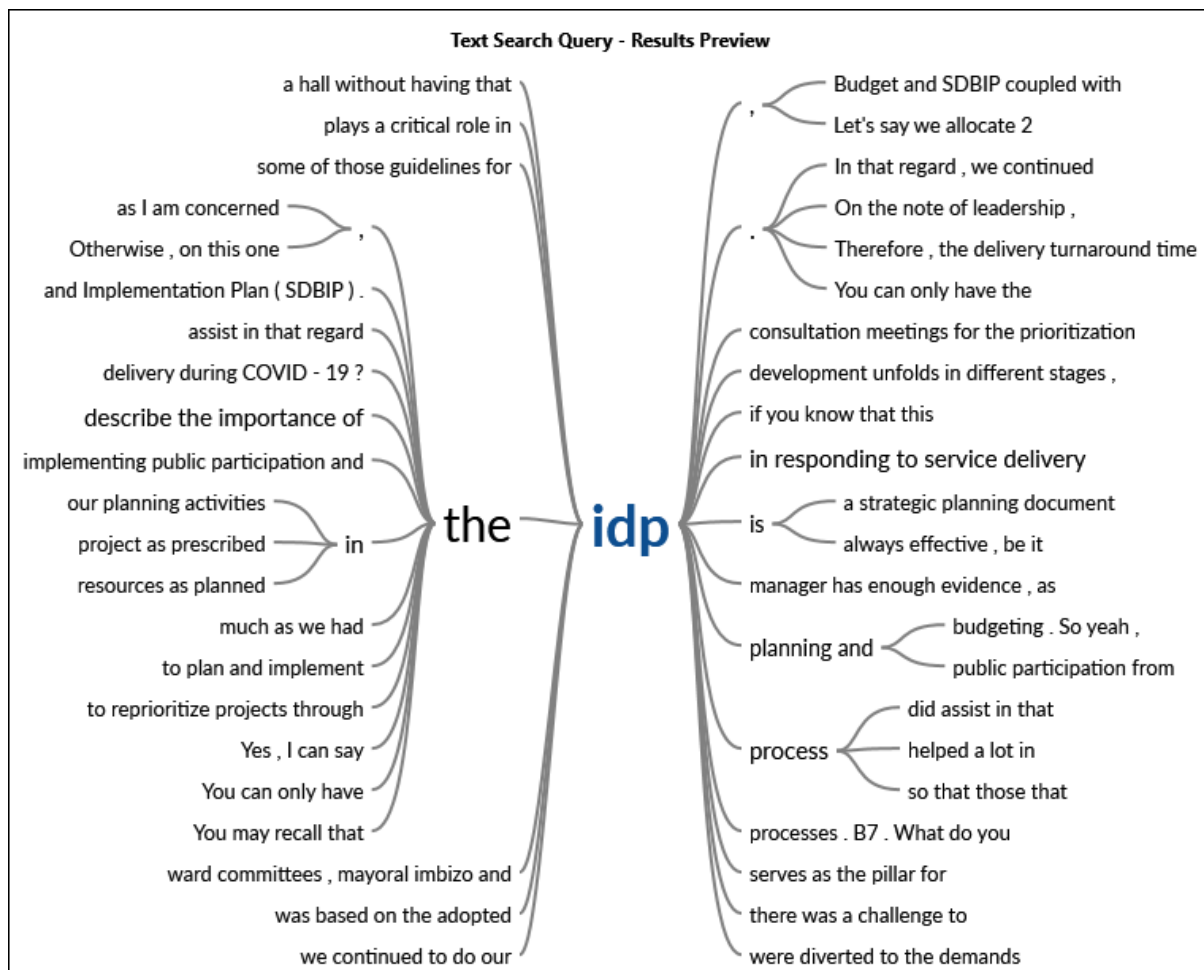
MUNICIPAL CALL CENTRE NUMBER: 0800 222 011

"Motho ke motho ka batho"

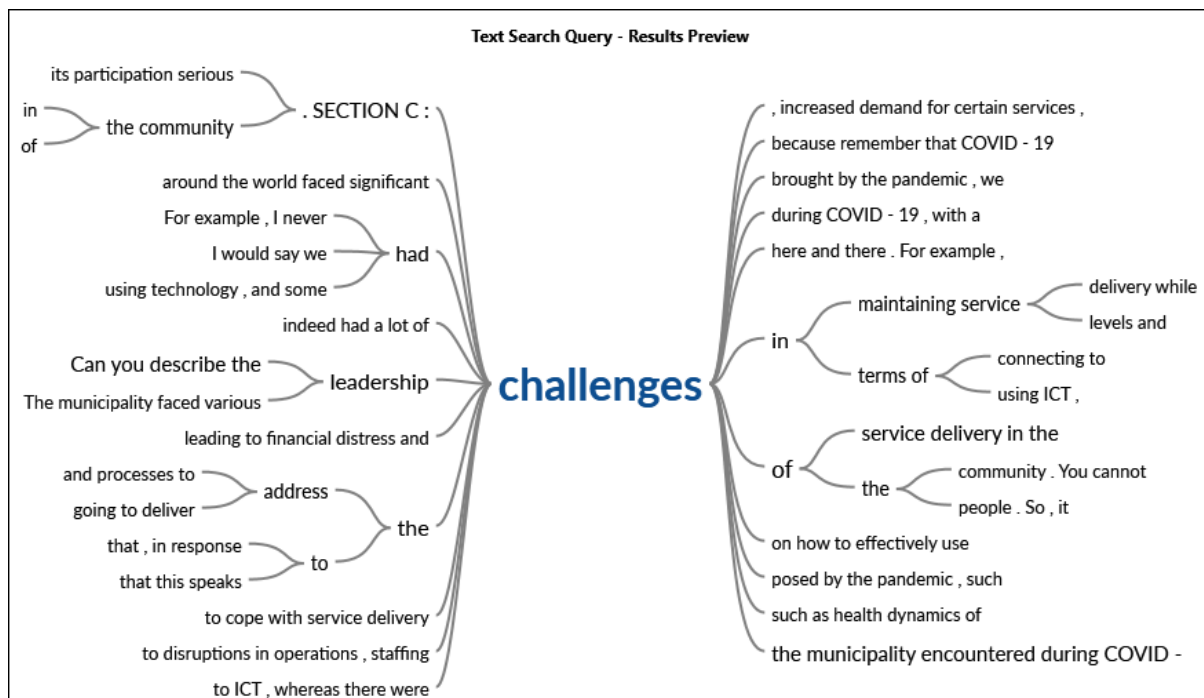
Appendix J: Text Search Query for Planning.



Appendix K: Text Search Query for IDP support for Service Delivery.



Appendix L: Text Search Query for Challenges of Service Delivery.



Appendix M: Language editing certificate.

 For the best version of your written word	Megan Winifred Mance meganmance@outlook.com 081 382 4830 editing proofreading layout
Editing certificate Megan Mance 7A Poinsettia Street Heldervue Somerset West 7130	
To whom it may concern This is to confirm that I, Megan Mance, edited the dissertation IMPLICATIONS OF THE COVID-19 PANDEMIC ON SERVICE DELIVERY: A CASE STUDY OF LEPELLE-NKUMPI LOCAL MUNICIPALITY IN LIMPOPO PROVINCE, SOUTH AFRICA by Makalela, Kagiso Innocent The onus is on the author to attend to the suggested changes. Furthermore, I do not take responsibility for any changes to the document after the fact.  8 December 2025 Megan Mance Date	

Appendix N: Similarity index (report).

Kagiso Makalela

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