



**RURAL-URBAN MIGRATION PATTERNS TO ENHANCE SERVICE DELIVERY
IN KWAZULU-NATAL: ETHEKWINI MUNICIPALITY**

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ABSTRACT

Townships in South Africa were designed and established when apartheid was at its peak. The challenge facing the democratic government in the developmental local sphere of government, is inefficient service provision, due to the continuous increase of local inhabitants, caused by an increased rate of rural-urban migration patterns. Urban planning focuses on city and town design and how the municipality delivers services to communities dwelling within these designed urban spaces. Rural-urban migration is the movement of people from rural to urban areas, with the main reason the pursuit of better opportunities to improve their socio-economic conditions. Therefore, the pull and push factors of rural to urban migration are clearly defined and explained in order to assist the municipal administration and academia to improve urban service delivery. The study adopts a quantitative approach with the sample comprising 350 respondents, purposively selected through non-probability sampling and required to complete a 5-point Likert scale questionnaire. The researcher assisted in terms of questionnaire administration. The completed questionnaire provided the quantitative data for statistical analysis, using SPSS version 28.0.

Study findings indicate that, among other factors, a strong significance exists regarding increased crime levels in urban areas as a result of rural-urban migration patterns, with suggestions that include more money needs to be prioritised from government for policing and crime in cities such as eThekweni Municipality. Since there are more informal settlements because of rural-urban migration, it is also shown as necessary to create networked infrastructure in rural areas to improve communication for those working from home. To identify and explain migration to enhance service delivery at eThekweni Municipality, the study investigated the pull and push factors in migration patterns and their influence on service delivery, as well as examining the extent to which rural-urban migration can be used to deal with the current state of service delivery. In addition, the study determined the role of rural-urban migration in the overpopulation of urban areas at eThekweni Municipality, to suggest and recommend a conceptual framework that should be employed to improve the current state of service delivery in the municipality.

DECLARATION

I, Buyani Nkabinde, declare that, to the best of my knowledge and belief, this is my own, original work, and I acknowledge all sources and accurately reported their use in this dissertation.

BU

DATE

06/03/2024

DEDICATION

I dedicate this research to my family and especially my late grand Mother, Mrs L.F Nkabinde (MaSkhakhane), who was my inspiration and always motivated me to keep on studying. I appreciate the support from my friends who have always believed in me and motivated me about studying.

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ACRONYMS AND ABBREVIATIONS

FIG	International Federation of Surveyors
KMO	Kaiser-Meyer-Olkin
KZN	KwaZulu-Natal
LED	Local Economic Development
MFMA	Municipal Finance management Act of 2003
MIG	Municipal Infrastructure Grant
MSA	Municipal Structures Act of 2000
PFMA	Public Finance management Act of 1999
PLS	Partial least squares
PPP	Public-Private Partnerships
SA	South Africa
SEM	Structural Equation Modelling
SMART	Specific, measurable, achievable, time-bound
SPSS	Statistical Package for Social Sciences
UN	United Nations
UNDESA	United Nations Department of Economic and Social Affairs
WHO	World Health Organisation

CHAPTER ONE

1.1 INTRODUCTION

There were approximately 281 million international migrants in 2020 – 3.6 percent of the global population, according to the World Migration Report (WMR) (2022: 5), with migrants living in countries not their place of origin adding to existing rural-urban migration, leading to the increase of the urban populace (Mubangizi 2021: 181). Putting matters into perspective, the urban population in the world comprised 34 percent of the total in the 1960s and was steadily accumulating, according to studies by the United Nations Department of Economic and Social Affairs (UNDESA) (2015: 7). In 2014, this growth was predicted to increase from 54 to 66 percent by the year 2020 (Niva, Taka and Varis 2019: 34-87).

Rural-urban migration means the movement from rural-urban areas, where urbanisation processes enable these individuals to become permanently situated in the urban areas (Berry, Bowen, and Kjellstrom 2010: 31-123). In this process, the number of migrants living in cities increases beyond the population in the rural areas, leading to growth in urban areas, coupled with natural population growth, which worsens the problem (Liu and Dang 2019: 1-30). An economy is considered urbanised when more than half of the population lives in the urban areas; with the ability to harness the power of rural-urban migration for economic growth and service in municipalities such as the eThekweni municipality, in the province of KwaZulu-Natal (KZN) (Munishi and Jewitt 2019: 216-227).

The rapid increases in rural-urban migration are linked to economic transformation and urbanisation, for example, people mostly migrate for economic reasons, such as education and better jobs; however, should migration be ignored, it can only exacerbate poor service delivery (Eduful and Hooper 2019: 102-029). Moreover, when there is no proper planning, the growth then leads to disadvantages in urban areas that relate to housing allocation and infrastructure, which result in increased informal settlements (Ginsburg *et al.* 2016: 59-73). Nonetheless, there is an existing problem of government being unproductive, while the outputs of services and goods seem to not meet the demands and needs of the community, which lead to poor

service delivery performance (Jacobs, Rivett and Chemisto 2019: 204-226).

1.2 BACKGROUND

The South African government faces a tremendous task in addressing the issues that emerged as a product of imperialist and apartheid eras (Yampolsky and Amiot 2016). These problems stem from historical injustices, namely the displacement of African tribes' resources, ranging from farmland to minerals, including the oppression era's separatist laws, which permitted the State to fixate on certain regions where minorities previously lived (Nkabinde, Lekhanya and Dorasamy 2018: 11-24). As a result of having limited or no prosperity in native lands, alongside long-standing prohibitions on minorities in these native lands (Alexander 2013: 605-619), urbanisation remained possible (Verkuyten 2018: 10).

Following 1994, a fundamental shift with regard to politics took place, along with the modified Constitution in 1996, which enabled a modern and fair government (Agyabeng *et al.* 2022: 242-253). As a consequence of State efforts to address racial inequality (Verkuyten 2018: 10), their desire to expedite development manifested with a record prevalence of city dwellers (Lawanson, Proverbs and Ibrahim 2023 1-16 11-80). This accompanied population growth, due to urbanisation, with individuals leaving their homelands in pursuit of better socio-economic conditions in the city (Kumar, Seay, and Karabenick 2015: 201). The need to migrate results in a flow of people from rural to urban areas, with informal settlements then built by migrants in urban spaces to keep families together. Nonetheless, post-apartheid migratory movement saw municipalities declining to build houses for migrants, as it was usual for migrants to be provided with housing while working (Parnell and Robinson 2012: 593-617).

As migrant numbers increased, the demand exceeded municipal capacity to build houses for these residents (Patel 2016: 2738-2757). However, migrants from rural areas left behind their homes, structurally sound houses in good condition, preferring to live together as families in informal settlements in urban areas, able to respond and take advantage of economic opportunities (Agergaard and Broegger 2016: 71-81). Thus, the demise of apartheid and the regulations that accompanied

it contributed directly to SA's infamous inequality classes, although the transformation had been extensive, particularly with political ingress. However, the country's reintegration into the global community stimulated foreign interest, along with local migration, in respect of sparsely populated migration (Berry *et al.* 2010).

1.3 RESEARCH AIM AND OBJECTIVES

This research aims at studying rural-urban migration patterns to enhance service delivery in the eThekweni Municipality, in the KZN province, where the study objectives will be:

- To identify and explain migration patterns to enhance service delivery in eThekweni Municipality.
- To investigate the pull and push factors in the patterns of migration and its influence on service delivery.
- To examine to what extent rural-urban migration can be used to deal with the current service delivery state.
- To determine the role of rural-urban migration on the overpopulation of urban areas in eThekweni Municipality.
- To suggest and recommend strategies that should be employed to improve the current state of service delivery in the eThekweni municipality local government, related to service delivery.

1.4 RESEARCH QUESTIONS

The following research questions will be asked to address the above objectives:

- How can rural-urban migration be used to enhance service delivery in local government?
- How are pull and push factors influencing the current rate of rural-urban migration?

- How can rural-urban migration be utilised in a manner that will benefit local economic development (LED)?
- What are the perceptions behind rural-urban migration and can they help in understanding the phenomenon?
- What are the strategies to be used by eThekweni Municipality in improving rural-urban migration that affect service delivery?
- What will the study recommend towards improving current rural-urban migration strategies to enhance service delivery in eThekweni Municipality?

1.5 RESEARCH PROBLEM

As per a latest study into municipal urban growth, the eThekweni Municipality 2016/17 Spatial Development Framework reported 276 988 in-migrants in 2001 and 2011, showing marked growth (Govender 2017: 1-100). According to the municipality, this figure grew to 3 414 197 for 2011, yet was expected to rise 3 818 499 for 2021, amid estimates reaching 4,47 million by the year 2030, which indicates an unsettling trend (Musvoto, Lincoln and Hansmann 2016: 187-210). Urbanisation usually impacts resource allocation and the management of public amenities (Hellberg 2014: 226-236). Hence, the research aims to demonstrate a link across rural-urban migration trends and service delivery (Fleischmann and Phalet 2018: 44-61).

Poor service provision protests are found to occur because of the rising populace's constriction over municipalities (Haslam 2016: 1-7). Noteworthy, is that global migration has less impact on local socio-economic constants (Potts 2015: 10-67). To modify the perception on migration of people, policy decisions must be changed (Igarashi 2019: 88–100). It is crucial to highlight that global migration is less impacted, because certain migrants only remain for a short time before returning to their homeland (Jasinskaja-Lahti *et al.* 2019: 10-30).

Competent service provision, however, remains necessary (Posel and Marx 2013: 819-831). To uncover remedies towards this issue, both global and regional

governments must unite (Kurien 2018: 81–98) and work on dedication by public office bearers (Wolman 2019: 321-354). Nonetheless, it is inconceivable that legislators, governmental office bearers and public officials tolerate unproductiveness (Gillette 2019: 11-12), which is confirmed as one of the leading causes of public service delivery protests by society (Steyn and Van Heerden 2011: 167-182).

Public services are rendered within the realm of public administration, described as the world in which government and its institutions function to deliver services (Moore 2018: 263-272). The services rendered are influenced by economic factors such as rural-urban migration and urbanisation (Chigwata, Marumahoko and Madhekeni 2019: 44-67), which affect each other and impact service delivery negatively. Government is responsible for the type of services that can and will be delivered (Marumahoko 2020: 81-95).

1.6 SIGNIFICANCE OF THE STUDY

The research is anticipated to contribute to solutions required in support of both local and national administrations on how rural-urban migration trends may improve service provision for effective good governance. With service provision improving one's life, this study can be used to shape a service distribution framework across urban areas. This will be accomplished by attending local and global symposiums to present the research results. A replica of the research will be preserved within DUT's library for academic and professional interests.

1.7 RESEARCH METHODOLOGY

The research design is a framework that needs to be adhered to when conducting research, since it provides the researcher with relevant procedures needed in attaining information to solve challenges (Muzari, Shava and Shonhiwa 2022: 14-20). A quantitative technique was employed for this investigation with the use of a closed-ended questionnaire, developed from the literature reviewed, in line with the study objectives. This method was useful in assisting the researcher to obtain relevant information regarding the research topic and using the information with the

intention of solving problems (Creswell 2014: 30). Primary data were collected from Silver City informal settlement residents; the settlement is located in the eThekweni City Municipal area.

1.8 TARGET POPULATION

The term population means all members that meet a set of specifications or a specified criterion. A single member of any given population is an element. When only some elements are selected from a population, they are referred to as a sample (Patel and Patel 2019: 48-55). Therefore, this research made use of a sample population from one of the eThekweni Municipality areas, named Silver City informal settlement. This area was developed not more than five years ago, through an accumulation of numerous shacks and is located under Umlazi Township (Langdon 2022:

1-14). The reason for choosing this area is the sudden movement of people from poor areas within SA and abroad (Hove and Dube 2022: 100-108), looking for better living conditions.

1.9 DELIMITATIONS

The study delimitation is that it was specifically confined and limited to the selected eThekweni Metropolitan Municipal area and its residents. The findings could, nevertheless, be generalised to similar areas, since the researcher used a quantitative approach.

1.10 DEFINITION OF TERMS

Service Delivery: can be explained as the distribution of basic resources such as water, sanitation, infrastructure, and housing, as well as land (Brown *et al.* 2023: 606-614).

Government: can be defined as the action of governing in respect of politics and public administration, with aims of serving migrants, since “the government is for the migrants by the migrants” (Carling and Schewel 2018: 945-963).

Municipality: A municipality is a town or a city under a common jurisdiction that also has governing powers under its jurisdiction (Singaravelloo 2023: 196).

Economy: An economy is the large set of inter-related production, consumption, and exchange activities that aid in determining how scarce resources are allocated (Sundararajan, Shkurska and Lin 2023: 15-35). The production, consumption, and distribution of goods and services are used to fulfil the needs of those living and operating within the economy, which is also referred to as an economic system (Southerton and Warde 2023: 339-361).

Patterns: A "[particular](#) way in which something is done, is [organised](#), or [happens](#)," which includes repeated occurrence (Sixtus, Wesche, and Kerschreiter 2019: 486-514).

Migration: The "process of people travelling to a new place to live" temporarily or permanently (Syed and McLean 2016: 109-118).

Rural Areas: A rural area is referred to as a swath of land that is open, with few homes and other buildings, This is because population numbers in rural areas are low, since many people prefer to live in urban areas (Gardiner and Hajek 2020: 124-135).

Urban Areas: Urban areas can be explained as a region surrounding the city (Cea and Costabile 2022: 50). Hence, there is a high number of people living in urban areas with well-developed houses, commercial buildings and infrastructure (Boulding and Wampler 2010: 125-135).

1.11 GENERAL OUTLINE

The presentation of the research is structured as follows:

Chapter one introduced the topic and set out information to its background, statement of the problem, study purpose, and objectives of the research, along with the research questions, the significance of the study, and its limitations and delimitations.

Chapter two presents the literature related to the study topic on rural-urban

migration and urban service delivery, along with the theoretical framework.

Chapter three will focus on the pull and push factors of rural-urban migration and service delivery.

Chapter four sets out and discusses the study's research methodology and design type, in addition to the data collection methods, target population, and sampling, as well as ethical considerations.

Chapter five will deal with presenting the data obtained in the field and its interpretation, as well as a discussion of the findings related to the reviewed literature.

Chapter six puts forward the conclusions, its contributions and any necessary recommendations.

1.12 HYPOTHESES

Hypothesis testing is important to determine the significance, with the following variables tested to identify the association of rural-urban migration and urban service delivery. In this section, the null hypotheses (Ho) and the alternative hypothesis (Ha) are presented:

Ho1: There is no relationship between rural-urban migration and road/transport infrastructure.

Ha1: There is a relationship between rural-urban migration and road/transport infrastructure.

Ho2: There is no relationship between schooling facilities and rural-urban migration.

Ha2: There is a relationship between schooling facilities and rural-urban migration.

Ho3: There is no relationship between rural-urban migration and health facilities in urban areas.

Ha3: There is a relationship between rural-urban migration and health facilities in urban areas.

Ho4: There is no relationship between rural-urban migration and crime/policing in urban areas.

Ha4: There is a relationship between rural-urban migration and crime/policing in urban areas.

Ho5: There is no relationship between electricity supply and rural-urban migration.

Ha5: There is a relationship between electricity supply and rural-urban migration.

Ho6: There is no relationship between rural-urban migration and water/sanitation in urban areas.

Ha6: There is a relationship between rural-urban migration and water/sanitation in urban areas.

Ho7: There is no relationship between social development and rural-urban migration.

Ha7: There is a relationship between social development and rural-urban migration.

Ho8: There is no relationship between rural-urban migration and technology/communication.

Ha8: There is a relationship between rural-urban migration and technology/communication.

Ho9: There is no relationship between rural-urban migration and employment/job creation.

Ha9: There is a relationship between rural-urban migration and employment/job creation.

1.13 CONCLUSION

The main aim of this study was to analyse the impact of rural immigrants on service delivery, focusing on the eThekweni Municipality. The conclusion to the study was informed by a questionnaire, administered to residents living in informal settlements in the eThekweni area. Whereas this chapter set out the objectives, as well as offering a brief outline, the literature review relating to the impact of rural immigrants on service delivery is discussed in chapter two, which will also cover the theoretical framework, rural-urban migration, and service delivery. Push and pull factors will be explained in chapter three.

CHAPTER TWO

LITERATURE REVIEW

2.1 INTRODUCTION

Increased rural-urban migration in SA has attracted the attention of researchers (Leah *et al.* 2017: 254-281; Kanayo, Anjofui and Stiegler 2019: 219), with the increase in population growth (Nkabinde *et al.* 2018: 11-24), projected at a higher rate of growth in urban population numbers by the year 2030, compared to previous years (Ray *et al.* 2020: 443-469; Adesote and Osunkoya 2018: 395). This increase in rural-urban migration raises the country's annual income budget, which calls for extensive research on push and pull factors of rural-urban migration (Ambrus, Mobius, and Szeidl 2014: 149–182; Mbiyozo 2018: 1-36; Fafchamps and El-Hamine 2017: 291-305).

In response to the global phenomenon of urbanisation impacting both people and the environment (Turok 2012: 8; Kersting 2018: 201), this study focuses on rural-urban migration to enhance service delivery in eThekweni Municipality, KZN. On the one hand, eThekweni has an influx of rural-urban migrants that affects urban growth at the destination (Van Hear, Bakewell and Long 2018: 927-944). On the other hand, it increases urban service delivery demands (Barone and Mocetti 2014: 52-66).

Scott, Hall, and Gössling (2016), however, noted climate change is a key driving factor in rural-urban migration, because environmental and socio-economic shocks increase rural household vulnerabilities. Climate change is coupled with displacement in countries with a history of discriminatory segregation, such as apartheid in SA (Boas *et al.* 2019: 901-903). Nevertheless, an inconclusive debate exists on whether the environmental perspective should be at the centre of migration, since there are matters perceived to be more important, for instance, socio-economic, as well as political factors, which affect rural-urban migration (Rafiq, Nielsen and Smyth 2017: 31-44). In addition, several studies on migration had less focus on economic reasons of migration (Black *et al.* 2011: 3-11).

2.2 THEORETICAL FRAMEWORK ON RURAL-URBAN MIGRATION

People engage in internal migration (in-country) or external migration (inter-country) (Ahouga 2021: 1-21; Gardiner and Hajek 2020: 124-135), because of harsh climate conditions, political conflicts, limited access to social amenities and in search of better economic opportunities, among other reasons (Bimrose and McNair 2011: 325-333; Usman *et al.* 2020: 8334-8349). In the context of SA, people practice rural-urban migration mainly due to underdeveloped rural areas imposed by the apartheid regime that favoured urban development at the expense of rural development (Gelb and Krishnan 2018: 1-20; Boulding and Wampler 2010: 125–135). As a result, rural-urban migration leads to overpopulation in urban areas, which chokes service delivery. It also results in poor economic development in rural areas, as the economic and politically active population migrate to urban areas (Nkabinde *et al.* 2018: 11-24; Dago and Barussaud 2021: 308-316) which, evolves around numerous theories.

It is, therefore, important to examine the theories developed by scholars of internal migration in the 1900s. These include the theories of: Lee (1966) - theory of migration; Mabogunje (1970) - migration systems theory; Zelinsky (1971) - mobility transition theory; and the 1990s work of Skeldon on migration transitions, as well as Harris and Todaro (1970) - neo-classical migration theory; Piore (1979) - dual labour-market theory, Stark (1978, 1991) - new economics of labour migration; and, lastly, Massey (1990) - cumulative causation theory in the 90s. It is important to investigate all the theories in full context, to wholly understand the phenomenon of rural-urban migration and its role in population growth and service delivery (Nkabinde *et al.* 2018: 11-25).

Though urbanisation is viewed as an integral part of economic development in developing economies such as SA (Posel and Casale 2011: 195-223), it has created overcrowding in eThekweni city, as it accommodates local rural-urban migrants, refugees, asylum seekers and regional economic migrants (Bonallack 2018: 92-105). This has resulted in the eThekweni Municipality struggling to provide social services efficiently and effectively to its residents. In socio-political spaces, this has created 'social classes' dubbed "us (locals) and them (foreigners)", which is born

from rising insecurities that affect the way migrants are perceived in general (McKinsey 2016: 25-39).

Urbanisation is, furthermore, deemed an integral part of economic development in developing economies such as SA (Posel and Casale 2011: 195-223). Globally, there have been calls for support mechanisms on migration by civil society, particularly rural-urban, with rising concerns crippling the cities. As such, SA needs a legal policy framework that regulates rural-urban migration (Machinya 2020: 96-112).

Rural-urban migration results in imbalances in both source and destination communities. For example, it may lead to health personnel leaving rural areas and small cities, negatively impacting rural area hospital capacity (Labonté *et al.* 2015: 1-16). It follows this reduces resources, for example, health personnel; subsequent capability problems in rural areas, small towns and cities need to be determined to find solutions that negate the impact (Missinne and Bracke 2012: 97–109; Mohamed and Abdul-Talib 2020: 231-246).

2.3 TYPES OF MIGRATION

There is an ongoing debate that places international immigration at the centre of population increases around the world, despite this, research suggests otherwise, estimating international migrants at only 272 million (2.8 percent) of international populaces (Stricker 2019: 469-485; Narsai *et al.* 2013: 367-385). Extant literature implicates rural-urban migration to be at least four times more responsible for the increase of the population in developing economies, compared to international migration (Nkabinde *et al.* 2018: 11-24; Abramitzky, Boustan, & Connor 2020). As of the early 1920s, internal migration was pegged at 763 million internal migrants globally, a value equivalent to 11.7 percent of prevailing international populaces (Coulter 2023: 21-51). Developing countries are still undergoing urbanisation; therefore, they are more affected by rural-urban migration, compared to developed countries (Brueckner and Lall 2015: 13-99; Ingram, Yue and Rao 2010: 53–92; Bryan and Morten 2019: 22-68).

Urban-urban migration is common in urbanised countries in Latin America and the East, compared to developing economies (Lucas 2016: 190; Özden *et al.* 2011: 12–56; Cattaneo and Robinson 2020: 2335). There are two types of migration, namely temporary and permanent (Stiegler and Bouchard 2020: 695-698; Breakfast, Bradshaw and Nomarwayi 2019: 106-126). Thus, urban space overcrowding and lack of opportunities account for 51 percent male and 32 percent female rural-urban migrants that will eventually return to rural areas. This might be through retirement or buying a home and the decision to permanently settle in rural areas (Crawley and Skleparis 2018: 48-64).

Rural-urban Migration: Researchers concur people migrate for improved benefits, not only for themselves but their families left behind in rural areas (Dercon, Krishnan, and Krutikova 2013: 1676-1693). According to Mulholland and Hernández-Julián (2019: 65-87), most households consist of highly educated adult migrants who relocate to urban areas where there are broad opportunities, in comparison to rural areas. This is because migrating to seek better paying jobs yields more money compared to remaining in the rural areas, where one would fully depend on farming (Nguyen, Raabe and Grote 2015: 79-93).

Urban to rural (urban-rural) Migration: According to the World Bank (2015), the urban population is increasing at a higher rate globally, but this is more prevalent in developing economies. Hence, there is a need for strategies in dealing with rural-urban migration. One such possibility is the establishment of economic hubs to accommodate migrants while growing the economy (Rocklöv and Sjödin 2020: 38). When managed well, this strategy can increase economic activity that can lead to growth (Benson and O'Reilly 2016: 20-37)

Rural-rural migration is motivated by economic desire to seek better jobs (Asamoah-Gyadu 2015: 189–192), particularly in the agriculture sector. Migration is, nonetheless, sometimes motivated by arid or harsh climates not conducive to farming and decent human survival (Rivera-Pagán 2013: 31–51).

Urban-urban migration happens when people migrate from urban areas to other urban areas (McDonald, Farnworth and Clements 2018: 258). This does not have

any impact on reducing the population in urban areas, with this type of migration only good for economic growth (Rhoads 2018: 278-305). These are common both in developed and developing countries (Yang and Dunford 2018: 11-21).

2.4 RELEVANT THEORIES OF MIGRATION

2.4.1 Social migration Theory

The COVID 19 pandemic brought challenges in all industrial sectors in SA, with the public sector having to introduce drastic measures to deal with the spread of the virus, which included placing the nation on disaster alert and implementing e-governance in all departments (Suresh, James and RSj 2020: 633-643; Bansak, Simpson and Zavodny 2020: 1-470). With social distancing in effect, people had limited access to services because government workers were forced to work from home. Despite the services being provided online, the larger population remained without access due to the digital divide in SA (McDonald *et al.* 2018: 258).

The tourism sector was also heavily affected by the pandemic, resulting in the closure of major businesses (Cobbinah and Chinyamurindi 2018: 1-8; Gössling, Scott and Hall 2020: 1-20). In response, the department of Tourism and Leisure developed an alleviative budget to cushion and restart tourism businesses (Fisher and Lewin 2018: 1055-1070; Sigala 2020: 312-321). The situation was exacerbated by rural-urban migrants who increased the demand for all services at a difficult time (Mlambo 2018: 22-27; Femenia-Serra and Gretzel 2020: 65-78). Added to this, is the existing perception that rural-urban migrants bring crime to urban areas, which is unfounded, as the true reason for their presence is quite the opposite, that is, they migrate for better economic opportunities (Szabo 2018: 256-257; Gray, Montresor and Wright 2020: 103-345).

Local authority capacity is dictated by rate paying residents within its jurisdiction, as a result, an increase in residents burdens the service delivery system (Baker and Phillips 2019: 177-196). According to a Ratings Afrika report (Businessstech 2022), municipal failure is set to force the South African government to financially intervene, thereby negatively impacting on taxpayers.

South African local municipalities have poor financial management systems. For example, the Auditor General (AG) stated that quality financials for audit purposes were submitted by 28 percent of municipalities in 2021, with a mere 11 percent that received unqualified audits. There were qualified audits in the provinces of the Free State and Northwest, while only five percent of municipalities are financially stable, with 64 percent shown to be dysfunctional, because of poor governance and financial management; weak institutional capacity and political instability, as well as corruption (Businessstech 2022: 1). In view of the foregoing, rural-urban migration is shown to be disrupting municipal operations. Therefore, innovative measures must be adopted to accommodate the ever-increasing urban population (Sibanda and Stanton 2022: 484-500).

Rural-urban migration does not only increase the population but burdens the services provided by the municipality (Nkosi *et al.* 2019: 1-8). Subsequently, municipalities fail to meet service demands, with those who live in informal settlements illegally connecting to water and electricity, at the expense of those who are paying (Abel 2019: 915-953). According to the Municipal Finance Management Act (MFMA) of 2003, municipalities must generate their own revenue, but this increased population due to rural-urban migrants, demands more than it gives in urban cities (Khalo 2013: 579-593). There have always been service delivery protests related to the delivery of services due to an increased population resulting from rural-urban migration (Mamokhere 2020: 20-49).

2.4.2 Economic migration theory

Research on migration in developing economies is limited and often revolves around economic theories, with rural economies pushing migrants to urban areas (Beine and Parsons 2015: 723-767). To determine the theoretical framework on rural-urban migration, both challenges and needs of rural and urban areas have to be examined, as this will identify conventional drivers of rural-urban migration and common development needs (Mthiyane, Wissink and Chiwawa 2022: 9). Therefore, the common needs are illustrated (Fig. 1). The working group of the International Federation of Surveyors (FIG) identified factors and delineating solutions for

specific, measurable, achievable, time-bound “SMART” rural development, to minimise the gap between urban and rural areas, with their focus on “rural-urban relations and their dependencies to foster smart and sustainable spatial developments in the urban-rural continuum” (Mthiyane *et al.* 2022: 9).

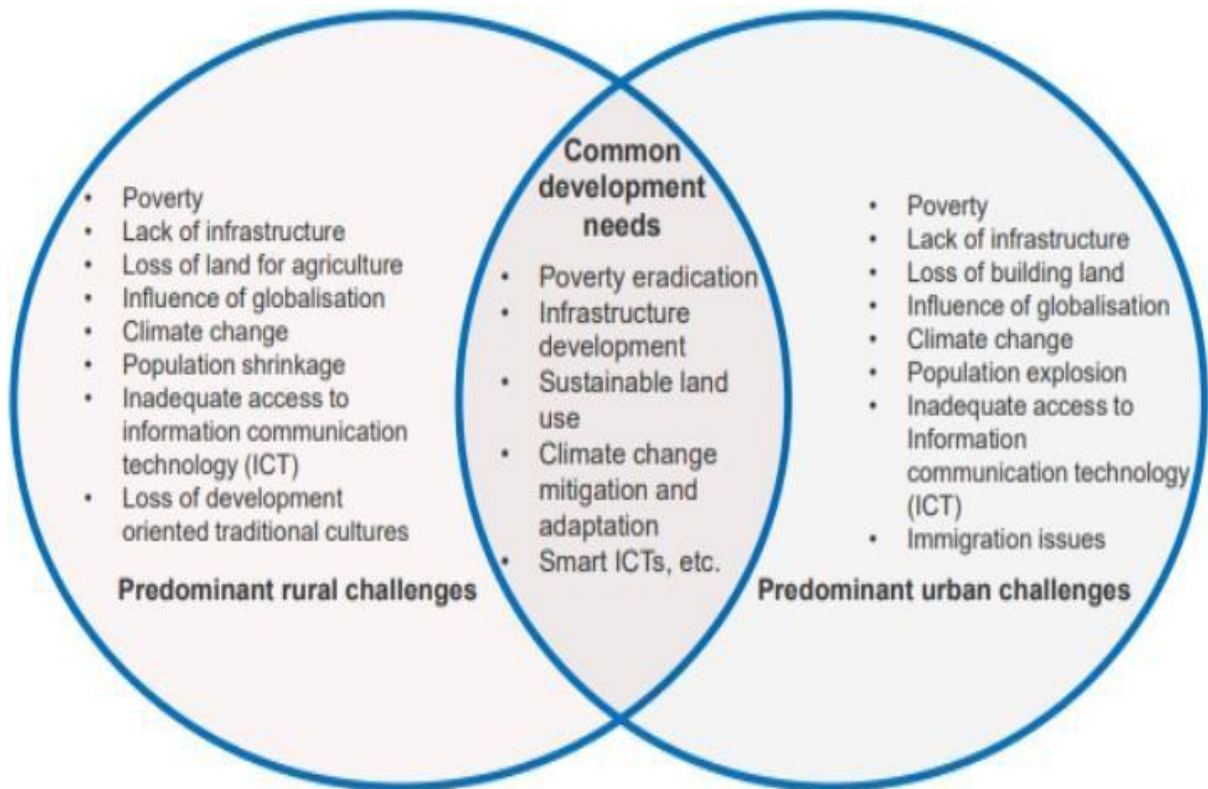


Figure 2.1: Challenges and common needs of rural and urban areas

Source: Mthiyane *et al.* (2022: 9)

Extensive research on environmental drivers of migration exists (McLeman 2019: 911-918; Gröger and Zylberberg 2016: 123-53). However, there are inconclusive debates on how economic issues are playing a pivotal role as a driver of internal migration, with economic theory investigated by researchers proving to be of significance with regard to rural-urban migration (Hunter *et al.* 2012: 1-43). A body of literature additionally indicates climate change can be problematic in the extreme for the poor in rural areas (Simini *et al.* 2012: 96-100).

Poverty is a trap for some households, confining them to rural areas, while some

households with better means see it as a motivating factor to migrate to urban spaces (Carling and Collins 2018: 909-926). Moreover, lack of economic opportunities pushes individuals from rural to urban areas, because rural areas have dysfunctional municipalities that cannot stimulate growth in rural areas (Koubi *et al.* 2016: 197-210). This leads to an increase of migrants from rural areas (Neumann *et al.* 2015: 118). Hence, the provincial accommodation departments have engaged over concerns in acquiring service suppliers, both contractors and project managers, to practically deal with the immediate delivery of houses (Lekonyane and Disoloane 2013: 57-71). On the one hand, rural-urban migration promotes, economic development in SA, because most migrants become entrepreneurs, while on the other hand, it strains service delivery (Lekhanya 2018: 40-45).

2.4.3 Political migration theory

A holistic review displays a long political history where native people were allocated less economic land (Mulcahy and Kollamparambil 2016: 13-71). Thus, there is need to view rural-urban migration with regard to service delivery theories (Cornwell and Inder 2004; Davies, Mosca and Frattini 2010). In addition, assumptions regarding the role of urban and rural areas and their relationship are implicit in almost all development theories (Allen 2010: 23-311). The rural-urban migrants are, furthermore, attracted by political participation in urban areas, particularly by the municipalities of these areas (World Bank 2015: 20-240). This is because urban municipalities have more public funds than rural municipalities (Taylor and Castelhana 2016: 525-541). Moreover, this is caused by more revenue opportunities in municipalities in urban areas than rural municipalities, which also means more political positions in urban areas (Lembani *et al.* 2020: 70-84). Correspondingly, political instability can motivate people based in rural areas to migrate to urban areas in search of a more politically stable environment (Makwetu 2017: 10-20).

The 'two sector model' developed by Harris and Todaro in the 1970s, commonly referred to as the Harris-Todaro economic model, which encompasses rural-urban migration, is used in development economics as an economic illustration of migrants' decisions on expected income differentials between rural (agriculture) and

urban (manufacturing) areas. The purpose of the model is to explain the critical urban unemployment problem in developing countries. The key hypothesis of the Harris-Todaro model is that “economic incentives, earnings differentials, and the probability of getting a job at the destination have influence on the migration decision. Therefore, rural-urban migration will occur when the urban expected wage exceeds the rural obtained wage” (Harris and Todaro 1970: 126-142).

2.4.4 Demographic migration theory

Although internal migration is a well-known and studied factor of rural-urban migration, the SA government has paid less attention to monitoring and controlling rural-urban migration, which has led to overcrowding in urban spaces (Aaronson, Davis and Schulze 2020: 101-317). For example, high increases in COVID-19 hotspots were in townships, due to the overcrowding in urban spaces that, in turn, affects the health of those living in these spaces (Abramitzky *et al.* 2020: 27-72). Rural migrants in urban areas demanding services does occur, however, this should be planned for, since both natural and unnatural growth of populations take place in urban areas due to birth and rural-urban migration (Abramitzky and Boustan 2017: 131-145).

Rural-urban migration is common among native South Africans, with a low number of immigrants from other African countries (Ager and Hansen 2017: 6-20). A migration spike of highly educated immigrants from other African countries in search of economic and entrepreneurship opportunities was, nonetheless, noted (Tjaden, Auer and Laczko 2019: 36-57; Eriksson and Ward 2020: 103-593). The cities have become congested and overcrowded, which has created a breeding ground for crime and diseases (Langa and Kiguwa 2016: 75-85; Ndinda and Ndhlovu 2016: 131-146). Thus, developing strategies to deal with the flow of rural-urban migration has become crucial. For example, developing a system designed to register both permanent and temporary internal migration, (Ataç and Rosenberger 2019: 1-10). This can be used to control and redirect the flow of rural-urban migration to urban-rural migration, without prejudice (Kalir, Achermann and Rosset 2019: 5-16).

SA has a dark past of racism and segregation that needs to be understood and

considered when dealing with migration. Even though there was the democratic dispensation in 1994, the damage and effects of apartheid in SA remain visible to date (Maphumulo and Bhengu 2019: 1-9). Over the years, a mix of Indian, White and Coloured citizens were resident in urban areas, while native South Africans migrated from rural-urban areas (Misago 2019: 646-646). The need exists for proper urban planning, since most populations of the world live in urban areas, where there are better economic opportunities and amenities (Porru *et al.* 2020: 88-97). However, the concentrated populace tends to increase the already high production and consumption levels, escalating to becoming a risk factor in KZN (Ronchi, Salata and Arcidiacono 2020: 102-459).

2.5 RURAL-URBAN MIGRATION GLOBAL PATTERNS AND THEIR IMPACT ON SERVICE DELIVERY IN URBAN AREAS

Evidence exists that people migrate with economic intentions in mind, such as the pursuit of a job opportunity or entrepreneurial opportunities available in urban spaces (Carson, Carson and Eimermann 2018: 183-198). Hence, the costs associated with migrating place a monetary value on the process of relocating (Huang, Dijst and Van Weesep 2017: 816-840). Government ought to focus all development efforts on rural economies to strike a balance between rural-urban and service delivery demands (Bryan and Morten 2019: 22-68; Rhoads 2018: 278-305). Most governments focus on developing urban economies, turning them into economic hubs but research shows this slows down economic growth (Morten and Oliveira 2016: 43; Yang and Dunford 2018: 11-21). Development of rural areas reduces overcrowding of urban areas (Fafchamps and Shilpi 2013: 388-409).

Migration is also common when people migrate to areas where there are people who share both their language and ethnic background (Tabellini 2020: 454-486; Bryan and Morten 2019: 2229-2268). This is due to migrants integrating better where there are ethnic groups similar to theirs (Artmann, Inostroza and Fan 2019: 3-9). Studying of networks in migration is important, particularly the implications of rural-urban migration in urban areas (Tjaden *et al.* 2019: 36-57; Détang-Dessendre, Partridge and Piguet 2016: 89-103). This can assist in understanding migration with

respect to destinations, as well as migration outcomes, development, and improving service delivery (Azose and Raftery 2019: 116-122). When people migrate from rural areas, labour in rural areas becomes scarce (Helbling and Leblang 2019: 248-269). High wages in urban areas are a pull factor attracting migrants to urban areas, increasing the rural-urban migration (Hankaew *et al.* 2019: 164-746).

SA is home to an extensive population, as it is one of the most urbanised parts of Africa (Zimmer *et al.* 2020: 2501-2516; Makinde 2014: 49-69). Existing governance issues also need to be considered, since it is necessary to put rural-urban migration on the government agenda (Phago 2020: 181-199; Liu, Zuo and Dong 2021: 42-99). New policy reforms in the southern African region have taken migration into consideration, however, there is less focus on urban planning (Wellmann *et al.* 2020: 103-921). In this regard, the way forward is to provide grounds for these changes and how these changes are going to affect urban spaces in SA (Ronchi *et al.* 2020: 102-459; Lagakos 2020: 92-174).

2.6 THE STATE OF RURAL-URBAN MIGRATION AND ITS IMPACT ON SERVICE DELIVERY IN SA

The increase of rural-urban migration brings challenges to the government, with most municipalities lacking clean water and electricity, which causes delays in service delivery to the community in SA (Weiberg *et al.* 2019: 1-20). There is a need to develop rural areas to help municipalities build and create job opportunities in rural areas to provide the municipality responsible in that area an opportunity to render services and curb rural-urban migration (Weimann and Oni 2019: 36-80).

Rural-urban migration is responsible for the increase in informal settlements in urban areas, with these settlements having long been an issue requiring government attention to ensure the safety of the community (Prior and Eriksen 2013: 1575-1586). While there has been improvement in settling informal settlements, the problem is that numbers increase day-by-day due to rural-urban migration (Mayer and Rouleau 2013: 1-9). An immediate need exists for local government to expand land projects in urban areas because of the never-ending population hike (Nielsen-Pincus, Ribe, and Johnson 2015: 1-12).

The issue of land remains a challenge, because part of the land is owned by Chiefs, and other stakeholders, apart from what the government owns (Petrzelka and Armstrong 2015: 303-312). The government is working to ensure 100 percent ownership of the land, to facilitate equal distribution to deserving communities (Ghebru and Okumo 2017: 5). LED is necessary, as urbanisation is closely linked to it (Cox *et al.* 2018: 72-80; Mamokhere 2019: 1-7). Rural-urban migration is also driven by the demand and supply of labour where economic development and growth are concerned, to the extent that temporal and permanent migration is gradually affecting coastal provinces (Qi 2019: 273-183; Wise, Perić, and Đurkin 2019: 107-128).

2.7 ECONOMIC CONTRIBUTION OF RURAL-URBAN MIGRATION IN KZN

The economic impact of rural-urban migration is a phenomenon that needs to be explored in its entirety due to its significance in productivity and growth in the entire economic spectrum in KZN (Tanrikulu 2021: 364-377; Day, Cornell and Malherbe 2021: 245-262). This includes positive aspects in terms of entrepreneurial migrants from rural areas who bring business to urban areas that contributes to LED and creates jobs within eThekweni Municipality (Henderson and Kriticos 2018: 287-314; Lekhanya 2018: 40-45).

The need for structural transformation is obvious in urban areas because rural-urban migration provides the necessary labour in all sectors including agriculture (Henderson, Nigmatulina and Kriticos 2019: 103-188; Ngcamu 2019: 9). Within eThekweni municipality, educated migrants are prominent in creating job competition and other urban migrants are entrepreneurs (Henderson and Kriticos 2018: 287-314; Breakfast, Nomarwayi, and Bradshaw 2020: 14-71). The rural municipalities are short-changed in the process because they find it difficult to sustain development in rural areas with limited labour (Henderson and Turner 2020: 150-73; Masuku and Jili 2019: 19-35).

Evidence of increases in urban employment has been attributed to increases in rural migrants (Strobl and Valfort 2013: 385-412), because there are higher earnings in urban than in rural areas (Piyapromdee 2021: 406-453). Unlike in developing

countries, salaries in developed countries are balanced for both rural and urban employees, thereby reducing the need for migration (Duranton and Puga 2020: 3-26; Cetin 2019: 1237-1249; El Badaoui, Strobl and Walsh 2017: 147-177). Other studies report little to no impact on hourly wages of workers in urban areas of eThekweni municipality (Kleemans and Magruder 2018: 20-65).

The rural areas become deficient of human capital to reach its potential (Monras 2019: 853-904). This points to the need to balance the flow of migrants in both rural-urban and urban-rural migration to ensure balance in salaries and the distribution of jobs created in rural KZN (Lyu and Chen 2019: 19-87). Comprehending the importance of migrants' contributions to the economy is equally important, particularly where educated migrants are concerned (Dustmann and Glitz 2011: 327-439; Njwambe, Cocks and Vetter 2019: 413-431).

2.8 URBANISATION IN SA

Since the democratic dispensation replaced the previous regime in SA in 1994 (Brøgger 2019: 97-105), many people have been relocating to urban areas, where they previously had limited admission and could only stay in homelands (Korsi 2022: 71-87). With overall urbanisation growth rising dramatically over the years, the accompanying challenges include, amongst others, the lack of attention to informal settlements in relation to sewerage, potable water, bad water drainage, as well as power supply (Bovo 2020: 23-32; Francis 2019: 20-232).

Some serious ecological influences in various low-cost housing sector settings are also found. For example, groundwater pollution strongly related to the lack of good hygiene facilities in several informal settlements, as well as disturbance of fragile environments, such as estuarine or wetland areas (Feola *et al.* 2019: 145-157). The low-cost housing sector is populated by under privileged people with comparatively miniscule energy and water usage. As a result, the sector's general ecological footprint remains big; due to fixture-driven changes in the country's urban civic alterations, in terms of townships and more organised societies (Scheitle and Guthrie 2019: 96-111; Onitsuka and Hoshino 2018: 123-136).

Underprivileged societies have “an insignificant distal ecological impact, counter to that of more prosperous societies” (Mandeli 2019: 102-409). However, Nweke (2019: 76) asserts cost constraints are evidenced by numerous families still utilising dangerous fuel, such as wood and paraffin, as opposed to electricity. Obviously, it is the urban poor straining the urban energy supply in urban informal settlements (Awasthi 2021: 102-965; Salemink, Strijker and Bosworth 2017: 360-371). It is imperative to note urbanisation is a result of rural-urban migration flow (Mubangizi 2021: 181). Arfanuzzaman and Dahiya (2019: 725-744) further affirm the growing African elite community has exacerbated environmental concerns, owing to their respective lifestyles through non-ecological cars and business habits, as the rural-urban migration flows increases.

A perception exists that major developing cities are over-crowded with sub-standard housing provision (Singh A 2019: 301-319). This is also linked to inadequate urban sanitation facilities, because of high levels of rural-urban migration. Nwanegbo (2019: 129-156) and Bryan and Morten (2019: 2229-2268) report when expectations are not met, they are not satisfactory to the beneficiaries. Research has shown cities have problems and there are more complexities in urban spaces, to the extent that they are vibrant and diverse in nature, while also being unique (Agergaard *et al.* 2019: 2-11).

Another challenge resulting from the high population growth in large cities, is the social-economic problems in respect of residences and the work environment (Hatala *et al.* 2019: 122-130). Most people receive an acceptable income and high levels of education recorded in urban spaces, leading to considerable standards of living.

The principles of sustainability, equity, accountability, and community empowerment, as well as participation, and efficiency, are pivotal in terms of good governance and critical to meet the needs of the community and ensure its adequate development (Kowalczyk, Kil, and Kurowska 2019: 26-34). Regardless of whether social and purely economic conditions have any influence as a driver of migration (Meng 2019: 77-107), it needs to be understood more than one driver acts as a force that enhances the migration processes (Francis 2019: 20-232). Thus, these drivers

frequently shape and motivate the decision to migrate to better conditions (Van Hear, Bakewell and Long 2012: 3-35).

2.9 INTERNATIONAL PERSPECTIVE ON RURAL-URBAN MIGRATION

The urban population upsurge is a global factor that is becoming a burden on local government and municipalities with restricted resources (Cheng, Jia and Meng 2022: 294-308). For example, in SA, the increase of migrant settlements among the poor and African people with a marginal income, living in shanty towns distant from jobs and public service stations (Eckert, Turner and Sallah 2019: 99-83).

The World Bank (2013: 40-240) raised ecological concerns regarding urbanisation, which exposes the timeless unsustainability of these settlements in SA (Dame *et al.* 2019: 189-199; Munshi and Rosenzweig 2016: 46-98). Nevertheless, to avoid wasteful competition amongst South African cities, partnerships with civil societies are necessary (Chen, J. and Wang 2019: 372-389). However, the increase in metropolitan land ownership includes former farming land, tribal land, and other urban zones, which increased the population under municipal authority as a result of rural-urban migration (Najera *et al.* 2019:1-7).

Additionally, SA has a comparatively high level of growth and a role as the economic capital of Africa (Jiang *et al.* 2019: 24-32; Monras 2020: 3017-3089). While the housing policy in SA is favoured by the market-lead method, it nevertheless excludes growth of expensive interior city land (Mueller *et al.* 2019: 181-206). This is contrary to elsewhere in Africa, where urbanisation is connected to enormous development (Chan and Wei 2019: 422-454). Moreover, the present universal rationale on urban policy in multilateral institutions, such as the United Nations (UN 2011), is echoed in South African urban policy and highlights the importance of municipal local administrations (Young 2013: 17-85; Tombe and Zhu 2019: 1843-72; Heise and Porzio 2019: 898; De La Roca and Puga 2017: 106-142). In this regard, the directives and tasks of cities have rapidly increased, with the new concern for accommodation being one of the more significant of these novel roles for cities in SA (Mishra 2019: 11-33).

Regrettably, cities also face approaching insolvency due to lack of payment by traditional municipalities, for which novel, ground-breaking, subsidy solutions are required (Levi and Sacks 2009: 311-333). The contextual document to these challenges was discussed at the World Urban Forum, held in June 2006, for cities in SA, in the provisioning of services for growing urban populaces (Ordor and Michell 2022: 153-171). Bankrolling basic town service areas, particularly water supply and hygiene, is a difficult endeavour for sustainable urbanisation (Porru *et al.* 2020: 88-97; Neely and Ponshunmugam 2019: 214-221). In addition, incremental change planning is required from the local government as town inhabitants occupy space and services; despite this, the municipality has no capacity to match the demands (Gaisie, Kim and Han 2019: 102-398; Salam *et al.* 2020: 612-622).

With constrained fiscal aptitudes, self-sourced income by municipalities is required to capitalise on economic growth, which is important for local economic growth (Rana and Parves 2011: 237-256). The cities and local administration will gradually find their future in new corporations with national and provincial spheres of administration locally; in worldwide capital marketplaces; as in bilateral and multilateral monetary organisations (Delazeri, Da Cunha and Oliveira 2021: 1-21). Research, in respect of analysing citizen movements and rebellion against service delivery dissatisfaction, show high levels of activism and a collective voice for the need of improved service delivery; this is happening around the world (Ingram *et al.* 2010: 53–92).

Service delivery is not immune to the enormous global cycles that intensified with the ascendancy of neo-libertarian globalism, market efficiency and increasing poverty and inequality, particularly for former colonies such as SA (Stuurman 2019: 325-333; Nkalu *et al.* 2019: 1247-1261). Moreover, the environment is unstable for development which only lead to public unrest on the issues of service delivery (Breakfast and Phago 2019: 45-62; Demirag and Khadaroo 2011: 271-296; Mlambo 2018: 67; Hellberg 2014: 226-236). All areas of governance are affected by migration and there are trails and limitations on the part of government which includes financial constraints (Dahiya and Das 2020: 3-36).

2.10 CONCLUSION

To conclude, this chapter presented the literature reviewed, offering a theoretical framework, and reviewed other theories related to the study which focused on rural-urban migration and service delivery. Chapter three will set out the pull and push factors influencing rural-urban migration

CHAPTER THREE

PUSH AND PULL FACTORS INFLUENCING RURAL-URBAN MIGRATION IN KWAZULU-NATAL

3.1 INTRODUCTION

Urbanisation and rural-urban migration have been implicated in overpopulation, overcrowding, increasing informal settlement, and service delivery protests in SA (Dewar and Kiepiel 2012: 30-35; Visagie and Turok 2021: 50-62). This has caused South African municipalities to become the epicentre of service delivery protests as service delivery demands increase (Ngcamu 2019: 9; Vearey, Hui and Wickramage 2020: 49-212). Therefore, a need exists for the government to develop strategies to curb the migratory flow (Nauman *et al.* 2015: 233-257; Rogerson and Rogerson 2021: 1-21). The government of SA can, for instance, build economic hubs to accommodate rural migrants, while growing the economy (Collinson 2010: 50-80; Matsui and Raymer 2020: 210-231). Furthermore, development of rural services will curb rural-urban migration (Parshotam 2018: 6-11).

It was noted a larger proportion of women participate in rural-urban migration, and the labour market (Boustan, Fishback and Kantor 2010: 719-746). According to Anglewicz, Kidman and Madhavan (2019: 112-389), the increased labour market participation is partly attributed to women becoming less interested in child bearing and housewife roles. Though this phenomenon reduces population on a natural basis, it is not significant enough to reduce the population and rural-urban migration (Şantaş, Erigüç and Eryurt 2019: 519-528; Visagie and Turok 2021: 50-62).

Urban and rural areas are also found to differ due to demographic dissimilarities and political, economic characteristics (Cetin 2019: 12-49). In addition, a substantial difference in migration transformation from rural-urban has been identified, with the municipality having recognised these changes; therefore, adjustments are made and planned (Li, Westlund and Liu 2019: 135-143). Municipal planning is, however, not static and bound to change daily, due to the increase of people migrating from rural to urban areas (Njwambe *et al.* 2019: 413-431). The focus is on the reasons motivating migrants to move, as well as costs from rural-urban migration (Bryan and

Morten 2019: 22-68), which affect urban planning in city municipalities when they have to provide accommodation for the additional population (Wise *et al.* 2019: 107-128).

Effects of rural-urban migration needs recognition, since migration touches SA municipalities and provinces in diverse ways (Hall *et al.* 2013: 47–70). Thus, the new population in urban areas as a result of rural-urban migration is vulnerable to political manipulation, leaving migrants disgruntled, which leads to service delivery protests (Strasser *et al.* 2019: 52-76).

The rapid growth of urban population comes with many challenges of sustainable development and growth, which affect service delivery efficiency for the populations in the municipality (Sharpley 2020: 1932-1946; Akdede and Giovanis 2020: 1-33). Thus, municipalities such as eThekweni municipality are providing housing, since they are capable to do so as metropolitan municipalities with enough financial capacity to deliver houses, although backlogs remain (Zhang and Xie 2019: 153; Umar *et al.* 2020: 1678-1688). An exploration of housing provision finds both public and private contractors involved (De Guimarães *et al.* 2020: 119-926). Furthermore, there is a need for effectiveness, efficiency and economic advantage in the delivery of such services to the community, since this is any administration's responsibility (Filgueiras, Flávio and Palotti 2019: 195-219; Niva *et al.* 2019: 34-87).

The post-apartheid innate service provision backlogs of SA administration are enormous (Masuku and Jili 2019: 1935; Cattaneo *et al.* 2019: 189-206). There is scarcity and hopelessness in cities, coupled with slow pace development and poor service delivery, which often lead to service delivery protests (Rana *et al.* 2019: 7-9; Baker and Phillips 2019: 177-196). SA as a former colony, is dealing with the effects of neo-liberal policies, market volatility and increasing inequality, as well as poverty, exacerbated by global trends (Hellberg 2014: 226-236). The eThekweni municipality is, furthermore, at the front of service delivery, since it is often the first contact between the public and elected government (Harrison and Todes 2015: 148–162). Moreover, municipalities are created to deliver services to the community (Todes *et al.* 2010: 414–420).

In the setting of ordinary lives, local government is “the sole level of administration that has the responsibility of service delivery and disaster management at the same time” (Rogerson 2019: 974-992). Municipalities depend on the revenue collected from local communities to deliver service (Legoabe and Worku 2019: 181-198). This adds to the burden for local authority, since they have to deliver service to their population and well as new population as a result of rural-urban migration flow (Landau 2012: 213-232). Often, there is misunderstanding with regard to the scope of the municipalities, since all service delivery protests are always directed at municipalities (Mathebula and Sebola 2019: 113-131; Van Deursen and Van Dijk 2019: 354-375). Thus, some problems emanate from poor intergovernmental relations from all spheres of government (Mlambo 2019: 207-224).

3.2 PULL FACTORS IN URBAN AREAS

Government decentralisation plays a major role in ensuring all decentralised regions maintain public participation in communities, which then attracts migrants from rural areas (Sandham, Chabalala and Spaling 2019: 150). In the urban areas, it is easy to work for the government or become an entrepreneur. When this happens, the government and the communities benefit from rural-urban migration (Daudu and Fagbadebo 2019: 233-250; Dube, Mnguni and Tschudin 2021: 2). Pull factors attract migrants to urban areas, which increases the population in urban areas (Bratton 2012: 516-527). Economically, both the community and entrepreneurs will gain, and the economy of the urban areas will improve, creating more job opportunities (Mubangizi 2021: 181).

Another huge influence on the country’s economy is politics and decisions based on self-interests; for example, a politician can use the unemployment rate to campaign and build core houses that will accommodate more migrants (Lyu *et al.* 2019: 1-12). A strategy is necessary to balance migration effects, obliging the government to plan, with due consideration for unforeseen circumstances (Hall and Posel 2019: 1-2). Financial constraints pressure people and force them to migrate to better places that offer better opportunities (Munshi and Rosenzweig 2016: 46-98; Morten 2019: 1-46).

As cities become overcrowded, this results in environmental hazards such as increased litter, resulting in the risks of flooding due to inefficient drainage. This has an overall impact on public health (Jokisch *et al.* 2019: 12-60). The scale of recent pushes around a global health governance agenda are impressive. These include global consultations on migration and health (Morrice, Shan and Sprung 2017: 129-135), as well as World Health Assembly Resolutions calling for improved responses to migration and health (Hanefeld *et al.* 2017: 23-58). There was also a Commission on Migration and Health and, most recently, the development of a Global Action Plan on the Health of Refugees and Migrants that examined issues of overpopulation in urban areas around the world (Vearey, Modisenyane and Hunter-Adams 2017: 89-98).

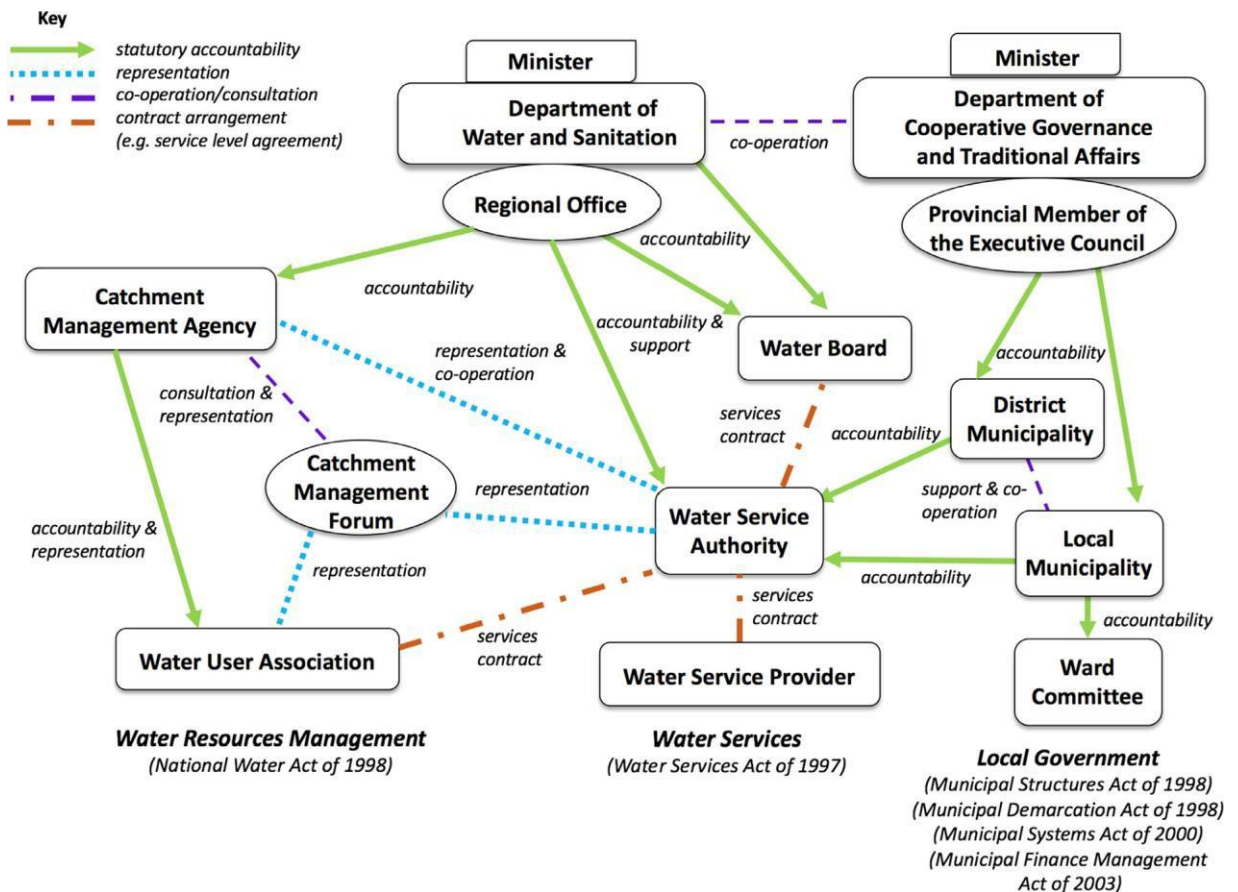
Pull factors have the potential to create overcrowding in urban areas, potentially creating more problems should it not be checked (Ware *et al.* 2019: 157-166; McCreesh *et al.* 2021: 1-11). The need exists for government to align development and migration (Ngcamu 2019: 9), because of the rapid increase in the population living under the poverty line in over-populated informal settlements, characterised by poor sanitation and inadequate basic services (Govender and Reddy 2019: 83-102; Mbandlwa and Mishi 2020: 1).

3.2.1 Water supply as a pull factor

Rural migrants are attracted by better water supply in urban areas (Biljohn and Lues 2019: 143-158; De Juan and Wegner 2019: 31-58; Jedwab *et al.* 2021: 105629). Civil society institutions are often seen as mediators between the community and the government (Khambule, Nomdo and Siswana 2019: 51), which is why government has a key role to play in the realisation of the rural-urban migration impact on service delivery (Msenge and Nzewi 2021: 10). However, there is less focus on the effects rural-urban migration has on the service delivery legislative framework, including the country's constitution (Klug 2010: 99-100). In addition, the canopy of informal settlements places more demand on the water supply in the urban areas (Mamokhere 2020: 20-49).

There is a notable rise of illegal water connection in informal settlements, adding to water demands in urban areas, far beyond what the municipality and rate payers planned for (Gasela 2021: 11; Poku-Boansi *et al.* 2020: 102-220). Government, therefore, needs to intervene and reduce the unnecessary water demand in urban areas (Kotze 2020: 1-7; Xie *et al.* 2020: 1-11), as progress in water supply expansion in rural areas is slow, making it more interesting to migrate to urban spaces, where there is proper water supply (Dirwai, Senzanje and Mudhara 2019: 127-146). Some focus on infrastructure development exists, in terms of roads and bridges, regarding urban expansion and integration of the peripheries to fast-track the urbanisation process in SA (Weaver *et al.* 2019: 1-13). The following diagram (Fig. 2.1) depicts SA's water systems arrangements and structures.

Figure 3.1: Depiction of intergovernmental relationships with all role players



in water supply

Source: Clifford-Holmes et al. (2016: 998-1014)

This illustration also covers the levels of superiority and subordination with the

relevant legislative framework in respect of governance in water. Due to climate change, water is becoming a scarce resource and rural-urban migration seemingly worsens the already problematic situation in urban areas (Brent *et al.* 2017: 657-670).

3.2.2 Electricity supply as a pull factor

Developing economies face a major challenge of rapid urbanisation caused by high volumes of rural-urban migrants (Iderawumi and Abiodun 2019: 7-12). In SA, the rural electrification programme has not progressed significantly to be able to curb rural-urban migration (Nathaniel *et al.* 2019: 27168-27179; Stark *et al.* 2020: 5251-5263). Hence, there is little to no electricity supply in rural areas and this motivates migrants to look for better places in urban areas (Détang-Dessendre *et al.* 2016: 89-103).

Although high population numbers may be good for the economy, there is also an increase in electricity demand that increases the odds of loadshedding (Liu *et al.* 2021: 42-99). Loadshedding is created by the breakdowns in power stations due to the demand created by the growing population in urban areas, in addition to cable thefts, which affect generation capacity (Bairoliya and Miller 2020: 103-615). The overburdening of the electricity supply system is reflected by unaccounted electricity units in the informal settlements, where illegal connections are prominent (Bohlmann *et al.* 2019: 830-837; Chopra 2020: 103-124). There is also a need to adapt very quickly in an ever-changing industrial environment, with added demand for electricity in urban areas caused by both industrialisation and the growing impact of rural-urban migration (Nweke 2019: 76; Baker and Phillips 2019: 177-196).

A need exists for proper urban planning and expansion that will incorporate the informal settlement population into the urban population, which will be beneficial economically (Alene 2022: 23-311; Racki, Patel and DeGroot 2014: 15-34). Incorporation of informal settlements into urban areas, furthermore, needs to consider the inevitable increase in the urban electricity demand, which must be coupled with infrastructural development to avoid load-shedding (Kroth, Larcinese and Wehner 2016: 774-791), since load-shedding is borne out of a higher demand

for electricity than the available infrastructure can provide (Nkabinde *et al.* 2018; Celemín 2015: 551-552).

Results from a report by Ratings Afrika (Businessstech 2022: 1), described municipalities as “on the brink of collapse”, indicating that of the eight major metropolitan municipalities in SA, six require critical government intervention, because they are financially unsustainable. The report describes the situation as

“... a death spiral, rampant corruption and mismanagement at many municipalities resulting in lack of funds and increasingly poor service delivery, the latter of which reinforces a culture of non-payment of municipal rates and service fees which, in turn, exacerbates the financial deterioration of the municipalities and further affects service delivery” (Businessstech 2022: 1).

The Ratings Afrika group annually tracks and assesses 100 local municipalities and eight metro councils, to determine their financial sustainability, with latest findings showing not only a deterioration in the country’s municipal sector over the last year, but also the state of collapse (Businessstech 2022: 1). In addition, Ndevu and Muller (2018: 1-11) highlight the failure by many municipalities to meet constituents’ basic needs, including the provision of suitable housing access, along with water, electricity, and sanitation.

Although politics in the administrative offices have a huge influence in enhancing new ideas and trends, this should not affect the municipality’s readiness to deliver and serve the community at large, in terms of housing and shelter (Ndevu and Muller 2018: 1-11; Safarik, Ursini and Wood 2016: 30-39). For the municipality to provide services fairly to the community, all citizens are obliged to adhere to rules and regulations set by the municipality regarding payment for electricity bills, mortgages, rates, and levies. Nonetheless, this is not achievable, because of mushrooming and ever-increasing informal settlements, exacerbated by all forms of migration, creating a bad municipal image (Dlamini and Reddy 2018: 1-24; Oranje, van Huyssteen, and Maritz 2020: 102-487). Therefore, those adhering to set rules perceive the municipality as not treating the community fairly, with some residents that stop paying for services; resulting in strikes, harmful protests, and infrastructure damage

(Mudau *et al.* 2020: 1-18).

The municipality faces intense pressure, such as the costs to rebuild houses and other resources burnt and damaged in protest (Masocha and Fatoki 2018: 1-16). Furthermore, adequately trained human capital is critical in the municipality to be able to deal with protests, strikes, and corruption (Hendriks 2018: 757-774; Everatt and Ebrahim 2020: 281-298). Inevitably, some of these efforts to curb migration and health constructively and progressively have been stymied by the slow government response (Serge Kubanza and Simatele 2020: 175-188).

Moreover, commercial water users such as farmers, mining and industry, and other well-resourced organisations, leave the voices of most of the population, particularly the poor, largely unheard (Lemanski 2020: 589-605; Weimann and Oni 2019: 8-36). SA is experiencing what has often been described as “the largest migration in human history”, which increases water demand in urban areas such as in the eThekweni Municipality; during the Apartheid regime, movement of most of the population was restricted through the oppressive Group Areas Act and Influx control policies (Zuma 2013: 17).

3.2.3 Crime and policing as a pull factor

The investigation of the relationship between rural-urban migration and increasing crime rates in urban areas has gained traction around the world (Kollamparambil 2020: 672-691). The rural migrant population in urban areas is shown to be made up of youths, often with skills and qualifications, who migrate with the aim of gaining better opportunities in urban areas (Clack 2018: 40-59). Singh C (2019: 6-14) suggests rural-urban migration increases the crime statistics in urban areas. This increase is coupled with little to no law enforcement response (Anderson and Silva 2020: 102-193), while there is better response from law enforcement in urban than in rural areas (Lagakos 2020: 92-174).

Another strand of literature suggests rural-urban migration has little to no impact on the crime rate (Clack 2019: 11-12). Hence, better policing in urban areas is a pull factor for rural migrants, because, with less of a police presence, crime is high in

rural areas with regard to stock theft (Mamokhere 2019: 1-7; Donaldson, Marais and Nel 2020: 121-137). Better facilities and access to police stations seem to attract migrants to urban areas as a measure of safety and better access to security facilities (Narsai *et al.* 2013: 367-385; Iderawumi and Abiodun 2019: 7-12).

Rural municipalities are resource constrained, because they depend on local residents for revenue. These local residents are incapacitated and instead, look to the municipality and the government for support (Olutola 2012: 17-30). Rural-urban migration exacerbates this, as rural migrants leave their home municipalities (Omodan, Dube and Tsotetsi 2019: 1-17) in search of opportunities in major cities.

While rural municipalities depend on grants from the government (Lagakos 2020: 92-174), urban municipalities receive revenue from different rates and taxes (Mulcahy and Kollamparambil 2016: 13-57). This has pros and cons for urban municipalities, because while rural-urban migrants might bring more revenue, they also burden the municipality with unemployment, increased crime, and a strain on municipal services (Varkey and Manasi 2019: 96-111). As such, there is an increase in cash-in-transit robberies, street mugging, armed robbery, and murder in urban areas, with an established relationship between unemployment, poverty, and crime in urban areas (Breetzke 2018; Nguyen, Dang and Liu 2019: 31-66). It is important to understand that challenges accompanying rural-urban migration affect individuals and communities (Monras 2020: 3017-3089).

3.2.4 Municipal resources as a pull factor

Rural municipalities lack various resources, including vehicles, employees, and infrastructure, which tend to motivate rural-urban migrants to leave their places for urban municipal areas (Piguet 2010: 517-524; Stites 2020: 32-55). Though urban municipalities have more infrastructure and employees to render service to the community, pressure arises with follow-up work that, at times, leads to the municipality failing to meet community needs (Delpont 2015: 219; Kakwagh 2019: 86-91).

Municipalities not only deal with the needs of the community, but also with skills

development programmes (Laczko and Piguet 2014: 1-20). Most urban municipalities, particularly those near the coastline, have several seasonal jobs that attract rural migrants to urban spaces and permanent jobs for skilled migrants (Imbert and Papp 2015: 233-63; Chen, H. and Wang 2019: 136-143). This is due to the financial resources urban areas offer because of urban municipal capacity (Guizardi 2019: 1-9; Lagakos *et al.* 2020: 138-154).

This, in turn, helps the municipality to grow financially through new rate payers (Simpson *et al.* 2019: 257-276). Entrepreneurs born from rural-urban migration may become successful business migrants (MacManus 2019: 145-183), which generates added revenue for financially disadvantaged urban municipalities (Liu 2019: 367-381). However, there is a need to balance rural-urban and urban-rural migration to enable rural municipalities to gain capacity to self-maintain and deliver services (Oranje *et al.* 2020: 102-487).

Apart from better opportunities, migration is motivated by better infrastructure and amenities, as well as pursuit of better living conditions (Bedasso and Jaupart 2020: 1). It is important for municipalities in cities to capitalise on the opportunities that come with rural-urban migration (Hendriks 2020: 159). The economic growth associated with rural-urban migration is beneficial when well-managed (Iqbal, Peng and Hafeez 2020: 307-318).

3.2.5 Schooling and education as a pull factor

Rural-urban migrants are mostly motivated by education and schooling pulling migrants from rural areas to urban areas (Yu *et al.* 2019: 3-27). Hence, the urbanisation is 33.6 percent driven by rapid population, with rural-urban migration at 55.3 percent in the year 2020, which was expected to grow fast over the years, with rural migrants choosing urban schools over rural schools (Ratha *et al.* 2019: 1-8). Thus, there is more overcrowding in urban than in rural area schools (Bakker, Parsons and Rauch 2020: 509-532). Furthermore, there is an alarming prediction of 68 percent growth in the year 2050 (Boluk, Cavaliere, and Higgins-Desbiolles 2019: 847-868). Nonetheless, although migrant numbers for the period 2000-2010 increased around the world, it is important to note education has always been part

of rural-urban migration patterns and a major element of urban new populations (Zanker and Moyo 2020: 100-112).

3.2.6 Roads and transportation pull factor

Rapid urbanisation in developing economies in the 21st century is characterised by rural-urban migration, which increases the need for urban planning (Jedwab and Storeygard 2022: 1-38; Williams *et al.* 2019: 157-176) to cope with the overcrowding in urban areas. As a result of natural increases and rural-urban migration, there is increased demand for proper infrastructure, in terms of the development of roads (Alarima 2018: 34-39; Nikuze *et al.* 2019: 38-47).

South African cities have seen a major increase in urban population due to rural-urban migration trends that have increased both demand and supply of transportation services (Duda, Fasse and Grote 2018: 785-798). The increase has created competition in the transport industry, which is beset by violence due to rivalry within the traditional taxi industry (Ross and Townshend 2018: 329-339; Benfica, Cunguara, and Thurlow 2019: 91-100). In addition, many rural-urban migrants have businesses in urban areas, making urban roads more congested (Musvoto *et al.* 2016: 187-210; Mubangizi 2021: 181). Coupled with the lack of urban road maintenance by urban municipalities, this leaves the condition of transport infrastructure in a state of severe neglect (Bikam and Chakwizira 2021: 8-25).

Damaged roads are a major contributor to road accidents in urban areas (Wang *et al.* 2019: 34884-34895). Another contributor in the slow recovery pace of the roads, is the contractors offered the opportunities seemingly do not deliver quality road recovery (Koubi *et al.* 2016: 197-210; Mishra 2019: 1115-1133). The roads in urban areas play a key role in economic development by ensuring the urban population participates in the urban economy (Sewell *et al.* 2019; Bhattarai and Budd 2019).

A major demand for urban expansion exists by incorporating some peripheries into urban cities, through the creation of major roads connecting all these areas with local economic benefit (Nyawo and Mashau 2019: 12-53), since road development typically benefits both the economy and the government (Bhattarai and Budd 2019:

327-341). This is a contractual relationship between government and an organisation in the private sector, where the organisation performs the functions of service delivery on behalf of the government authority that offered the tender for the service, while ensuring risks are also transferred (Docquier and Rapoport 2012: 681–730).

3.2.7 Public Private Partnerships (PPPs)

PPPs can contribute to economic growth and redistribution of wealth while creating jobs for rural-urban migrants (Fjellstrom and Frick 2020: 76-95). Moreover, the government can also contract with companies through these partnerships and assist in the redirection of rural-urban migration into urban-rural migration (Tshombe *et al.* 2020: 152-163). In addition, urbanisation and urban planning done well can also assist in managing deforestation in both urban and rural areas (Muzzini and Aparicio 2013; Bakrania 2015; Nathaniel *et al.* 2019: 27168-27179). By providing a proper register of permanent and temporal internal migrants, these PPPs can help in creating proper mechanisms to deal with the rural-urban migrant flow, which will contribute to enhanced service delivery (Tacoli, McGranahan and Satterthwaite 2015: 1-36; Xiao *et al.* 2022: 1-30).

In rural-urban migration, public private companies are instructed to, for instance, build roads in cities and rural areas. These roads are used connecting rural areas and cities (Reddy 2017: 251; Pheiffer 2021: 113-785). While there is good progress with these partnerships, problems arise when the partnership experiences delays in the building of roads due to corruption (Parnell and Robinson 2012: 593-617; Pietrelli and Scaramozzino 2019: 525-547), or when land is inherited falsely, and when tenders are acquired through corrupt means (Sandham *et al.* 2019: 150).

The positive effect of PPPs is the pace of dedication, because shareholders are involved in the day-to-day routines of work and meetings related to duty-of-work (Martiniello *et al.* 2020: 3625). The community is also involved in plans made for their environment and their input conveys how they wish to be assisted. Involving the community allows the organisation to remain informed regarding community demands, enabling assistance to help overcome challenges faced by the community

(Parnell and Robinson 2012: 593-617; Dolla and Laishram 2020: 567-584). Moreover, surveys are done to keep record of work to be done, the location, and how many migrants are to be involved in the daily routine of the job (Filippova *et al.* 2020: 602–611).

3.2.8 Government grants as a pull factor

Most migrants living in informal settlements do not practice family planning. Hence, they bear many children and survive on government grants. The apparent effects of rural-urban migrants on grants have been evident through the increasing demand for grants in urban areas (Sun 2018: 577-583). This increased demand over the years has slowed down the service pace. Queues are longer and staff members working with grants are subjected to fatigue (Geyer, Ngidi and Mans 2018: 58-69).

Although uncontrolled child-bearing increases population and the grants budget, it boosts business from an entrepreneurial perspective, because some individuals re-invest their grant money into small businesses (Gollin, Lagakos, and Waugh 2014: 939-993). However, the increased demand in urban areas escalates the number of cash-in-transit vehicles, which heightens the risk of heists of the vehicles in urban areas (Seekings 2020: 455). In addition, cash in-transit heists and the robbery of post offices in urban areas have also intensified, due to more cash in circulation, because of the social distress grants distributed from postal offices (Parnell and Robinson 2012: 593-617; Zikhali 2021: 17-54).

There are delays in the distribution of grants in rural areas, since most resources are often reserved for urban areas, due to the grants and accompanying security demands (Morrison *et al.* 2017: 133-145). Urban economies, furthermore, flourish more than rural economies, since rural-urban trends increase the consumption in urban areas (Patel 2016: 2738-2757; Schnitzler 2020: 432-448).

3.2.9 Job opportunities as a pull factor

The rural-urban migration trend has both a negative and a positive impact on unemployment in urban areas (Patel 2016: 2738-2757). On the negative side, it

creates fierce competition in urban areas for jobs (Agergaard and Broegger 2016: 71-81; Zizzamia 2020: 104-938). On the positive side, the influx of rural migrants in urban areas creates a bigger labour pool, with some rural area migrants educated and skilled, which helps the urban economy (Anderson and Silva 2020: 102-193). Another detrimental result of the urban overpopulation is that some migrants tend to commit crime in urban areas due to lack of economic opportunities (Mueller, Gray and Hopping 2020: 102-183). Likewise, lack of opportunities increases homelessness, fuels the scourge of drug abuse and other types of crime such as street muggings; these situations increase crime in urban areas (Gwanshak, Yusoff and Shafie 2021: 51-98).

Rural-urban migration trends contribute significantly to the increase of urban informal settlements, which leads to issues of health that reduce life expectancy in the urban areas (Tambi and Njuh 2020: 16-29). However, urban statistics are not truly reflective of urban unemployment, since there is another large population of rural migrants working in the informal sector, either by using hand skills or starting different kinds of business (Imbert and Papp 2020: 102-473). This points to the need for proper urban plans to facilitate economic growth in urban areas, as well as urban expansion and service delivery (Shackleton, Drescher and Schlesinger 2020: 1-14).

3.2.10 Higher urban incomes as a pull factor

The issue of urban planning must not be ignored to accommodate the increasing number of migrants migrating to cities (Khadduri *et al.* 2012: 1-150). Developing rural economies is another strategy that can be implemented to reduce rural-urban migration (Giles and Mu 2018: 521-544). There has been an inconclusive debate on the role of income and wage differences as pull factors for migrants from rural to urban areas (Lall, Selod and Shalizi 2006: 3915). Rural-urban migration contributes to local market differences, because companies prefer rural migrants over urban citizens (Njwambe *et al.* 2019: 413-431), due to the perception of rural migrants being more dedicated to their work (Imbert and Papp 2020b: 927-963; Mukumbang, Ambe, and Adebisi 2020: 1-7).

Improved access to urban amenities can also motivate rural-urban migration (Jain

and Korzhenevych 2019: 103588; Shilpi, Sangraula and Li 2014: 927-963). For example, proximity to electricity and tarred roads improves access to markets, cities, hospitals and other service areas required by migrants. As a result, migrants tend to move to areas where there are developed roads and access to electricity, however, despite this, the rate of development of services such as electricity are slower than the rate at which migrants are using it. This places a strain on supply and maintenance of power stations in SA (Fu and Gabriel 2012: 473-484; De Juan and Wegner 2019: 31-58).

The government, regrettably, does not pay attention to issues related to population increase, rural-urban migration, urbanisation, and service delivery (Ubisi, Khumalo and Nealer 2019: 13-55). This lack of focus on urban expansion to accommodate the incoming population leads to an increased demand for services in urban areas (Mamaile 2020: 160-168). Service delivery protests mostly emanate from informal settlements because the processes of government housing ownership are slow (Fowler *et al.* 2019: 465-486).

An inclusive debate exists on whether migration has a positive or negative impact on urbanisation. Some researchers argue it affects economic benefits, while others argue migration leads to overpopulation (Mubangizi 2021: 181). Nevertheless, rural-urban migration in KZN only leads to an increase in informal settlements, exacerbating the already problematic overpopulation in urban spaces in SA (Cockx *et al.* 2019: 1-51).

This problem is enhanced by the need for migrants to reproduce their social positions and who they are in the new environment (Biswas, Kabir and Khan 2019: 593-614; Sigala 2020: 312-321). Moreover, there has been an increase in the rate of rural-urban migration over the years (Gallemore, Munroe and van Berkel 2018: 141-152). The canopy of informal settlements in urban spaces seems to increase the already heavy burden for the government, with land grabs on the rise (Posel and Marx 2013: 819-831). In addition, climate change issues threaten informal settlements in urban spaces, with soil erosion that leads to a high demand for houses to be delivered to the community (Chmura *et al.* 2011: 1121-1142), while urban fires are also claiming lives in informal settlements (Twigg *et al.* 2017: 139).

Moreover, LED is hindered by ever-increasing informal settlements (Drummond and Loveland 2010: 286-298).

Rural-urban migration is growing at a rapid pace, and it has an impact on service delivery in SA (Nkabinde *et al* 2018: 50). Land grabs have become prevalent in SA, particularly when the owners are not known (Petrzelka and Armstrong 2015: 303-312). Proper urban planning can be beneficial for the development of local economies, which enhances economic growth (Sagor *et al.* 2014: 15-22). The government should thus develop semi peri-urban areas to ease the burden of urban planning in cities (Parkes *et al.* 2019: 22) as is with developed economies. Extant research on migration had little focus on rural-urban and their role in either improving or delaying economic growth and increasing service delivery demand (Drummond and Loveland 2010; Eimermann 2015; Haugen, Karlsson and Westin 2016).

3.2.11 Housing provision as a pull factor.

Receivers of government-subsidised houses are taken from the human settlement lists (Phiri 2020: 1-114). While possession of a new formal house is an enhancement in living conditions (Igarashi 2019: 88-100), the housing backlog in urban areas is severe, and the government is struggling to meet community needs (Olojede, Agbola and Samuel 2019: 162-183). Most migrants live in informal settlements, because the government is unable to meet migrant housing and service needs (Osunsanmi *et al.* 2018: 147-156). With the government's image painted negatively, disgruntled community members go as far as starting strikes in their impatience for feedback of their needs being met (Mamokhere 2019: 373-377). While there are procedures to be followed for rendering service to the community, as well as record-keeping, and feedback to communities and stakeholders (Maluleke, Dlamini and Rakololo 2019: 139-176), proper housing promotes access to economic opportunities for rural-urban migrants (Marutlulle 2019: 1-12).

Proper planning is the main priority in the municipality; however, planning is difficult in low-income settlements as most environments that have been informally settled are not suitable for habitation. As a result, construction costs are increased, because the land has to be prepared and improved to be habitable before building houses

(Smit 2020: 1-3). Further complications to planning include backyard dwellings that are a fire risk in urban settlement, as the dwellers use open fires for cooking and lighting (Shapurjee and Charlton 2013: 653-666).

These incidents force the municipality to restructure their plan for new community housing (Shoniwa and Thebe 2020: 533-547). In addition, there is a major need for urban expansion in terms of integrating the peripheries, which includes all less developed spaces near urban areas (Venter *et al.* 2020: 103-889). Where service delivery is concerned, this has proven to increase service delivery protests, since municipalities cannot meet *all* demands in a timely manner (Moschetto, Ribeiro and De Freitas 2021: 105-418).

The Housing Act in SA affirms the Bill of Rights and policies of state regarding prioritisation of citizen needs (Chakwizira 2019: 71-88), ensure implementation in a sustainable, integrated way on a consultation basis of empowerment and good governance, in terms of equity, for adequate use of resources, as well as adherence to the principles for land development. The problem is these policies are not adhered to and there is rampant corruption (Lewis, Nguyen and Hendrawan 2020: 101-910).

Legislative provisions in both the national and provincial government spheres are in place to ensure accountability and transparency in procurement, prescribed by the PFMA of 1999; Treasury regulation 16 of 2004; the MFMA of 2003; and the Municipal Systems Act (MSA) of 2000. These policies are important in housing programme implementation (Drolc and Keiser 2021: 773-789; Anderson and Silva 2020: 102-193). The upgrading of the informal settlements programme was done on the grounds of the Housing Act, as well as the country's constitution (Smit 2020: 1-3). The Breaking New Ground programme, aimed at supplying a subsidy to municipalities for advancement of informal settlements, through better admittance to amenities and safety of tenure (Denoon-Stevens and Nel 2020: 104-708), is based on endorsing informal settlement eradication and includes the incorporation of informal settlements into the wider urban fabric, to overcome spatial, social and economic exclusion (Muzondi 2014: 641). Nevertheless, the upgrading of housing delivery, water facilities and other forms of service delivery remains a priority (Mashamaite 2014: 231).

3.3 PUSH FACTORS OF RURAL-URBAN MIGRATION

Rural-urban migration push factors are situations and events that motivate migrants to migrate from one place to another (Bakewell, De Haas and Kubal 2012: 413-437), in this case; from rural to urban areas. Push factors are factors that leave the victim with no choice but to move, even though they would have preferred to stay, for example, political violence in rural areas, climate change and persistent drought, among others (Munshi and Rosenzweig 2016: 46-98). Understanding the importance of push factors in relation to rural-urban migration is crucial (Singh A 2019: 81-107) and these are discussed in the following section.

3.3.1 Economic push factors

Urbanisation and rural-urban migration are inter-related and intricately linked to socio economic changes (Kandpal *et al.* 2018: 463-469). The urbanisation processes, when well-managed, can bear the fruits of economic growth (Breakfast *et al.* 2019: 106-126). However, the rapid growth in the urban population in developing economies calls for government interventions using local authorities (Chigwata, O'Donovan and Powell 2017: 2). In SA, rural-urban migration is high due to apartheid laws and a quest for better economic opportunities (Long and Crisp 2010: 56). However, amongst pursued economic opportunities, jobs being sought, education and entrepreneurship are priorities (Cetin 2019: 1237-1249). There is, furthermore, an inconclusive debate in the policy development space, whether the redirection of rural-urban migration into urban-rural migration can reduce the flow and improve rural areas in terms of development (Klug 2010: 99-100).

Another aspect requiring consideration is that agricultural production is what comes to mind when we speak of rural development in developing countries, while there are other forms of production in rural areas of developed countries, such as textile production and more (Njwambe *et al.* 2019: 413-431). Furthermore, informal settlements mushrooming in urban areas are damaging the natural environment that can be used for urban agricultural economy (Kahanji, Walls and Cicione 2019: 101-146). With the population in urban areas rapidly expanding, rural development is key in changing migration, inequalities, and reducing urban poverty in the process

(Kumar 2011: 662–673).

An overabundance of small cities in the peripheries of the big metros could also be well-integrated in the urban expansion, which could lead to economic growth that is holistic in nature, in terms of both urban and rural areas (Chiloane-Tsoka and Mmako 2014: 377-383). There are several studies that suggest most inhabitants of small cities in SA are living below the poverty line, in addition to prevalent issues of lacking water supply and sanitation (Patrolia *et al.* 2017: 252-258). In the one extreme, well-managed migration leads to economic growth (Börsch-Supan, Leite, and Rausch 2019: 193), while on the other hand, uncapped urbanisation negatively impacts economic growth, breeds an unhealthy environment, and causes traffic congestion that can lead to accidents, among other things (Sinatti 2019: 609-623).

3.3.2 Social push factors

Metropolitan municipalities face a major challenge of service delivery demands motivated by the increased urban population (Zhu, Wei & Niu 2020: 1-3), with this population increase merely assisting to increase crime in the urban areas (Singhal 2020: 281-286). Informal settlements are increasing fast and this has highlighted the need for urban planning and proper urban expansion in urban areas, in order to harness the power of urbanisation in the economic growth of developing economies (van Vliet 2019: 755-763).

In addition to other social issues, there is lack of service delivery in developing economies such as SA (Woods 2018: 164-176). Furthermore, with the apartheid era government policies having trapped people in rural areas, this has resulted in high rural-urban migration flows that have further implications in relation to municipal capacity (Ziervogel 2019: 494-506). This population increase leads to overcrowding in urban spaces, with rapidly growing informal settlement numbers in townships and cities where there is poor housing delivery, with little to no service delivered in some parts of the community (Forbes 2019: 95-117). Moreover, urban planners pay less attention to the link between rural-urban migration and urban populations that, in turn, increase the demand for services (Kyed 2019: 65-94). Urbanisation and urban growth can, thus, only worsen poverty in developing economies when not managed

well or ignored, which is a trend amongst all developing economies (Matelski and Sabrié 2019: 11-31).

Another social factor that needs to be investigated is that there is urban poverty because of rural-urban migration overpopulation (Goodwin and Hetland 2013: 83–102). Changing rural areas that are peripheries to the big cities, together with small cities being integrated in metropolitan municipalities, are also a major contributor to the rapid growth in the urban populace (Missinne and Bracke 2012: 97-109). Nonetheless, the international community assumes big cities administered by municipalities, such as the eThekweni Municipality, lack good strategies on urban policies and planning (Bala and Kang’ethe 2021: 584-596).

Niva *et al.* (2019: 34-87) contend rural-urban migration has been a major factor in the rapid population growth in municipality governed areas, straining water infrastructure and service delivery, resulting in poor urban dwellers consuming mostly clean water at expensive prices, while wealthier groups enjoy highly subsidised services. Rural areas have limited infrastructure and facilities needed to maintain a healthy standard of living, whereas urban areas have all the necessary infrastructure and facilities that make it ideal for rural dwellers to migrate to urban areas, with lack of water supply in rural areas a major contributing factor (Bernzen, Jenkins and Braun 2019: 51).

3.3.3 Political push factors

Public participation of marginalised community members in policies is seen as empowerment around the world (Van Loon, Oosterlynck and Aalbers 2019: 400-418). The significance of community participation in politics is used to, for instance, examine housing delivery performance (Smith and Brown 2019: 102-061). Therefore, the lack of foresight and urban planning is “setting the government up for failure”, with political parties elected into power by people believing their parties to “be their messiahs and deliver them from poverty” (Lewis 2021: 189-206). In addition, the failure by political parties to deliver on campaign objectives leads to dissatisfaction and anger in both urban and rural populations (De Jager and Steenekamp 2019: 147-169). This has further increased uncertainty in SA, a country

with a violent past, leaving the only way to communicate dissatisfaction through service delivery protests (Namberger *et al.* 2019: 452-472).

Since the 1950s, the minority-led government ensured no mixing of races, “with blacks at the bottom of the food chain”, and rigid urban planning based on segregation focused development in suburbs, where whites and Indians lived, and less focus on townships, where other people of colour lived (Stillwell and Dennett 2012: 23-44). In addition, international migration is “a drop in the ocean” where urban population growth in SA is concerned, since rural-urban migration contributes to most incoming populations in cities (Nkabinde *et al.* 2018: 11-24). A carefully planned urbanisation process, along with balanced rural-urban migration, can lead to economic growth, sustainable development and excellent service delivery performance (Magidi and Ahmed 2019: 335-346).

Urban population growth requires a holistic view, as there is natural population growth due to births. Recently, incorporation of small cities in the peripheries and its impact on rural-urban migration is a major growth contributor (Gu 2019: 1351-1360). The difficulty of the SA local government system, is it does not have a groundbreaking method, aimed at recovery of the way cities plan and financially plan their Municipal Infrastructure Grant (MIG) projects, to improve basic service delivery to poor communities (Danielle and Masilela 2020: 33-47). Local governments have been the principal providers but have been hampered by limited ability to bear the associated costs, particularly where population density is low and service delivery is costly or difficult (Sambo 2019: 1-12)

3.3.4 Global push factors

International socio-economic organisations, such as the UN Children’s Fund, World Health Organisation (WHO) and UN-Habitat, have agreed the number of pit latrines still in use in Africa has partly improved (Tembo *et al.* 2019: 260-272). Njuguna (2019: 1-8) departs from this notion, contending wide-spread use of the pit latrine, particularly in Southern Africa, is relative to the prevalent lack of employment opportunities in the countryside, due to the rural and urban populace facing serious institutional barriers, along with the respective labour markets and their distinctive

natures, based in urban and rural centres (Kannan and Raveendran 2019: 38-44). Labour migration never reduced rural-urban migration, instead, it put migrants into more disadvantaged positions in their access to basic services and workers' rights (Yousefifar and Riahi 2017: 169).

The economic rates of countries in the southern region of Africa, such as SA, experience faster growth, in relation to the economy and urbanisation. In this regard, internal migration seems to be more rapid in developing than in developed economies (Mau 2019: 5-28). Nonetheless, the absence of access to water, sewage or solid waste administration schemes in informal dwellings contaminates streams, affecting the presence, air quality and health of urban spaces (Segal 2019: 135-142). This has a severe impact on health costs; for example, reports show infants and adults die every year due to infections related to poor sanitation and water provision (Hackl 2018: 150-162).

Globalisation and decentralisation have advanced the issue of overcrowding in urban spaces, to where production industries are further situated in peripheries and rural spaces, while urban businesses are growing more than the actual populace (Chen 2018: 35-58). However, more of this nature of development tends to be projected as problematic for future populations, pertaining to the incorporation of such development as a bridge to interlink urban centres (Kienast, Buchecker and Hunziker 2018: 1669-1677), as there is little focus of this phenomenon in developing economies (Saghir and Santoro 2018: 1-7). Moreover, urbanisation and internal migration levels in the world are difficult to measure, because the common census and surveys are only used to capture places of birth and current location, with less attention on migration indicators (Kühn 2018: 1747-1762).

3.3.5 Natural push factors

Environmental factors are drivers of rural-urban migration (Garip 2014: 673–698), where environmental situations fluctuate from natural disasters to life-threatening weather events, and more gradual weather dissimilarities that might encourage individuals to use migration as a variation strategy for economic growth (Patrolia *et al.* 2017: 252-258). Moreover, individual migration choices are affected by ecological

influences and migration is conceived through a multi-faceted fundamental relations web (Nagar-Ron and Motzafi-Haller 2011: 653-663). These include potentially fewer “argumentative environmental situations” in the short- and long-term; the protection of households or societies; individual health deterioration; and reduced “household strength value through terrestrial and property deprivation” (Jokisch *et al.* 2019: 12-60). Bernzen *et al.* (2019: 51) found the interrelation of environmental influences with monetary activities may be encountered in little recognised ways and also indirectly affects separate migration choices. Furthermore, changes in weather situations may decrease agricultural production and increase food product prices (Brøgger 2019: 97-105).

Implementation of lockdown restrictions by the SA government in response to the COVID-19 pandemic led to most people, with the exception of essential workers, staying at home. The stricter measures enforced by the government “exposed the (un)responsiveness of the physical planning and architecture of informal settlements in SA” (Cattaneo *et al.* 2019: 189-206). Informal settlements are defined as “residential areas with no security of tenure vis-à-vis the land, the dwelling area, or permission to inhabit,” in addition to “neighbourhoods with a lack of or being cut off from basic facilities, services and city infrastructure,” as well as “housing that not necessarily complies with current planning and building regulations,” frequently located within an environmentally hazardous area (Soyinka *et al.* 2016: 52-64).

COVID-19, as with all pandemics, has a spatial element that needs to be managed (Chowell and Mizumoto 2020: 1093-1094). As lockdown continued, it became evident the impact of the COVID-19 crisis would differ, “evidently not only across countries, but also across regions and municipalities within countries, both in terms of declared cases and related deaths” (Hartnett *et al.* 2020: 699). The outbreak of COVID-19 has, furthermore, triggered a wider shock for informal settlements, as most of the population in SA live in densely populated areas (Usher, Durkin and Bhullar 2020: 315). Characterised by high population density, these poverty-stricken, informal settlements also have limited access to water, sanitation, and adequate infrastructure (Bhatti *et al.* 2020: 14-49). This leaves many uncertainties around virus control measures in informal settlements, possibly attributed to the

controversial relationship that exists involving local government and those living in informal settlements (Smit 2020: 1-3).

3.3.6 Broad economic community participation push factor

Community participation entails government involving citizens in decisions, ranging from distribution of public funds to policy design, as well as development of monitoring and evaluation of government spending (Omodan *et al.* 2019: 1-17). This participation plays a role in the improvement of service delivery, in terms of the 3Es (Economic, Efficient and Effective) and in strengthening the relationship between the government and citizenry (Kanyane 2014: 90-110). SA should include the community in agricultural projects, to emancipate people in rural areas and reduce the number of people migrating from rural areas (Masuku and Jili 2019: 19-35).

Most land in rural areas is, in addition, owned by tribal chiefs and kings, creating difficulty for the government to access the land to benefit the entire rural population, and enable the provision and maintenance of service standards. As a result, the rural community often feels it is a country within SA, due to poor service delivery (Masiya *et al.* 2019: 20-40). Thus, the issue of not owning land in rural areas is another motivation for rural-urban migration, coupled with feeling excluded in service delivery and governance (Khoza-Shangase 2019: 73-78). Furthermore, people are forced to move to urban areas where there is high community participation (Weaver *et al.* 2019: 14-23). The major issue, however, is that urban land invaded by informal migrant settlements can be used for urban agricultural development and urban planning in cities (Dinbabo *et al.* 2019: 13-86).

Local establishments have, occasionally, been expected to perform functions of a broader nature for historical motives and, at other times, from pure need conditions (Mlambo 2019: 207-224; Alexander 2013: 605-619). It makes sense that local governments must execute specific, related functions to realise their goals and objectives (Gram-Hansen *et al.* 2019: 361-368; Akhmat, Khan and Ali 2011: 301-317).

3.4 CONCLUSION

Chapter three discussed the pull and push factors of rural-urban migration, with an in-depth discussion on the factors that play a very significant role in either attracting migrants to the urban areas or rather pushing migrants from rural areas to urban areas with no choice, while chapter four will set out the research methodology employed to undertake the study.

CHAPTER FOUR

RESEARCH METHODOLOGY

4.1 RESEARCH METHODOLOGY

The previous chapter focused on urbanisation, rural-urban migration, service delivery push and pull factors, as well as the theoretical framework. In this chapter, the application of the interpretivist and positivist paradigms, as well as the use of qualitative and quantitative evidence will be discussed (Weinreb, Stecklov and Arslan 2020: 2019-254). These approaches rely on data gathering to analyse and find correlations in data that may be generalised to the entire population (Jumriani, Hadi and Mutiani 2023:1). Assumptions will be established and evaluated to draw conclusions based on factual reality, rather than illusions (Saunders, Lewis and Thornhill 2012: 20).

Interpretivism incorporates components of explanation into research by fully integrating objectives, which investigators presume they can use to gain accessibility to truth, using social contrasts such as language, knowledge, tools, and shared meaning (Jumriani *et al.* 2023: 1). The study will aim to integrate the two, relying on philosophical assumptions to be realistic by acknowledging there are several ways to perceive things (Saunders *et al.* 2012: 20). Following substantial research, the researcher adopted a quantitative approach, while an extensive literature review assisted in examining rural-urban migration, in respect of service delivery within the eThekweni Municipality.

4.2 RESEARCH DESIGN

This study follows an explanatory design, which addressed concerns regarding frequently used strategies for information collection, the form of sample, and ways to control difficulties such as public opinion concerning rural-urban migration within SA. This design became an integral part of supporting the scientific strategy and will be properly developed to answer (a) the essence of the technique, (b) data gathering procedures, (c) assessment, and to offer a framework to recognise the correlations

(Shukla 2010: 1). With this aim in mind, the analysis focused on exploring a challenging scenario through explanatory design, with the goal of factor analysis (Saunders *et al.* 2012: 20). The explanatory analysis allowed the researcher to make use of ideas and assumptions to elucidate the variables that led to a certain event (Silverman 2016: 9); these influenced the population used in the research.

4.3 RESEARCH METHOD

In scientific inquiry, interpretation is recognised as the practical implementation in terms of data collection (Sanjar and Nargiza 2022: 40-48). The method should, in principle, be used for the purpose it is intended (Brannen 2016: 20). Thus, quantitative, qualitative, and mixed methods are the three approaches used in social research to find answers to research questions (Creswell 2014: 10). For this study, a quantitative approach was used for its “fundamental abilities to test the objectives and theories by examining the relationships among variables” (Gorard 2013: 15).

These variables were measured using a questionnaire and analysed statistically to determine whether rural-urban migration can be employed to enhance service delivery in Silver City informal settlement, eThekweni City, KZN. This approach was also deemed appropriate for exploring the large sample size of 350 rural migrants in KZN, considered necessary for establishing valid findings, and which would have been impractical should qualitative methods have been employed. The adoption of a different method, such as a qualitative research method, would not have been suitable for this study, because of its inability to test relationships between study variables and provide statistical tests that prove study hypotheses (Brannen 2016). Furthermore, it would not have been feasible to target the same study sample size using a different approach.

4.3.1 Quantitative research

A quantitative research method is an approach that involves a collection or cluster of methods, as well as data in numerical form. It focuses on, and sets out to examine the relationships between variables and allows the testing of hypotheses and statistical analyses (Brannen 2016: 20; Saunders *et al.* 2012: 20). From a broader

view, a quantitative research approach is a type of empirical research focusing on a social phenomenon—in the case of this research, rural-urban migration, to enhance service delivery by the eThekweni municipality, KZN. It involves testing theory through analysis of the numerically measured variables and analysing them statistically, to evaluate and ascertain whether the theory explains or predicts the phenomena of interest (Yilmaz 2013: 311-325).

Mellinger and Hanson (2017: 6) assert this type of approach is powerful and an essential tool that can help the researcher to test the hypotheses and, thus, make sound generalisations to the parent population. This is based on accepted theory, where hypotheses are developed and then tested to prove or disprove any correlations or relationships that may or may not exist (Rasinger 2013: 11). In this instance, this approach was designed to provide a clear picture of the underpinning how rural-urban migration can enhance service delivery and lead to economic growth in the city (Farrelly *et al.* 2017: 80). As with other approaches, quantitative methods involve the processes of collecting, analysing, interpreting, and writing the results of a study (Creswell 2014: 30). Based on its scientific objectivity and rationale (McLeod 2017: 13), this approach was identified as ideal for the study, since it provided a significant execution in answering the objectives. This approach was further used to test the variables selected from the literature review that formed the basis of the questionnaire.

4.4 TARGET POPULATION

The term population refers to all members that meet a set of specifications or a specified criterion. A single member of any given population is referred to as an element. When only some elements are selected from a population, they are referred to as a sample and the selection method is called a census (Taherdoost 2016: 18-27). Therefore, this research made use of a population from one of the eThekweni Municipality informal settlements named Silver City. This area was developed not more than five years ago by the erection of numerous shacks and is located under Umlazi Township. The reason for choosing this area is the sudden movement of migrants from across poor areas within SA and abroad, in search of

better living conditions.

Knowing it will be impossible to conduct the research in every element of the residents in Silver City informal settlement, the research employed a non-probability sampling that assisted in determining a suitable sample to represent the entire population. According to Taherdoost (2016: 18-27), the researcher cannot estimate the probability of an element being included in the sample in non-probability sampling. The choice to use non-probability sampling is due to it being less difficult and cheaper than probability sampling. A non-probability method includes quota, snowball, judgemental, and purposive, as well as convenience sampling.

This study made use of purposive sampling for the researcher to ensure the selected respondents offer valuable information that cannot be obtained from other choices (Taherdoost 2016). The inclusion of residents that have lived in Silver City informal settlement for more than two years will provide valuable and relevant information to help answer the research questions. This sampling method was selected, because it was impossible for the researcher to reach the entire population in Silver City informal settlement. Qualities that ensured inclusion and exclusion of the sample are:

- The individual must reside in Silver City informal settlement for more than two years.
- Persons from outside SA should possess a valid passport.
- Participants need to come from poor/rural regions.
- Have an understanding and knowledge of the subject matter of this research.

4.4.1 Sampling Size

According to a study into municipal urban growth, the eThekweni Municipality 2016/17 Spatial Development Framework reported 276 988 in-migrants in 2001 and 2011, showing marked growth (Govender 2017: 1-100). This number is too large for this study; thus, the research used the Raosoft sample Calculator (Fatoki and Chindoga 2011: 161-169), with the calculation achieving a 97 percent confidence

level, a 6.86 margin of error, and 50 percent response distribution, which resulted in the recommended sample size of 350. Therefore, the researcher made use of 350 participants that formed the sample size under this non-probability sampling method.

4.5 DATA COLLECTION INSTRUMENTS

Data collection instruments can be designed to collect either qualitative or quantitative data or a mixture of both (Hall and Posel 2019:1-20). The type and amount of data to be collected depend on the nature and its research objectives (Podesva and Sharma 2013: 10). The literature was used as a source of information for guiding the questionnaire formulation, and a quantitative research method was selected as the best technique to test the variables identified. According to Day *et al.* (2023: 1-17), the importance of good instrumentation and clearly defined data collecting procedures should not be underestimated and should be tested carefully to ensure their applicability under the conditions given by the context in which the method is to be used. As the study was concerned with the determination of prevailing conditions and identifying factors affecting rural-urban migration, it adopted a descriptive approach (Amare 2023: 189–192). As Sekaran and Bougie (2016: 1) explain, there are two main types of data collection instruments, namely: questionnaires and interviews. For this study, and based on the research approach, a questionnaire was selected.

The extensive literature review assisted the researcher in developing a 5-point Likert scaled questionnaire, with responses ranging from (1) strongly disagree to (5) strongly agree, and a neutral midpoint. This allowed the study to concisely describe the occurrences, applying statistics considered worthy of large studies (McLeod 2017). Such an approach was used in the research to support the use of quantitative methods, which enabled descriptions of the issue and conclusions about potential solutions (Creswell 2014). The researcher disseminated the questionnaire to the target demographic residing in Silver City informal settlement, within the eThekweni metropolitan region.

4.5.1 Questionnaire

Various factors generally determine the type of questionnaire the researcher will employ, with Rose and Grosvenor (2013: 129) highlighting the nature of the research question, the identified data required to answer the question, and the resources available. Sanjar and Nargiza (2022:40-48) describe a questionnaire as a self-completion survey instrument, intended to collect data on social phenomena within the population of interest. Quelhas *et al.* (2011: 02) indicate constructing a questionnaire is not easy and straightforward, but a difficult task. This is because questionnaires need to clearly address the research questions, aims and objectives, since all questions within the questionnaire have a direct impact on the outcome (Quelhas *et al.* 2011: 24). A questionnaire was adopted for this study.

4.5.2 Design of the questionnaire

Designing a questionnaire is a complex procedure that involves many considerations (Buschle, Reiter and Bethmann 2022: 823-842). Which must be in context and aligned to the study, in order for the questionnaire to obtain the most accurate data to address the objectives (Sanjar and Nargiza 2022: 40-48). Hence, the researcher has a responsibility to ensure the questionnaire is designed effectively, to enable the respondents to answer properly (Arora and Knight 2022: 161-168). The study objectives and research questions were used to design the questionnaire for this study.

4.6 DISSEMINATION OF THE QUESTIONNAIRE

One area in which a questionnaire study can go wrong concerns the procedures used in its administration (Sekaran and Bougie 2016: 11). These authors claim the most efficient way to administer questionnaires is by hand to the targeted participants. This method proved to be effective and efficient, as all participants voluntarily agreed to complete the questionnaires and, where they had issues and questions, the researcher was on hand to assist.

It must be noted this method is very demanding for the researcher and some participants took long to complete the questionnaire, requiring numerous reminders and visits in order to finally attain feedback. The initial timeframe allocated for

questionnaire dissemination was two months. However, this time frame proved to be very limited and was extended to approximately four months. The extension was due to unavailability of respondents because of their congested work schedules and reluctance from participants to take part.

4.7 PILOT TESTING THE QUESTIONNAIRE

A pilot study is a distinct preliminary investigation, conducted before the main study, to test the research instrument's ability to capture the required information from the participants (Trochim, Donnelly and Arora 2016: 7). Pilot studies often provide important insights into the problem being investigated and may lead to reconceptualisation of the problem or refinement of the research questions (Phakiti 2014: 9). Grove, Gray, and Burns (2015: 12) claim pilot testing improves and eliminates any ambiguities that may be found in a questionnaire. A pilot study was, therefore, conducted with 10 respondents from the Silver City informal settlement, with the feedback used for reliability and to enhance the final survey questionnaire. The piloted respondents were not included in the actual research.

4.8 DATA ANALYSIS

The data collected after the field survey allowed the researcher to identify techniques for data analysis that would be conducive to understanding the findings through different analytical tests. Gravetter and Forzano (2016: 20) affirmed the necessity of data processing and analyses, as it covers all research study related technical matters. According to Brannen (2016: 20), the analysis of quantitative data entails the use of statistics, which are procedures for assembling, classifying, tabulating and summarising numerical data to obtain some meaning or information. The independence of the variables was determined by Chi-square tests (X^2) to observe the degree of data frequency (Bryman 2016: 1-20).

Descriptive statistics such as bivariate analysis and correlations were used to describe trends in the data set (Brown, Suter and Churchill 2018: 1-30). Inferential statistics, in the form of the t-test, were utilised to test the research hypotheses. For quantitative analysis to provide a basis for generalisation, the selection of cases to

be studied should follow adequate statistical procedures to ensure their representativeness (Silverman 2016: 9). The following analyses were conducted for this study.

4.8.1 Frequency analysis

This research study used frequency analysis to determine the associated number of times each respondent referred to a particular statement and to check coding of data (Ho 2013). Frequency analysis further provided a clear view of the number of cases that fall into the various response categories set in the research questionnaire, and assisted in depicting the overall results (Brown *et al.* 2018: 254); deemed relevant for this study.

4.8.2 Descriptive analysis

This type of analysis describes the nature of an object or phenomenon under study. It provides “profiles of organizations, work groups, persons and other subjects concerning any of a multitude of characteristics such as size, composition, efficiency, and preferences” (Wan 2022: 69-86). In this study, descriptive statistics were used for two major purposes: first, to summarise the data set; second, they were used to numerically describe sample units, phenomena, and other variables of interest (Islam and Aldaihani 2022: 1-11). Thus, descriptive statistics include the process of converting raw facts into a structure used to depict a group of elements in a scenario; accomplished by ascending and managing original data gathered. Frequencies, indices of statistical significance, and variation were used to produce this type of data (Sekaran and Bougie 2016). This approach was adopted within this research to illustrate the relationship among distinct factors that were tested.

4.8.3 Inferential statistics and Chi-square test

Inferential statistics are used to make assumptions or inferences regarding a population, from the measurement taken of sample units drawn from the population (Arora, Kumar and Anand 2022: 88-111). There are three inferential statistical tests namely the z test and the t test that required the researcher to make certain assumptions concerning estimates of population characteristics, or parameters, and the Chi-square (X^2) test. The latter does not involve the use of any population parameters and the underlying distribution does not have to be normal (Vrbin 2022:

301-304). Ullah and Ameen (2022: 698-714) explain a Chi-Square test (X^2) is conducted to determine whether there is a significant association between two variables in one or more categories. Therefore, the test compares the number of cases falling into each cell of the table with the frequency that would be expected, if there was no association between the two variables that form the table (Whatley 2022: 57-74).

The researcher thus used a Chi-Square test for goodness of fit and to test relationships between the study variables (Dewi 2022: 142-150). with variables tested guided by the study objectives. Therefore, inferential statistics and a Chi-Square test were conducted on all variables to test for significant relationships, with the tests then used to help in determining and proving the hypotheses. Additionally, the Chi-Square test was conducted because the sample data consisted of numerical scores, making it much easier to determine different relationships between the tested variables.

4.8.4 Correlations

Correlation statistical analysis refers to the measurement of association between or among variables (Saunders *et al.* 2012: 475). Lê and Schmid (2022: 308-336) explains correlation tests allow the researcher to determine which variables are interacting and what type of interaction is occurring. This means +5 and -5 represent the strength of the relationship between two ranked or quantifiable variables (Xiao *et al.* 2022: 3103). Correlations were used to determine and identify critical factors affecting rural-urban migration to enhance service delivery in eThekweni Municipality

4.9 VALIDITY

The legitimacy of the research instrument was proven, since it employs measures already evaluated in comparable research (Hair *et al.* 2016). The survey was revised, and on completion, digitally stored in a data backup system; furthermore, to check the validity of the questionnaire, a pilot study was conducted.

4.10 RELIABILITY

When preparing a suitable questionnaire, the assurance technique proposed by De Vries, Bekkers and Tummers (2016) should be used. As a result, all concepts and

matching measures were sourced from past research investigations, in which their dependability was demonstrated as suitable (Saunders *et al* 2012: 475). Assessments examined include correlation, Chi-square test, coefficients, as well as Cronbach's alpha, since the study included statistics. This research utilised these procedures to check the reliability and accuracy of the questionnaire.

4.11 RATIONALE FOR SELECTED STATISTICAL APPROACH

Several methodologies and programmes were examined in subsequent reviewed literature, after which the selected program was employed (SPSS or R). Nonetheless, R software is known for its simplicity in analysing predictive-based opinions, such as the present study (Bivand 2022: 488-518). Although, Hair *et al.* (2016) explain, with structural equation modelling (SEM), the partial least squares (PLS-SEM), for example, is an effective method for developing and refining hypotheses. Thus, this study adopted a quantitative approach and used SPSS program for statistical analysis.

4.12 DELIMITATIONS

This research focused on residents living in Silver City informal settlement, in eThekweni Municipality, in the KZN province. The reason for selecting this area for the study is it comprises migrants from rural regions within and outside SA. As a result of this unique feature of these individuals, effort was made to not choose individuals who do not live in the Silver City area. Subsequently, the research focus was on registered South African residents with recognised identity numbers, of Silver City informal settlement, in eThekweni Municipality, who are affected by rural-urban movement trends, to improve service provision.

4.13 ETHICAL CONSIDERATIONS (ANONYMITY AND CONFIDENTIALITY)

The objective of study ethics should guarantee no person is injured or experiences negative repercussions as a result of research activity (Johnson and Onwuegbuzie 2004). Most ethical issues were managed throughout the study process, namely confidentiality and anonymity, the ability to withdraw, and ethical approval.

Confidentiality: Respondent confidentiality of the present study was respected, with attention to conversations being managed and delivered in a discreet and

confidential manner. Participant identities and data were dealt with privately, and the investigator will use their own codename in the study. Anonymity: Study Respondents were informed of not being identified at any stage during the data collection.

4.14 CONCLUSION

This chapter detailed the research methodology and design, sampling size and population, in addition to the study rationale and scope. Thus, the following chapter will be focusing of interpretation and presentation of data as well as discussion on the empirical findings.

CHAPTER FIVE

DATA ANALYSIS, DISCUSSION AND INTERPRETATION

5.1 INTRODUCTION

The preceding chapter focused on the research design adopted for this research. Chapter five develops an analysis report using the quantitative data obtained, with a major focus on the interpretation and discussion in relation to the study objectives. Therefore, this chapter is based on the results and findings using the information obtained from the questionnaire. As mentioned in the methodology chapter, the questionnaire was distributed to 350 participants, with data collected from the responses analysed with SPSS version 28.0.

The results were presented in the form of descriptive statistics using graphs, cross tabulations and other figures, illustrative of the quantitative data collected. Inferential techniques include the use of correlations and Chi-square test values, interpreted using p-values. The literature review was used as the grounds for the rural-urban migration to enhance service delivery.

5.2 THE SAMPLE

In total, 350 questionnaires were distributed and 350 were returned, which gave a 100 percent response rate. The attainment of a 100 percent response rate meant an excellent representation of the population was obtained, allowing conclusive generalisations to be made.

5.3 THE RESEARCH INSTRUMENT

The research instrument comprised 44 items, with nominal and ordinal levels of measurement. The questionnaire was separated into two sections, the first comprising biographical data (race, gender, age, and educational, as well as occupational backgrounds) and the second section the questions, with different themes measured, namely:

- Effects of rural-urban migration on roads and Transportation infrastructure.
- Impact of rural-urban migration on schooling facilities capacity.

- Effects of rural-urban migration on health facilities in urban areas.
- Effects of rural-urban migration on policing and crime.
- Effects of rural-urban migration on the electricity supply.
- Effects of rural-urban migration on water and sanitation.
- Effects rural-urban migration on social development.
- Effects of rural-urban migration on Technology and communication.
- Effects of rural-urban migration on employment and job creation.

The questionnaire adopted a Likert scale format, which consisted of only closed-ended questions. For the basis of ascertaining their experience and knowledge of rural-urban migration from respondents, which they deemed significant in urban service delivery, respondents were required to select their responses based on predetermined statements. The relationship between the variables were tested using cross-tabulations. A reliability test was also conducted based on the questionnaire sections.

5.4 RELIABILITY STATISTICS

The two most important aspects of precision are reliability and validity. Reliability is computed by taking several measurements on the same subjects, a reliability coefficient of 0.70 or higher is considered as “acceptable” (Alwan and Alshurideh 2022: 837-848). The table below reflects the Cronbach alpha score for all items that constituted the questionnaire.

Table 5.1: Reliability Scores

N of Items		Cronbach's Alpha
8A	The effects of rural-urban migration on roads and Transportation infrastructure.	6 0.962
9A	The impact of rural-urban migration on schooling facilities capacity.	3 0.963

10A	The effects of rural-urban migration on health facilities in urban areas.	3	0.880
11A	The effects of rural-urban migration on policing and crime.	5	0.974
12A	The effects of rural-urban migration on the electricity supply.	3	0.953
13A	The effects of rural-urban migration on water and sanitation.	4	0.964
14A	The effects rural-urban migration on social development.	4	0.958
15A	The effects of rural-urban migration on Technology and communication	4	0.936
16A	The effects of rural-urban migration on employment and job creation.	4	0.975

The reliability test was performed on all statements in the questionnaire. The questionnaire was designed and divided into research themes based on the research aims. Table 5.1 above indicates the reliability scores for all sections exceeded the recommended Cronbach's alpha value for a newly constructed construct. This indicates a degree of acceptable, consistent scoring for all these sections of the research.

5.5 FACTOR ANALYSIS

Factor analysis is a statistical technique whose main goal is data reduction (Steenkamp and Maydeu-Olivares 2023: 86-113). In a number of hypothetical factors a research can use the factors analysis to represent and test different variables (Bivand 2022: 488-518). Thus, the factor analysis is used to check whether a variable is significant or determine whether two variables can be combined into one and can be useful in checking reliability and validity of different variables in the measurement instrument it is important to note that a factor analysis is applicable in a number of situations (Saunders *et al.* 2012: 475).

Factors that exist requires a factor analysis in order to interpret and give names to

different variables and be reflected as real things. Therefore, the Kaiser-Meyer-Olkin (KMO) and Bartlett's test requirement is that the KMO Measure of Sampling Adequacy should be > 0.50 and Bartlett's Test of Sphericity < 0.05 (McNeish and Wolf 2023: 61). These tests are important for a successful factor analysis. It is also important to note a factor analysis can only be performed on a Likert scaled questionnaire, where some components are divided into finer components. The rotated component matrix will elaborate on this, with a KMO and Bartlett's test was conducted as the following;

Table 5.2: KMO and Bartlett's test

Bartlett's Test of Sphericity					
	Sub-themes	Kaiser-Meyer-Olkin Measure (KMO) of Sampling Adequacy	Approx. Chi-Square	df	Sig.
	The effects of rural-urban migration	0.853	3559.371	15	0.000
8A	On roads and Transportation infrastructure.				
	The impact of rural-urban migration on schooling facilities capacity.	0.733	1768.192	3	0.000
9A					
	The effects of rural-urban migration on health facilities in urban areas.	0.805	1544.206	6	0.000
10A					

11A	The effects of rural-urban migration on Policing and crime.	0.833	3021.757	10	0.000
12A	The effects of rural-urban migration on the electricity supply	0.753	1191.572	3	<0.001
13A	The effects of rural-urban migration on water and sanitation.	0.791	2053.820	6	0.000
14A	The effects rural-urban migration on social development.	0.797	1900.984	6	0.000
15A	The effects of rural-urban migration on Technology and communication	0.796	1941.734	6	0.000
16A	The effects of rural-urban migration on employment and job creation.	0.830	2567.941	6	0.000
8A-16A	Rural-urban migration to enhance urban service delivery.	0.951	41133.832	666	0.000

Based on table 5.2 above, all conditions are satisfied for factor analysis, where the KMO value should be > 0.500 and Bartlett's significance value should be < 0.05. These results clearly indicate that sampling, with all variables under the categorised themes shown as adequate and statistically significant in measuring the same thing. Furthermore, the tests show a 0.951 KMO measure of sampling adequacy, indicating the effects of rural-urban migration as (<0.001), which is highly significant on the electricity supply.

5.6 BIOGRAPHICAL DATA

As indicated above, the questionnaire was divided into two sections, biographical information and the questions on rural-urban migration patterns to enhance service delivery.

Section A, questions 1-7, comprised the biographical data: respondents' race, gender, age, and educational as well as occupational backgrounds were determined to offer insight regarding participant characteristics relative to the study.

5.6.1 Race

Table 5.3: Respondents' race

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	African	300	86	86	86
	Indian	10	3	3	3
	Coloured	10	3	3	3
	other	30	9	9	100
	Total	350	100	100	

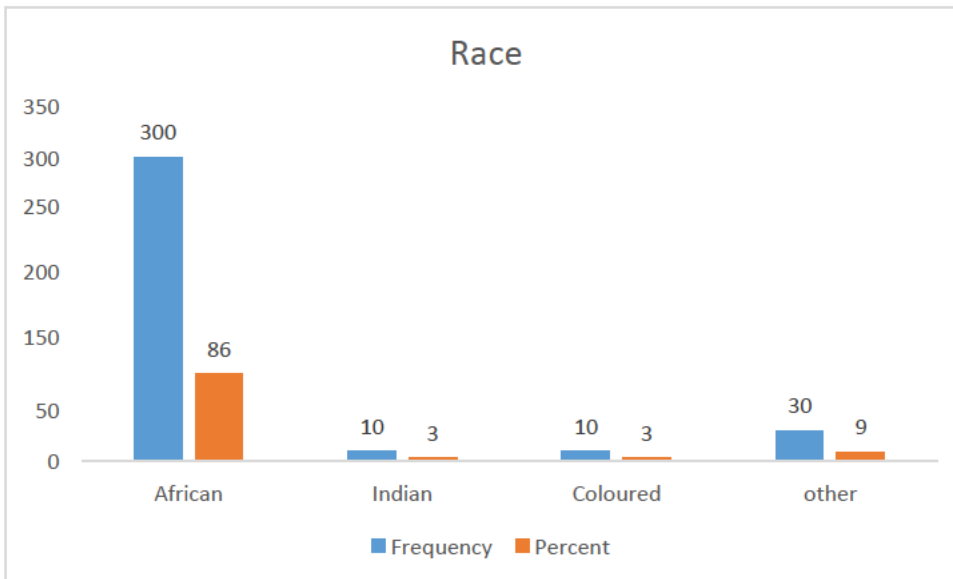


Figure 5.1: Respondents' Race

Table 5.3 and figure 5.1 indicate 300 (86 percent) respondents that are African, which is significant, while 10 (three percent) respondents indicated they were Indian, which is insignificant, whereas 30 (nine percent) respondents indicated other, also insignificant. A Chi-square test was conducted in relation to “There is no proper transport system in the rural areas which makes it difficult to go to work” and race, with the results (X^2 44.444; $df= 3$; $P<0.001$), which is highly significant. The findings suggest the majority African migrants migrate from rural areas due to transport needs.

5.6.2 Gender

Table 5.4: Gender

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	Male	50	14	14	14
	Female	300	86	86	100
	Total	350	100	100	

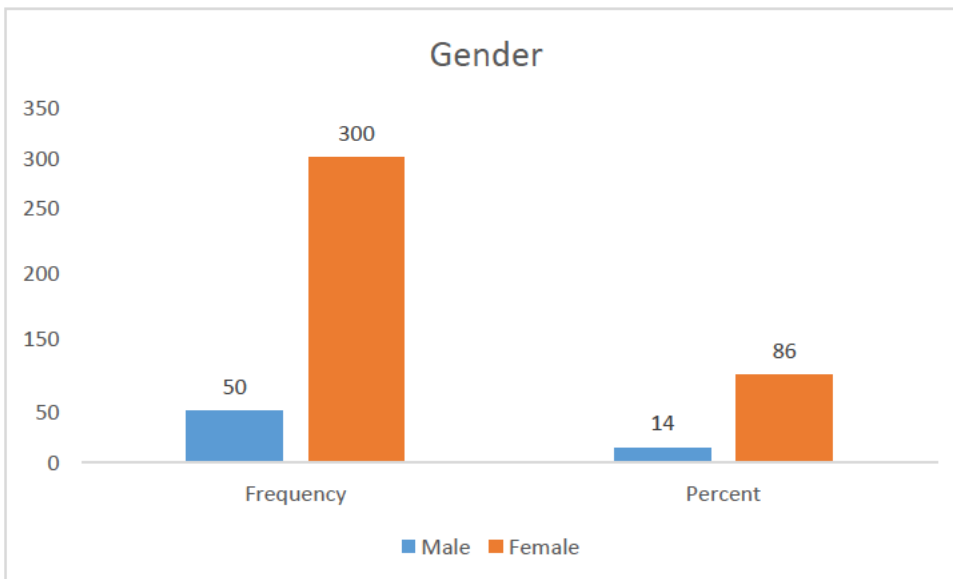


Figure 5.2: Respondents' Gender

Table 5.4 and figure 5.2 indicate 300 (86 percent) respondents are female, which is significant and 50 (14 percent) are male, which is insignificant. A Chi-square test was conducted on Gender and "I migrated from rural areas to urban areas to have access to transport" the results were (X^2 52.593; $df=$ 12; $P<0.001$), which is highly significant. The findings of the study suggest a number of females migrate from rural areas motivated to have better access to transport in urban areas.

5.6.3 Age

Table 5.5: Respondents' Age

	Frequency	Percent	Valid Percent	Cumulative Percent
Valid Less than 20 years	60	17	17	17
20-25	90	26	26	43
26-30	100	29	29	71
31-35	30	9	9	80
36-40	40	11	11	91
41-50	20	6	6	97

51-60	5	1	1	99
61 and above	5	1	1	100
Total	350	100	100	

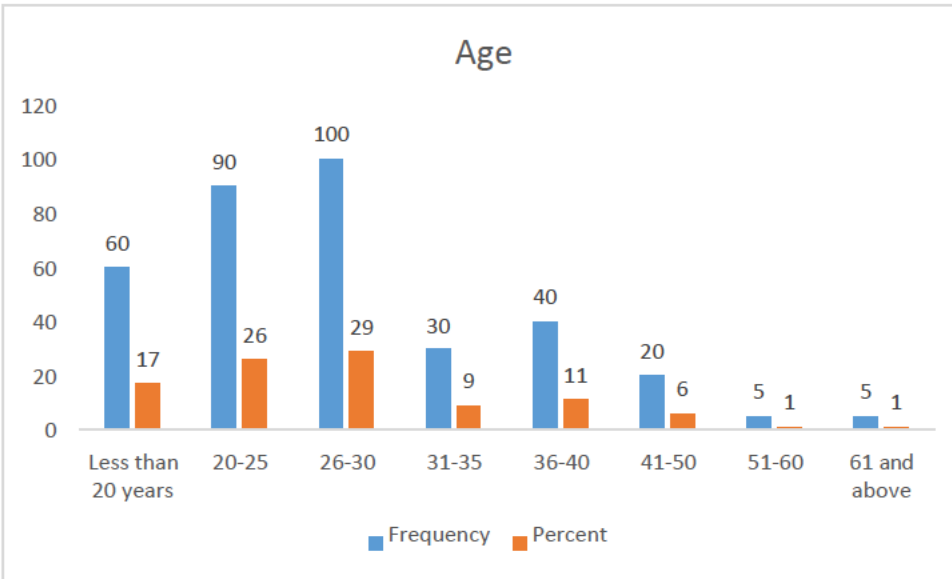


Figure 5.3: Respondents' Age

Table 5.5 and figure 5.3 indicate 60 (17 percent) respondents are less than 20 years old; they are teenagers, with 90 (26 percent) respondents who are young adults between 20-25 years, while 100 (29 percent) respondents are within the age of 26-30 years, which is significant. A total of 30 (nine percent) respondents are within the age of 31-35 years, 40 (11 percent) respondents are between 36-40 years, 20 (six percent) respondents are in the age group 41-50 years, with five (one percent) respondents each, respectively between 51-60 and 61 years and above. A Chi-square test was conducted on the relationship between age and “Infrastructure development can minimise rural-urban migration”; the results were (X^2 644.414; $df=28$; $P<0.001$) and this is highly significant.

This supports findings that rural youth are migrating due to lack of development in rural areas, which is corroborated by Hajdu, Neves and Granlund (2020: 743-772),

who found young African people are migrating from rural to urban areas in search of better opportunities. Hence, there is a need for policy development that will address issues affecting rural development to make the rural areas conducive for economic opportunities to reduce rural-urban migration patterns (Masuku and Macheke 2021: 185-742).

5.6.4 How long have you lived in Silver City informal settlement?

Table 5.6: How long have you lived in Silver City informal settlement?

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	2-3 Years	30	9	9	9
	2-4 Years	100	29	29	37
	More than 4 years	220	63	63	100
	Total	350m	100	100	

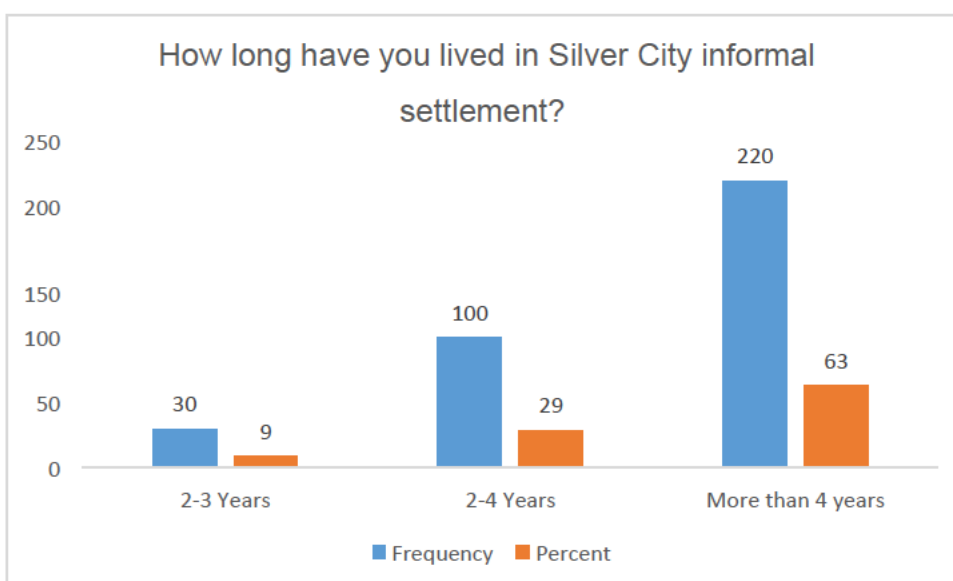


Figure 5.4: How long have you lived in Silver City informal settlement?

Table 5.6 and figure 5.4 show 30 (nine percent) respondents have resided in Silver City informal settlement for 2-3 years, 100 (29 percent) respondents have stayed for a period of 2-4 years, whereas 220 (63 percent) respondents have lived in Silver

City informal settlement for more than four years, which is significant. To support this, a Chi-square test was conducted in relation to “How long have you lived in Silver City informal settlement?” and “Rural-urban migration patterns lead to shortages in hospital admission facilities”, where results were (X^2 645.244; $df= 8$; $P<0.001$), which is highly significant.

The findings suggest the rural-urban migrant population leads to challenges in the healthcare system, with the healthcare sector having challenges to maintain sustainable work due to health workers pursuing better opportunities overseas (Pillay *et al.* 2020: 1-13). This is attributed to slow growth in the health sector of SA, along with poor maintenance of the hospital systems, as well as the remnants of slow development in rural areas due to the apartheid era (Maphumulo and Bhengu 2019: 1-9).

5.6.5 Educational Background

Table 5.7: Educational Background

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	Below Matric	130	37	37	37
	Matric	110	31	31	69
	Tertiary	70	20	20	89
	None	40	11	11	100
	Total	350	100	100	

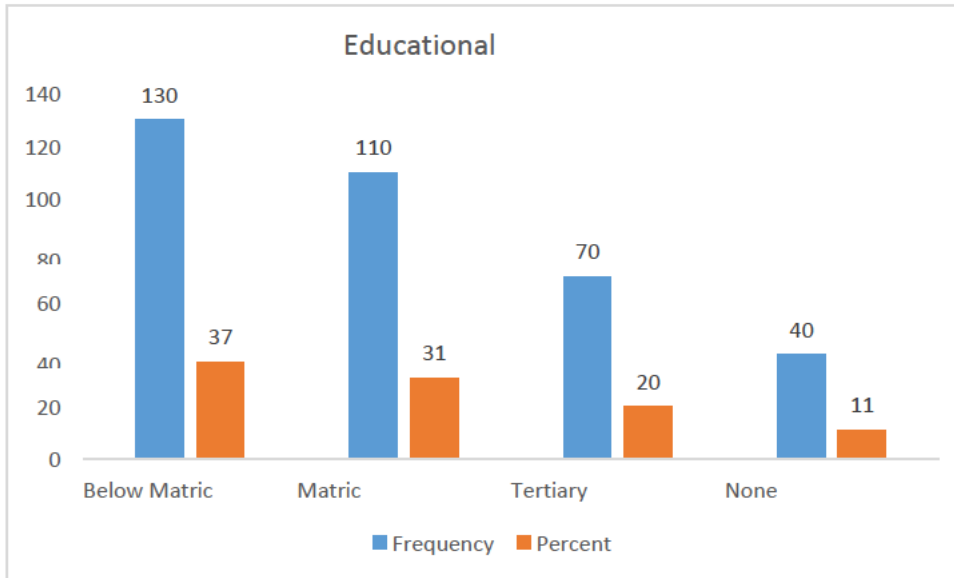


Figure 5.5: Educational Background

Table and 5.7 figure 5.5 show 130 (37 percent) respondents are below matric in terms of education, which is significant. While 110 (31 percent) respondents are at matric level and 70 (20 percent) respondents are at tertiary level, 40 (11 percent) respondents indicated not having any level of education. To support this, a Chi-square test was conducted in relation to educational background and “There is an increase in the student population due to rural-urban migration patterns,” which resulted in (X^2 402.126; $df=$ 12; $P<0.001$) and is highly significant.

The study findings suggest a connection between rural-urban migration patterns and the increase in the student population. Due to the slow pace of development in rural areas, more people migrate from rural to urban areas for better schools and education (Yang and Bansak 2020: 101-365); hence, rural-urban migration patterns increase the demand for urban services (Dick and Schraven 2021: 2021-03).

5.6.6 Occupational Background

Table 5.8: Occupational Background

	Frequency	Percent	Valid Percent	Cumulative Percent
Valid Employed	135	39	39	39

Not Employed	85	24	24	63
Self Employed	130	37	37	100
Total	350	100	100	

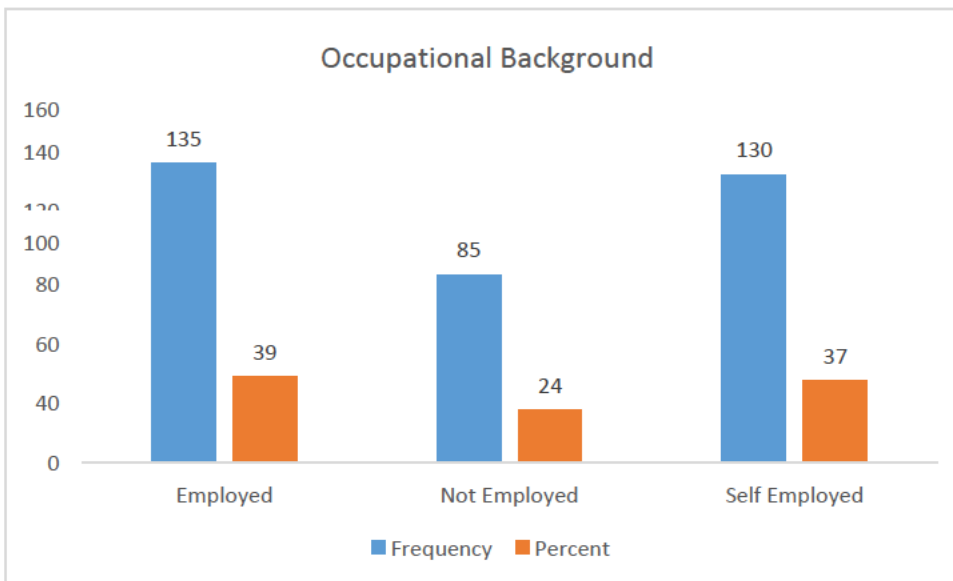


Figure 5.6: Occupational Background

Table 5.8 and figure 5.6 show 135 (39 percent) respondents who are employed, which is quite significant, with 85 (24 percent) respondents who are unemployed, while 130 (37 percent) respondents are self-employed, indicating there are entrepreneurial rural-urban migrants. To support this, a Chi-square test was conducted in relation to occupational background and “The influx of rural-urban migrants creates more competition in the job market in urban areas”, with the results as (X^2 287.884; $df= 8$; $P<0.001$), which is highly significant.

The findings of the study suggest a relationship exists between rural-urban migration patterns and the job market. With rural-urban migration patterns, more young people are migrating to urban areas motivated by education and job seeking (Walker and

Mathebula 2020: 1193-1209). Hence, urban poverty results from the high level of unemployment and stiff competition for jobs in the urban areas (Zizzamia 2020: 104-938).

5.6.7 Do you come from rural areas?

Table 5.9: Do you come from rural areas?

	Frequency	Percent	Valid Percent	Cumulative Percent
Valid Yes	210	60	60	60
No	140	40	40	100
Total	350	100	100	

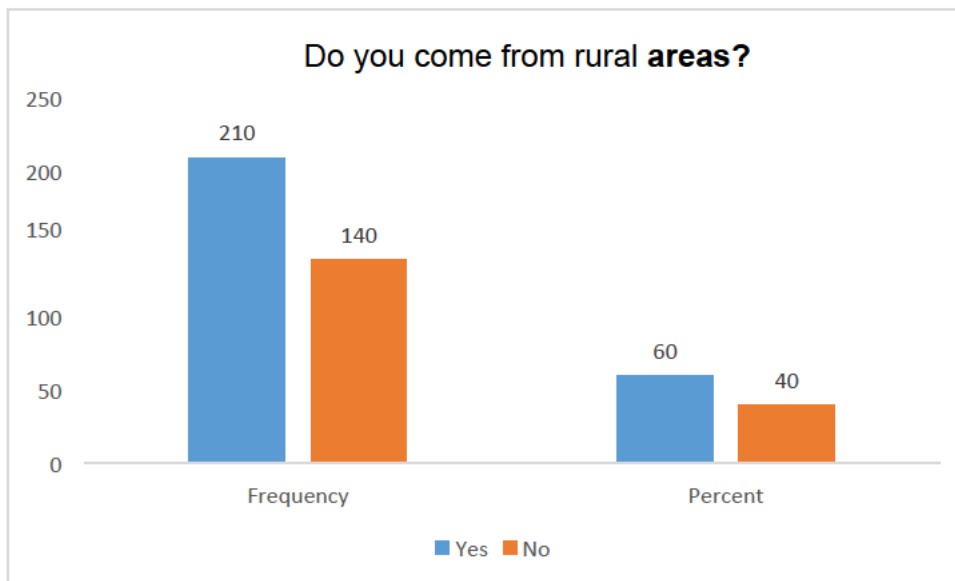


Figure 5.7: Do you come from rural areas?

Table 5.9 and Figure 5.7 show 210 (60 percent) respondents come from rural areas, which is quite significant for this study, with 140 (40 percent) respondents who indicated they are not from rural areas, which is insignificant. A Chi-square test was conducted in relation to race and “Do you come from rural areas?”, where the results show (X^2 44.444; $df= 3$; $P<0.001$), which is highly significant. The empirical findings indicate Africans are a majority in rural-urban migration patterns.

5.7 VARIABLES BASED ON EFFECTS OF RURAL-URBAN MIGRATION ON ROADS AND TRANSPORTATION INFRASTRUCTURE

5.7.1 Statement: There is no proper transport system in the rural areas which makes it difficult to travel to work

Table 5.10: There is no proper transport system in the rural areas which makes it difficult to travel to work

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	Strongly Disagree	20	6	6	6
	Disagree	30	9	9	14
	Neutral	40	11	11	26
	Agree	100	29	29	54
	Strongly Agree	160	46	46	100
	Total	350	100	100	

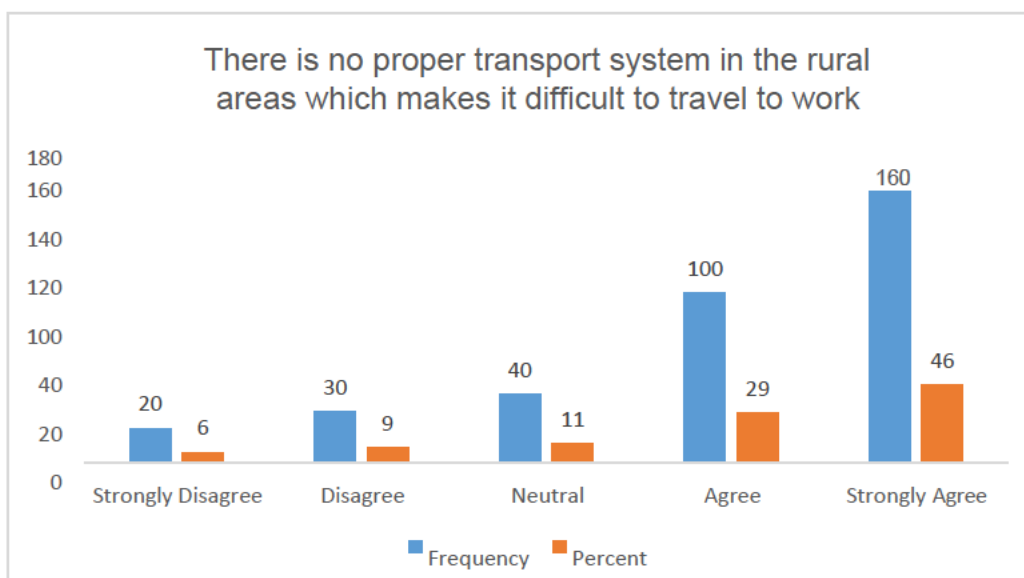


Figure 5.8: There is no proper transport system in the rural areas which makes it difficult to travel to work

Table 5.10 and figure 5.8 indicate 20 (six percent) respondents strongly disagreed

with the statement, while 30 (nine percent) respondents disagreed with the statement, 40 (11 percent) respondents were neutral to the statement and 100 (29 percent) respondents agreed with the statement, and 160 (46 percent) respondents strongly agreed there is no proper transport system in the rural areas, which makes it difficult to travel to work. This is supported by a Chi-square test, conducted in relation to occupational background and “There is no proper transport system in the rural areas which makes it difficult to travel to work”, with results showing (X^2 305.802; df= 8; $P < 0.001$), which is highly significant.

The study findings suggest most working respondents migrate to have a better transport system in urban areas, since there is no proper transport system in rural areas. With the slow pace of rural development, both entrepreneurs and the working class migrate to urban areas for better transport, which is a very important aspect in business (Lekhanya 2016: 108-114), since there is more transport in urban compared to rural areas (Kgwedi and Krygsman 2019: 10).

5.7.2 Migrated from rural to urban areas to work in transport

Table 5.11: Migrated from rural to urban areas to work in transport

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	Strongly Disagree	20	6	6	6
	Disagree	30	9	9	14
	Neutral	70	20	20	34
	Agree	90	26	26	60
	Strongly Agree	140	40	40	100
	Total	350	100.0	100.0	

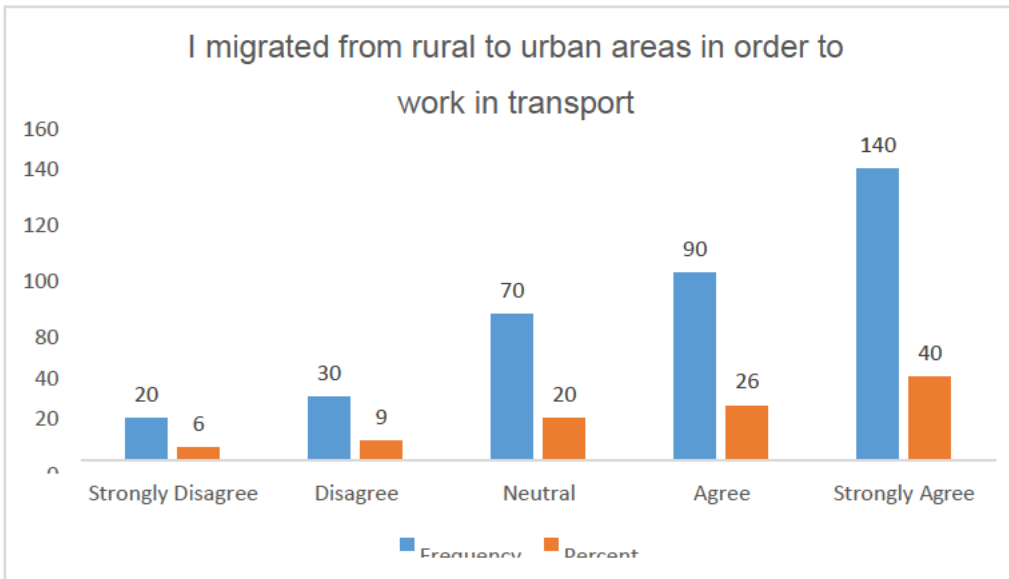


Figure 5.9: Migrated from rural to urban areas in order to work in transport

Table 5.11 and Figure 5.9 show 140 (40 percent) respondents strongly agreed they migrated to urban areas to work in transport. This was supported by a Chi-square test, which showed (X^2 428.949; $df=$ 8; $P<0.001$), suggesting 40 percent migrants work in the transport sector. Hence, migrants that work as drivers often work on long distance routes that connect small towns and big cities (Viljoen *et al.* 2021: 5903). There is a need to grow rural economies to reduce rural poverty (Ramaano 2022: 220-243)

5.7.3 Infrastructure development of rural areas can minimise rural-urban migration

Table 5.12: Infrastructure development of rural areas can minimise rural-urban migration

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	Strongly Disagree	100	29	29	29
	Disagree	90	26	26	54

Neutral	20	6	6	60
Agree	60	17	17	77
Strongly Agree	80	23	23	100
Total	350	100	100	

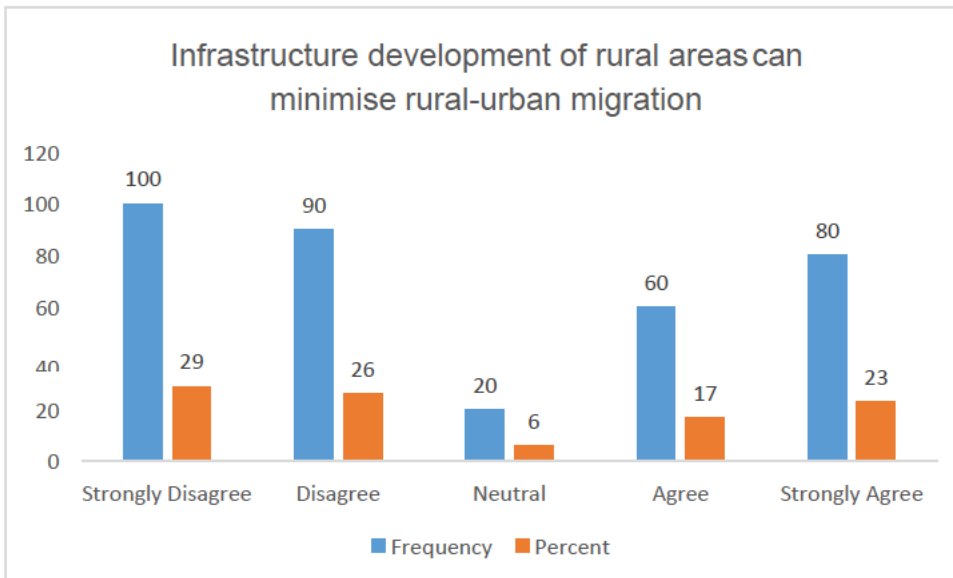


Figure 5.10: Infrastructure development of rural areas can minimise rural-urban migration

Table 5.12 and Figure 5.10 indicate 100 (29 percent) respondents strongly disagreed with the statement, which is significant, while 90 (26 percent) respondents disagreed with the statement and 20 (six percent) respondents indicated neutral to the statement, which is insignificant. While 60 (17 percent) respondents agreed with the statement, 80 (23 percent) respondents strongly agreed with the statement, which is insignificant. To support this, a Chi-square test was conducted in relation to occupational background and “Infrastructure development of rural areas can

minimise rural-urban migration”, where the results were (X^2 563.557; $df= 8$; $P<0.001$), which is highly significant.

The findings suggest a strong relationship between occupational background and “Infrastructure development can minimise rural-urban migration trends”, since many workers are not migrating due to infrastructural development. Job seekers do not normally migrate from rural areas motivated by infrastructure; they are typically motivated by economic opportunities to migrate (Mianabadi *et al.* 2021: 1-25). Hence, most driving factors of rural-urban migration are job opportunities and education (Yahuza *et al.* 2021: 222-240).

5.7.4 There are no roads and bridges in my area of origin

Table 5.13: There are no roads and bridges in my area of origin

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	Strongly Disagree	20	6	6	6
	Disagree	30	9	9	14
	Neutral	50	14	14	28
	Agree	180	51	51	80
	Strongly Agree	70	20	20	100
	Total	350	100	100	

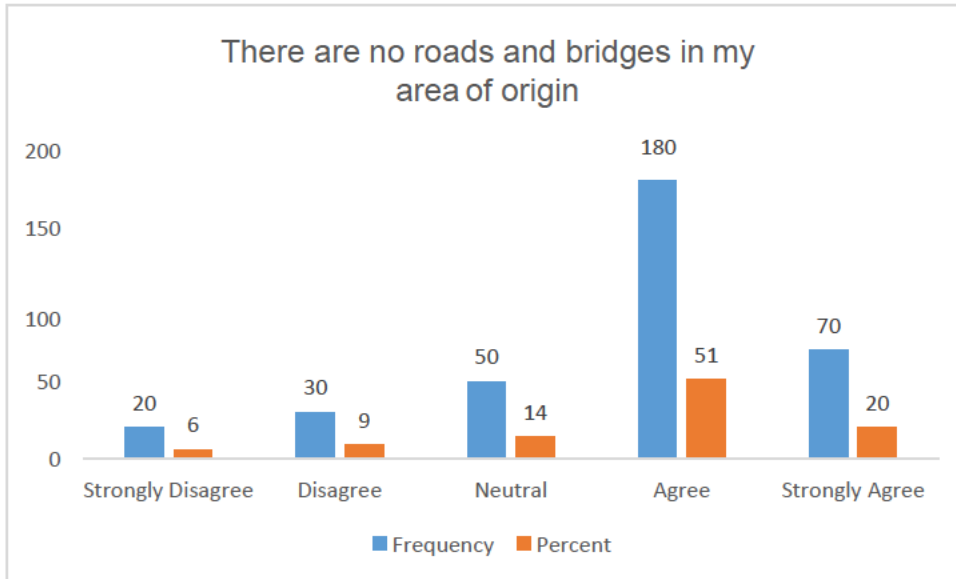


Figure 5.11: There are no roads and bridges in my area of origin

Table 5.13 and figure 5.11 show that 20 (six percent) respondents strongly disagreed there are no roads in their places of origin. Of the remaining participants, 30 (nine percent) disagreed, 50 (14 percent) respondents indicated neutral, 180 (51 percent) agreed, while 70 (20 percent) respondents strongly agreed with the statement. In support, a Chi-square test was conducted in relation to race and “There are no roads in my area of origin”, with results showing (X^2 233.333; $df=$ 12; $P<0.001$), which is highly significant, indicating the majority African migrants confirm slow development in rural areas.

Slow economic growth in rural areas is one of the major motivations for rural-urban migration (De Kadt and Sands 2021: 87-117). Hence, poor service delivery in rural areas only worsens rural-urban migration, which then creates more of a burden for urban municipalities, in terms of service delivery and urban planning (Mubangizi 2021: 181).

5.7.5 Migrated from rural to urban areas to gain access to better roads and bridges

Table 5.14: Migrated from rural to urban areas to gain access to better roads and bridges

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	Strongly Disagree	190	54	54	54
	Disagree	70	20	20	74
	Neutral	60	17	17	91
	Agree	20	6	6	97
	Strongly Agree	10	3	3	100
	Total	350	100	100	

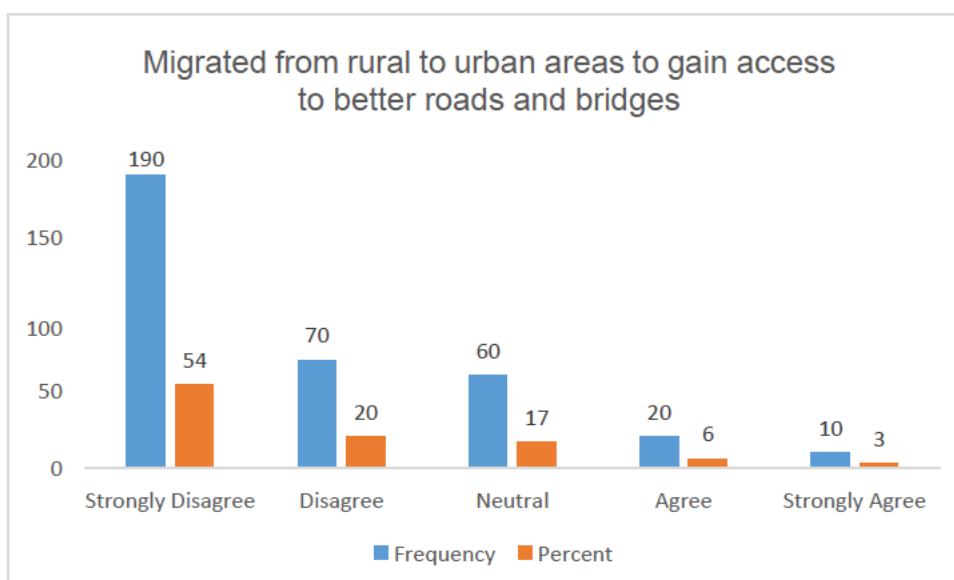


Figure 5.12: Migrated from rural to urban areas to gain access to better roads and bridges

Table 5.14 and figure 5.12 indicate 190 (54 percent) respondents strongly disagreed with the statement, which is significant, with 70 (20 percent) respondents that disagreed and 60 (17 percent) respondents indicating neutral to the statement. While 20 (six percent) respondents agreed with the statement, 10 (three percent) respondents strongly agreed with the statement, which is insignificant. To support this, a Chi-square test was conducted in relation to race and “I migrated from rural to urban areas to gain access to better roads and bridges”, with results showing (X^2

61.765; df= 12; P<0.001), which is highly significant.

The empirical study indicated the majority African rural migrants did not migrate in order to gain access to better roads and bridges. Bridges and infrastructure are not pull and push factors, they are service needs in terms of service delivery for both rural and urban areas (Hiropoulos 2020: 104-121). Thus, most rural-urban migrants live in informal settlements of urban areas, as their primary objective is to be in close proximity to work (Yiran *et al.* 2020: 1-28).

5.7.6 Rural-urban migration is good for the Transport

Table 5.15: Rural-urban migration is good for the transport economy

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	Strongly Disagree	10	3	3	3
	Disagree	20	6	6	9
	Neutral	50	14	14	23
	Agree	100	29	29	51
	Strongly Agree	170	49	49	100
	Total	350	100	100	

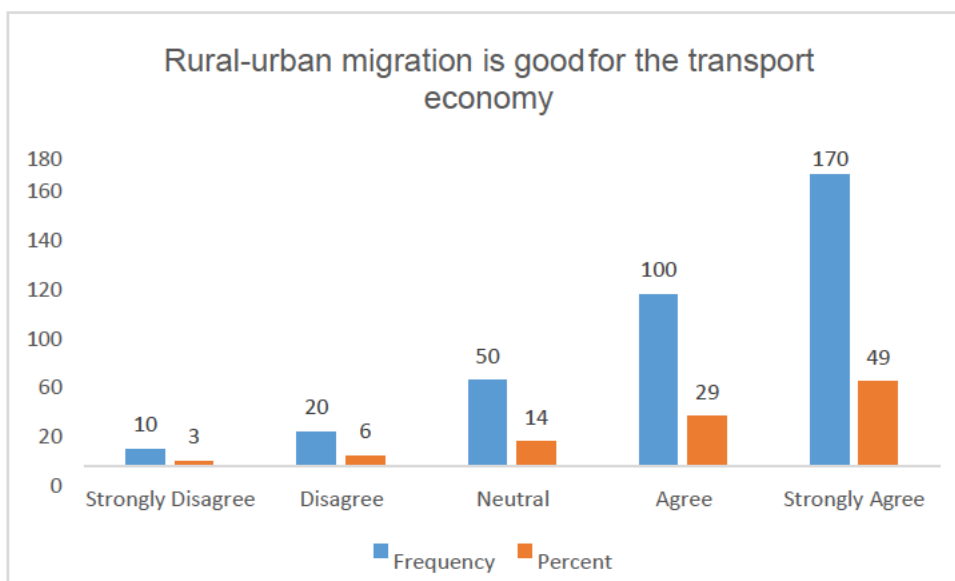


Figure 5.13: Rural-urban migration is good for the transport economy

Table 5.15 and figure 5.13 show 10 (three percent) respondents strongly disagreed with the statement, which is insignificant, while 20 (six percent) respondents disagreed with the statement, 50 (14 percent) respondents indicated neutral to the statement, and 100 (29 percent) respondents agreed with the statement, whereas 170 (49 percent) strongly agreed with the statement, which is significant. To support this, a Chi-square test was conducted in relation to occupational background and “Rural-urban migration is good for the transport economy”, where results were (χ^2 282.692; df= 8; $P < 0,001$), which is highly significant.

The empirical study suggests, since workers use transport to work and rural-urban migration increases the number of workers that are in needed in urban areas, the transport economy depends on rural-urban migration. Hence, there is a need for the government to harness the power of rural-urban migration for LED (Mthiyane *et al.* 2022: 9), while driving urban expansion and devising strategies to eradicate urban poverty (Ramya, Kowsalya and Dharanipriya 2019: 38-41).

5.8 VARIABLES BASED ON THE IMPACT OF RURAL-URBAN MIGRATION ON SCHOOLING FACILITIES AND CAPACITY

5.8.1 There is an increase in the student population due to rural-urban migration

Table 5.16: There is an increase in the student population due to rural-urban migration

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	Strongly Disagree	10	3	3	3
	Disagree	30	9	9	11
	Neutral	40	11	11	23
	Agree	190	54	54	77

Strongly Agree	80	23	23	100
Total	350	100	100	

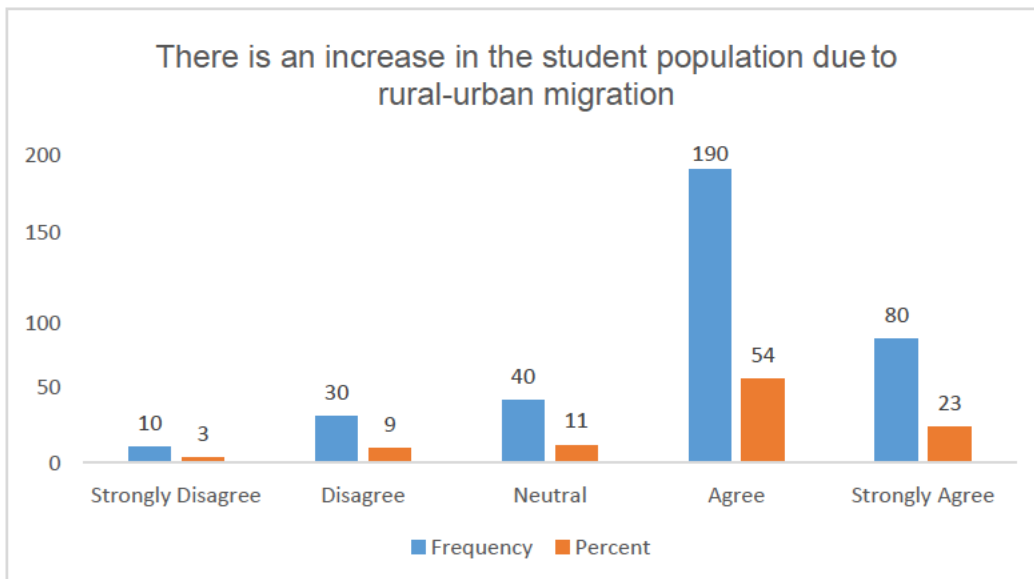


Figure 5.14: There is an increase in the student population due to rural-urban migration

Table 5.16 and figure 5.14 show 10 (three percent) respondents strongly disagreed with the statement, which is insignificant, while 30 (nine percent) respondents disagreed with the statement and 40 (11 percent) respondents were neutral to the statement. Whereas 190 (54 percent) respondents agreed with the statement, which is significant, 80 (23 percent) respondents strongly agreed with the statement. In support, a Chi-square test was conducted in relation to Educational Background and “There is an increase in the student population due to rural-urban migration”, with the results as ($X^2=479.447$; $df= 8$; $P<0,001$), which is highly significant.

The empirical study suggests a high number of students in urban areas are rural-urban migrants. This concurs with Guo, Huang and Zhang (2019: 37-50), who found a number of rural-urban migrants that migrate from rural areas in search of a better life, which they seek by enrolling in a number of universities in urban areas. This increases the number of young migrants with qualifications in urban areas and while some are absorbed by the labour markets, others are not, due to fierce job competition and lack of opportunities (Biswas *et al.* 2019: 593-614).

5.8.2 There is a large number of high school dropout in urban schools because of rural-urban migration

Table 5.17: There is a large number of high school dropout in urban schools because of rural-urban migration

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	Strongly Disagree	20	6	6	6
	Disagree	30	9	9	14
	Neutral	40	11	11	26
	Agree	90	26	26	51
	Strongly Agree	170	49	49	100
	Total	350	100	100	

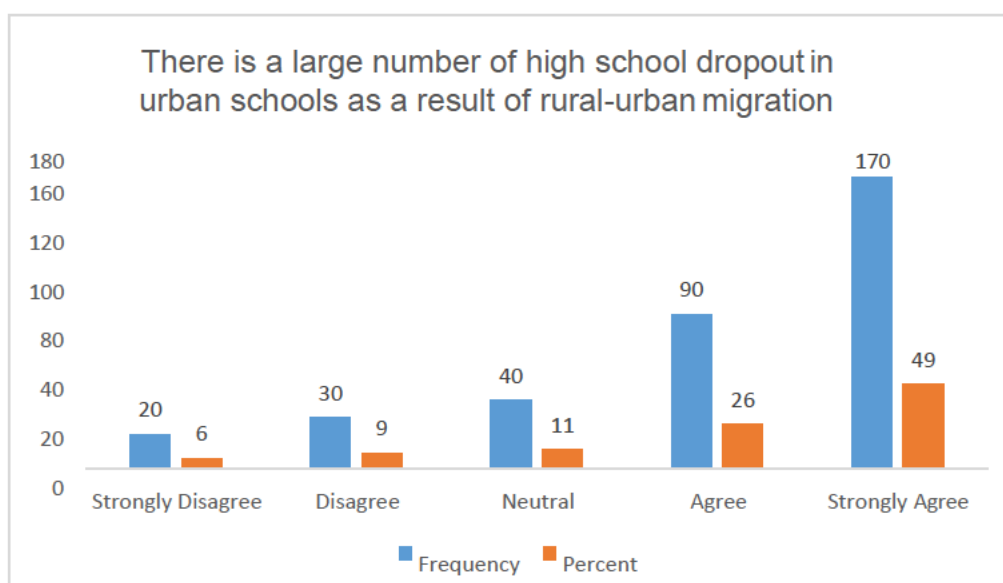


Figure 5.15: There is a large number of high school dropout in urban schools as a result of rural-urban migration

Table 5.17 and figure 5.15 show 20 (six percent) respondents strongly disagreed, 30 (nine percent) respondents strongly disagreed with the statement and 40 (11 percent) respondents indicated neutral, while 90 (26 percent) respondents agreed, 170 (49 percent) respondents strongly agreed.

and 170 (49 percent) respondents strongly agreed with the statement, which is quite significant. To support this, a Chi-square test was conducted in relation to educational background and “High dropout rates due to rural-urban migration”, as results showed (X^2 322.405; $df=$ 12; $P<0,001$), which is highly significant.

The empirical data suggest a link between urban school dropout levels and learners that have no education due to dropping out of high school; a significant number of these dropout students are rural-urban migrants. The increased high school dropout levels in urban areas are attributed to overcrowding in classes, which affects the effectiveness of urban teachers in providing adequate attention (Kumar and Sati 2023: 1-20). Moreover, there are other socio-economic issues that lead to students dropping out, with most rural-urban migrants that are studying having left their family home in search of better life in urban areas (Poku-Boansi *et al.* 2020: 102-220).

5.8.3 Learner overload in classrooms is increasing the learner teacher ratio

Table 5.18: Learner overload in classrooms increases learner teacher ratio

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	Strongly Disagree	10	3	3	3
	Disagree	30	9	9	11
	Neutral	40	11	11	23
	Agree	200	57	57	80
	Strongly Agree	70	20	20	100
	Total	350	100	100	

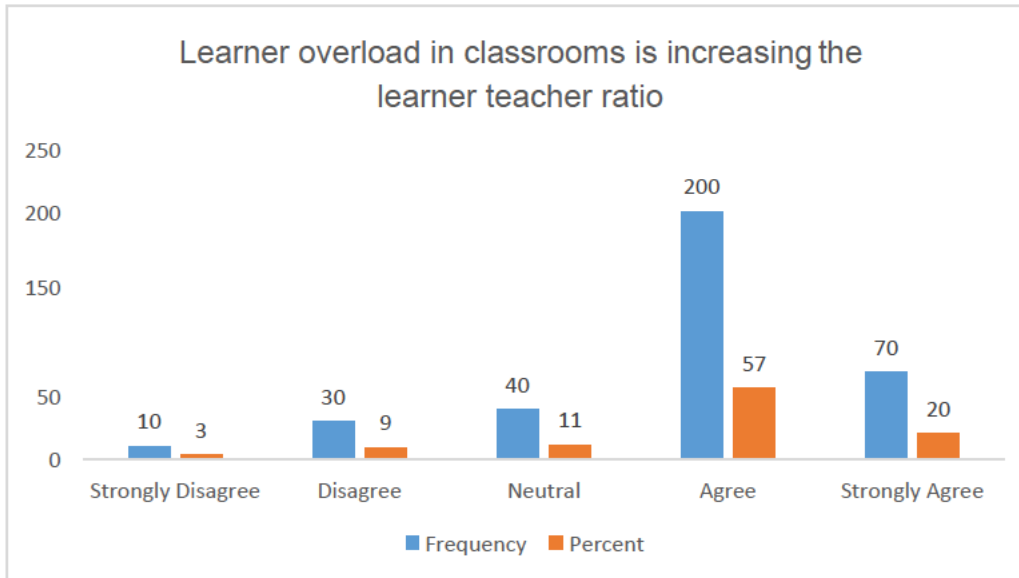


Figure 5.16: Learner overload in classrooms is increasing the learner teacher ratio

Table 5.18 and figure 5.16 show 10 (three percent) respondents strongly disagreed, 30 (nine percent) respondents disagreed and 40 (11 percent) respondents indicated neutral to the statement, while 200 (57 percent) respondents agreed with the statement, which is significant and 70 (20 percent) respondents strongly agreed with the statement. To support this, a Chi-square test was done in relation to educational background and “Learner overload in classrooms is increasing the workload for teachers”, where the results showed (χ^2 395.842; $df=$ 12; $P<0.001$), which is highly significant.

The empirical data suggest a strong relationship between educational needs of rural-urban migration learners and the overload in classes. Due to rural-urban migration, there seems to be an increasing number of learners and students in university affecting the capacity of these institutions (Basri *et al.* 2022: 14-09). As a result, teachers and lecturers subsequently teach more learners than expected (Welter 2022: 80).

5.9 VARIABLES BASED ON THE EFFECTS OF RURAL-URBAN MIGRATION ON HEALTH FACILITIES IN URBAN AREAS

5.9.1 Rural-urban migration causes delays in urban hospitals

Table 5.19: Rural-urban migration causes delays in urban hospitals

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	Strongly Disagree	5	1	1	1
	Disagree	10	3	3	4
	Neutral	45	13	13	17
	Agree	199	57	57	74
	Strongly Agree	91	26	26	100
	Total	350	100	100	

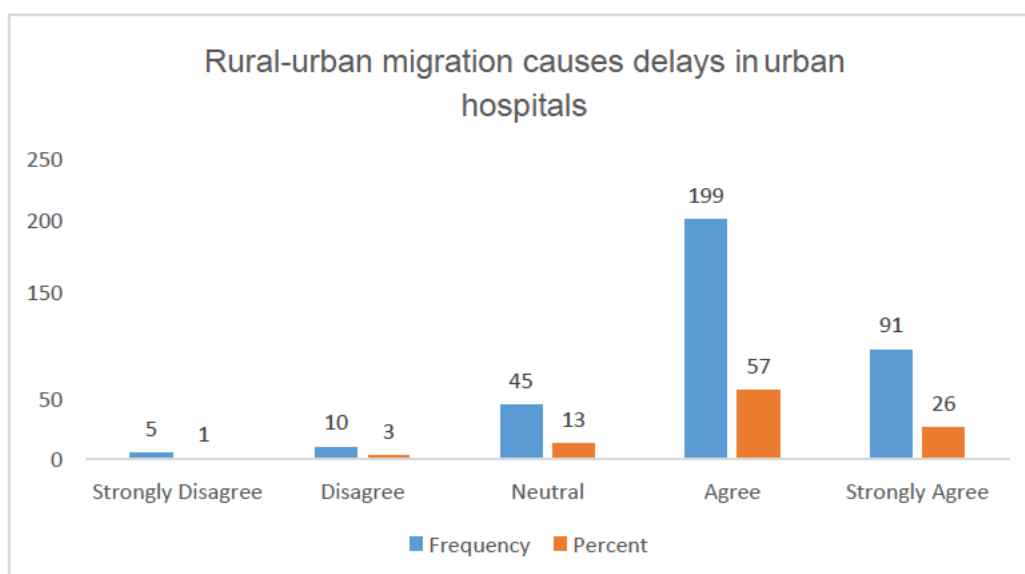


Figure 5.17: Rural-urban migration causes delays in urban hospitals

Table 5.19 and figure 5.17 show five (one percent) respondents strongly disagreed with the statement, while 10 (three percent) respondents disagreed with the statement and 45 (13 percent) respondents were neutral to the statement, while 199 (57) respondents were in agreement and 91 (26 percent) respondents strongly agreed with the statement. To support this, a Chi-square test was conducted in relation to “How long have you lived in Silver City informal settlement?” and “Rural-

urban migration causes delays in urban hospitals”, with results showing (X^2 523.678; $df= 8$; $P<0.001$), which is highly significant.

The empirical data suggest rural-urban migrants affect urban service delivery in terms of health provisions. This echoes findings by Omodan *et al.* (2019: 1-17) that rural-urban migration impacts the country’s health system. This happens when delays are experienced in urban hospitals due to the high number of patients that need to be attended by doctors (Radebe 2019: 61-70).

5.9.2 Rural-urban migration patterns increase diseases in urban areas

Table 5.20: Rural-urban migration patterns increase diseases in urban areas

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	Strongly Disagree	185	53	53	53
	Disagree	80	23	23	76
	Neutral	70	20	20	96
	Agree	10	3	3	99
	Strongly Agree	5	1	1	100
	Total	350	100	100	

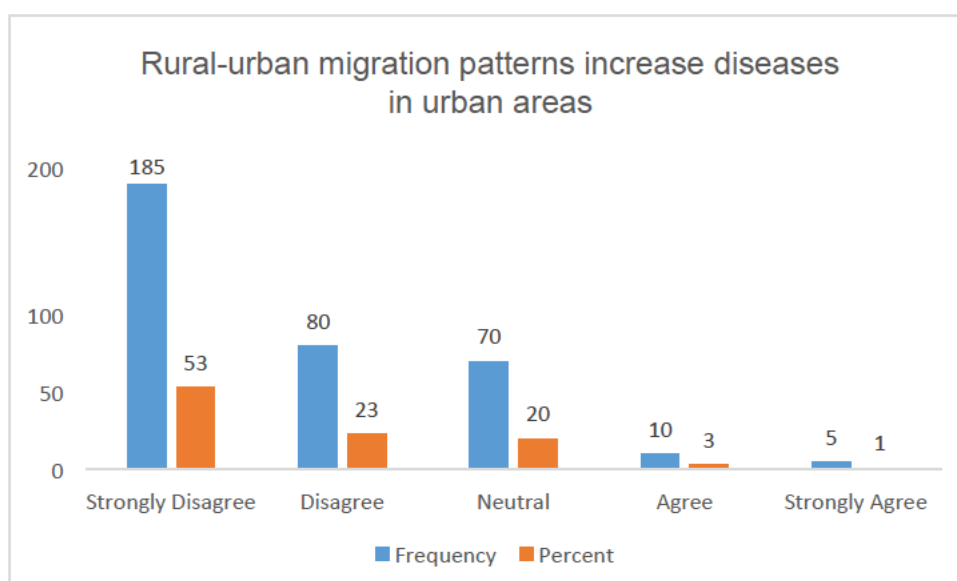


Figure 5.18: Rural-urban migration patterns increase diseases in urban areas

Table 5.20 and figure 5.18 show 185 (53 percent) respondents strongly disagreed with the statement, which is significant, and 80 (23 percent) respondents disagreed with the statement, with 70 (20 percent) respondents that indicated neutral. Whereas 10 (three percent) respondents agreed with the statement, only five (one percent) respondents strongly agreed with the statement, which is insignificant. To support this, a Chi-square test in relation to “How long have you lived in Silver City informal settlement?” and “Rural-urban migration increases diseases in urban areas”, with results as (X^2 304.724; $df=$ 8; $P<0.001$), which is highly significant.

In the empirical study, a majority respondents disagreed with this statement; which clearly shows there is no relationship between rural-urban migrants and the increase in diseases in urban areas. Rural-urban migrants do not bring diseases to the urban areas (Mbunge 2020: 1809-1814), as these migrants mostly live in informal settlement areas that are overcrowded and infested due to unhealthy environmental practices (Matamanda, Dunn and Nel 2022: 309-327).

5.9.3 The ever-increasing number of patients in urban hospitals because of rural-urban migration leads to shortages in medical staff

Table 5.21: The ever-increasing number of patients in urban hospitals because of rural-urban migration leads to shortages in medical staff

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	Strongly Disagree	7	2	2	2
	Disagree	12	3	3	5
	Neutral	45	13	13	18
	Agree	100	29	29	47
	Strongly Agree	186	53	53	100
	Total	350	100	100	

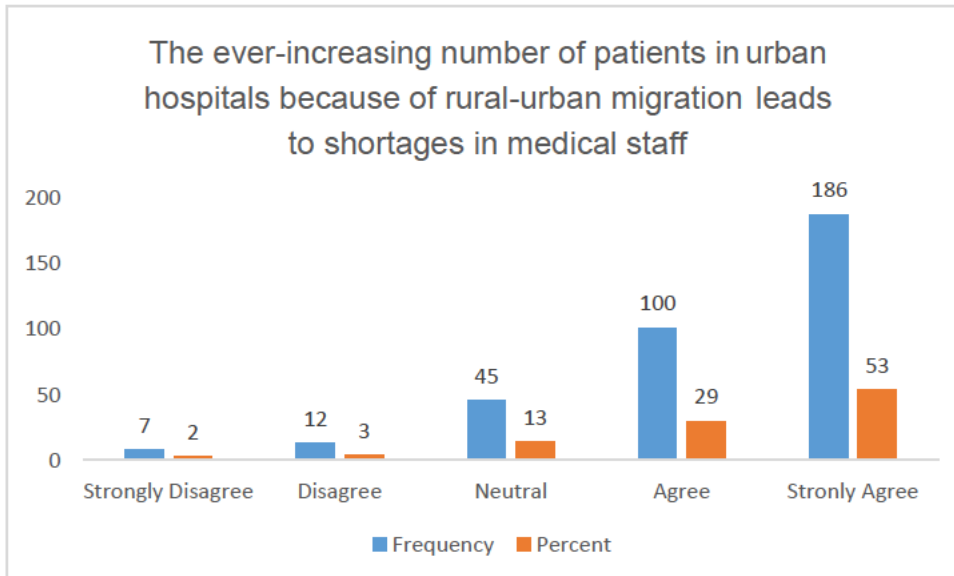


Figure 5.19: The ever-increasing number of patients in urban areas because of rural-urban migration leads to shortages in medical staff

Table 5.21 and figure 5.19 show seven (two percent) respondents strongly disagreed, 12 (three percent) respondents disagreed and 45 (13 percent) respondents were neutral with the statement. Whereas 100 (29 percent) respondents were in agreement with the statement, 186 (53 percent) respondents strongly agreed with the statement. To support this, a Chi-square test was conducted in relation to “How long have you lived in the Silver City informal settlement?” and “The ever-increasing number of patients in urban areas because of rural-urban migration leads to shortages in medical staff”, with results showing (X^2 354.429; df = 8; P <0.001), which is highly significant.

The empirical study suggests a connection between rural-urban migrants and the shortage of medical staff in urban areas. These shortages are due to the higher number of patients demanding more medical staff, which are scarce (Mlambo and Adetiba 2019: 19-42). The doctor to patient ratio is normally low, with fewer doctors having to care for overpopulated urban areas (Agwu, Anugwa and Ifeonu 2021: 36-45).

5.9.4 Rural-urban migration leads to shortages in hospital admission facilities

Table 5.22: Rural-urban migration leads to shortages in hospital admission facilities

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	Strongly Disagree	15	4	4	4
	Disagree	20	6	6	10
	Neutral	33	9	9	19
	Agree	181	52	52	71
	Strongly Agree	101	29	29	100
	Total	350	100	100	

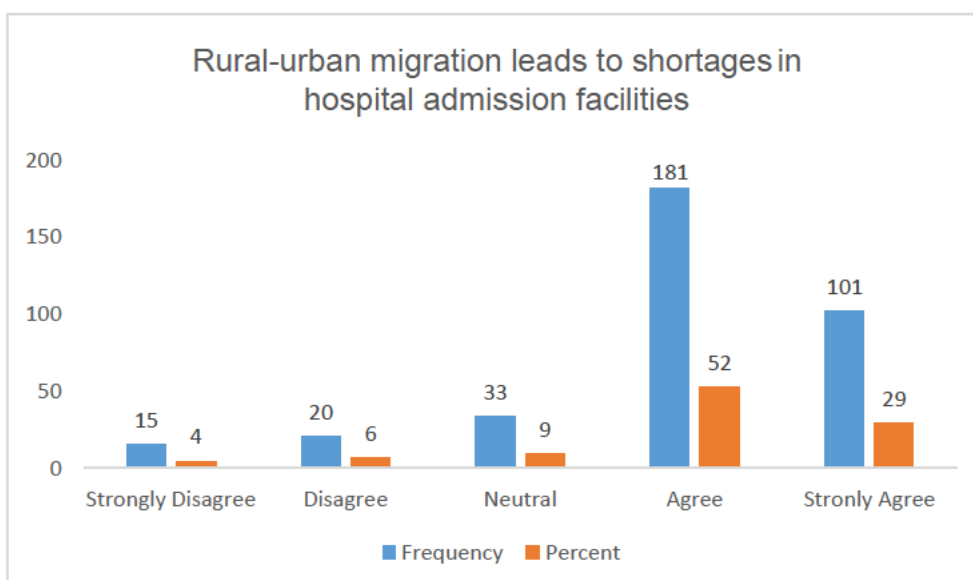


Figure 5.20: Rural-urban migration leads to shortages in hospital admission facilities

Table 5.22 and figure 5.20 indicate 15 (four percent) respondents strongly disagreed with the statement, with 20 (six percent) respondents that disagreed with the statement and 33(9%) respondents indicating neutral to the statement. Whereas

181 (52 percent) respondents agreed with the statement, which is significant, 101 (29 percent) respondents strongly agreed with the statement. To support this, a Chi-square test was conducted in relation to “How long have you lived in Silver City informal settlement?” and “Rural-urban migration leads to shortages in hospital admission facilities”, with results showing (X^2 645.244; $df= 8$; $P<0.001$), which is highly significant.

The empirical study suggests a strong connection between the influx of rural-urban migrants and the shortages in hospital admission facilities in urban areas. There is a need to build more hospitals in urban areas due to rural-urban migration patterns (Smith and Wesselbaum 2020: 2855-2858). Furthermore, building more hospitals in rural areas will allow migrants to use rural facilities (Irudaya Rajan, Sivakumar and Srinivasan 2020: 1021-1039).

5.10 VARIABLES BASED ON RURAL-URBAN MIGRATION EFFECTS ON POLICING AND CRIME

5.10.1 Rural-urban migration leads to increased crime in urban areas

Table 5.23: Rural-urban migration leads to increased crime in urban areas

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	Strongly Disagree	20	6	6	6
	Disagree	30	9	9	14
	Neutral	40	11	11	26
	Agree	100	29	29	54
	Strongly Agree	160	46	46	100
	Total	350	100	100	

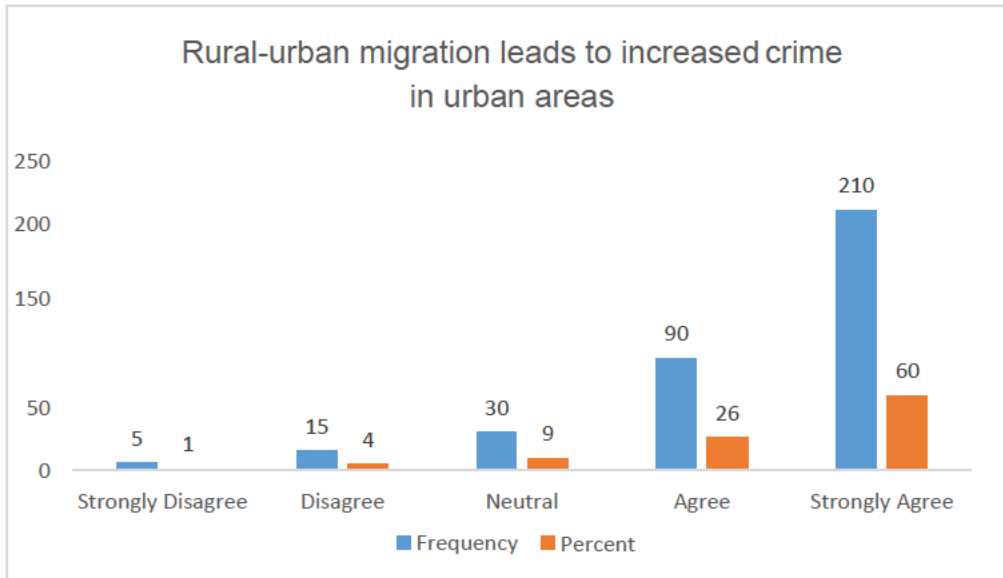


Figure 5.21: Rural-urban migration leads to increased crime in urban areas

Table 5.23 and figure 5.21 show five (one percent) respondents strongly disagreed with the statement and 15 (four percent) respondents disagreed with the statement, which is insignificant. Whereas 30 (nine percent) respondents indicated neutral to the statement, 90 (26 percent) respondents agreed and 210 (60 percent) respondents strongly disagreed with the statement, which is significant. To support this, a Chi-square test was conducted in relation to “How long have you lived in the Silver City informal settlement?” and “Rural-urban migration leads to an increase in crime in urban areas” and the results showed (X^2 344.949; $df=$ 8; $P<0.001$), which is highly significant.

The study suggests a connection between the flow of rural-urban migrants and crime in urban areas, to an extent. Unemployed rural-urban migrants are the most likely to commit crime in urban areas (Lagakos 2020: 92-174). Hence, crimes mostly happen in urban areas and urban prisons are always full to capacity (Cui and To 2021: 24-50).

5.10.2 Rural-urban migration creates more demand for police officers

Table 5.24: Rural-urban migration creates more demand for police officers

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	Strongly Disagree	6	2	2	2
	Disagree	12	3	3	5
	Neutral	51	15	15	20
	Agree	191	55	55	74
	Strongly Agree	90	26	26	100
	Agree				
	Total	350	100	100	

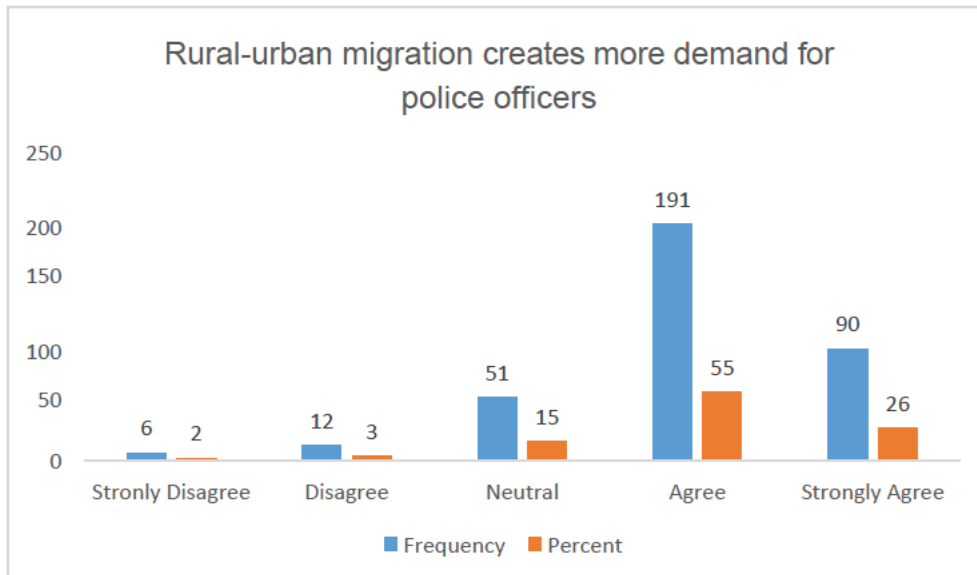


Figure 5.22: Rural-urban migration creates more demand for police officers

Table 5.24 and figure 5.22 show six (two percent) respondents strongly disagreed with the statement, with 12 (three percent) respondents that disagreed with the statement, as well as 51 (15 percent) respondents indicating neutral to the statement. Whereas 191 (55 percent) respondents agreed with the statement, which is significant, and 90 (26 percent) respondents strongly agreed with the statement. To support this, a Chi-square test was conducted in relation to “How long have you lived in Silver City informal settlement?” and “Rural-urban migration creates more

demand for police officers”, with results as (X^2 530.099; $df= 8$; $P<0.001$), which is highly significant.

The study suggests a strong connection between rural-urban migrants and the demand for more urban police. The high crime levels in urban areas overwhelm the police force in urban areas when crimes are happening at the same time (Adger *et al.* 2021: 50-66). Hence, there is a need for the government to hire more professional police officers to combat crime in urban areas (Gu, Andreev and Dupre 2021: 604)

5.10.3 We need more police stations due to the high rural-urban migration demand

Table 5.25: We need more police stations due to the high demand created by rural-urban migration

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	Strongly Disagree	3	1	1	1
	Disagree	18	5	5	6
	Neutral	64	18	18	24
	Agree	80	23	23	47
	Strongly Agree	185	53	53	100
	Total	350	100	100	

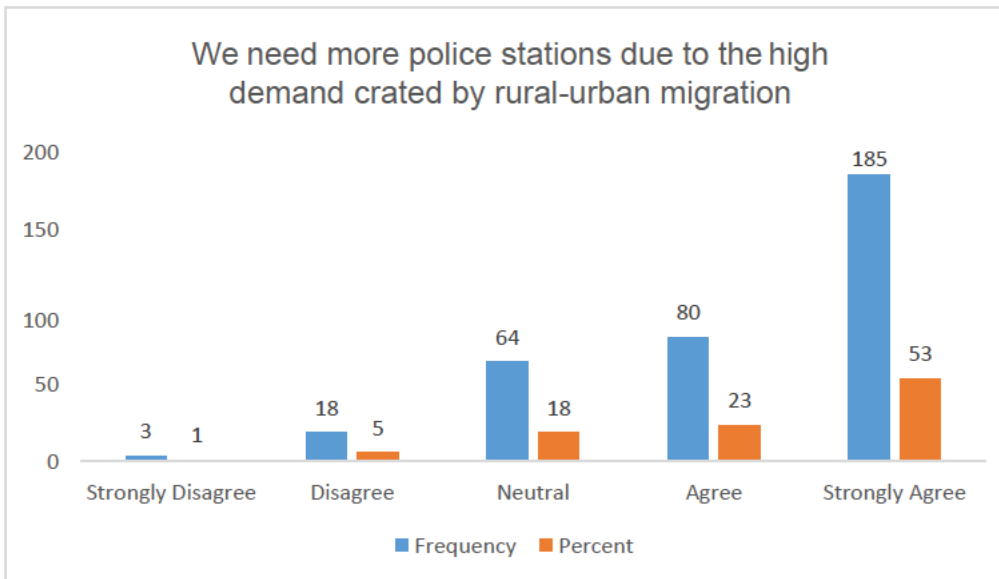


Figure 5.23: We need more police stations due to the high demand created by rural-urban migration

Table 5.25 and figure 5.23 show three (one percent) respondents strongly disagreed, which is insignificant, while 18 (five percent) respondents disagreed with the statement, 64 (18 percent) respondents were neutral, with 80 (23 percent) respondents in agreement with the statement, and 185 (53 percent) respondents strongly agreed with the statement, which is significant. To support this, a Chi-square test was conducted in relation to “How long have you lived in Silver City informal settlement?” and “We need more police stations to the high demand created by rural-urban migration” and results showed (X^2 263.554; $df= 8$; $P<0.001$), which is highly significant.

The study suggests a connection between rural-urban migration and “the need for more police station in urban areas.” Another reason for lack of supervision of crime in urban areas is the shortage of the police stations (Soyinka *et al.* 2016: 52-64). Hence, it is mostly populated urban areas that need more police stations strategically stationed to deal with crime (Aaron and Felix 2020: 157-164).

More police officers need to be hired to deal with the rural-urban migration demand

Table 5.26: More police officers need to be hired to deal with the demand created by rural-urban migration

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	Strongly Disagree	7	2	2	2
	Disagree	23	7	7	9
	Neutral	70	20	20	29
	Agree	160	46	46	74
	Strongly Agree	90	26	26	100
	Total	350	100	100	

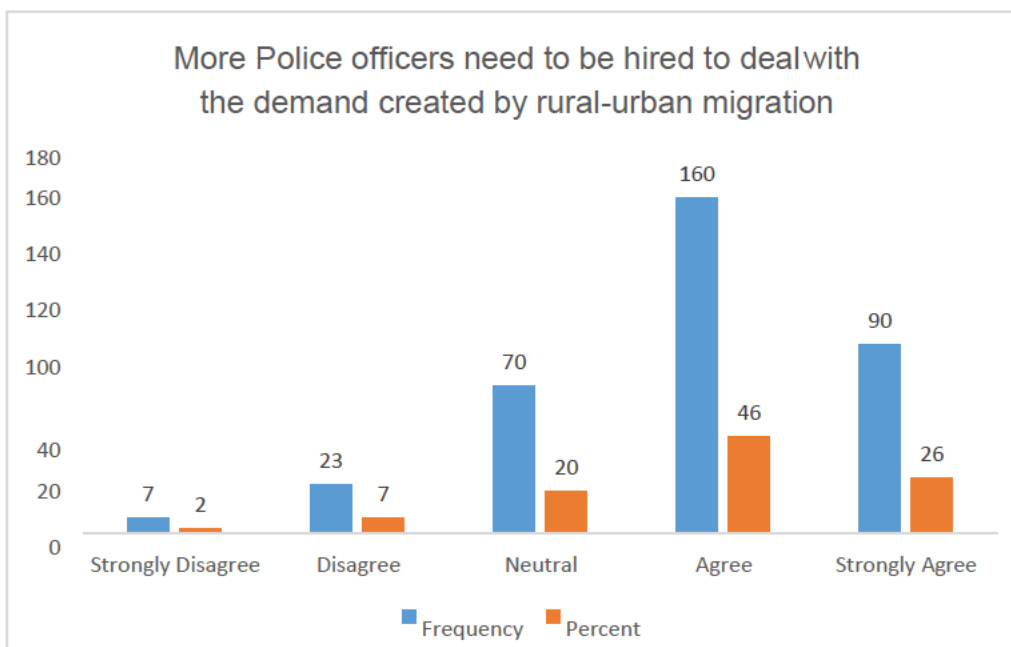


Figure 5.24: More police officers need to be hired to deal with the demand created by rural-urban migration

Table 5.26 and figure 5.24 shows seven (two percent) respondents strongly disagreed with the statement, with 23 (seven percent) respondents that disagreed, and 70 (20 percent) respondents were neutral, while 160 (46 percent) respondents agreed with the statement, which is significant, whereas 90 (26 percent) respondents strongly agreed with the statement. To support this, a Chi-square test was conducted in relation to “How long have you lived in the Silver City informal

settlement?” and “More police officers need to be hired to deal with the demand created by the rural-urban migration”, with results showing (X^2 652.273; $df= 8$; $P<0.001$); this is highly significant, indicating the study suggests a connection between rural-urban migration and the need for more police officers.

There is a need for more police officers in urban areas, according to King, Lulle and Melossi (2021: 52-58), to deal with crime as a result of overcrowding. Nonetheless, there is also a need for professionals in the police force, trained to work with the new technology used to commit crimes (Marutlulle 2021:16).

5.10.4 More money from government needs to be prioritised for policing and crime

Table 5.27: More money from government needs to be prioritised for policing and crime

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	Strongly Disagree	2	1	1	1
	Disagree	18	5	5	6
	Neutral	30	9	9	14
	Agree	80	23	23	37
	Strongly Agree	220	63	63	100
	Total	350	100	100	

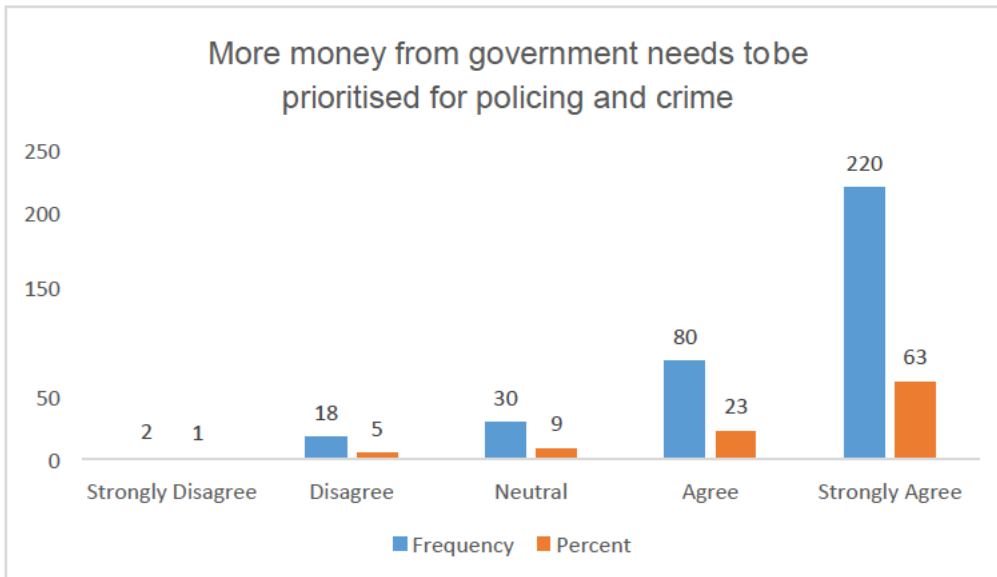


Figure 5.25: More money from government needs to be prioritised for policing and crime

Table 5.27 and figure 5.25 show two (one percent) respondents strongly disagreed, 18 (five percent) respondents disagreed, 30 (nine percent) respondents were neutral with the statement, while 80 (23 percent) respondents agreed with the statement and 220 (63 percent) respondents strongly agreed with the statement, which is significant. To support this, a chi-square test was conducted in relation to “How long have you lived in Silver City informal settlement?” and “More money from the government needs to be prioritised for policing and crime”, with results showing (X^2 333.390; $df= 8$; $P<0.001$), which is highly significant.

The study suggests more money is, indeed, needed to deal with crime as a result of rural-urban migration. An amount of R7.8 billion was allocated to the police department to hire more police officers to deal with the surge of violence in urban areas (Mail & Guardian 2023: 1).

5.11 VARIABLES BASED ON EFFECTS OF RURAL-URBAN MIGRATION ON ELECTRICITY SUPPLY

5.11.1 Rural-urban migration leads to more migrants demanding more electricity, which results in loadshedding

Table 5.28: Rural-urban migration leads to more migrants demanding more electricity which results in loadshedding

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	Strongly Disagree	6	2	2	2
	Disagree	19	5	5	7
	Neutral	50	14	14	21
	Agree	155	44	44	66
	Strongly Agree	120	34	34	100
	Total	350	100	100	

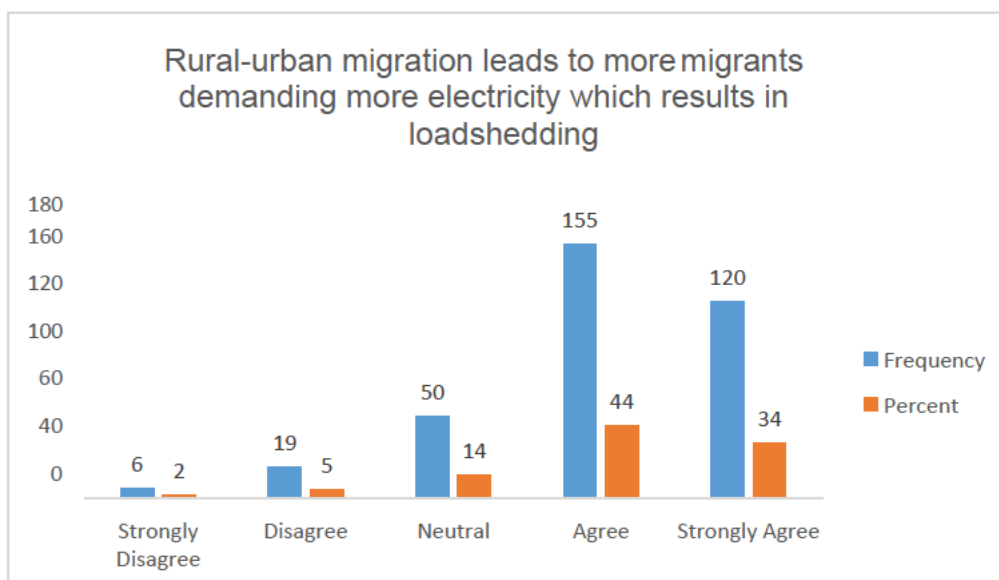


Figure 5.26: Rural-urban migration leads to more migrants demanding more electricity which results in loadshedding

Table 5.28 and Figure 5.26 show six (two percent) respondents strongly disagreed with the statement. With 19 (five percent) of respondents that disagree with the statement and 50 (14 percent) respondents were neutral to the statement, while 155 (44 percent) respondents agreed and 120 (34 percent) respondents strongly agreed with the statement, which is significant. To support this, a Chi-square test in relation to “How long have you lived in silver city informal settlement?” and “Rural-urban

migration leads to more migrants demanding more electricity, which results in loadshedding” and the results show (X^2 555.492; $df= 8$; $P=<0.001$), which is highly significant.

The study suggests a strong connection between rural-urban migration and migrants demanding more electricity, which then leads to loadshedding. The South African government is dealing with power cuts, using loadshedding to try and alleviate the demand for more electricity in urban areas (Reuters 2023: 1).

5.11.2 More power stations are needed in urban areas to curb the demand created by rural-urban migration.

Table 5.29: More power stations are needed in urban areas to curb the demand created by rural-urban migration

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	Strongly Disagree	4	1	1	1
	Disagree	7	2	2	3
	Neutral	30	9	9	12
	Agree	89	25	25	37
	Strongly Agree	220	63	63	100
	Total	350	100	100	

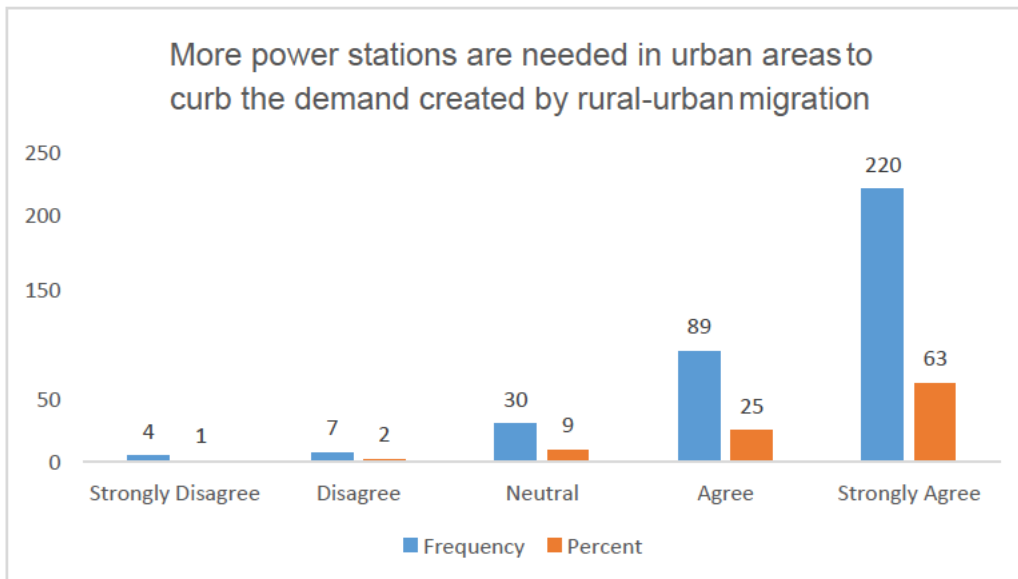


Figure 5.27: More power stations are needed in urban areas to curb the demand created by rural-urban migration

Table 5.29 and figure 5.27 show four (one percent) respondents strongly disagreed with the statement. With seven (two percent) respondents who disagreed and 30 (nine percent) respondents who indicated neutral to the statement, 89 (25 percent) respondents agreed with the statement and 220 (63 percent) respondents strongly agreed with the statement, which is significant. To support this, a chi-square test in relation to “How long have you lived in the silver city informal settlement?” and “More power stations are needed in urban areas to curb the demand created by rural-urban migration”, with the results showing (X^2 392.953; $df= 8$; $P<0.001$), which is highly significant.

The study suggests a connection between rural-urban migration and the need to create more power stations. Cities in urban areas need to have proper urban planning that will account for the new population due to rural-urban migration (Ahady, Dev and Mandal 2022: 3963-3978). Thus, when there is no proper planning in local government, municipalities end up being overwhelmed by the demand for services in urban areas (Philipo, Kakande and Krauter 2022: 5215).

5.11.3 More options need to be created for electricity; for example, solar and wind energy, since there is more demand due to rural-urban migration

Table 5.30: More options need to be created for electricity, for example, solar and wind energy, since there is more demand due to rural-urban migration

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	Strongly Disagree	1	0	0	0
	Disagree	9	3	3	3
	Neutral	40	11	11	14
	Agree	100	29	29	43
	Strongly Agree	200	57	57	100
	Total	350	100	100	

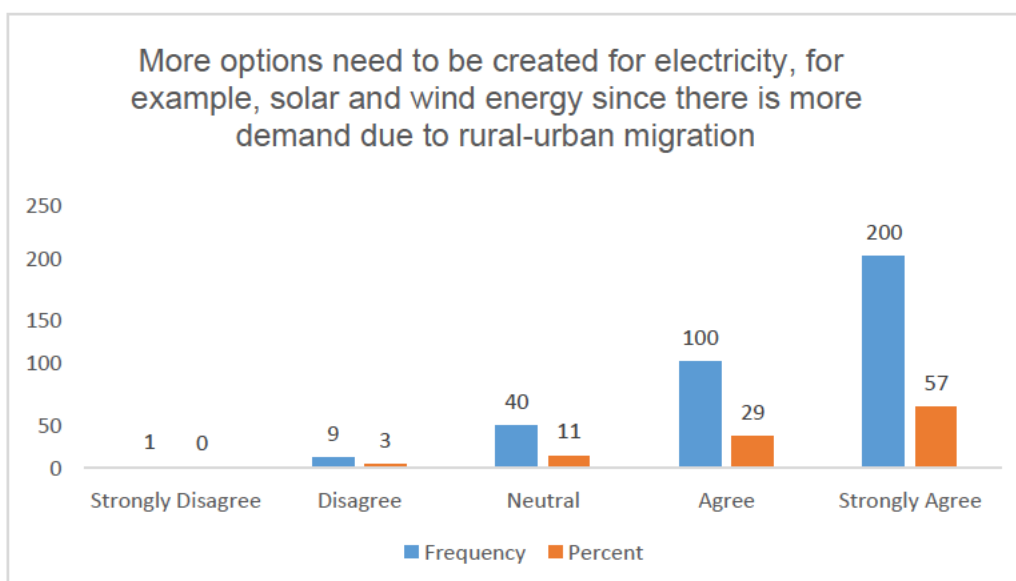


Figure 5.28: More options need to be created for electricity, for example, solar and wind energy since there is more demand due to rural-urban migration

Table 5.30 and figure 5.28 show one (zero percent) respondents strongly disagreed and nine (three percent) respondents disagreed with the statement, which is

insignificant. While 40 (11 percent) respondents indicated neutral to the statement, 100 (29 percent) respondents agreed and 200 (57 percent) respondents strongly agreed with the statement, which is significant. To support this statement, a Chi-square test was conducted in relation to “How long have you lived in Silver City informal settlement?” and “More options need to be created for electricity, for example, solar and wind energy, since there is more demand for electricity due to rural-urban migration,” where the results showed (X^2 312.879; $df= 8$; $P<.001$), which is significant.

The study suggests a strong connection between rural-urban migration and creating more energy options to address the increased demand for electricity. Renewable energy is needed in urban areas to take advantage of the natural resources in these spaces (Akinbami, Oke and Bodunrin 2021: 5077-5093). This is due to power supply failure in urban areas, which leads to power cuts (Mutezo and Mulopo 2021: 110-609)

5.12 VARIABLES BASED ON THE EFFECTS OF RURAL-URBAN MIGRATION ON WATER AND SANITATION

There is more demand for water in urban areas because of rural-urban migration

Table 5.31: There is more demand for water in urban areas because of rural-urban migration

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	Strongly Disagree	2	1	1	1
	Disagree	18	5	5	6
	Neutral	60	17	17	23
	Agree	200	57	57	80
	Strongly Agree	70	20	20	100
	Total	350	100	100	

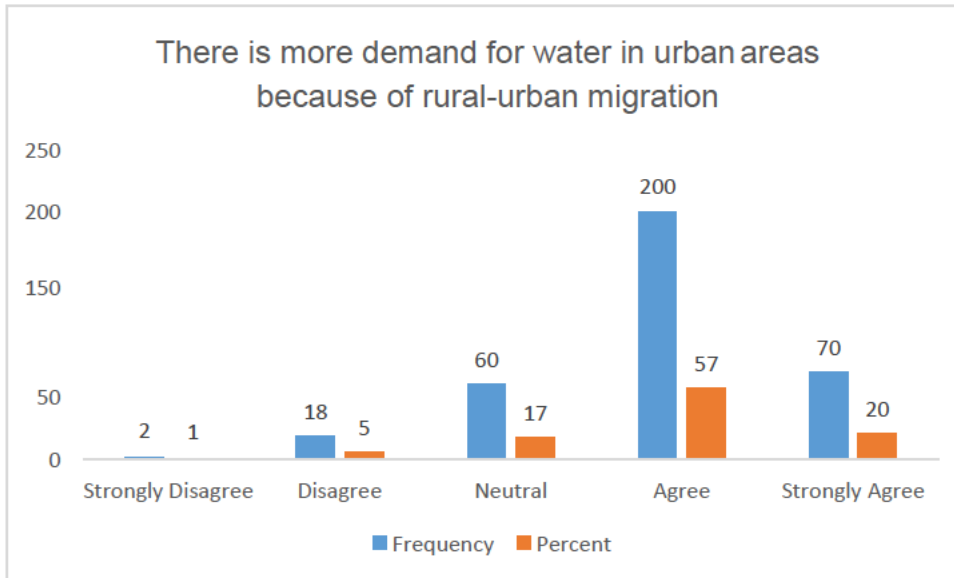


Figure 5.29: There is more demand for water in urban areas because of rural-urban migration

Table 5.31 and figure 5.29 show two (one percent) respondents strongly disagreed with the statement and 18 (five percent) respondents disagreed, which is insignificant. While 60 (17 percent) respondents remained neutral to the statement, 200 (57 percent) respondents agreed and 70 (20 percent) respondents strongly agreed with the statement, which is significant. To support this, a Chi-square test was conducted in relation to “How long have you lived in Silver City informal settlement?” and “There is more demand for water in urban areas because of rural-urban”, with results showing (X^2 459.702; $df= 8$; $P<0.001$), which is highly significant.

The study suggests a strong relationship between rural-urban migration and the demand for more water in urban areas. These areas need more water for service delivery, since there are informal settlements as well that mostly connect themselves into the water supply (Sinha, Kumar and Prakash 2020:148-160). Thus, there is need for a proper urban expansion plan that will ensure no one is left behind when it comes to urban service delivery (Dube, Nhamo and Chikodzi 2022: 453-468).

5.12.1 There are pit latrines in urban areas due to rural-urban migration

Table 5.32: There are pit latrines in urban areas due to rural-urban migration

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	Strongly Disagree	4	1	1	1
	Disagree	7	2	2	3
	Neutral	50	14	14	17
	Agree	100	29	29	46
	Strongly Agree	189	54	54	100
	Total	350	100	100	

Figure 5.30: There are pit latrines in urban areas due to rural-urban migration

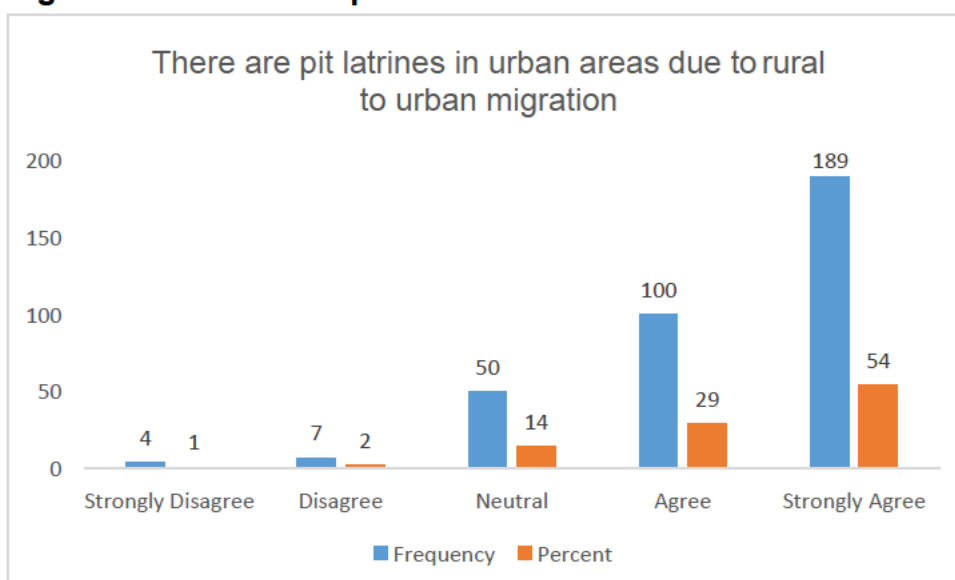


Table 5.32 and figure 5.30 show four (one percent) respondents strongly disagreed with the statement and seven (two percent) respondents disagreed with the statement. With 50 (14 percent) respondents neutral with the statement. While 100 (29 percent) respondents agreed and 189 (54 percent) respondents strongly agreed with the statement, which is significant. To support this, a Chi-square test was conducted in relation to “How long have you lived in the Silver City informal settlement?” and “There are pit latrines in urban areas due to rural-urban migration”, where results show (X^2 304.095; $df= 8$; $P<0.001$), which is highly significant.

The study suggests a connection between rural-urban migration and the increase in pit latrines in urban areas. This corroborates previous findings regarding the increasing number of informal settlements leading to development of pit latrines (Loukaitou-Sideris 2020: 19-37). Furthermore, urban areas are forerunners when there are pandemics, due to the living conditions of rural-urban migrants (Bakare 2019: 042006).

5.12.2 More illegal water connections are in the urban areas due to rural-urban migration

Table 5.33: More illegal water connections are in the urban areas due to rural-urban migration

	Frequency	Percent	Valid Percent	Cumulative Percent
Valid Strongly Disagree	11	3	3	3
Disagree	25	7	7	10
Neutral	56	16	16	26
Agree	160	46	46	72
Strongly Agree	98	28	28	100

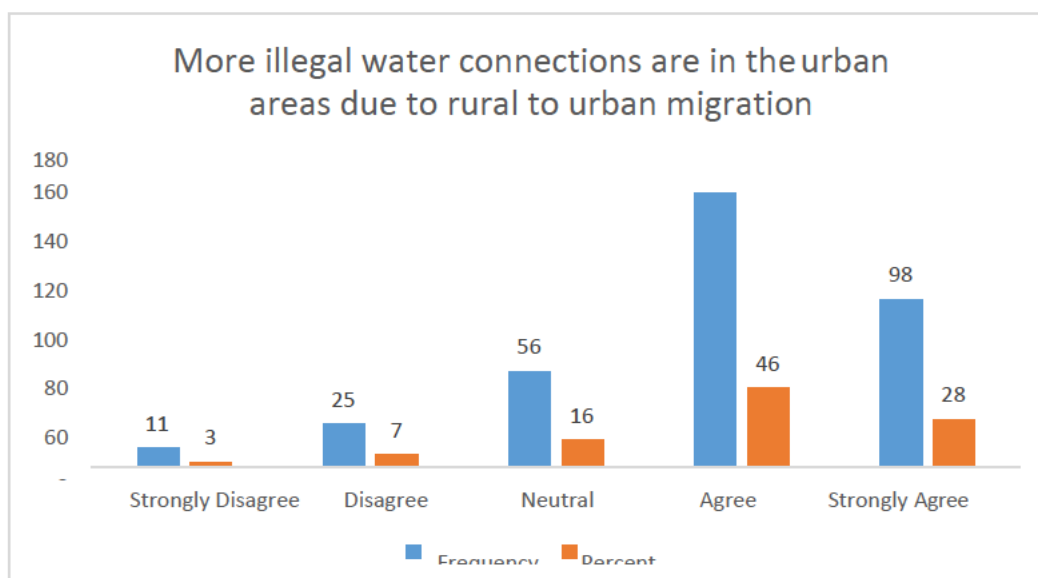


Figure 5.31: More illegal water connections are in the urban areas due to rural-urban migration

Table 5.33 and figure 5.31 indicate 11 (three percent) respondents strongly disagreed with the statement and 25 (seven percent) respondents disagreed with the statement, which is insignificant. With 56 (16 percent) respondents indicating neutral to the statement, 160 (46 percent) respondents were in agreement and 98 (28 percent) respondents strongly agreed with the statement, which is significant. To support this, a Chi-square test was conducted in relation to “How long have you lived in the Silver City informal settlement?” and “More illegal water connections are in the urban areas due to rural-urban migration” results were (X^2 629.491; $df= 8$; $P<0.001$), which is highly significant.

The study suggests a strong connection between rural-urban migration and illegal water connection. The illegal water connections in urban areas create more demand for water not accounted for in urban area municipalities (Nyambe, Agestika and Yamauchi 2020: 0232763). Therefore, the burden of paying for water services is only with urban dwellers that are legally connected (Adeyeye, Gibberd and Chakwizira 2020: 122-594).

5.12.3 Air pollution of rural-urban migration leads to climate change

Table 5.34: Air pollution of rural-urban migration leads to climate change

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	Strongly Disagree	12	3	3	3
	Disagree	18	5	5	8
	Neutral	60	17	17	26
	Agree	71	20	20	46
	Strongly Agree	189	54	54	100
	Total	350	100	100	

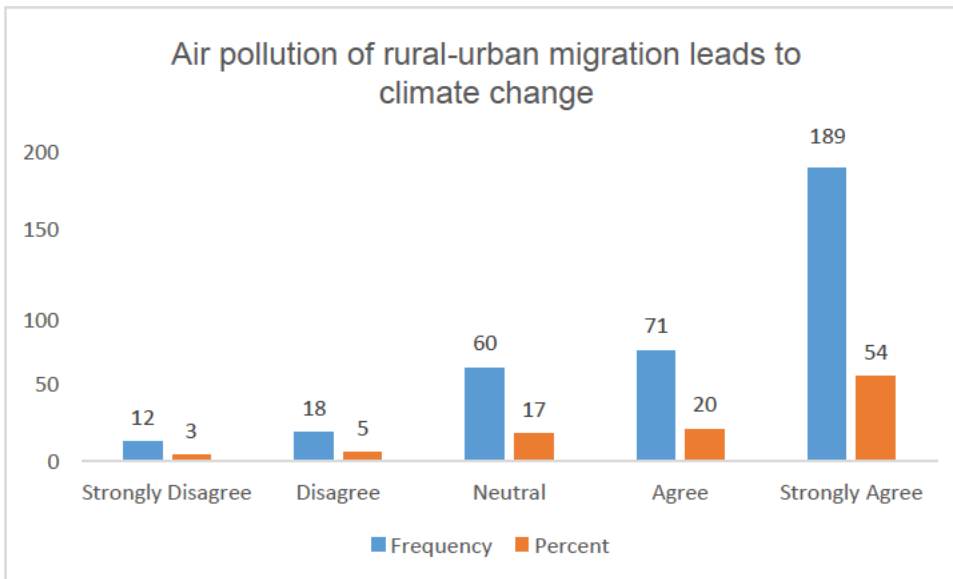


Figure 5.32: Air pollution of rural-urban migration leads to climate change

Table 5.34 and figure 5.32 show 12 (three percent) respondents strongly agreed with the statement and 18 (five percent) respondents disagreed with the statement, while 60 (17 percent) respondents indicated neutral to the statement. Whereas 71 (20 percent) respondents agreed with the statement, 189 (54 percent) respondents strongly agreed with the statement, which is significant. To support this, a Chi-square test was conducted in relation to “How long have you lived in Silver City informal settlement?” and “Air pollution because of rural-urban migration leads to climate change”, with results indicating (X^2 460.269; $df= 8$; $P<0.001$), which is highly significant.

The study suggests a strong connection between rural-urban migration and air pollution. Hence, with urban areas suffering from air pollution, this affects the air quality which, in turn, results in health complications (Parkins 2010: 6). Moreover, issues of climate change are now also evident in urban areas due to continuing air pollution in these areas (Helldén *et al.* 2021: 164-175).

5.13 VARIABLES BASED ON RURAL-URBAN MIGRATION EFFECTS ON SOCIAL DEVELOPMENT

There is more demand for housing in urban areas because of rural-urban migration.

Table 5.35: There is more demand for housing in urban areas because of rural-urban migration

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	Strongly Disagree	11	3	3	3
	Disagree	19	5	5	8
	Neutral	49	14	14	23
	Agree	190	54	54	77
	Strongly Agree	81	23	23	100
	Total	350	100	100	

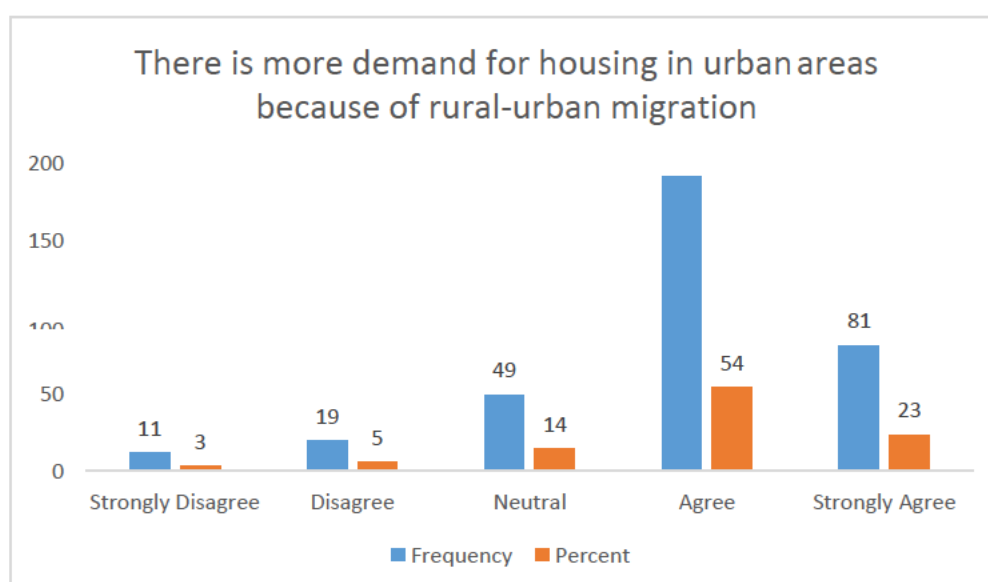


Figure 5.33: There is more demand for housing in urban areas because of rural-urban migration

Table 5.35 and figure 5.33 show 11 (three percent) respondents strongly disagreed and 19 (five percent) respondents disagreed with the statement, while 49 (14 percent) respondents were neutral with the statement, 190 (54 percent) respondents agreed, whereas 81 (23 percent) respondents strongly agreed with the statement,

which is significant. To support this, a Chi-square test was conducted in relation to “How long have you lived in the Silver City informal settlement?” and “There is more demand for housing in urban areas because of rural-urban migration”, with results showing (X^2 612.945; $df= 8$; $P<0.001$), which is highly significant.

The study suggests a strong relationship between rural-urban migration and the demand for housing. Rural-urban migrants end up demanding housing in urban areas, which then affects the government housing allocation programme (Walker and Mathebula 2020: 1193-1209). Moreover, the housing backlogs continue to be a problem in urban areas, with a number of migrants waiting for housing, while there is a constant flow of new rural migrants joining lists for housing allocation in urban areas (Bodo 2019: 32-45).

5.13.1 There are more informal settlements because of rural-urban migration

Table 5-36: There are more informal settlements because of rural-urban migration

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	Strongly Disagree	2	1	1	1
	Disagree	10	3	3	4
	Neutral	41	11	11	15
	Agree	86	25	25	40
	Strongly Agree	211	60	60	100
	Total	350	100	100	

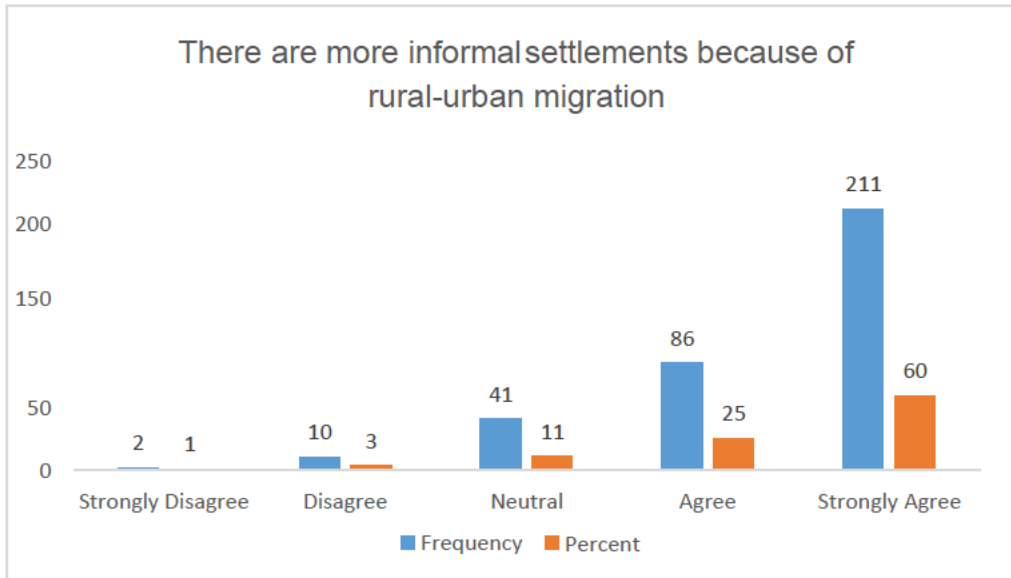


Figure 5.34: There are more informal settlements because of rural-urban migration

Table 5.36 and figure 5.34 show two (one percent) respondents strongly disagreed with the statement, with 10 (three percent) respondents that disagreed, which is insignificant, while 41 (11 percent) respondents indicated neutral to the statement. Whereas 86 (25 percent) respondents agreed, 211 (60 percent) respondents strongly agreed with the statement, which is significant. To support this, a Chi-square test was conducted in relation to “How long have you lived in Silver City informal settlement?” and “There are more informal settlements because of rural-urban migration”, with results showing (X^2 298.315; $df= 8$; $P<0.001$), which is highly significant.

The study suggests a strong relationship between rural-urban migration and more informal settlement in urban areas. Rural-urban migration to urban areas with no formal settlement in urban areas, forces these migrants to live in informal settlements (Mubangizi 2021: 181). Rural-urban migrants are motivated by economic opportunities, such as jobs and education in urban areas; hence, informal settlements are mostly situated near economically active areas (Zulch, Musefuwa and Yacim 2023: 293-308).

5.13.2 There is more demand for social grants in urban areas because of rural-urban migration

Table 5.37: There is more demand for social grants in urban areas because of rural-urban migration

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	Strongly Disagree	3	1	1	1
	Disagree	8	3	3	4
	Neutral	60	17	17	20
	Agree	190	54	54	74
	Strongly Agree	89	25	25	100
	Total	350	100	100	

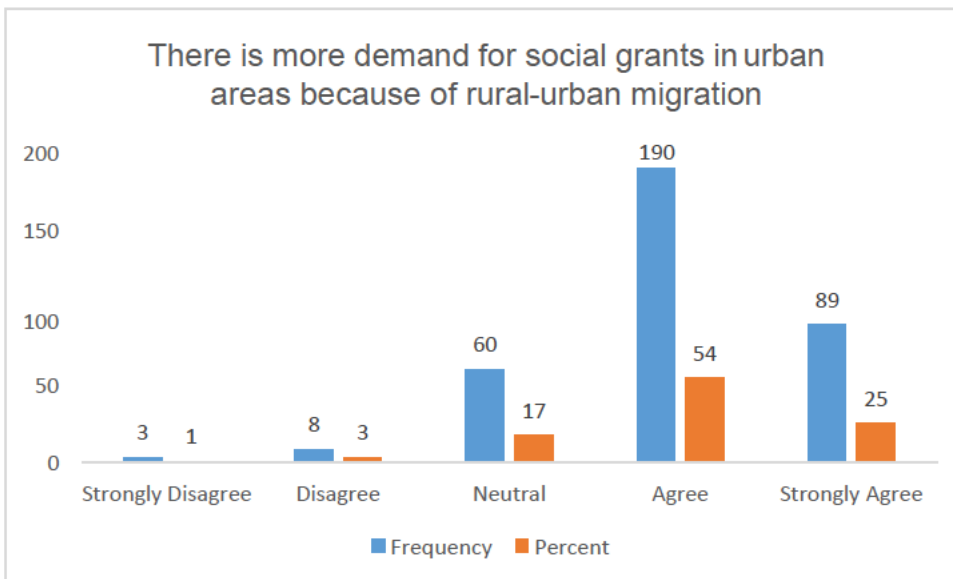


Figure 5.35: There is more demand for social grants in urban areas because of rural-urban migration

Table 5.37 and figure 5.35 show three (one percent) respondents that strongly disagreed with the statement, with eight (three percent) respondents that disagreed

and 60 (17 percent) respondents that indicated neutral to the statement. Whereas 190 (54 percent) respondents agreed with the statement, 89 (25 percent) respondents strongly agreed with the statement, which is significant. To support this, a Chi-square test in relation to “How long have you lived in the Silver City informal settlement?” and “There is more demand for social grants in urban areas because of rural-urban migration”, with results showing (X^2 575.115; $df= 8$; $P<0.001$), which is highly significant.

The study suggests a strong connection between rural-urban migration and demand for grants in urban areas, as people migrate from rural to urban areas and end up staying there permanently (Winchester, King and Rishworth 2021: 100044). Hence, there are more migrants receiving grants in urban areas than in rural areas; this is because everyone wishes to live in the city, with migrants living there already, which only doubles the numbers (Visagie and Turok 2021: 50-62).

5.13.3 It is difficult to eliminate informal settlements in urban areas because of rural-urban migration

Table 5.38: It is difficult to eliminate informal settlements in urban areas because of rural-urban migration

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	Strongly Disagree	16	5	5	5
	Disagree	20	6	6	11
	Neutral	59	17	17	27
	Agree	95	27	27	54
	Strongly Agree	160	46	46	100
	Total	350	100	100	

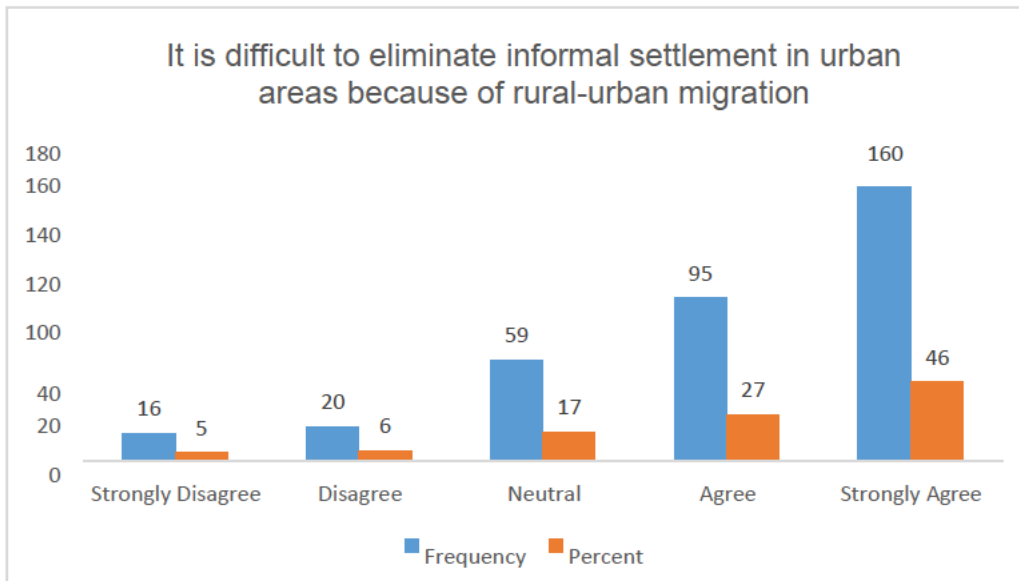


Figure 5.36: It is difficult to eliminate informal settlements in urban areas because of rural-urban migration

Table 5.38 and figure 5.36 show 16 (five percent) respondents that strongly disagreed with the statement and 20 (six percent) respondents that disagreed with the statement. A further 59 (17 percent) respondents were neutral with the statement, whereas 95 (27 percent) respondents agreed with the statement and 160 (46 percent) respondents strongly agreed with the statement, which is significant. To support this, a chi-square test was conducted in relation to “How long have you lived in the eThekweni Silver City?” and “It is difficult to eliminate informal settlements” in urban areas because of rural-urban migration, with the result as (X^2 453.409; $df= 8$; $P<0.001$), which is highly significant.

The study suggests a connection between rural-urban migration and “it is hard to eliminate informal settlement”. Rural-urban migration only creates more problems for housing delivery, since the flow of new population to urban areas creates more demand for houses in urban areas (Zulch *et al.* 2023: 293-308). Rural-urban migrants end up living in informal settlements, which is another problem for municipalities that have to deal with “the mushrooming of informal settlements in urban areas” (Satterthwaite *et al.* 2020: 143-156).

5.14 VARIABLES BASED ON THE EFFECTS OF RURAL-URBAN MIGRATION ON TECHNOLOGY AND COMMUNICATION

There is poor network connection in urban areas due to demand created by the flow of rural-urban migration

Table 5.39: There is poor network connection in urban areas due to demand created by the flow of rural-urban migration

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	Strongly Disagree	13	4	4	4
	Disagree	20	6	6	10
	Neutral	35	10	10	20
	Agree	201	57	57	77
	Strongly Agree	81	23	23	100
	Total	350	100	100	

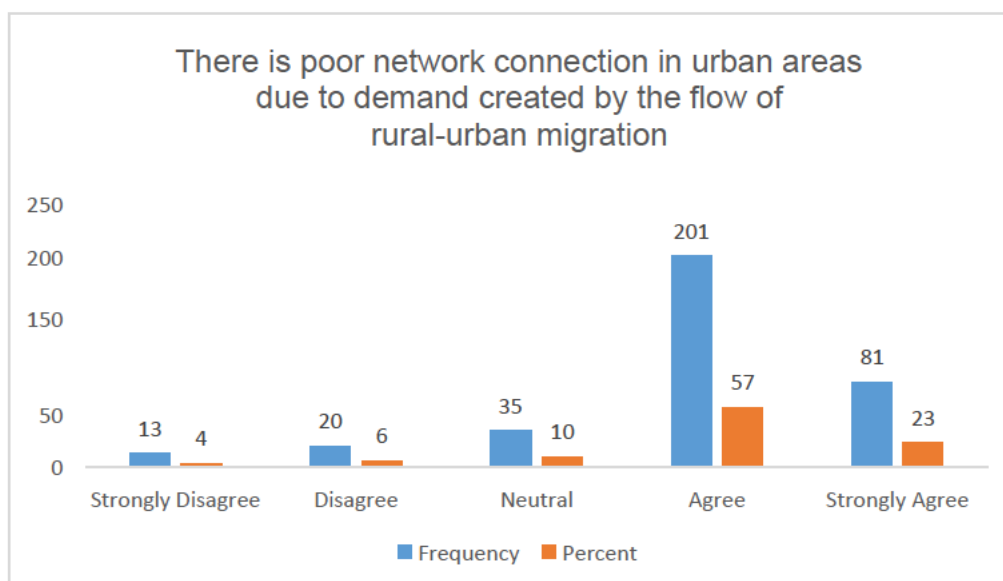


Figure 5.37: There is poor network connection in urban areas due to demand created by the flow of rural-urban migration

Table 5.39 and figure 5.37 indicates 13 (four percent) respondents that strongly

disagreed with the statement, while 20 (six percent) respondents disagreed with the statement and 35 (10 percent) respondents indicated neutral to the statement. Whereas 201 (57 percent) respondents agreed with the statement, 81 (23 percent) respondents strongly agreed, which is significant. To support this, a Chi-square test was conducted in relation to occupational Background and “There is poor network connection in urban areas due to demand created by the flow of rural-urban migration”, with results showing (X^2 453.497; $df=$ 8; $P<0.001$), which is strongly significant.

The study suggests a connection between the working rural migrants and poor network connection. There are more connectivity problems in urban areas due to the high demand created by the flow of rural-urban migrants to cities (Lyu *et al.* 2019: 1-2). Whereas, there is theft of network infrastructure in urban areas which creates more problems since network connectivity plays a significant role in urban economics from businesses to universities and government departments (Panwar and Mishra 2020: 2249).

5.14.1 E-Public service delivery is needed to meet demands created by rural-urban migration

Table 5.40: E-Public service delivery is needed to meet the demands created by rural-urban migration

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	Strongly Disagree	6	2	2	2
	Disagree	25	7	7	9
	Neutral	40	11	11	20
	Agree	91	26	26	46
	Strongly Agree	188	54	54	100
	Total	350	100	100	

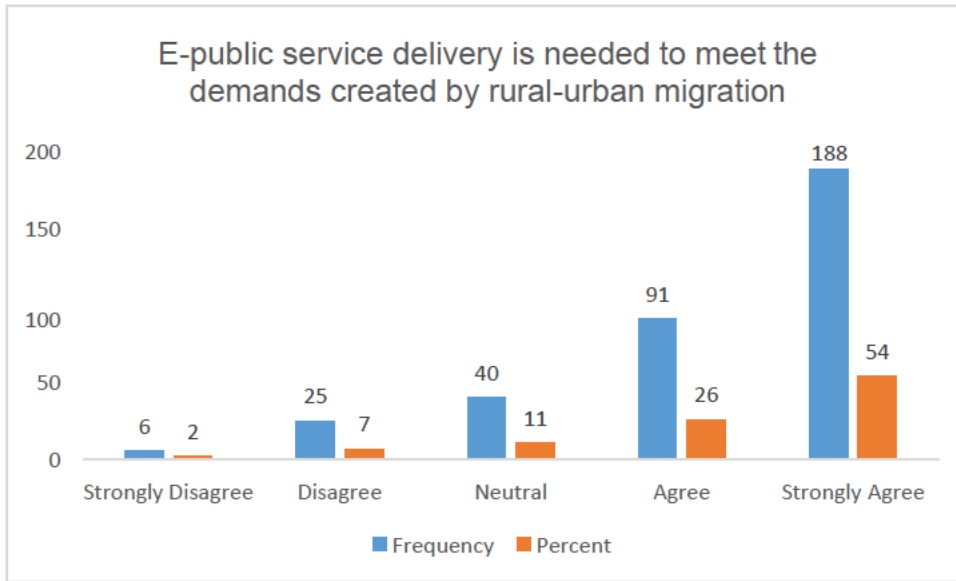


Figure 5.38: E-Public service delivery is needed to meet the demands created by rural-urban migration

Table 5.40 and figure 5.38 show six (two percent) respondents strongly disagreed with the statement, as well as 25 (seven percent) respondents that disagreed with the statement and 40 (11 percent) respondents that indicated neutral, while 91 (26 percent) respondents agreed with the statement, with 188 (57 percent) respondents that strongly agreed with the statement, which is significant. To support this, a Chi-square test was conducted in relation to occupational background and “E-public service delivery is needed to meet the demands created by rural-urban migration”, where results show (X^2 277.863; $df= 8$; $P<0.001$), which is highly significant.

The study suggests a connection between working migrants and e-public service delivery. There is a need for e-service delivery in government to deal with the demand for services in urban areas (Satola and Milewska 2022: 5175)

5.14.2 There is a need to create network infrastructure in rural areas to improve communication for working at home

Table 5.41: There is a need to create network infrastructure in rural areas to improve communication for working at home

	Frequency	Percent	Valid Percent	Cumulative Percent
Valid Strongly Disagree	4	1	1	1
Disagree	6	2	2	3
Neutral	35	10	10	13
Agree	90	26	26	39
Strongly Agree	215	61	61	100
Total	350	100	100	

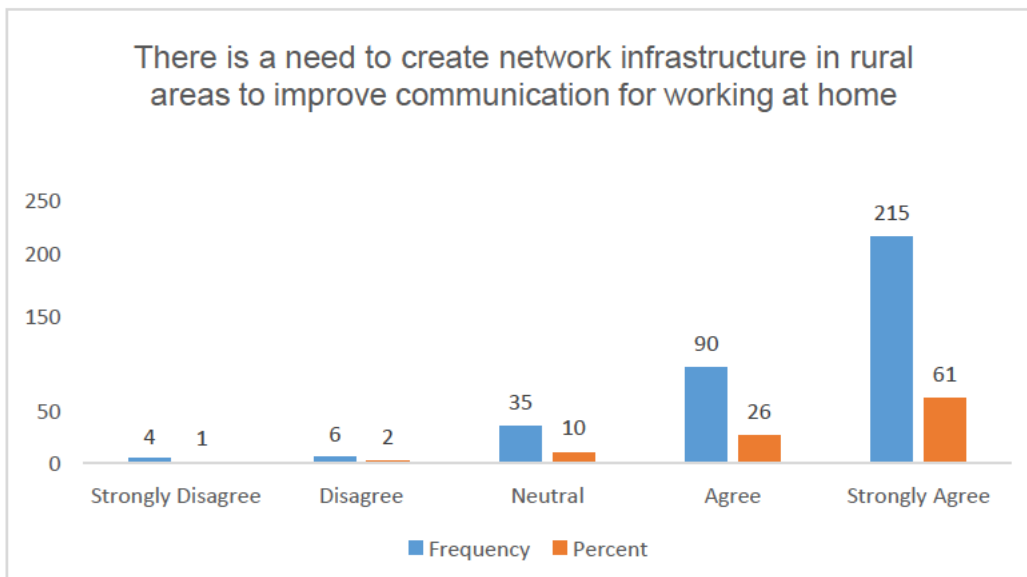


Figure 5.39: There is a need to create network infrastructure in rural areas to improve communication for working at home

Table 5.41 and figure 5.39 show four (one percent) respondents strongly disagreed with the statement, with six (two percent) respondents that disagreed with the statement and 35 (10 percent) respondents that were neutral with the statement. Whereas 90 (26 percent) respondents agreed with the statement, 215 (61 percent) respondents strongly agreed with the statement, which is significant. To support this,

a Chi-square test was conducted in relation to occupational background and “There is a need to create network infrastructure in rural areas to improve communication”, where results were (X^2 330.168; $df= 8$; $P<0.001$), which is highly significant.

The study suggests a connection between working rural migrants and the need for network infrastructure in rural areas. There is a need for government to create network infrastructure in rural areas to deal with digitisation of broadcasting services and service delivery (Matli 2020: 1237-1256).

5.14.3 There is theft of network infrastructure in urban areas as a result of rural-urban migration

Table 5.42: There is theft of network infrastructure in urban areas as a result of rural-urban migration

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	Strongly Disagree	6	2	2	2
	Disagree	9	3	3	5
	Neutral	50	14	14	19
	Agree	190	54	54	73
	Strongly Agree	95	27	27	100
	Total	350	100	100	

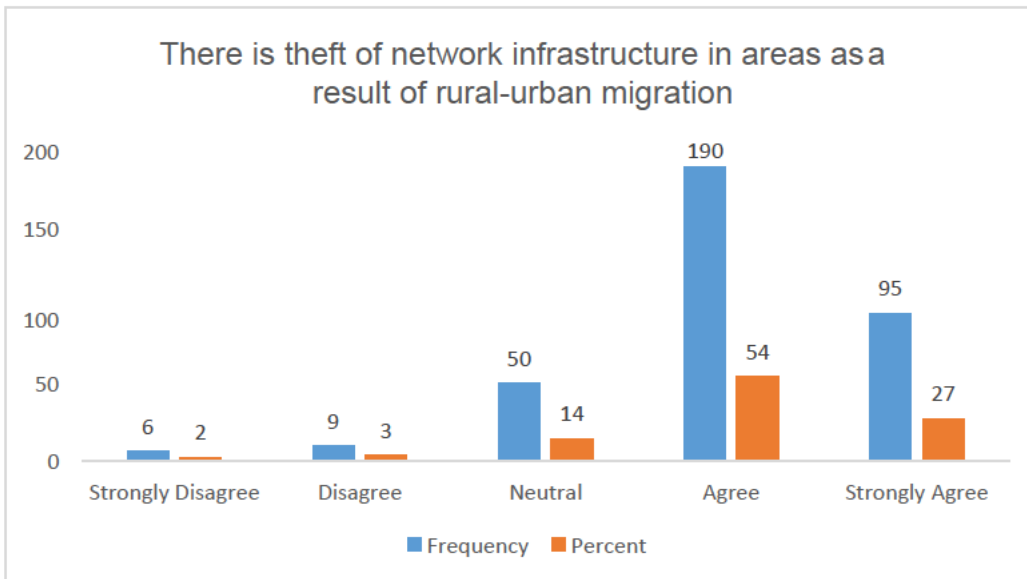


Figure 5.40: There is theft of network infrastructure in urban areas as a result of rural-urban migration

Table 5.42 and figure 5.40 show six (two percent) respondents strongly disagreed with the statement, with nine (three percent) respondents disagreed with the statement and 50 (24 percent) respondents were neutral to the statement. Whereas 190 (54 percent) respondents agreed, 95 (27 percent) respondents strongly agreed with the statement, which is significant. To support this, a Chi-square test was conducted in relation to occupational background and “There is theft of network infrastructure in urban areas as a result of rural-urban migration”, with results as (X^2 413.962; $df= 8$; $P<0.001$), which is highly significant.

The study suggests a connection between rural migrants and the theft of infrastructure. Due to unemployment in urban areas, rural migrants end up stealing network infrastructure and selling it to willing buyers to make ends meet (Adeyeye *et al.* 2020: 122-594).

5.15 VARIABLES BASED ON THE EFFECTS OF RURAL-URBAN MIGRATION ON EMPLOYMENT AND JOB CREATION

5.15.1 Influx of rural-urban migrants creates more competition in the job market in urban areas

Table 5.43: The influx of rural-urban migrants creates more competition in the job market in urban areas

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	Strongly Disagree	4	1	1	1
	Disagree	12	3	3	5
	Neutral	44	13	13	17
	Agree	91	26	26	43
	Strongly Agree	199	57	57	100
	Total	350	100	100	

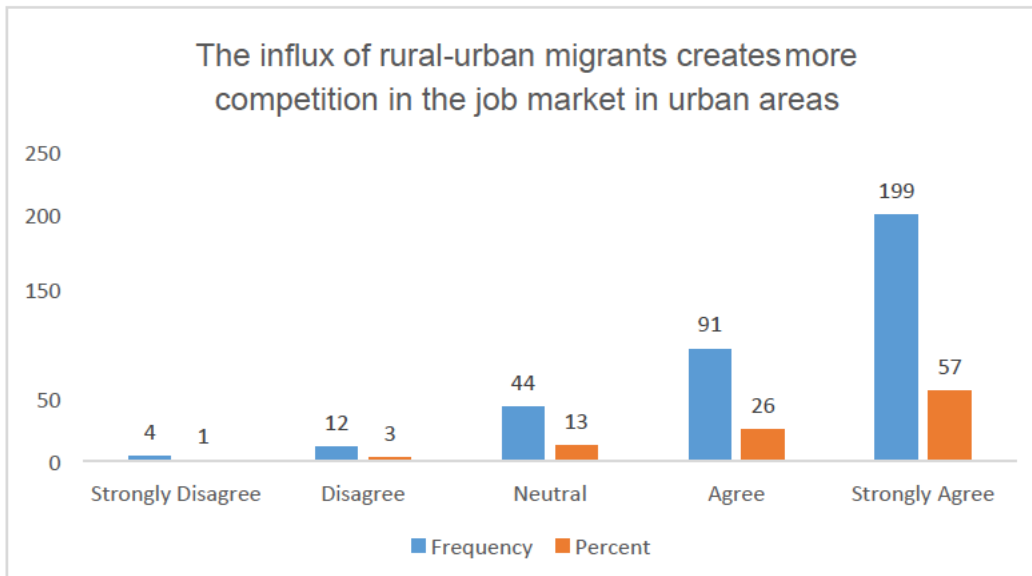


Figure 5.41: The influx of rural-urban migrants creates more competition in the job market in urban areas

Table 5.43 and figure 5.41 show four (one percent) respondents strongly disagreed with the statement, with 12 (three percent) respondents that disagreed with the statement and 44 (13 percent) respondents that indicated neutral to the statement, whereas 91 (26 percent) respondents agreed with the statement and 199 (57 percent) respondents strongly agreed with the statement, which is significant. To support this, a Chi-square test was conducted in relation to occupational

background and the influx of rural-urban migrants creates more competition in the job market in urban areas, with results showing (X^2 287.884; $df= 8$; $P<0.001$), which is highly significant.

The study suggests a connection between working migrants and more competition for jobs in urban areas. Rural-urban migrants migrate to urban areas pulled or attracted by the economic opportunities such as jobs and education in the urban areas, which then creates competition for better jobs in urban areas (Addaney and Cobbinah 2019: 3-26).

5.15.2 There are more unemployed migrants in urban areas because of rural-urban migration

Table 5.44: There are more unemployed migrants in urban areas because of rural-urban migration patterns

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	Strongly Disagree	5	1	1	1
	Disagree	11	3	3	5
	Neutral	45	13	13	18
	Agree	189	54	54	72
	Strongly Agree	100	29	29	100
	Total	350	100	100	

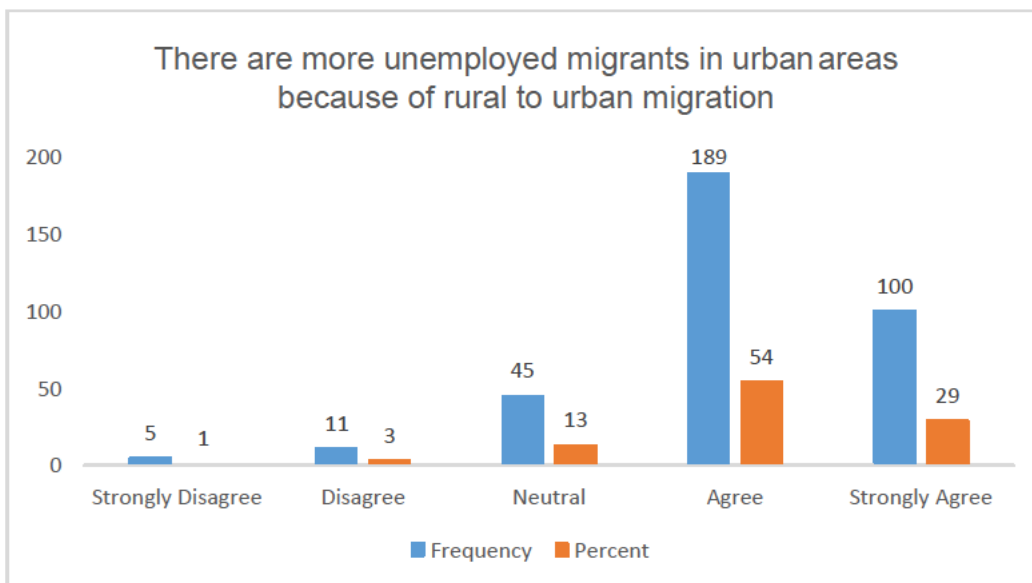


Figure 5.42: There are more unemployed migrants in urban areas because of rural-urban migration

Table 5.44 and figure 5.42 show five (one percent) respondents strongly disagreed with the statement, while 11 (three percent) respondents disagreed and 45 (13 percent) respondents indicated neutral to the statement, whereas, 189 (54 percent) respondents agreed with the statement and 100 (29 percent) respondents strongly agreed. A Chi-square test was conducted in relation to occupational background and “There are more unemployed migrants in the urban areas because of rural-urban migration” results were (X^2 382.915; $df=$ 8; $P<0.001$), which is highly significant and shows a strong connection between rural-urban migration and unemployment in urban areas.

The flow of rural-urban migrants also brings uneducated migrants, who are not absorbed by the urban labour market and end up unemployed in cities (Iwunze and Chikwere 2021: 85-94).

5.15.3 Unemployment caused by the influx of rural-urban migration leads to high crime rates in urban areas

Table 5.45: Unemployment caused by the influx of rural-urban migration leads

to high crime rates in urban areas

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	Strongly Disagree	2	1	1	1
	Disagree	8	2	2	3
	Neutral	50	14	14	17
	Agree	90	26	26	43
	Strongly Agree	200	57	57	100
	Total	350	100	100	

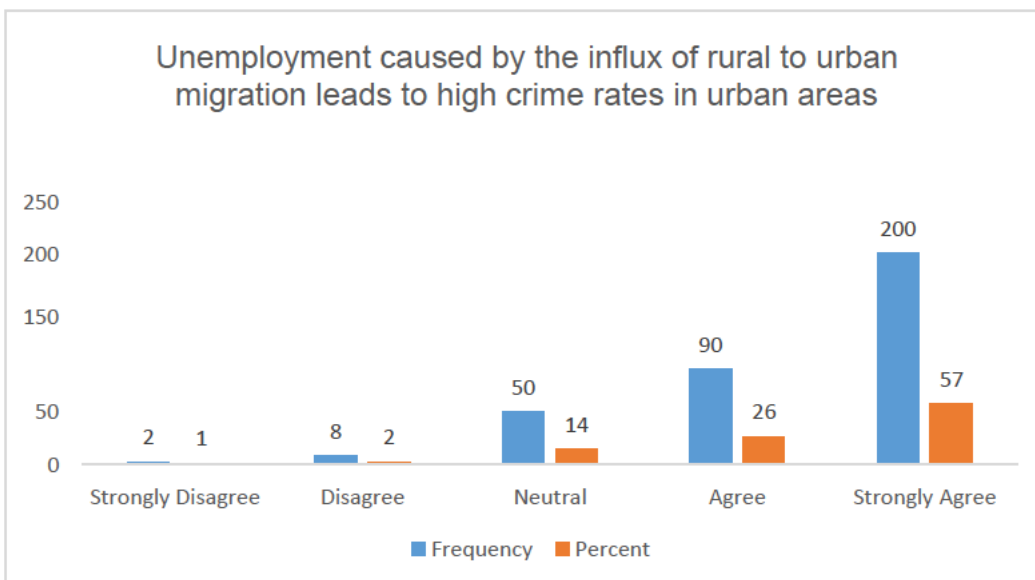


Figure 5.43: Unemployment caused by the influx of rural-urban migration leads to high crime rates in urban areas

Table 5.45 and figure 5.43 shows two (one percent) respondents strongly disagreed with the statement, with eight (two percent) respondents that disagreed and 50 (14 percent) respondents that were neutral to the statement, whereas 90 (26 percent) respondents agreed and 200 (57 percent) respondents strongly agreed with the statement, which is significant. To support this, a Chi-square test was conducted in relation to occupational background and “Unemployment caused by the influx of rural-urban migration leads to high crime rates in urban areas”, where results were

(X^2 289.827; df= 8; $P < 0.001$), which is highly significant.

The study suggests a strong connection between rural-urban migration and “Unemployment, and crime in the urban areas”. It is most likely that an unemployed person in rural areas ends up committing crimes, with rural-urban migration adding to unemployment; hence, we see much more violence in urban than in rural areas (Ogele 2020: 23-36).

5.15.4 There are entrepreneurs that come from rural areas to start businesses and create jobs in cities

Table 5.46: There are entrepreneurs that come from rural areas to start businesses and create jobs in cities

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	Strongly Disagree	4	1	1	1
	Disagree	12	3	3	5
	Neutral	55	16	16	21
	Agree	99	28	28	49
	Strongly Agree	180	51	51	100
	Total	350	100	100	

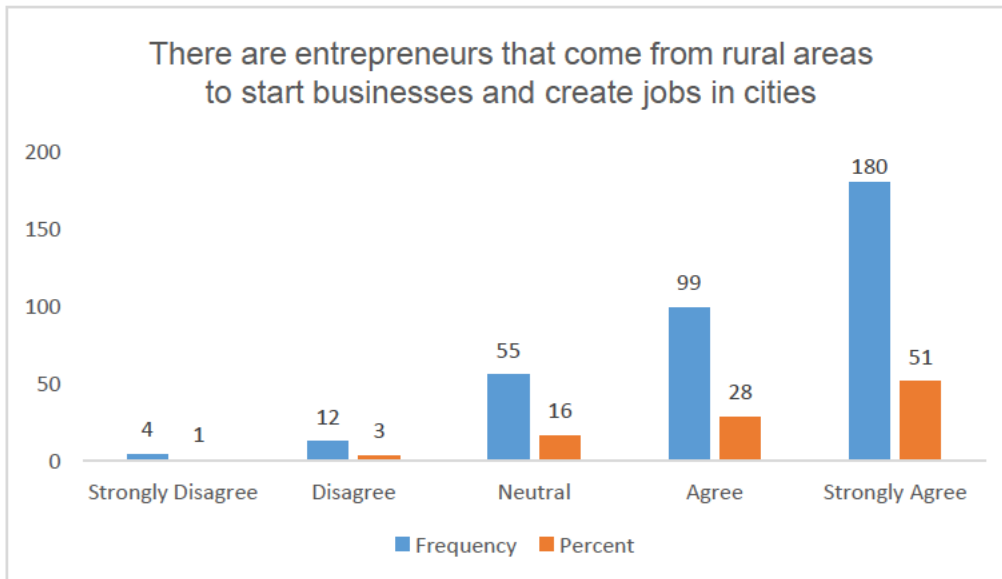


Figure 5.44: There are entrepreneurs that come from rural areas to start businesses and create jobs in cities

Table 5.46 and figure 5.44 indicate four (one percent) respondents strongly disagreed with the statement and 12 (three percent) respondents disagreed with the statement, while 55 (16 percent) respondents remained neutral, 99 (28 percent) respondents agreed and 180 (51 percent) respondents strongly agreed with the statement, which is significant. To support this, a Chi-square test was conducted in relation to occupational background and “There are entrepreneurs that come from rural areas to urban areas to start businesses and create jobs”, with results showing (X^2 272.988; $df= 8$; $P<0.001$), which is highly significant.

The study suggests a strong connection between rural migrant entrepreneurs and job creation in urban areas. Some rural-urban migrants create employment in urban areas by starting business and hiring migrants in cities to work for them (Beresford 2020: 65-79).

5.16 ROTATED COMPONENT MATRIX: RURAL-URBAN MIGRATION TO ENHANCE URBAN SERVICE DELIVERY

Table 5.47: Rotated Component Matrix

	Component 1	Component 2
Migrated from rural areas to urban areas to gain access to better roads and bridges	0.173	0.895
Rural-urban migration increases diseases in urban areas	0.214	0.873
Infrastructure development of rural areas can minimise rural-urban migration	0.443	0.788
There is more demand for social grants in urban areas because of rural-urban migration	0.572	0.774
Rural-urban migration creates more demand for police officers	0.610	0.745
Rural-urban migration causes delays in urban hospitals	0.598	0.741
There is theft of network infrastructure in urban areas as a result of rural-urban migration	0.609	0.739
There are more migrants unemployed in urban areas because of rural-urban migration	0.620	0.723
There is more demand for water in urban areas because of rural-urban migration	0.611	0.721
More police officers need to be hired to deal with crime with the demand created by rural-urban migration	0.642	0.720
There is more demand for housing in urban areas because of rural-urban migration	0.654	0.704
More illegal water connections are in the urban areas due to rural-urban migration	0.678	0.691
There is an increase in the student population due to rural-urban migration	0.668	0.690
There is poor network connection in urban areas due to demand created by the flow of rural-urban migration	0.658	0.687
Rural-urban migration leads to an increase in crime in urban areas	0.902	0.382
More money from the government needs to be prioritised for policing and crime	0.900	0.373
There are more informal settlements because of rural-urban	0.894	0.388

migration		
There is a need to create network infrastructure in rural areas to improve communication for working at home	0.894	0.374
More power stations are needed in urban areas to curb the demand created by rural-urban migration	0.890	0.370
The influx of rural-urban migrants creates more competition in the job market in urban areas	0.881	0.424
More options need to be created for electricity, for example, solar and wind energy, since there is more demand due to rural-urban migration	0.880	0.408
Unemployment caused by the influx of rural-urban migration pattern leads to high crime rates in urban areas	0.872	0.423
E-public service delivery is needed to meet the demands created by rural-urban migration	0.858	0.464
Air pollution because of rural-urban migration leads to climate change	0.857	0.459
The ever-increasing numbers of patients in urban areas because of rural-urban migration leads to shortages in medical staff	0.855	0.465
There are pit latrines in urban areas due to rural-urban migration	0.854	0.454
We need more police stations due to the high demand created by rural-urban migration	0.832	0.480
There is overcrowding in classes due to rural-urban migration	0.830	0.504
There are entrepreneurs that come from rural areas to start businesses and create jobs in cities	0.823	0.501
Rural-urban migration is good for the transport economy	0.812	0.527
There is no proper transport system in the rural areas which makes it difficult to travel to work	0.807	0.534
It is hard to eliminate informal settlements in urban areas because of rural-urban migration	0.791	0.548
Migrated from rural to urban areas in order to work in transport	0.771	0.567
There is no roads and bridges in my area of origin	0.711	0.638

Rural-urban migration leads to more migrants demanding more electricity which results in load shedding	0.685	0.667
Rural-urban migration leads to shortages in hospital admission facilities	0.680	0.673
Learner overload in classrooms is increasing the workload for teachers	0.677	0.665

Extraction Method: Principal Component Analysis.

Rotation Method: Varimax with Kaiser Normalization.

a. Rotation converged in 3 iterations.

These components are an additional statistical analysis of the above-mentioned figures (Figure 5.8 to 5.44). A component test was conducted on rural-urban migration patterns to enhance service delivery. Respondents indicated two categories of components.

5.17 DISCUSSION OF KEY FINDINGS IN LINE WITH LITERATURE REVIEW AND RESEARCH OBJECTIVES

This section discusses the key findings in line with the literature review and the research objectives. As indicated in chapter two and three, the following are the objectives.

Sub-objective 1: To identify and explain migration to enhance service delivery in eThekweni Municipality.

Sub-objective 2: To investigate the pull and push factors of rural-urban migration and its influence on service delivery.

Sub-objective 3: To examine to what extent rural-urban migration can be used to deal with the current state of service delivery.

Sub-objective 4: To determine the role of rural-urban migration on the overpopulation of urban areas in eThekweni Municipality.

Sub-objective 5: To suggest and recommend strategies that should be employed to improve the current state of service delivery in the municipality's local government,

related to service delivery.

This section provides a comprehensive overview of the key empirical findings and a comparison between these and the literature gathered for the purpose of this research. The discussions are based on the research objectives and relevant questions within the survey. The following discussion of the key findings of the research was done in accordance with the outlined objectives.

5.17.1 Key findings on Objective 1

To identify and explain migration to enhance service delivery in eThekweni Municipality.

Various different factors (Rafiq *et al* 2017: 31-44) decrease the current government accountability “by institutional alluding to economic and physical resource critical topics ranging from utilisation of money and malfeasance” within departments (Benfica *et al.* 2019: 91-100). External causes can be associated with social concerns and population changes (Bernzen *et al.*2019: 51). For instance, the government presents an annual spending plan for migrants, wherein it explains how the monies will be utilised to ensure fundamental needs are met on time (Makwetu 2017: 10-20). These fundamental needs include education, healthcare, welfare programmes, and job prosperity, with a focus on strategic goals that tend to attract rural-urban migrants to urban areas (Bhagat 2019: 429). The study suggests 57 percent of respondents agreed there is fierce competition in cities as a result of rural-urban migration patterns, with the empirical study indicating 86 percent African migrants that live at Silver City informal settlement, with 50 percent being female and 63percent that have lived in the settlement for more than four years, benefiting from the eThekweni municipality.

In the government sector, malfeasance is growing like cancer and remains a concern with resource allocation and service provision (Bovo 2020: 23-32). This tendency impacts government departments from inside, with projects postponed and others cancelled (Brodeur and Flèche 2019: 217-238). Additionally, there is unfavourable financial efficiency when auditing reporting is conducted on municipal

financial efficiency (Breakfast and Phago 2019: 45-62). The study indicated 37 percent migrants have less than matric as educational qualification, with the uneducated and unemployed most likely to commit crimes in urban areas, while 63 percent agreed with the statement that government should prioritise more funding and focus on crime fighting and prevention.

5.17.2 Key findings on Objective 2

To investigate the pull and push factors in migration and its influence on service delivery.

The influx of rural-urban migration in most local internal regions attributable to foreign migrants is an insignificant number. This connection implies a link between service provision and urbanisation migration (Agergaard and Engh 2016: 45). The study suggests 85 percent migrants are not employed, which shows high unemployment in eThekweni Municipality, with 60 percent migrants from rural areas, confirming the rural-urban influx to eThekweni city, in Silver city informal settlement.

This rapid rural-urban migration contributes to polluted air, with increased health hazards, particularly in urban areas (Carens 2013: 11). The State does have certain mechanisms to manage spontaneous birth using contraception, with the urban populace devoting almost no attention towards the initiatives in force (Kurien 2018: 81–98). Additionally, proactive urban planning will continue to be crucial when dealing with the existing situation of municipal and provincial domains in order to better lives in city centres. Rural-urban migration trends can thus be seen as critical for improving public service provision (Lunga, Lubbe and Meyer 2019: 435-446).

Undesirably, multiple motivators force migrants from their place of nationality. This can cause many justifications relating to both the environment along with economic factors. On the one hand, this “creates a stream of migrants rippling from countryside to the cities,” which results in many migrants throughout big centres (Stillwell and Dennett 2012: 50). Pull forces on the other hand, actively draw individuals from remote regions, such as modern living, careers, education, and healthcare, which are believed to be superior to those in remote areas. This causes

urban overpopulation, which affects the level of service supplied, affecting the populace previously present within city areas (Satterthwaite 2010: 33). However, an unresolved disagreement remains regarding how population movement adds to rapid urbanisation and urban sprawl. Urban leaders and officials need to design policies and urban planning that function as a method to regulate rural-urban migration trends for local municipalities to oversee internal migration (Turok 2012: 20).

The overwhelming migrant movement within South African provinces is undoubtedly intra-provincial or intra-district, motivated by socio-economic factors and is dominated by women (UN 2011). Furthermore, in statistical terms, it is anticipated the number of rural-urban migrants across SA is increasing and becoming a norm (Asamoah-Gyadu 2015: 189–192). Conversely, in certain migration contexts, there seems to be a substantial percentage of rural-urban migration trends (Rivera-Pagán 2013: 31–51).

5.17.3 Key findings on Objective 3

To examine to what extent rural-urban migration can be used to deal with the current state of service delivery.

Failure of administrative authorities places an added burden on the government, as it also does not meet the needs of the community, resulting in the inability to render service to the community, such as with the power cuts and loadshedding from Eskom (Benfica *et al.* 2019: 91-100). Rural migrants undertake the journey to urban areas to improve their standard of living, because municipalities in rural areas do not perform the way the community wants to be served, due to a lack of resources required by local government institutions in rural areas (Bikam and Chakwizira 2021: 8-25). Hence, the study found 44 percent respondents in agreement on increased electricity demand in urban areas due to rural-urban migration, with 63 percent agreeing more power stations are needed in urban areas and 57 percent in agreement on the need for more options for energy supply, such as solar and wind.

Migrants from rural areas migrate from their places of origin for better opportunities

in urban areas, as well as better education (Mlambo 2018: 4). The eThekweni municipal area is highly populated with those migrating from rural-urban areas because of its attractions and opportunities (Musvoto *et al.* 2016: 187-210). Hence, the empirical data suggest 60 percent of respondents agreed there is a high crime rate in cities as a result of rural-urban migration patterns.

5.17.4 Key findings on Objective 4

To determine the role of rural-urban migration on the overpopulation of urban areas in eThekweni Municipality.

In respect of reducing land pressure, Iderawumi and Abiodun (2019: 7-12) state internal migration tends to do the unexpected, as there are less dwellers in poor spaces, with employment opportunities and the development of skills having become barely available in these spaces, similar to other parts of the world, especially developing economies. The high prevalence found in the practice of engaging the private sector for some basic services, such as health, in the urban environment, although at a cost, is inevitable with high levels of income among the urban populace, while private sector service provision also stimulates urban growth and development (Varkey and Manasi 2019: 96-111). In addition, there is the benefit in housing provision of “innovative building technologies and conventional building methods in the provision of temporary residential units” (Nguyen *et al.* 2019: 31-66).

The discussion further examined strategies needed to build human settlements and governance practices that ensure post-COVID-19 resilience against any resurgence or other pandemic (Stites 2020: 32-55). The empirical study suggests 46 percent of respondents agreed with the statement on whether there are illegal water connections in eThekweni city, with 54 percent respondents agreed pit latrines were found in the city, 57 percent respondents agreed on more demand for water as a direct result of rural-urban migration and 54 percent respondents agreed rural-urban migrants are demanding more houses in the city.

Research on indicators of SA’s internal migration in the past two decades, such as social, economic, demographic, as well as geographic indicators, show climate

change plays a pivotal role as an indicator of internal migration, as migrants tend to be environmentally sensitive (Bhagat 2019: 429). It is difficult to qualify the level to which environmental factors influence internal, as well as international migration, not only because of its complicated nature but due to there being households that live in these harsh conditions (Guizardi 2019: 1-9). There are few major contributors on migration numbers, in respect of different economic, political and social challenges, nonetheless, there seems to be less restriction by local authorities on internal migration in SA (Chen, H. and Wang 2019: 136-143).

5.17.5 Key findings on Objective 5

To suggest and recommend strategies that should be employed to improve the current state of service delivery in the municipality's local government, related to service delivery.

There appears to be less focus on rural-urban migration in developing economies, while a lack of information is found regarding employable strategies to deal with overpopulation in urban areas (McDonald *et al.* 2018: 258). A potential channel for reducing inequalities in developing economies is the control of rural-urban migration (Rhoads 2018: 278-305). Some provinces tend to indirectly increase the flow of rural-urban migration to other provinces because, in SA, some provinces are more rural (Yang and Dunford 2018: 1111-1121), while other provinces are more urbanised (Bryan and Morten 2019: 2229-2268). In addition, rural-urban migration is the most dominant form of migration in SA (Chaves *et al.* 2021: 1186-1197), with the study indicating 60 percent respondents that agreed more informal settlements result from rural-urban migration and 54 percent that agreed there is a demand for social grants in eThekweni city.

There are, nevertheless, those who live in rural areas that only migrate for work purposes; they are temporary migrants (Détang-Dessendre *et al.* 2016: 89-103). Entrepreneurial migrants who migrate from rural areas with skill and business ideas should also not be ignored in the migrant population, since they contribute greatly to the urban economy (Lekhanya 2018). Furthermore, educated migrants live in rural areas but work in cities, while their rural economies remain dwarfed and

stagnated (Nkabinde 2018). However, these migrants tend to have two houses, one in the urban and one in the rural areas, resulting in a trend of migrants leaving their rural houses and eventually becoming permanent residents in urban spaces (Makinde 2014: 49-69). Hence, the empirical findings suggest 54 percent of the migration populace demands housing when they become permanent residents in urban areas. The study further suggests an increase in informal settlement as a result of rural-urban migration patterns, with 60 percent of respondents agreeing with that statement.

5.18 CONCLUSIONS ON VARIABLES MATCHED WITH THEORIES

This section explores relevant theories relating to rural-urban migration to enhance service delivery. These theories are also integrated with the empirical findings.

Urban and rural areas differ due to demographic dissimilarities, as well as political, and economic characteristics (Cetin 2019: 1237-1249). A substantial difference in migration transformation from rural-urban has been identified, with the municipality having recognised these changes; therefore, adjustments are made and planned (Li *et al.* 2019: 135-143). Municipal planning is, however, not static and bound to change daily, due to the increase of people migrating from rural-urban areas (Njwambe *et al.* 2019: 413-431). The study found 29 percent rural migrants are aged between 26 to 30 years, which shows a number of young people as migrants, with 63 percent migrants that have lived in the city for more than four years.

The study focus is on reasons motivating people to move, as well as costs from rural-urban migration (Bryan and Morten 2019: 2229-2268), which affect urban planning in municipalities in cities when accommodation for the additional population has to be provided (Wise *et al.* 2019: 107-128). This then leads to service delivery backlogs, coupled with violent protests (Munshi and Rosenzweig 2016: 46-98). We also examined corruption by the municipality in terms of accommodation being sold to unqualifying migrants, instead of providing this to qualifying migrants, which results in violence and strikes (Monras 2018: 1-74). Hence, the empirical findings found 61 percent respondents agreed with the statement whether there is a need for government to create network infrastructure in rural areas so rural people can

also work from home.

It is important to understand that challenges accompanying rural-urban migration affect individuals and communities (Monras 2020: 3017-3089). Hence, proper plans must be in place in municipalities to deal with urban planning and avoid the problems that come with poor urban plans, such as, overcrowding and unemployment (Tombe and Zhu 2019; Heise and Porzio 2019; De La Roca and Puga 2017). Moreover, while the government is concerned with the health of the poor in rural areas, this is focused on managing the varying quality of health for migrants staying in urban areas, in comparison to urban health services (Neely and Ponshunmugam 2019: 214-221). The study found 46 percent respondents agreed they migrated because there is no proper transport in the rural areas, while 40 percent agreed they migrated due to working in transport.

Health facilities collect data from different regions in the rural areas to help the poor and maintain the services that need to be rendered, with the aim that the poor in rural areas are to receive equal health attention as those residing in urban areas (Salam *et al.* 2020: 612-622). The health department not only assists in ensuring all who seek medical attention, especially women, are assisted, it also aids women from informal settlements to reduce the birth rate. Nonetheless, families become overcrowded while staying together in these informal settlements (Abbas and Varma 2014: 3).

Noteworthy, is acknowledgement by the international community of the significant occurrence where the rural populace is comparable to that of the urban populace (Greenwood-Ericksen and Kocher 2019: 1-12). This shows a change in the environmental, social, cultural, and economic spheres of internal migration, in terms of rural-urban migration, as well as urban-rural migration but largely, rural-rural and urban-urban migration (Bakker *et al.* 2020: 509-532). The study suggests 54 percent respondents disagreed having migrated to gain access to roads and bridges, meaning migration was not motivated by the need for roads.

Health issues relating to the pandemic, or any kind of disease, has left management with questions of how to manage the movement of rural-urban migrants, as the

majority of migrants are known to be moving to and from different places (Visagie and Turok 2021: 50-62). The movement is threatening the lives of the community, resulting in a challenge for the department of health, which has to ensure all procedures are followed, and migrants are educated regarding health safety (Rogerson and Rogerson 2021: 1-21), with organizations also given the task to initiate procedures for employees to follow (Visagie and Turok 2021: 50-62).

Having to manage rural-urban migrants, with different attitudes, the government is doing a good job thus far by instilling rules for health, which is a cost carried by the government (McCreesh *et al.* 2021: 1-11). Hence, the study suggests 53 percent rural-urban migrants strongly agreed there are ever-increasing numbers of patients in urban areas because of rural-urban migration and this leads to shortages in medical staff.

5.19 CONCLUSION

Based on the data analysis and the empirical findings, it is apparent rural-urban migration patterns are affecting urban service delivery in a negative manner, reflecting the need for government intervention to deal with the overcrowding in cities and added service delivery demands. Thus, the testing of different variables revealed an image of challenges related to service delivery shortfall and negative impact of rural to urban migration patterns. Furthermore, the findings suggest indirect and direct impact of rural-urban migration patterns that lead to urban population growth.

Rural-urban migration patterns cover economic opportunities such as jobs and education, overcrowding in city schools and hospitals, crime, as well as service delivery demands and the opportunity to become an entrepreneur. Furthermore, there is a need for local government to closely monitor this phenomenon, as it can make or break local economies. This discussion of the key empirical findings, therefore, supports the literature quite closely. Thus, the next and final chapter provides a comprehensive discussion of the conclusions, recommendations and the suggested conceptual framework.

CHAPTER SIX

CONCLUSIONS AND RECOMMENDATIONS

6.1 INTRODUCTION

The aim of this research was to discover and analyse the main factors contributing to rural-urban migration, to enhance service delivery with the focus on eThekweni Municipality. A comprehensive literature search provided a rich foundation of secondary data, while the primary data were obtained from a detailed empirical study, which was broadly analysed to determine any significant correlations between the study variables. This chapter provides conclusions of the key findings and evidence of achieving the research objectives, with the hypotheses also discussed in relation to the findings, while the study limitations, along with recommendations linked to findings, are also provided and explained. Finally, recommendations for further study are made.

6.2 SUMMARY OF KEY FINDINGS

The primary aim of this research was to identify critical factors enabling rural-urban migration to enhance service delivery. The following conclusions were reached from evidence, as well as a prototype model derived from empirical findings. Based on the findings, the following conclusions can be drawn.

The biographical and background data obtained indicated that:

- The majority rural-urban migrants are women.
- The majority rural-urban migrants are African.
- Most migrants came from rural areas.
- Most migrants are employed, or self-employed.

The main study findings are set out as follows:

Transport: The study found 46 percent respondents strongly agreed there is no proper transport system in the rural areas, which makes it difficult to travel to work; however, 40 percent respondents strongly agreed they migrated from rural to urban

areas in order to work in transport, and 49 percent strongly agreed rural-urban migration is good for the transport economy.

Infrastructure development: strong disagreement was indicated by 29 percent respondents regarding whether rural area infrastructure development can minimise rural-urban migration, while 51 percent respondents agreed there are no roads and bridges in their area of origin, with 54 percent respondents that strongly disagreed their motivation to migrate from rural to urban areas was to gain access to better bridges. Furthermore, 61 percent respondents strongly agreed there is a need to create network infrastructure in rural areas to improve communication for working at home; however, 54 percent respondents agreed there is theft of network infrastructure in urban areas as a result of rural-urban migration.

Schooling and education: 54 percent respondents agreed there is an increase in the student population due to rural-urban migration, 49 percent respondents strongly agreed there is a high level of high school dropout in urban schools as a result of rural-urban migration, and 57 percent respondents agreed learner overload in classrooms is increasing the learner and teacher ratio.

Health: 57 percent respondents were in agreement that rural-urban migration causes delays in urban hospitals, whereas 53 percent respondents strongly disagreed rural-urban migration increases diseases in urban areas, 53 percent respondents strongly agreed there is an ever-increasing number of patients in urban areas because of rural-urban migration, which leads to shortages in medical staff, and 52 percent respondents agreed rural-urban migration leads to shortages in hospital admission facilities.

Crime and policing: 60 percent respondents strongly agreed rural-urban migration leads to an increase in crime in urban areas, while 55 percent respondents agreed rural-urban migration also creates more demand for police officers, with 53 percent respondents that strongly agreed there is a need for more police stations, due to the high demand created by rural-urban migration patterns. In addition, 46 percent respondents agreed more police officers need to be hired to deal with the demand created by rural-urban migration, while 63 percent respondents strongly agreed

more government funding needs to be prioritised for policing and crime.

Power supply: 44 percent respondents agreed rural-urban migration leads to more migrants demanding more electricity, which results in loadshedding; however, 63 percent respondents strongly agreed more power stations are needed in urban areas to curb the increased demand created by rural-urban migration. Significantly, 57 percent respondents strongly agreed more options need to be created for electricity; for example, solar and wind energy, since there is more demand due to rural-urban migration.

Water and sanitation: 57 percent respondents agreed there is increased demand for water in urban areas because of rural-urban migration, in addition 54 percent respondents strongly agreed there are pit latrines in urban areas due to rural-urban migration. Furthermore, 46 percent respondents were in agreement there are more illegal water connections in the urban areas due to rural-urban migration, and 54 percent respondents strongly agreed air pollution of rural-urban migration leads to climate change.

Housing: 54 percent respondents agreed there is more demand for housing in urban areas because of rural-urban migration, with 60 percent that strongly agreed there are more informal settlements because of rural-urban migration, corroborated by 46 percent respondents that strongly agreed it is difficult to eliminate informal settlements in urban areas due to rural-urban migration.

Network connectivity: 57 percent respondents agreed there is poor network connection in urban areas due to demand created by the flow of rural-urban migration. Furthermore, 57 percent respondents strongly agreed E-Public service delivery is needed to meet the demands created by rural-urban migration.

Grants: agreement was indicated by 54 percent respondents there is increased demand for social grants in urban areas because of rural-urban migration.

Employment: 57 percent respondents strongly disagreed the influx of rural-urban migrants creates more competition in the job market in urban areas, however, 54 percent respondents agreed there are more migrants unemployed in urban areas because of rural-urban migration, while 57 percent respondents strongly agreed

unemployment caused by the influx of rural-urban migration leads to high crime rates in urban areas. In addition, 51 percent respondents strongly agreed there are entrepreneurs that come from rural areas to start businesses and create jobs in cities.

6.3 CONCLUSIONS

The conclusions are formulated in accordance with the objectives as discussed below.

6.3.1 Conclusions as to research objectives

The following section provides an overview of the variables tested and conclusion are reached and they are based on the analysis of empirical findings and hypotheses test was conducted on different variables. Questionnaires were very useful in reaching conclusions using different variables.

6.3.1.1 Key findings of Objective 1: To identify and explain migration patterns to enhance service delivery in eThekweni Municipality

The findings suggest a need for urban planning to harness the good aspects of rural-urban migration, providing key pointers for sustainable growth in local government, as well as to address the high urban crime rate, unemployment, delays in hospitals, and the importance of creating a conducive environment for rural entrepreneurs to start businesses in cities, thus contributing to economic growth. A further need identified is for more power stations, in terms of energy generation, and the adoption of other energy options such as solar, wind and hydro power.

While there is high demand for housing in urban areas as a result of rural-urban migration patterns, there is also more demand for social grants, in addition to overcrowding in classes in urban areas as a result of rural-urban migration. Consequently, rural areas suffer directly and indirectly as a result of rural-urban migration. The suggested theoretical framework (figure 6.1) shows the importance of understanding all the patterns in order to enhance both urban and rural service

delivery.

6.3.1.2 Key findings on Objective 2: To investigate the pull and push factors of rural-urban migration and their influence on service delivery

The findings reflected there is a need for the government to understand the pull and push factors in rural-urban migration to enhance service delivery, since migrants are attracted to urban areas by better services and economic opportunities, such as jobs and education, while they are pushed from rural to urban areas by poor service delivery and lack of economic opportunities such as education and employment; this also increases the unemployment rate in cities. Hence, there is a need to maintain local economic growth and development, while ensuring service delivery performance is at an optimum level.

6.3.1.3 Key findings on Objective 3: To examine to what extent rural-urban migration can be used to deal with the current state of service delivery

The study suggests a strong relationship exists between rural-urban migration patterns and urban service delivery. Hence, there are demands for services in cities, since migrants end up living in and occupying cities, which lead to overcrowding. The study further concludes government needs to put money aside for urban policing in order to eradicate crime in eThekweni municipality. In addition, the study found there is fierce competition for jobs in urban areas, as well as illegal water connections, more patients in urban hospitals, air pollution and pit latrines, which are major factors in urban pollution, indicating poor service delivery, network infrastructure theft, and more water demand in eThekweni municipality as a result of rural-urban migration patterns.

6.3.1.4 Key findings on Objective 4: To determine the role of rural-urban migration on the overpopulation of urban areas in eThekweni Municipality

Rural-urban migration patterns show migrants are motivated by economic opportunities such as jobs and education, which only lead to more electricity and water demand, overcrowding in schools and hospitals, and creates fierce

competition in the job markets in cities, which leads to joblessness. However, development needs to also focus on rural areas, which can alleviate the flow of rural migrants into cities.

6.3.1.5 Key findings on Objective 5: To suggest and recommend strategies that should be employed to improve the current state of service delivery in the municipality's local government, related to service delivery

There is a major need for integrated urban expansion and town plans that will harness the power of migration to enhance service delivery. Hence, there is a suggested conceptual framework (figure 6.1), developed after testing different variables with the review of literature. The study suggests a review of the critical patterns, indirect and direct impact of rural-urban migration patterns in urban service delivery, as a strategy to improve service delivery.

6.4 CONCLUSION REGARDING RESEARCH HYPOTHESES

This section focuses on the hypotheses test for the suppositions set in chapter one and presented as the null hypotheses (H₀) and alternative hypothesis (H_a). The main hypotheses for this study are addressed as follows:

Ha1: There is a relationship between rural-urban migration and road/transport infrastructure.

Bivariate correlation results reflected a significantly positive strong relationship between the tested variables at 0.936** (sig. <0.001) level. The null hypothesis is rejected, and it can be concluded that rural-urban migration influences urban road and transport infrastructure.

Ha2: There is a relationship between schooling facilities and rural-urban migration.

Bivariate correlation results reflected a significantly positive strong relationship between the tested variables at 0.974** (sig. <0.001) level. The null hypothesis is rejected, and it can be concluded rural-urban migration influences schooling facilities and education in urban areas.

Ha3: There is a relationship between rural-urban migration and health facilities in urban areas.

Bivariate correlation results reflected a significantly positive strong relationship between the tested variables at 0.830** (sig. <0.001) level. The null hypothesis is rejected, and it can be concluded rural-urban migration influences health facilities in urban areas.

Ha4: There is a relationship between rural-urban migration and crime/policing in urban areas

Bivariate correlation results reflected a significantly positive strong relationship between the tested variables at 0.931** (sig. <0.001) level. The null hypothesis is rejected, and it can be concluded rural-urban migration influences crime and policing in urban areas.

Ha5: There is a relationship between electricity supply and rural-urban migration.

Bivariate correlation results reflected a significantly positive strong relationship between the tested variables at 0.882** (sig. <0.001) level. The null hypothesis is rejected, and it can be concluded rural-urban migration influences electricity supply in urban areas.

Ha6: There is a relationship between rural-urban migration and water/sanitation in urban areas.

Bivariate correlation results reflected a significantly positive strong relationship between the tested variables at 0.806** (sig. <0.001) level. The null hypothesis is rejected, and it can be concluded rural-urban migration influences water and sanitation in urban areas.

Ha7: There is a relationship between social development and rural-urban migration.

Bivariate correlation results reflected a significantly positive strong relationship between the tested variables at 0.868** (sig. <0.001) level. The null hypothesis is rejected, and it can be concluded rural-urban migration influences social development in urban areas.

Ha8: There is a relationship between rural-urban migration and technology/communication.

Bivariate correlation results reflected a significantly positive strong relationship between the tested variables at 0.857** (sig. <0.001) level. The null hypothesis is rejected and it can be concluded rural-urban migration influences communication and technology in urban areas.

Ha9 There is no relationship between rural-urban migration and employment/job creation

Bivariate correlation results reflected a significantly positive strong relationship between the tested variables at 0.891** (sig. <0.001) level. The null hypothesis is rejected, and it can be concluded rural-urban migration influences employment and job creation.

6.5 IMPLICATIONS

The outcomes include implications for rural-urban migration on service delivery in the eThekweni Municipality's Silver City informal settlement.

6.5.1 Implications of rural-urban migration on Service delivery Theory

The primary focus was to contribute to the body of knowledge by proposing an integrated model consisting of the critical factors affecting rural-urban migration, with specific reference to South African municipalities. This also accounts for the international perspective on rural-urban migration, as documented in the literature and through the empirical findings; rural-urban migration leads to overcrowding in cities.

The conceptual framework developed (figure 6.1) depicts different theories of migration as the foundation in understanding the phenomenon, together with indirect and direct impact of migration patterns in service delivery. It is important to note variables that have a critical effect impact both rural and urban areas. There is thus a need for a greater understanding of rural-urban migration to enhance urban service delivery and economic growth. The development of a new conceptual

framework indicates the need for urban planning and adoption of new theories developed from the study to enhance service delivery.

6.5.2 Implications for rural-urban migration in practice

Rural-urban migration is able to either make or break the South African local government economy, which can only enhance and create more jobs in cities, with rural-urban entrepreneurs starting businesses in cities, creating more jobs. The study saw the need to analyse elements of service delivery, such as housing, education, instruction and job creation, against rural-urban migration; thus, reflecting the need for training in the public sector. Local government officials specifically require an understanding of the need and agency for urban planning.

The study suggests more money needs to be set aside to deal with crime in urban areas, as it is suggested rural-urban migrants end up demanding housing in cities such as eThekweni municipality. The study found overcrowding in schools and the demand for more water and electricity, hence, there is loadshedding and the study suggests there is a need for more options in electricity supply, meaning energy diversification in order to enhance service delivery. There is a need for development of economic hubs in cities to enhance economic activities.

6.6 RECOMMENDATIONS BASED ON THE RESULTS

The recommendations discussed below are based on the empirical findings.

The study recommends urban planning to harness the good aspects of rural-urban migration, providing key pointers for sustainable growth in local government, as well as curbing the high urban crime rate, unemployment, delays in hospitals, and the importance of creating a conducive environment for rural entrepreneurs to start businesses in cities for economic growth. There is also a need for more power stations in terms of energy generation and the adoption of other energy options such as solar, wind and hydro power. A high demand exists for housing in urban areas as a result of rural-urban migration patterns, as well as more demand for social grants, while overcrowding in classes happens in urban areas as a result of rural-

urban migration, with rural areas suffering directly and indirectly as a result of rural-urban migration. There is thus a need for the development of policies and control mechanisms to manage rural-migration patterns.

The study recommends, in order to enhance service delivery, there is a need for the government to understand the pull and push factors in rural-urban migration. Migrants are attracted to urban areas by better service and economic opportunities such as jobs and education, while they are pushed from rural to urban areas by poor service delivery and lack of economic opportunities, such as education and employment, which also increases the unemployment rate in cities. Hence, there is a need to maintain local economic growth and development, while ensuring service delivery performance is at an optimum level.

The study recommends the need for a strong relationship between rural-urban migration patterns and urban service delivery. Hence, there is service demand in cities since migrants end up living and occupying cities, which only leads to overcrowding. The study further concludes the government needs to put money aside for urban policing in order to eradicate crime in eThekweni municipality. The study also concludes there is fierce competition for jobs in urban areas, as well as illegal water connections, and more patients in urban hospitals, while air pollution and pit latrines are major factors in urban pollution indicating poor service delivery. Other factors include network infrastructure theft and more water demand in eThekweni municipality as a result of rural-urban migration patterns.

The study recommends proactively dealing with rural-urban migration patterns to enhance service delivery, since migrants are motivated by economic opportunities such as jobs and education, which only lead to more electricity and water demand, overcrowding in schools, hospitals and creates fierce competition in the job market in cities, which leads to joblessness. However, development needs to also be focused on rural areas, which can alleviate the flow of rural migrants into cities. There is a major need for integrated urban expansion and town plans that will harness the power of migration to enhance service delivery. Therefore, a conceptual framework is suggested, developed after testing different variables with the review of literature. The study suggests the review of critical patterns, indirect and direct

impact of rural-urban migration patterns in urban service delivery, as a strategy to improve service delivery.

6.6.1 Conceptual framework formulated through variables identified from the questionnaire

As indicated in the previous chapters, the formulation of the objectives, hypotheses and data collection instrument was achieved through a rigorous literature search. The literature review served as a fundamental source for identifying and selecting variables that supported the development of this research study

Based on the questionnaire, it can be concluded rural-urban migration leads to overcrowding, crime, and poor service delivery in terms of health, education, housing and job creation, as per the identified themes. Different variables were used in the formulation of questionnaire and they were test scientifically; as a result, the integrated Conceptual framework has been developed and is presented below (figure 6.1).

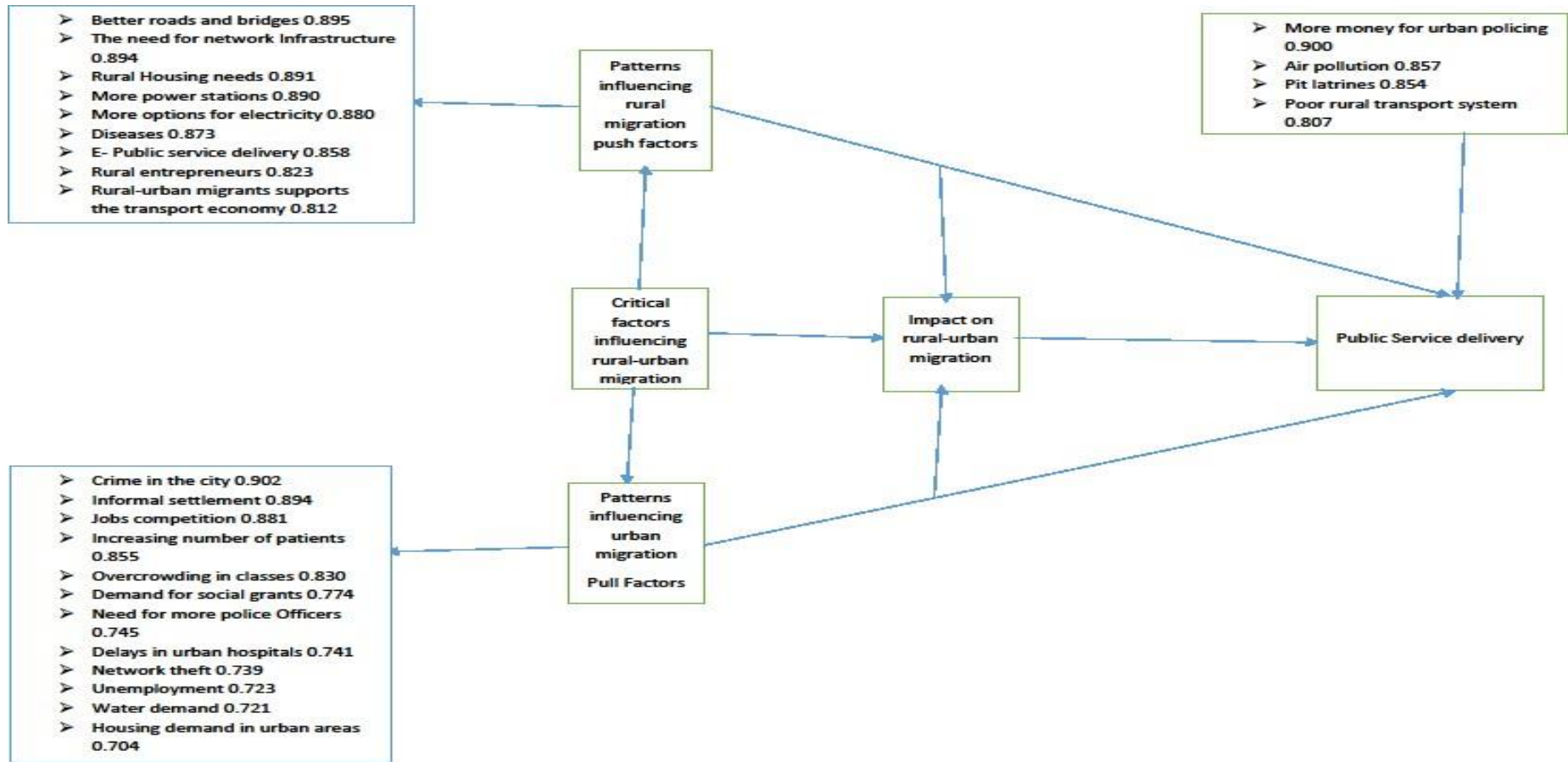


Figure 6.1: Suggested Conceptual Framework

Source: Developed by the researcher

6.6.2 Interpretation of the Suggested Conceptual Framework

This is the interpretation of the above suggested conceptual framework, which depicts a strong connection between crimes in cities (0.092), as results of pull factors impact migration patterns, which then affect service delivery. The framework further depicts a strong significant connection between more money for urban policing (0.900), public service delivery, reflecting the need for government to prioritise policing in all government spheres. Likewise, with informal settlement (0.984) showing a strong connection and significance with the patterns influencing urban migration pull factors, impact of migration patterns and service delivery, this indicated the need for the government to build more formal housing in cities to accommodate new populations.

The need for network infrastructure (0.894), in addition, indicates a strong connection and significance with the patterns influencing rural push factors, impact of rural migration patterns on service delivery. More power stations (0.890) show a connection and significance in relation to rural migration patterns, critical patterns; which means the need for power stations has effects on both rural and urban areas in terms of service delivery. Jobs competition (0.881) similarly reflects a strong connection and significance to the urban impact of migration patterns and service delivery. Likewise, more options for electricity (0.880) indicates a strong connection and significance in relation to rural impact of migration patterns and service delivery lack power option effects both rural and urban areas.

Unemployment in the city (0.872), furthermore, shows a strong significance and connection to critical patterns, urban migration patterns, the urban direct impact of migration patterns and service delivery. E-service delivery (0.857) additionally reflects a strong significance and connection to the rural impact of migration patterns and service delivery, showing the need for e-service delivery in rural areas, in order to curb rural-urban migration patterns and enhance service provision. Further to this, air pollution (0.857) illustrates a connection to housing provision, the urban impact of migration patterns and service delivery, with informal settlements contributing much to urban pollution.

Moreover, the increasing number of patients (0.854) signifies a strong connection to the urban migration patterns and service delivery, while overcrowding in classes

(0.830) affects urban areas as a result of rapid rural-urban migration patterns that have an impact on service delivery. Rural entrepreneurs affect rural areas, since rural migrants end up helping the urban economy grow, while rural municipalities suffer in terms of LED, which then affects service delivery. Rural migrants support the urban economy through transport (0.812), which in turn, affects the transport economy in rural areas. As a result, there is no appropriate transport system in the rural areas (0.807) and no proper roads and bridges (0.711), which shows poor service delivery in rural area, while more people are migrating for transport needs (0.771). Furthermore, access to better roads and bridges (0.895) has both direct impact as it affects rural areas, since this better infrastructure seems to act as a pull factor attracting migrants from rural areas to urban areas, which then shows poor service delivery in rural areas and better provision of roads and bridges in urban areas.

Rural people migrate to cities with housing needs (0.791), resulting in reduced housing needs in rural areas but this increases housing needs in urban areas, which then affects service delivery in urban areas. Moreover, electricity demands are critical to both rural and urban (0.685), which signifies a strong connection to the impact of rural-urban migration patterns, with both indirect and direct effects that subsequently affect service delivery in cities and in rural areas. And, increasing diseases in urban areas (0.873) is critical to both the rural and urban impact of rural-urban migration pattern and highlights the need for government to be proactive with regard to disease management. Infrastructural development (0.788) is connected to both the direct and indirect impact of migration patterns affecting rural areas, indicating the need for the government to prioritise rural service delivery. Demand for social grants (0.774) is, furthermore, critical factors influencing rural-urban migration to both the rural and impact of rural-urban migration patterns, which affects service delivery to people in rural areas, who have less access to points of collection, while there are more access points in cities, as well as more people receiving social grants in cities due to unemployment.

The demand for more police officers (0.745) is connected to the urban direct impact of migration patterns and service delivery, which reflects the need for the government to hire more police officers in order to deal with crime rates in eThekweni

municipality. Delays in urban hospitals (0.741) is connected directly to service delivery, because hospitals are mostly in cities as opposed to rural areas, and patients normally travel to the urban hospital (in this case, the Emshiyeni Memorial hospital).

The framework further shows theft of network infrastructure in urban areas (0.739) is connected to both the indirect and direct urban impact of migration patterns and service delivery, which means rapid rural-urban migration patterns lead to crime, including network infrastructure theft in urban areas. Unemployed in the city (0.723) is connected to critical patterns, meaning it affects both rural and urban areas and the urban direct impact of migration patterns, as well as service delivery. Rural-urban migration patterns are contributing to the unemployment in eThekweni municipality. Thus, demand for water in urban areas (0.721) has a connection to urban impact of migration patterns and service delivery, meaning there is more demand for water in eThekweni municipality due to rural-urban migration patterns. Housing demand in urban areas (0.704) is connected to the urban impact of migration patterns, showing the need for eThekweni municipality to create more formal settlements to eradicate other problems associated with informal settlements, such as air pollution and pit latrines, which affect urban service delivery.

Illegal water connections are in the urban areas (0.691) is connected to urban impact of migration patterns and service delivery; this shows rural-urban migration contributes to urban illegal water connections. Furthermore, network connectivity in urban areas (0.687) is connected to the impact of migration patterns, meaning it can affect service delivery directly and indirectly, at the same time, while other migrants migrate indirectly, motivated by the lack of network connection, others due to their educational and work needs. The above figure 6.1 depicts the suggested conceptual framework explained above, which can be adopted by the municipality to improve how it deals with rural-migration patterns and to enhance service delivery performance.

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ANNEXURE 1: CONSENT LETTER AND QUESTIONNAIRE



Consent Letter

Faculty of Management Sciences
Department of Public Management law and economics

Consent Letter

Date:

Dear Respondent

I am studying towards a Ph.D. in Management Sciences specialising in Public Administration in the faculty of Management Sciences at the Durban University of Technology. The title of my research is Rural-urban migration patterns to enhance service delivery in KwaZulu-Natal: eThekweni Municipality.

Kindly complete the following questionnaire to help me with data for my study. This questionnaire collects essential information concerning, rural-urban migration patterns to enhance service delivery in KwaZulu-Natal: eThekweni Municipality. Your response is confidential and you are anonymous throughout this study.

Feel free to contact me in case you need any clarification.

Signatures

Respondent

..... Principal Researcher

Mr. B Nkabinde

DPhil Student: Public Administration Public management law and economics
buyanin1@dut.ac.za

Study promoter: Dr L.M Lekhanya Email Address: lawrencel@dut.ac.za

Co-study promoter: Professor N. Dorasamy Email Address: nirmala@dut.ac.za

RESEARCH QUESTIONNAIRE

SECTION A: Demographic information Instructions

Cross the appropriate box that best represents your answer. Your responses are confidential.

Please cross the right response. Example

Male	1	Female	2
	X		

Ubuhlanga

African	1	White	2	Indian	3	Coloured	4	Other	5
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Gender:

Ubulili

Male	1	Female	2
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Age

Iminyaka

Less than 20 years	0
20 - 25	1
26 - 30	2
31 - 35	3
36 - 40	4
41 - 50	5
51 - 60	6
61 and above	7

How long have you lived in Silver City informal settlement?

Ushlale Isikhathi Esingakanani kulendawo

2-3 years	1
3-4 years	2
More than 4 years	3

Educational background

Ezemfundo

Below Matric	0
Matric	1
Tertiary	2
None	3

Occupational background

Ezokusebenza

Employed	1	Not Employed	2	Self-employed	3
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Do you come from a rural area?

Ngabe Uqamuka emakhaya

Yes	1
No	2

SECTION B: Critical factors of rural to urban rural-urban migration: patterns to enhance service delivery – eThekwini city

Please show your response to the following questions regarding critical factors of rural to urban rural-urban migration patterns to enhance service delivery – eThekwini city

Please place a cross (X) for each statement that truly reflects your response where: 1 = strongly disagree

2 = Disagree

3 = Neutral

4 = Agree

5 = strongly agree

STATEMENTS	Strongly disagree 1	Disagree 2	Neutral 3	Agree 4	Strongly agree 5
<p>The following questions are based on the effects of rural-urban migration on roads and transportation infrastructure.</p> <p>Imibuzo elondelayo inhekene nomuthelale woku hamba kwabantu baye endaweni ezise Dolobheni kwi nqalasizinda</p>					
<p>8a. There is no proper transport system in the rural areas which makes it difficult to travel to work.</p> <p>Azikho kahle izinto zokhuthutha emakhaya okwenza kube Nzima Ukuya emsebenzin</p>					
<p>8b. I migrated from rural areas to urban areas in order to work in transport.</p> <p>Ngisuke emakhaya ngeza edolobheni ngenxa yokuthola umsebenzi kezokuthutha.</p>					
<p>8cThe infrastructure development of rural areas can minimise rural-to-urban migration trends.</p> <p>Makungakhona Intuthuko emakhaya ngehla ukuhamba kwabantu beya emadolobheni</p>					

<p>8d. There is no Roads and bridges in my area of origin. Ayikho amigwaqo nama bridge ngasekhaya</p>					
<p>8e. I migrated from rural areas to urban areas to gain access to better roads and bridges. Ngize la edolobheni ukuze ngoba indawo yas dolonheni inemigwaqo Kanye nama bridge</p>					
<p>8f. Rural-to-urban migration is good for the transport economy. Ukuhamba kwabantu beya emadolobheni kuhle kumnotho wezasekhaya</p>					
<p>The following is about the impact of rural-urban migration on schooling facilities capacity. Imibuzo elandlayo imayelana nomuthelela zowkihamba kwabantu emakhaya beya emadolobheni ezindaweni Zokufunda.</p>					
<p>9a. There is an increase in the student population due to rural-urban migration patterns. Kunokwanda kwabafundi emadolobheni ngenxa</p>					

<p>9b. There is overcrowding in classes due to rural-urban migration patterns. Emaclasin ezikole kugcwele Kuphuphuma ngenxa yabantu Abasuka emakhaya beze Edolobheni</p>					
<p>9c. The learners' overload in classrooms is increasing the work load for teachers. Ukwanda kwabafundi emaclassin kwenza ukuthi nomsebenzi wokufunsisa ube Mningi</p>					
<p>The following questions are based on the effects of rural-urban migration patterns on Health Facilities in urban areas. Imibuzo elandelayo igxile kwimithelelo yokusuka Emakhaya nokuya emadolobheni kezempilo zase Dolobheni.</p>					
<p>10a. The rural-urban migration patterns cause delays in urban hospitals. Ukusuka kwabantu emakhaya kuyiwa emadolobheni kubambezela izinhlelo eziqhubekayo zase zibhedelela zase madolobheni</p>					

<p>10b. The rural-urban migration patterns increase diseases in urban areas.</p> <p>Ukusuka kwabantu emakhaya beya edolobheni bungela ukwanda kwezifo eziningi edolobheni</p>					
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<p>10c. The ever-increasing numbers of patients in urban areas because of rural-urban migration leads to shortages in medical staff.</p> <p>Ukwanda kwabantu edolobheni besuka emakhaya kubanomthelela wokushoda kwemishanguzo emtholampilo</p>					
<p>10d. The rural-urban migration patterns leads to shortages in hospital admission facilities.</p> <p>Ukusuka kwabantu emakhaya beya emadolobheni kugcina kunimthelela wokushoda kwemibhede yeziguli</p>					
<p>The following statements are based on the effects of rural-urban migration patterns on policing and crime.</p> <p>Umbhalo olandelayo umayelana nemithelela yokusuka emakhaya kuya edolobheni Kanye nezabakasilodlo Kanye nezobugebengu.</p>					
<p>11a. The rural-urban migration patterns lead to an increase in crime in urban areas.</p> <p>Ukusuka emakhaya kuya edolobheni kubangela ukwanda kobungebengu emadolobheni</p>					

<p>11b. The rural-urban migration patterns create more demand for police officers.</p> <p>Ukusuka emakhaya kuya emadolobheni kubangela ukuthi kwande ukuqashwa kwamaphoyisa emadolobheni.</p>					
<p>11c. We need more police stations to the high demand created by rural-urban migration patterns.</p> <p>Sidinga izikhungo zamaphoyisa eziningi ezindaweni zasemkhaya njengase madolobheni</p>					
<p>11d. More police officers need to be hired to deal with the demand created by rural-to-urban migration.</p> <p>Kuyadingeka ukuqashwa kwamaphoyisa amaningana ngenxa yokwanda kwabantu abasuka emakhaya beza edolobheni.</p>					
<p>11e. More money from the Government needs to be prioritised for policing and crime. Imali evela kuhulumeni iyadingakala ukuthi ilekelele kwezobugebengu Kanye namaphoyisa alekeleleke</p>					

<p>The following questions are based on the effects of rural-urban migration patterns on the Electricity supply</p> <p>Imibuzo elandelayo igxile kumthelela wokusuka kwabantu emakhaya beza edolobheni Kanye nokusetshenziswa kwagesi edolobheni</p>					
<p>12a. The rural-urban migration patterns lead to more migrants demanding more electricity which results in load shedding. Ukusuka kwabantu emakhaya beza edolobheni kubangela ukudingeka kakhulu kwagesi ezindaweni zokuhlala okungabangela ku cima sbani</p>					
<p>12b. More power stations are needed in urban areas to curb the demand created by rural-urban migration patterns. Kusadingeka izindawo zika gesi zakhiwe emadolobheni ngenxa yokwanda kwabantu abasuka emakhaya beza edolobheni</p>					
<p>12c. More options need to be created for electricity for example, solar and wind energy since there is more demand for electricity due to rural-urban</p>					

<p>migration patterns. Ngenxa yokwanda kwesingo sika gesi emadolobheni kudingeka ukuthi kwakhiwe, ugesi ophehlwa ngomoya Kanye nogesi ophehlwa ngelanga</p>					
<p>The following questions are based on the effects of rural-urban migration patterns on water and sanitation. Imibuzo elandelayo igxile kumthelela wokusuka kwabantu emakhaya beza edolobheni Kanye nezamanzi</p>					
<p>13a. There is more demand for water in urban areas because of rural-urban migration patterns. Kunesdingo esikhulu samanzi endaweni yase Dolobheni ngenxa yokwanda kwabantu abasuka emakhaya beza edolobheni</p>					
<p>13b. There are pit latrines in urban areas due to rural-urban migration patterns. Kunezindawo zangasese ezimbiwe emadolobheni loko kungenxa yokuza kwaantu abasuka emakhaya beza</p>					

edolobheni					
13c. More illegal water connections are in the urban areas due to rural-urban migration patterns. Kunokuxhunywa kwamanzi ngokungemthetho emadolobheni loko kungenxa yokuza kwabantu abasuka emakhaya beza edolobheni					
13d. Air pollution because of rural-urban migration patterns leads to climate change Ukungcola komoya kubangela ukushintsha kwesimo sezulu ngenxa yokuza kwabantu abaningi besuka emakhaya beza edolobheni					
The following questions are based on the effects of rural to urban rural-urban migration patterns on social development. Imibuzo elandelayo igxile kumthelela wokusuka kwabantu emakhaya beza edolobheni Kanyenezokuthuthukisa komphakathi					

<p>14b. There are more informal settlements because of rural-urban migration patterns.</p> <p>Mining imikhukhu emadolobheni ngenxa yokwanda kwabantu abasuka emakhaya beza edolobheni</p>					
<p>14c. There is more demand for social grants in urban areas because of rural-urban migration.</p> <p>Uxhaso luka hulumeni mayelana nezimali luyadingeka kakhulu ngenxa yokwanda kwabantu abasuka emakhaya beza edolobheni</p>					
<p>14d. It is hard to eliminate informal settlements in urban areas because of rural-urban migration patterns. Kuba nezinqinamba mayelana nokususwa kwemikhukhu Emadolobheni ngenxa yokwanda kwabantu abasuka emakhaya beza edolobheni</p>					
<p>The following questions are based on the effects of rural-urban migration patterns on technology and communication.</p> <p>Imibuzo elandelayo igxile</p>					

<p>kumthelela wokusuka kwabantu emakhaya beza edolobheni Kanye nezobuchwepheshe nezokuxhumana</p>					
<p>15a. There is poor network connection in urban areas due to demand created by the flow of rural-urban migration. Kunezinkinga mayelana nezokuxhumana emadolobheni ngenxa yobuningi babantu abagcwele idolobha besuka emakhaya beza edolobheni</p>					
<p>15b. E-public service delivery is needed to meet the demands created by rural-urban migration patterns. Ukusetshenziswa kobuchwepheshe ukuhambisa izidingo zomphakathi kungasiza ekuthutheni abantu abasuka emakhaya beza edolobheni</p>					
<p>15c. There is a need to create network infrastructure in rural areas to improve communication. Kunesdingo esikhulu sokwakha izinkundla zokuxhumana Emakhaya ukulekelela abasemakhaya kuthi bakwazi</p>					

<p>ukuxhumana nabanye.</p>					
<p>15d. There is theft of network infrastructure in urban areas as a result of rural-urban migration patterns. Kunobugebengu mayelana nokuntshontshwa kwezidingo zokuxhumana, ngenxa yabantu abasuka emakhaya beza edolobheni.</p>					

<p>The following questions are based on the effects of rural-urban migration patterns on employment and job creation.</p> <p>Imibuzo elandelayo igxile kumthelela wokusuka kwabantu emakhaya beza emadolobheni Kanye namathuba omsebenzi</p>					
<p>16a. The influx of rural-urban migrants creates more competition in the job market in urban areas.</p> <p>Ukungenxa ngamandla kwabantu abasuka emakhaya beza edolobheni kubanga imbango kwezokudayisela umohakathi emadolobheni</p>					
<p>16b. There are more migrants unemployed in the urban areas because of rural-urban migration patterns.</p> <p>Baningi abantu abangasebenzi emakhaya ngenxa yobuningi babantu abasuka emakhaya beza edolobheni</p>					
<p>16c. Unemployment caused by the influx of rural-urban migration patterns leads to high crime rates in urban areas.</p>					

<p>Ukungasebenzi kwabantu Kubangela ukwanda kobugebengu edolobheni</p>					
<p>16d. There are entrepreneurs that come from rural areas to urban areas to start businesses and create jobs. Kunabantu abasuka emakhaya beza ngokuzoveza amathuba emsebenzi edolobheni, abanye beza ngokuzozisebenza edolobheni</p>					

Thank you for your contribution

ANNEXURE 2: FRC APPROVAL LETTER



26th November 2020

Student number: 21237444

Dear Mr B. Nkabinde

DOCTOR OF PHILOSOPHY IN MANAGEMENT SCIENCES: PUBLIC ADMINISTRATION

This serves to confirm the approval of your research proposal by the Faculty Research Committee, at its meeting on **26th November 2020**, as follows:

1. Research proposal and provisional dissertation title:
South African rural-urban migration control mechanisms to enhance Service delivery in KwaZulu-Natal.

Supervisor: **Dr L.M. Lekhanya**

Co-supervisor: **N/A**

Please note that any proposed changes in the thesis/dissertation title require the approval of your supervisor/s, the Faculty Research Committee, as well as ratification thereof by the Higher Degrees Committee.

2. Research budget to the amount of **R15 000**
Please note that this funding is not a scholarship or bursary and is therefore not paid directly to you, but is controlled by the Faculty. Any proposed changes to the use of this funding allocation requires the approval of your supervisor and the Dean. Please note that funding will be reimbursed to you after the provision of receipts.

The Institutional Research Committee has stipulated that:

- (a) This University retains the ownership of any Intellectual Property (patent, design, etc.) registered in respect of the results of your Masters/Doctors Degree in Technology studies as a result of the award and the provisions of the above Act;
- (b) Should you find any of the terms above not acceptable then you are given the option to decline the Research budget award to your project in writing.

May we remind you that in terms of Rule G25(2)(b), if you fail to obtain the Masters/Doctors degree within the maximum time period allowed after first registering for the qualification, Senate may refuse to renew your registration or may impose any conditions it deems fit. You may apply to the Faculty Research Committee for an extension.

Please note that you are required to convert your registration from the informal to the formal course and re-register each year.

Please note that the following must be adhered to:

Registration:

1. Ensure formal registration has taken place *(the onus is on the student and the supervisor to ensure registration takes place at the beginning of each year whilst the student is currently engaged with his/her Masters or PhD qualification)*
2. Ensure that application for Conferment of Status has been made in the event of your undergraduate qualification being different to this application. **Your attention is drawn to the fact that Conferment of Status is required for registration.**
3. Ensure that your supervisor has submitted your proposal to the Faculty Research Officer (FRO) for IREC clearance (institutional research ethics committee). This is in the case of Ethics level 2 IREC and level 3 IREC (in the case of a study dealing with vulnerable populations). See guideline attached. **It is the researcher's responsibility to check the Ethics requirements and submit to the relevant bodies irrespective of the reviewer's recommendation.**

Dissertation submission for examination:

1. Ensure that you submit the intention to submit form **(PG 5)**, signed by the HOD and Supervisor
2. Ensure that the signed checklist is submitted with the **PG 5**
3. Once your dissertation is submitted to the supervisor for examination purposes, communication from here on will only be with you supervisor and not with the faculty.
4. Your supervisor **MUST** nominate the examiners three months prior to submission of the dissertation/thesis for examination.
5. On submission for examination, please note that three ring bound signed copies must be submitted to your supervisor along with the completed and signed **PG 7** form, **FMS Checklist** and **Turn it in report**.
6. Feedback will be provided to your supervisor regarding the examination result after the result is ratified by the Higher Degrees Committee (HDC).
7. In the event of a resubmission the reports will be submitted to the supervisor who will communicate with you for revision. Once revision has taken place your supervisor will submit to the FRO for resubmission to the examiners.
8. In the case where there is a discrepancy in examiners results, an Arbiter will be nominated via the HOD and supervisor and tabled at FRC and ratified at HDC.

On completion of this process, the Arbiters report will be tabled at FRC and ratified at HDC.

9. Results of the Arbitration process will be communicated to your supervisor

Graduation requirements:

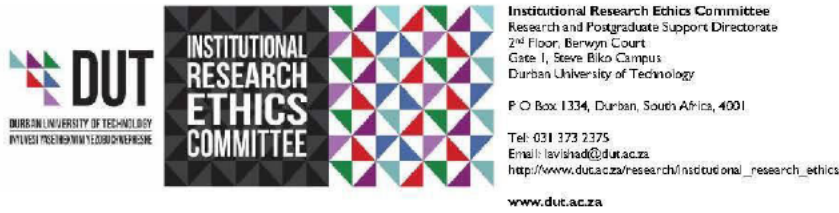
1. Ensure that you submit a completed signed PG10 form
2. one hard bound dissertation/thesis with a pdf version on CD
3. response to post graduate examination form
4. completion of study form (IREC form)

Should you experience any problems relating to your research, your supervisor must be informed of the matter as soon as possible. If the difficulties persist, you should then approach your Head of Department and thereafter the Faculty Research Coordinator. Please refer to the 2020 General Rule Book and the Postgraduate Students' Guide 2020 concerning the rules relating to postgraduate studies, which include *inter alia* acceptable minimum and maximum timeframes, submission of thesis/dissertations, etc. Please do not hesitate to contact this office for any assistance. We wish you success in your studies.

Kind regards,

Professor FG Netswera _____
Faculty of Management Sciences

ANNEXURE 3: IREC APPROVAL LETTER



25 March 2022

Mr B Nkabinde
15 Lorriane
Pehlem
Pietermaritzburg

Dear Mr Nkabinde

**Rural-urban migration patterns to enhance service delivery in KwaZulu-Natal:
eThekweni Municipality**
Ethical Clearance number IREC 009/21

The Institutional Research Ethics Committee acknowledges receipt of your notification regarding the piloting of your data collection tool.

Kindly ensure that participants used for the pilot study are not part of the main study.

In addition, the IREC acknowledges receipt of your gatekeeper permission letters.

Please note that **FULL APPROVAL** is granted to your research proposal. You may proceed with data collection.

Any adverse events [serious or minor] which occur in connection with this study and/or which may alter its ethical consideration must be reported to the IREC according to the IREC SOP's.

Please note that any deviations from the approved proposal require the approval of the IREC as outlined in the IREC SOP's.

Yours Sincerely,

PROF. S. CHAM
Chairperson: IREC

ANNEXTURE 4: GATEKEEPERS LETTER



Councillor

Mezzanine Floor Shell House
Cnr. Anton Lembede & Samora Machel Street, Durban, 4001
P O Box 1014, Durban, 4000
Tel: 031 322 7030, Fax: 031 311 3827
www.durban.gov.za

Our ref: Cllr T.Z Mathe
083 998 9924
Date: 30y 09y 2021

To Whom it May Concern

Letter of Support Mr B. Nkabinde Registration No: 01237444
Granting permission to use Silver City as a Study Site.

Title: Rural-urban migration patterns to enhance Service delivery in KwaZulu-Natal: Etherwini Municipality.

Please be informed that Etherwini Municipality Councillor ward 88 MR. T.Z Mathe have considered the Request by Mr B Nkabinde to use Silver City as a Study Site, of leading to the awarding of a Doctorate Degree (PHD) in Public Administration

I therefore wish to inform Mr B. Nkabinde of the acceptance of his Request and here by assure him of my utmost Co-operation towards achieving his Academic goals the outcome which I believe will help our municipality deliver more effective Service

Wishing the Student all the best in his Studies.

Yours faithfully
Cllr T.Z. Mathe
ward 88
083 998 9924

ETHEKWINI MUNICIPALITY
EX OFFICIO DISTRICT OF DURBAN IN
TERMS OF SECTION 4 OF ACT 11 OF 1993
(AS AMENDED) CITY WARD 88 COUNCILLOR
20 POLLEY PASSAGE STREET, DURBAN, 4001

ANNEXURE 5: RELIABILITY TESTS: ALL THEMES

Table 5.1: Reliability Scores

		N of Items	Cronbach's Alpha
8A	The effects of rural to urban rural-urban migration on roads and Transportation infrastructure.	6	0.962
9A	The impact of rural to urban rural-urban migration on schooling facilities capacity.	3	0.963
10A	The effects of rural to urban rural-urban migration patterns on health facilities in urban areas.	3	0.880
11A	The effects of rural to urban rural-urban migration patterns on policing and crime.	5	0.974
12A	The effects of rural to urban rural-urban migration patterns on the electricity supply.	3	0.953
13A	The effects of rural to urban rural-urban migration patterns on water and sanitation.	4	0.964
14A	The effects rural to urban rural-urban migration patterns on social development.	4	0.958
15A	The effects of rural to urban rural-urban migration patterns on Technology and communication	4	0.936
16A	The effects of rural to urban rural-urban migration patterns on employment and job creation.	4	0.975

ANNEXURE 6: CHI-SQUARE TEST

	Chi-square	df	Asymp.Sig.
Race	44.444	3	P<0.001
Gender	52.593	12	P<0.001
Age	644.414	28	P<0.001
How long have you lived in silver city informal settlement	645.244	8	P<0.001
Educational Background	402.126	12	P<0.001
Occupational Background	287.884	8	P<0.001
Do you come from rural areas	44.444	3	P<0.001
there is no proper transport system in the rural areas which makes it difficult to travel to work	305.802	8	P<0.001
I Migrated from rural areas to urban areas in order to work in Transport	428.949	8	P<0.001
The infrastructure development of rural areas can minimise rural to urban rural-urban patterns	563.557	8	P<0.001
There is no roads and bridges in my area of origin	233.333	12	P<0.001
Migrated from rural areas to urban areas to gain access to better bridges	61.765	12	P<0.001
Rural to urban Rural-urban migration is good for the transport economy	282.692	8	P<0.001
there is an increase in the student population due to rural to urban rural-urban migration patterns	479.447	8	P<0.001
There is a large number of high school dropout in urban schools as a result of rural to urban rural-urban migration patterns	322.405	12	P<0.001
the learners overload in classrooms is increasing the learner and teacher ratio	395.842	12	P<0.001
The rural to urban rural-urban migration patterns cause delays in urban hospitals	523.678	8	P<0.001
The rural to urban rural-urban migration patterns increase diseases in urban areas	304.724	8	P<0.001
there is ever-increasing numbers of patients in urban areas because of rural to urban rural-urban migration patterns leads to shortages in medical staff	354.429	8	P<0.001
The rural to urban rural-urban migration patterns leads to shortages in hospital admission facilities	645.244	8	P<0.001
the rural to urban rural-urban migration patterns lead to an increase in crime in urban areas	344.949	8	P<0.001
the rural to urban rural-urban migration patterns create more demand for police officers	530.099	8	P<0.001
We need more police stations due to the high demand created by rural to urban rural-urban migration patterns	263.554	8	P<0.001
More police officers need to be hired to deal with the demand created by the rural to urban rural-urban migration patterns	625.273	8	P<0.001
More money from government needs to be prioritised for policing and crime	333.390	8	P<0.001
the rural to urban rural-urban migration patterns leads to more people migrants demanding more electricity which results in load shedding.	555.492	8	P<0.001

More power stations are needed in urban areas to curb the demand created by rural to urban rural-urban migration patterns.	392.953	8	P<0.001
More options needs to created for electricity for example, solar and wind energy since there is more demand due to rural to urban rural-urban migration patterns	312.879	8	P<0.001
there is more demand for water in urban areas because of rural to urban rural-urban migration patterns	459.702	8	P<0.001
There are pit latrines in urban areas due to rural to urban rural-urban migration patterns	304.095	8	P<0.001
More illegal water connections are in the urban areas due to rural to urban rural-urban migration patterns	629.491	8	P<0.001
Air pollution of rural to urban rural-urban migration patterns leads to climate change	460.269	8	P<0.001
There is more demand for housing in urban areas because of rural to urban rural-urban migration patterns.	612.945	8	P<0.001
There are more informal settlements because of rural to urban rural-urban migration patterns.	298.315	8	P<0.001
There is more demand for social grants in urban areas because of rural to urban rural-urban migration	575.115	8	P<0.001
it is hard to eliminate informal settlements in urban areas because of rural to urban rural-urban migration patterns.	453.409	8	P<0.001
There is poor network connection in urban areas due to demand created by the flow of rural to urban rural-urban migration patterns.	453.497	8	P<0.001
E-Public service delivery is needed to meet the demands created by rural to urban rural-urban migration patterns	227.863	8	P<0.001
There is a need to create network infrastructure in rural areas to improve communication for working at home.	330.168	8	P<0.001
There is theft of network infrastructure in urban areas as a results of rural to urban rural-urban migration patterns	413.962	8	P<0.001
The influx of rural to urban rural-urban migrants creates more competition in the job market in urban areas	287.884	8	P<0.001
There are more migrants unemployed in urban areas because of rural to urban rural-urban migration patterns	382.915	8	P<0.001
Unemployment caused by the influx of rural to urban rural-urban migration patterns leads to high crime rates in urban areas	289.827	8	P<0.001
there are entrepreneurs that come from rural areas to start businesses and create jobs in cities.	272.988	8	P<0.001

ANNEXURE 8: KMO AND BARTLETT'S TEST

Table 5.2: KMO and Bartlett's test

		Kaiser-Meyer-Olkin Measure of Sampling Adequacy	Bartlett's Test of Sphericity		
			Approx. Chi-Square	df	Sig.
8A	The effects of rural-urban migration on roads and Transportation infrastructure.	0.853	3559.371	15	0.000
9A	The impact of rural-urban migration on schooling facilities capacity.	0.733	1768.192	3	0.000
10A	The effects of rural-urban migration patterns on health facilities in urban areas.	0.805	1544.206	6	0.000
11A	The effects of rural-urban migration patterns on policing and crime.	0.833	3021.757	10	0.000
12A	The effects of rural-urban migration patterns on the electricity supply	0.753	1191.572	3	0.001
13A	The effects of rural-urban migration patterns on water and sanitation.	0.791	2053.820	6	0.000
14A	The effects rural-urban migration patterns on social development.	0.797	1900.984	6	0.000
15A	The effects of rural-urban migration patterns on Technology and communication	0.796	1941.734	6	0.000
16A	The effects of rural-urban migration patterns on employment and job creation.	0.830	2567.941	6	0.000

all	Push and pull factors of rural-urban migration patterns related to urban service delivery	0.951	41133.832	666	0.000
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ANNEXURE 9: ROTATED MATRIX; RURAL-URBAN MIGRATION PATTERNS TO ENHANCE URBAN SERVICE DELIVERY

	Component 1	Component 2
Migrated from rural areas to urban areas to gain access to better roads and bridges	0.173	0.895
The rural-urban migration patterns increase diseases in urban areas	0.214	0.873
The infrastructure development of rural areas can minimise rural-urban Patterns	0.443	0.788
There is more demand for social grants in urban areas because of rural-urban migration	0.572	0.774
The rural-urban migration patterns create more demand for police officers	0.610	0.745
The rural-urban migration patterns cause delays in urban hospitals	0.598	0.741
There is theft of network infrastructure in urban areas as a result of rural-urban migration patterns	0.609	0.739
There are more migrants unemployed in urban areas because of rural-urban migration patterns	0.620	0.723
There is more demand for water in urban areas because of rural-urban migration patterns	0.611	0.721
More police officers need to be hire to deal with the demand created by rural-urban migration	0.642	0.720
There is more demand for housing in urban areas because of rural-urban migration patterns	0.654	0.704
More illegal water connections are in the urban areas due to rural-urban migration patterns	0.678	0.691
There is an increase in the student population due to rural-urban migration patterns	0.668	0.690
There is poor network connection in urban areas due to demand created by the flow of rural-urban migration patterns	0.658	0.687
The rural-urban migration patterns lead to an increase in crime in urban areas	0.902	0.382

More money from the government needs to be prioritised for policing and crime	0.900	0.373
There are more informal settlements because of rural-urban migration patterns	0.894	0.388
There is a need to create network infrastructure in rural areas to improve communication for working at home	0.894	0.374
More power stations are needed in urban areas to curb the demand created by rural-urban migration patterns	0.890	0.370
The influx of rural-urban migrants creates more competition in the job market in urban areas	0.881	0.424
More options need to be created for electricity for example, solar and wind energy since there is more demand due to rural-urban migration	0.880	0.408
Unemployment caused by the influx of rural-urban migration pattern leads to high crime rates in urban areas	0.872	0.423
E-public service delivery is needed to meet the demands created by rural-urban migration patterns	0.858	0.464
Air pollution because of rural-urban migration patterns leads to climate change	0.857	0.459
The ever-increasing numbers of patients in urban areas because of rural-urban leads to shortages in medical staff	0.855	0.465
There are pit latrines in urban areas due to rural-urban migration patterns	0.854	0.454
We need more police stations due to the high demand created by rural-urban migration	0.832	0.480
There is overcrowding in classes due to rural-urban migration patterns	0.830	0.504
There are entrepreneurs that come from rural areas to start businesses and create jobs in cities	0.823	0.501
Rural-urban migration is good for the transport economy	0.812	0.527
There is no proper Transport system in the rural areas which makes difficult to travel to work	0.807	0.534
It is hard to eliminate informal settlements in urban areas because of rural-urban migration patterns	0.791	0.548

Migrated from rural areas to urban areas to have access to transport in order to go to work	0.771	0.567
There is no roads and bridges in my area of origin	0.711	0.638
The rural-urban migration patterns leads to shortages in hospital admission facilities	0.680	0.673
The rural-urban migration patterns lead to more migrants demanding more electricity which results in load shedding	0.685	0.667
The learners' overload in classrooms is increasing the work load for teachers	0.677	0.665

Extraction Method: Principal Component Analysis.

Rotation Method: Varimax with Kaiser Normalization.a

a. Rotation converged in 3 iterations.

Rotated Component Matrix^a

	Component		
	1	2	
The rural to urban rural-urban migration patterns increase diseases in urban areas	0.214		0.873
The ever-increasing numbers of patients in urban areas because of rural to urban rural-urban leads to shortages in medical staff	0.855		0.465
The rural to urban rural-urban migration patterns leads to shortages in hospital admission facilities	0.680		0.673
The rural to urban rural-urban migration patterns lead to an increase in crime in urban areas	0.902		0.382
The rural to urban rural-urban migration patterns create more demand for police officers	0.610		0.745
We need more police stations due to the high demand created by rural to urban rural-urban migration	0.832		0.480
More police officers need to be hire to deal with the demand created by rural to	0.642		0.720

urban rural-urban migration		
More money from the government needs to be prioritised for policing and crime	0.900	0.373
The rural to urban rural-urban migration patterns lead to more migrant demanding more electricity which results in load shedding	0.685	0.667
More power stations are needed in urban areas to curb the demand created by rural to urban rural-urban migration patterns	0.890	0.370
More options need to be created for electricity for example, solar and wind energy since there is more demand due to rural to urban rural-urban migration	0.880	0.408
There is more demand for water in urban areas because of rural to urban rural-urban migration patterns	0.611	0.721
There are pit latrines in urban areas due to rural to urban rural-urban migration patterns	0.854	0.454
More illegal water connections are in the	0.678	0.691

urban areas due to rural to urban rural-urban migration patterns		
Air pollution because of rural to urban migration patterns leads to climate change	0.857	0.459
There is more demand for housing in urban areas because of rural to urban rural-urban migration patterns	0.654	0.704
There are more informal settlements because of rural to urban migration patterns	0.894	0.388
There is more demand for social grants in urban areas because of rural to urban migration	0.572	0.774
It is hard to eliminate informal settlements in urban areas because of rural to urban rural-urban migration patterns	0.791	0.548
There is poor network connection in urban areas due to demand created by the flow of rural to urban rural-urban migration patterns	0.658	0.687
E-public service delivery is needed to meet the demands created by rural to	0.858	0.464

urban rural-urban migration patterns		
There is a need to create network infrastructure in rural areas to improve communication for working at home	0.894	0.374
there is theft of network infrastructure in urban areas as a result of rural to urban rural-urban migration patterns	0.609	0.739
The influx of rural to urban rural-urban migrant creates more competition in the job market in urban areas	0.881	0.424
There are more migrants unemployed in urban areas because of rural to urban rural-urban migration patterns	0.620	0.723
Unemployment caused by the influx of rural to urban rural-urban migration pattern leads to high crime rates in urban areas	0.872	0.423
There are entrepreneurs that come from rural areas to start businesses and create jobs in cities	0.823	0.501
There is no proper Transport system in the rural areas which	0.807	0.534

makes difficult to travel to work		
Migrated from rural areas to urban areas to have access to transport in order to go to work	0.771	0.567
The infrastructure development of rural areas can minimise rural to urban rural-urban Patterns	0.443	0.788
There is no roads and bridges in my area of origin	0.711	0.638
Migrated from rural areas to urban areas to gain access to better roads and bridges	0.173	0.895
Rural to urban Rural-urban migration is good for the transport economy	0.812	0.527
There is an increase in the student population due to rural to urban rural-urban migration patterns	0.668	0.690
There is overcrowding in classes due to rural to urban rural-urban migration patterns	0.830	0.504
The learners' overload in classrooms is increasing the work load for teachers	0.677	0.665
The rural to urban rural-urban migration patterns cause delays in urban hospitals	0.598	0.741

Extraction Method: Principal Component Analysis.
 Rotation Method: Varimax with Kaiser Normalization.^a
 a. Rotation converged in 3 iterations.

	Communalities	
	Initial	Extraction
The rural to urban rural-urban migration patterns increase diseases in urban areas	1.000	0.808
The ever-increasing numbers of patients in urban areas because of rural to urban rural-urban leads to shortages in medical staff	1.000	0.948
The rural to urban rural-urban migration patterns leads to shortages in hospital admission facilities	1.000	0.916
The rural to urban rural-urban migration patterns lead to an increase in crime in urban areas	1.000	0.959
The rural to urban rural-urban migration patterns create more demand for police officers	1.000	0.928
We need more police stations due to the high demand created by rural to urban rural-urban migration	1.000	0.922

More police officers need to be hire to deal with the demand created by rural to urban rural-urban migration	1.000	0.931
More money from the government needs to be prioritised for policing and crime	1.000	0.949
The rural to urban rural-urban migration patterns lead to more migrant demanding more electricity which results in load shedding	1.000	0.914
More power stations are needed in urban areas to curb the demand created by rural to urban rural-urban migration patterns	1.000	0.929
More options need to be created for electricity for example, solar and wind energy since there is more demand due to rural to urban rural-urban migration	1.000	0.942
There is more demand for water in urban areas because of rural to urban rural-urban migration patterns	1.000	0.892

There are pit latrines in urban areas due to rural to urban rural-urban migration patterns	1.000	0.935
More illegal water connections are in the urban areas due to rural to urban rural-urban migration patterns	1.000	0.937
Air pollution because of rural to urban migration patterns leads to climate change	1.000	.946
There is more demand for housing in urban areas because of rural to urban rural-urban migration patterns	1.000	0.923
There are more informal settlements because of rural to urban migration patterns	1.000	0.950
There is more demand for social grants in urban areas because of rural to urban migration	1.000	0.926
It is hard to eliminate informal settlements in urban areas because of rural to urban rural-urban migration patterns	1.000	0.927

There is poor network connection in urban areas due to demand created by the flow of rural to urban rural-urban migration patterns	1.000	0.905
E-public service delivery is needed to meet the demands created by rural to urban rural-urban migration patterns	1.000	0.951
There is a need to create network infrastructure in rural areas to improve communication for working at home	1.000	0.939
there is theft of network infrastructure in urban areas as a result of rural to urban rural-urban migration patterns	1.000	0.916
The influx of rural to urban rural-urban migrant creates more competition in the job market in urban areas	1.000	0.955
There are more migrants unemployed in urban areas because of rural to urban rural-urban migration patterns	1.000	0.907

Unemployment caused by the influx of rural to urban rural-urban migration pattern leads to high crime rates in urban areas	1.000	0.940
There are entrepreneurs that come from rural areas to start businesses and create jobs in cities	1.000	0.929
There is no proper Transport system in the rural areas which makes difficult to travel to work	1.000	0.937
Migrated from rural areas to urban areas to have access to transport in order to go to work	1.000	0.917
The infrastructure development of rural areas can minimise rural-urban Patterns	1.000	0.817
There is no roads and bridges in my area of origin	1.000	0.913
Migrated from rural areas to urban areas to gain access to better roads and bridges	1.000	0.830
Rural to urban Rural-urban migration is good for the transport economy	1.000	0.937

There is an increase in the student population due to rural to urban rural-urban migration patterns	1.000	0.923
There is overcrowding in classes due to rural to urban rural- urban migration patterns	1.000	0.943
The learners' overload in classrooms is increasing the work load for teachers	1.000	0.901
The rural to urban rural-urban migration patterns cause delays in urban hospitals	1.000	0.908

Extraction Method: Principal Component Analysis.

ANNEXURE 10: TURNITIN REPORT

DPhil in Public Administration

ORIGINALITY REPORT

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Helen Richter
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feetjieding@gmail.com
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12 June 2023

To whom it may concern

CERTIFICATE OF EDITING & AUTHENTICATION

I have proofread and language edited the PhD thesis titled:

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To the best of my knowledge, the work is free of spelling, grammar, structural and stylistic errors and the contents are certified as the author's own work.

With thanks.

H. S. Richter
