



**SOCIAL IMPACT ASSESSMENT:
KIMBERLEY STRENGTHENING PHASE 3
SCHEME WITHIN JOHN TAOLO GAETSEWE
DISTRICT MUNICIPALITY, NORTHERN
CAPE PROVINCE AND DR RUTH
SEGOMOTSI MOMPATSI DISTRICT
MUNICIPALITY, NORTH WEST PROVINCE**

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EXECUTIVE SUMMARY

As part of Eskom's grid capacity expansion and development, the Kimberley Strengthening Phase 3 powerline expansion project has been identified as one of the powerline development corridors envisaged in the Transmission Development Plan 2016-2025 as amended. The first route of the powerlines project has been earmarked to start from Ferrum substation in the south-east of the town of Kathu, which is Ward 6 and 7 of Gamagara Local Municipality. The local municipality, including Joe Morolong and Ga-Segonyana Local Municipalities, falls under John Taolo Gaetsewe District Municipality of the Northern Cape Province. It is hypothetically presumed that the proposed project route will have direct social impacts towards Joe Morolong and Gamagara Local Municipalities, while it is anticipated that Ga-Segonyana Local Municipality will have indirect socio-economic impacts of the project.

The powerline route will traverse into North-West Province through Ruth Segomotsi Mompati District Municipality, which host the following local municipalities- Naledi Local Municipality, Kagisano- Molopo, Mamusa Local Municipality and Greater Taung Local Municipality. The powerline construction will end at Mookodi substation near the town of Vryburg in Naledi Local Municipality. It is anticipated that the social impacts of the project will be more direct in Naledi and Greater Taung Local Municipalities than in Kagisano-Molopo, Mamusa and Lekwa- Teemane Local Municipalities where it is anticipated to be more indirect. Indirect social impacts in this purpose of the study are those impacts that are considered to be outside of the proposed powerline corridor. Defining Social Impacts and SIA approach, Vanclay (2002) defines social impact assessment as-

"... the process of analysing (predicting, evaluating and reflecting) and managing the intended and unintended consequences on the human environment of planned interventions (policies, programmes, plans and projects) and any social change processes invoked by those interventions so as to bring about a more sustainable and equitable biophysical and human environment."

Social impacts can be in the form of geographical and agricultural land use patterns; demographic processes as in the number and composition of people; Economic processes which is the way in which people make a living and economic activities in the area; Institutional and empowerment processes which is the ability of people to be involved and influence the decision-making process as well as the role, efficiency and effectiveness of government and other stakeholders. Finally, socio-cultural process which is the way in which humans behave, interact and relate to each other and their environment and the belief and value systems which guide this interactions.

Social impacts can be negative or positive and it is always important to enhance the positive side of the impacts and lessen the negative side in the implementation of any project. In most cases some of the infrastructure development projects lends themselves readily to being of a positive nature to the area of implementation. Development of powerlines has been identified as an infrastructure developmental need not only to improve energy capacity in the country but also to accommodate renewable energy measures in terms of the government's Integrated Resource Plan, which is intended to look at other alternative energy sources. This will, in turn, contribute to less reliance on harmful or negative energy sources and improve efforts to reduce carbon emissions, which is the commitment of the South African government towards the Paris Agreement under the United Nations Framework Convention on Climate Change (UNFCCC). On the other hand, there is the National Development Plan (NDP) and the United Nations Sustainable Development Goals (SDG's) at the international level, which the South African government must consider as a signatory and a member concerning its developmental needs.

The most important policy framework of this study approach is the Integrated Development Plans of the affected District and Local Municipalities in the project. Social impacts of the project are actualised at the local level however, some of the socio-economic impacts can be regional, country-wide or even international. This will be discussed further in the report. It is, therefore, indicative from the above-mentioned that a quantifiable method in the form of cost and benefit analysis can assess the impacts. A qualitative approach in public participation discussions and an information-gathering process to enhance and review quantitative data will be used.

Findings and Recommendations

a) Findings:

- Most of the impacts are negative, but the duration of occurrence is short-term, and the magnitude is either low or moderate;
- From the ratings, it seems economic opportunities such as job-creation and SME procurement opportunities though positive, would appear to be short-term at the local level. The impact is also anticipated to be regional, national and long-term in terms of its contribution to energy availability;

- Crime and security are high in terms of magnitude, which is in line with crime statistics in a national context. This is a problem in South Africa; however, the significance is medium, especially in that part of the country.
- In terms of farming operations, the significance is low, but the land within the powerline servitude might not be used for any economic activity because of the proximity to electromagnetic fields exposure under 400kv powerline. If the area of land under the powerline route cannot be used for any purposes, the area will be permanently sterilised.

b) Recommendations

- The role of Community Liaison in fostering relations between stakeholders and interested and affected parties (I&AP's) is very crucial and must be given the necessary support;
- Where possible, anticipated short-term job-creation and SME opportunities be enhanced for local people;
- Communication measures to include farming communities and in order to make arrangement for Contractors to access farmlands to avoid exposure to criminals;
- Security personnel must ensure that access to people's properties be controlled;

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ABBREVIATIONS

Abbreviation	Description
EIA	Environmental Impact Assessment
EWT	Endangered Wildlife Trust
GIS	Geographical Information System
GDPR	Growth Domestic Product Rate
HIV	Human Immunodeficiency Virus
IAIA	International Association for Impact Assessment
IDP	Integrated Development Plan
I&AP	Interested and Affected Parties
JTGDM	John Taolo Gaetsewe District Municipality
NEMA	National Environmental Management Act
RDP	Reconstruction and Development Programme
SALGA	South African Local Government Association
RSMDM	Dr Ruth Segomotsi Mompati District Municipality
SIA	Social Impact Assessment
SME	Small Medium Enterprises
UNFCCC	United Nations Framework Convention on Climate Change
PPM	Public Participation Meeting
PPP	Public Participation Process
WESSA	Wildlife and Environmental Society of Southern Africa

1 INTRODUCTION

1.1 Project Background

DIGES Group CC appointed Barry Nkomo as an independent and specialist consultant to conduct a Social Impact Assessment (SIA) for the Kimberley Strengthening Phase 3 project, which entails the construction of the ± 260 km, Ferrum-Mookodi 400kV powerline and substation upgrades. This aligns with the mandatory requirements of the National Environmental Management Act (1998) as amended, hereinafter referred to as NEMA (1998). In Chapter 2 (Section 24) of the South African Constitution, NEMA (1998) is accorded the powers to implement, administer and enforce compliance as the Constitution safeguards human and environmental rights. The concept of Social Impact Assessments as an aspect and specialty of Environmental Impact Assessment (EIA) is provided for and administered in Chapter 5 of NEMA (1998).

The most important feature or function in the process of conducting the SIA is primarily the Specialist method of engaging with interested and affected parties and how it affords the affected communities or parties a chance to make their legitimate inputs and their opinions as to how they perceive the project to impact on their social, cultural, economic, health and safety as well as their environmental wellbeing. Apart from the Constitution and NEMA (1998) as primary guiding legislative documents, the SIA process is also guided by various overarching multi-faceted policy and legislative frameworks depending on the subject of the project. Regarding the Kimberley Phase 3 Strengthening Project, the social impact study and its review of the municipal Integrated Development Plans (IDPs) of both local and district municipalities is essential. The SIA process looks at various aspects of the project's viability and its positive and negative impacts on communities, local entities and organisations.

An SIA specialist study was commissioned and completed during the screening phase in 2020; however, it included extended areas falling under North-West Province, including Dr Kenneth Kaunda and Ngaka Modiri Molema District Municipalities. As mentioned, the new terms of reference for the project have been amended to reduce the distance of the powerline route, which will end at Mookodi Substation in the south of Vryburg.

1.2 Need and Desirability of the Project

The National Transmission Company South Africa SOC Ltd (NTCSA), a subsidiary of Eskom Holdings SOC Ltd, has to supply reliable power to meet the increasing needs of electricity users. Therefore, NTCSA must

continuously maintain, construct, and upgrade its transmission powerlines and substation infrastructure. According to Eskom TDP 2010–2019, some objectives involve transmission network strengthening plans and reliability projects, ensuring the transmission system's reliability and adequacy are sustained as load demand increases. A study done for the Northern Cape and North West grid indicated that based on the anticipated growing electricity demand, there may be a risk that demand will exceed the supply. As a result, they have identified the need to strengthen the transmission system between the Ferrum, Hotazel Transmission and Mookodi Substations by constructing two 400kV transmission powerlines and upgrade substations.

The advantages of the proposed transmission powerline would include:

- (i) avoiding current and future possible voltage collapse;
- (ii) contributing towards a more flexible electrical network;
- (iii) Improve the overall reliability of the electrical systems, which would benefit electricity users in the region and sustain economic growth in the two Provinces.

The scope of work proposed by NTCSA to strengthen the network entails the following:

- (i) Construct a ± 260 km, 400kV transmission powerline from Ferrum Main Transmission Substation (MTS) to the Mookodi MTS.
- (ii) Upgrade the Mookodi Substation by installing:
 - 1 X 100MVAR busbar reactor at Mookodi 400kV busbar;
 - 1x400kV Mookodi feeder bay;
 - 1X400kV Line reactor at Mookodi 400kV.
- (iv) Upgrade the Ferrum Substation by installing:
 - 1 X 100MVAR busbar reactor at Ferrum 400kV busbar;
 - 1x400kV Ferrum feeder bay; and
 - 1X400kV Line reactor at Ferrum 400kV

Below is a topographical map showing the powerline route (pink line), traversing the two district municipalities and provincial boundaries. The link to the ArcGIS online interactive map indicating the powerline route and the areas traversed is the following: [Ferrum-Mookodi Powerline \(2\).kml](#)

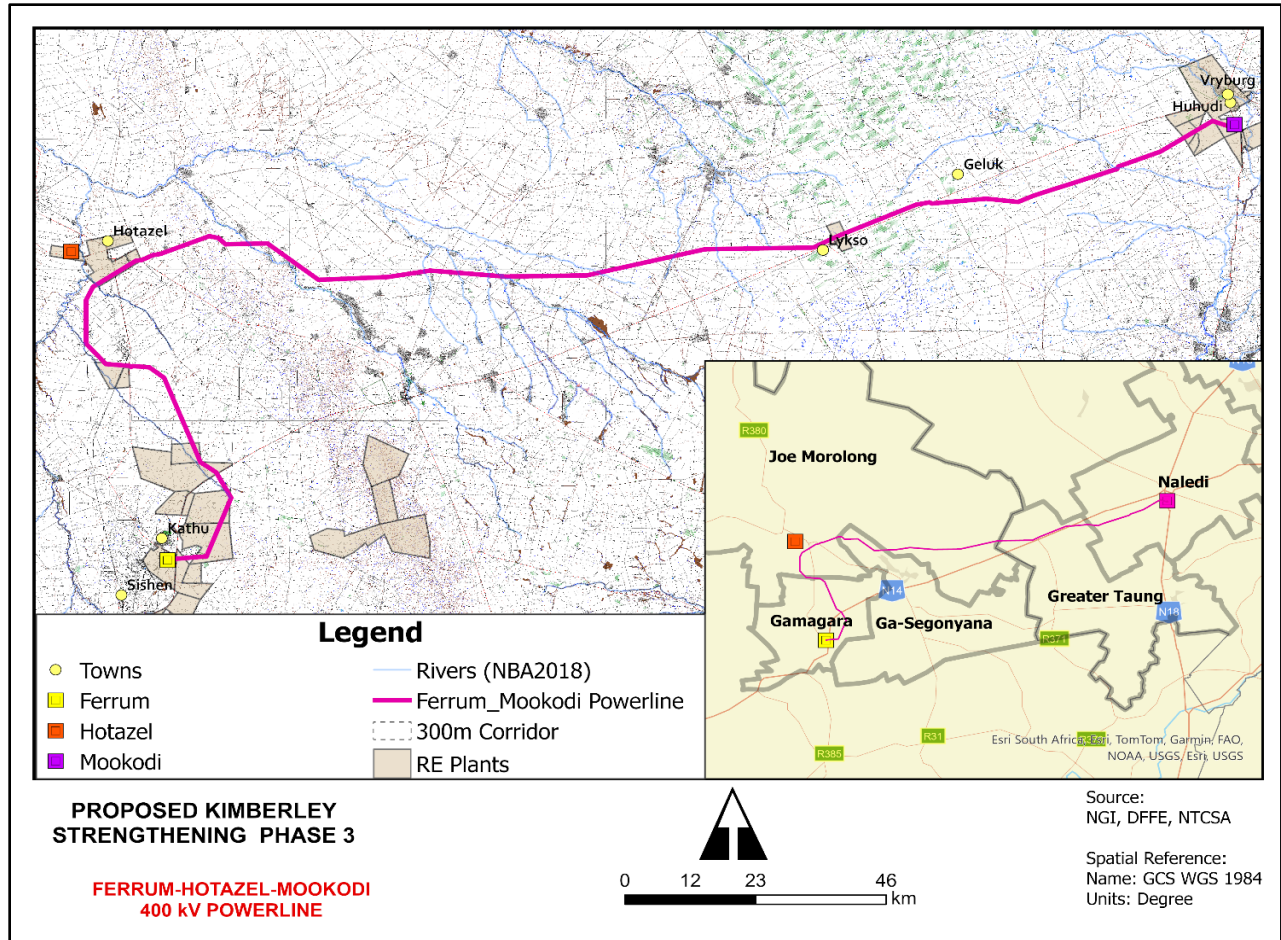


Figure 1: Maps of the Powerline Route

(Source: DIGES)

1.3 Terms of Reference (ToR)

The following outcomes/ objectives should be identified;

- A detailed description and overview of the proposed project,
- A detailed description of the environment likely to be affected by the proposed project,
- A detailed assessment and description of the potential social issues, which are associated with the proposed project and how the environment might be affected by this development and
- The identification of enhancement measures and mitigation measures aimed at reducing and avoiding the negative impacts of the development and maximising the positive impacts of the proposed intervention.

1.4 Assumptions and Limitations

a) Assumptions made for the study were as follows:

- (i) Short-term employment opportunities for local unskilled and semi-skilled local labour will lessen migrant contractual labour and prevent problems such as illegal and informal settlements, crime and undesired health hazards such as the spread of HIV in the area;
- (ii) The intended grid capacity enhancement will boost local industrialisation and create more opportunities in terms of more solar energy plants that can be transferred to the grid;
- (iii) The comments from JTGDM is that in terms of their District, Provincial and Municipal Development Plans there is anticipated future infrastructure development such as housing settlements, schools and health facilities which will require additional energy and electrification.
- (iv) A proactive public participation process that is based on effective consultation, informed prior consent and information sharing, will assist in lessening misunderstandings and prevent potential conflicts.
- (v) Due to the identified future demand for electricity in the area, it is anticipated that there will be a stakeholder buy-in into the implementation of the project.

b) Limitations anticipated for the study were as follows:

- (i) Prior input from the public participation process into the baseline study was necessary, however due to logistical issues the inputs from the I&AP's would be done later in the process;
- (ii) Government stakeholders, municipalities and provincial departments have not made any comments except John Taolo Gaetsewe District Municipality;
- (iii) Some of the information from the Municipal IDP documents relies on the statistics that were gathered 10 years ago due to the national lockdown in collecting recent statistics;
- (iv) The project is happening in various local municipalities and district municipalities and traditional authorities as well as different provinces; might hinder the information-gathering process in terms of multi-sectoral stakeholders with varying expectations in terms of socio-economic development and political orientation, might render shortcomings in the application of our assessment tools if the methodology is not adequately applied in terms of context and inherent differences.

1.5 Site Verification

The Gazetted Specialist Protocols, published in Government Notice No. 320 of March 2020, indicate that before commencing with a specialist assessment, the current use of the land and the environmental

sensitivity of the site under consideration identified by the screening tool, where determined, must be confirmed by undertaking a site sensitivity verification. The Terms of Reference for undertaking site sensitivity verification are:

- To undertake a desktop analysis using satellite imagery.
- To undertake a preliminary on-site inspection.
- To utilise any other available and relevant information.
- To compile a report confirming or disputing current land use and environmental sensitivity and include the motivation and evidence.

Though the Screening Tool Report (STR) does not identify any issues relating to direct social impact, the previous study by Margen Industrial Services (2020) indicated in general that the transmission line would traverse several sensitive social areas such as high to a low-density residential area, commercial farms, smallholdings, mines, business developments, secondary and tertiary towns and crossing of the main roads. Google Earth imagery of the project area indicated that various sites are characterised by semi-desert topographical features, agricultural land, forest plantations and mining activities.

The distance of the powerline route from Ferrum substation in Kathu to Mookodi substation near Vryburg is ± 260 km. Due to the different land use activities within the areas, it is crucial to ensure that both positive and negative impacts associated with the project are identified and maximised where they are positive and minimised where they are harmful, hence the need for an SIA study. The report has been compiled as per Appendix 6 of the NEMA Environmental Impact Assessment (EIA) Regulations, Government Notice R (GNR) 326 of 2017, as amended, as no theme protocol exists for Social Impact Assessment.

2 METHODOLOGY AND APPROACH

2.1 Steps of an Effective Social Impact Assessment

The following steps serve as guidelines and complement each other, so any methodology adopted should recognise or follow the steps in one way or another. It is also important to note that the steps should be applied or followed depending on the project's scope and objectives.

- (a) Formulate a public plan or policy that involves all potential parties;
- (b) Describe what your public plan is or policy;
- (c) Describe the environment or area specific to your public plan or policy and its conditions;
- (d) After you have formulated your practical understanding of your proposal, recognise the potential social impacts will be communicated to those who are affected;
- (e) Identify the potential social impacts;
- (f) Establish the consequences of social impacts;
- (g) Identify future impacts and growing social impacts.

2.2 Policy Framework Review

The impact study needs to assess how the proposed powerline construction route fits with the district municipalities' overall policy planning and their particular IDPs. It also needs to define the context of the SIA regarding various policy implementations and measures, which is why policy formulation processes borrow from impact studies' recommendations. The International Association of Impact Assessment defines the SIA process as "The process of analysing, monitoring and managing the intended and unintended social consequences, both positive and negative, of planned interventions (policies, programs, plans, projects) and any social change processes invoked by those interventions. Its primary purpose is to create a more sustainable and equitable biophysical and human environment". (IAIA Review, 2009).

The approach to the project SIA should be examined in the context of the legislative and policy frameworks of different spheres of government and the internationally accepted standards, guidelines, and protocols. Social Impact Assessment of Kimberley 3 Project is given impetus by the National Environmental Management Act (1998) as amended, and hereinafter referred to as NEMA (1998). In terms of Chapter 2 (Section 24) of the South African Constitution, NEMA (1998) is accorded the powers to implement, administer and enforce compliance as far as human and environmental rights are safeguarded by the Constitution under the Bill of Rights. In order to advance social and economic development *vis a vis* social and environmental rights, the policy framework also incorporate Integrated

Development Plans (IDP's) and in this instance IDP's of the two affected District Municipalities- Dr Ruth Segomotsi Mompati and John Taolo Gaetsewe informed the basic assessment. This was done in terms of District Development Model Approach which accords that Section 83 (2) of the Municipal Structures Act provides that the powers and functions of local government must be divided in the case of a district municipality and the local municipalities within the area of the district municipality. Fundamentally, section 83(3) indicates that a district municipality must seek to achieve the integrated, sustainable and equitable social and economic development of its area as a whole by:

- Ensuring that there is integrated development planning for the district as a whole;
- Promoting bulk infrastructural development and services for the district as a whole;
- Building the capacity of local municipalities in its area to perform their functions and exercise their powers where such capacity is lacking; and
- Promoting the equitable distribution of resources between the local municipalities in their area to ensure appropriate levels of municipal service within the area.

(SALGA: 2021)

Social impacts should be assessed in terms of their negative or positive contribution towards local, regional or national development goals. Local economic development initiatives are implemented as Integrated Development Plans (IDPs). IDPs are reviewed annually and have a lifespan of five years. Most importantly, IDPs are integrated with other local, provincial, or national development plans to bring about a holistic approach and policy coherence for implementation. Having social and economic development imperatives in mind as promoted by these local, provincial and ultimately national development policies. Special attention and care should be afforded to the fact that both District Municipalities have many traditional communities under the leadership of Dikgosi or traditional leaders. The Traditional Leadership and Governance Framework Act of 2003 governs the communities. While municipal IDPs are recognised to be inclusive of service delivery and socio-economic development in traditional communities, there are always misunderstandings and tensions regarding local municipalities and traditional councils' responsibilities.

South African government has also committed itself and is a signatory to various overarching international agreements and treaties such as the United Nations Framework Convention on Climate Change on the one hand and the United Nations Guiding Principles on Business and Human Rights on the other. The 2030 Agenda for Sustainable Development, adopted by all United Nations members in 2015, created 17

Sustainable Development Goals (SDGs). Six of the SDG goals are particularly relevant to the impact assessment study, and those are the following-

- a) (7) Affordable and Clean Energy;
- b) (9) Industry, Innovation and Infrastructure;
- c) (11) Sustainable Cities and Communities;
- d) (13) Climate Action;
- e) (15) Life on Land;
- f) (17) Partnership for the Goals.

The SDGs highlight the connections between sustainable development's environmental, social and economic aspects. Sustainability is at the center of the SDGs, and sustainable development principles are at the core of any development project. The principles are essential criteria in social impact assessment processes.

2.3 Data Collection Method

Data collection can be done through primary sources and or secondary sources of information. Primary sources comprise interested and affected parties and other stakeholders such as the municipality and other business entities closer to and directly affected by the development project. Secondary sources are drawn from research materials such as online policy research and institutional inquiries. The study will borrow and use the data collection method from Margen Industrial Services (2020), study that was conducted in 2020 for the Screening Phase. The method is suitable for cross-boundary information gathering, moving from site-specific to broader spheres of the project cycle. The powerline project encompasses extensive and different areas; therefore, a standard method amenable to differentiations in locations, risks and impacts is essential.

The study focused on specifying how adverse impacts may interact with beneficial impacts and identifying how to manage the impacts. SIA builds on two fundamental approaches to evaluating the impact of the proposed development:

- a) Technical analysis, where researchers identify from their investigations, published studies and complicated simulations how the proposed development will likely affect different groups in society, and

- b) Through consultation with stakeholders, a participatory approach is used to assess the impact of the proposed development from those most affected and knowledgeable about the context.

Both a quantitative and qualitative methodological approach was applied throughout the study, using a research technique referred to as triangulation. A recognised impact assessment technique was applied in assessing the impacts, and data was gathered through the following methods:

- Site visit -drive along the proposed route;
- An extensive review of documentation was also undertaken. The quantitative approach used secondary data which were obtained from various websites, including Municipalities IDPs and Socio-economic studies, GIS maps, Google Earth, and the Demarcation Board;
- A review of maps and aerial photographs of the route;
- A broader literature scan.

3 BASELINE ASSESSMENT

3.1 Project Areas

The proposed powerline and substations are located within the Northern Cape and North West Province, stretching between Kathu and Vryburg. The powerline crosses several commercial farms, small holdings, and various types of settlements such as tribal authority, council-owned and informal settlements, and mines. The project implementation occurs across two district municipalities, which are under two provinces adjacent to each other. Our baseline assessment study will first look into the Integrated Development Plans of district municipalities. District municipalities are the link between provincial and local policy frameworks in terms of socio-economic development and service delivery objectives, and the New District Development Model seeks to integrate local development with provincial and national plans.

3.2 John Taolo Gaetsewe District Municipality (JTGDM)

The John Taolo Gaetsewe District Municipality (JTGDM) is situated in the Northern Cape Province. It is bordered by ZF Mgcawu and Frances Baard District Municipalities to the west and south, the North West Province (Dr. Ruth Segomotsi Mompati District Municipality) to the east and northeast; and Botswana to the northwest. JTGDM is the second smallest district in the Northern Cape, occupying only 7% of the Province (27 498.9 km²) (StatsSA 2016). Administratively, the JTGDM comprises three Local Municipalities: the Gamagara, Ga-Segonyana and Joe Morolong, which encapsulates the geographical area covered by the former District Management Area and the former Moshaweng Local Municipality. Joe Morolong Local Municipality is the district's largest local municipality in terms of area size, covering an extent of 20 215 km², with Ga-Segonyana LM and Gamagara LM covering 16% and 10%, respectively. The JT Gaetsewe District comprises 186 towns and settlements of which the majority (80%) are villages in the Joe Morolong Municipality.

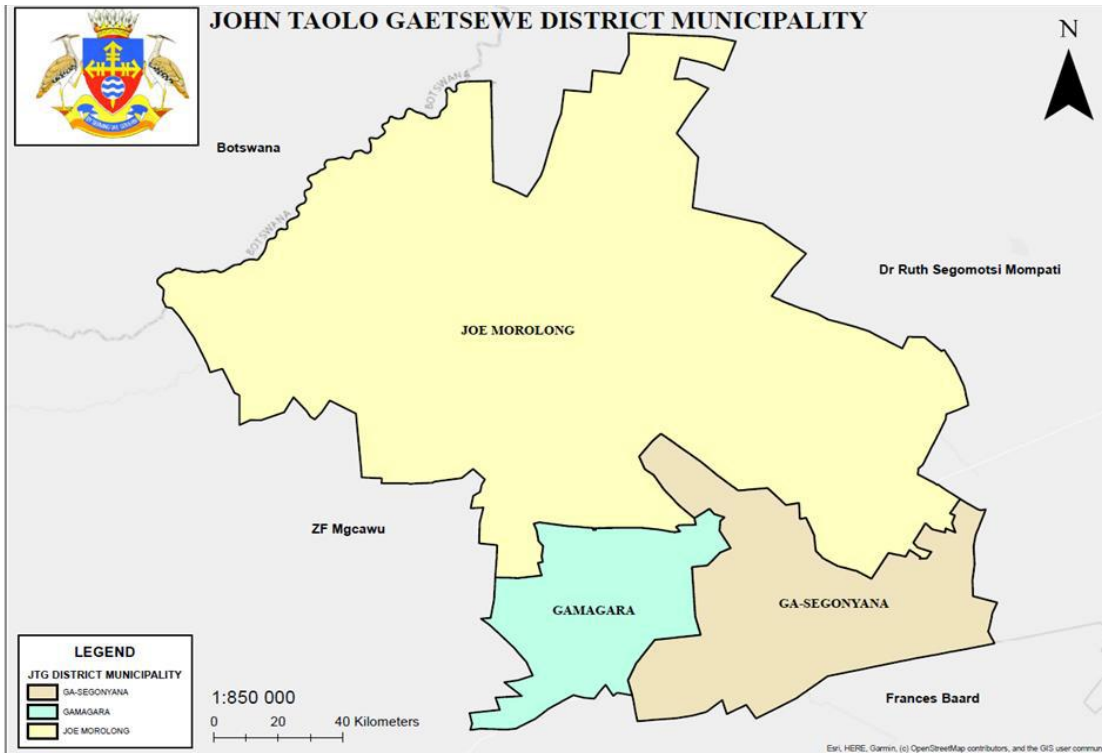


Figure 2: John Taolo Gaetsewe District Municipality

Source: JTGDM IDP 2022-2023

3.2.1 Traditional Leadership Areas

There are eight (8) Traditional Authorities in the District distributed as follows: two (2) are in Ga-Segonyana Local Municipality, and six (6) are in Joe Morolong. Local Municipality as shown on Figure 4 and listed hereunder. The table below indicates the traditional authorities, including their seats and leaders within the district.

Table 1: Traditional Authorities, including their Seats and Leaders in the District

No.	Traditional Authorities	Local Municipality	Seat/ Main Offices	Traditional Leader
1.	Batlharo Ba Ga Phadima	Joe Morolong LM	Ga-Morona	Kgosi Dioka
2.	Batlhaping Boo Phuduhutswana Ba Ga Thaganyane	Joe Morolong LM	Cassel	Kgosi Thaganyane
3.	Batlhorro Ba Ga Motlhwane	Ga-Segonyana LM	Batlharos	Kgosi Toto
4.	Batlharo Ba Ga Motshwarakgole	Joe Morolong LM	Dithakong	Kgosi Motshwarakgole
5.	Batlhaping Boo Phuduhutswana Ba Ga Phetlhu	Joe Morolong LM	Camden	Kgosi Phetlhu

No.	Traditional Authorities	Local Municipality	Seat/ Main Offices	Traditional Leader
6.	Batlhaping Boo Phuduhutswana Ba Ga Jantjie	Ga-Segonyana LM	Manyeding	Kgosi Jantjie
7.	Batlhaping Boo Phuduhutswana Ba ga Mahura	Joe Morolong LM	Deurward	Kgosi Mahura
8.	Batlharo Ba Ga Bareki	Joe Morolong LM	Ga-Tsoe (Heuningvlei)	Kgosi Bareki

The Traditional Leaders (Dikgosi) are supported by Headmen (Dikgosana) who are given areas to look after and have to report to the Traditional Leader (Kgosi) through a Traditional Council system. Kgosi and the Traditional Council determine the number of Dikgosana. They assist the Traditional Leaders (Dikgosi) with customary administrative issues within the respective traditional areas. The numbers will differ from one Traditional Council to another.

About 80% of the land mass of Joe Morolong is Trust Land and is under the custodianship of Traditional Leaders. This type of administration is important because they also make decisions on land ownership and development. If not consulted, serious conflicts could frustrate the ideals of the Reconstruction and Development Programme (RDP). The traditional leadership areas are displayed in Figure 3 below.

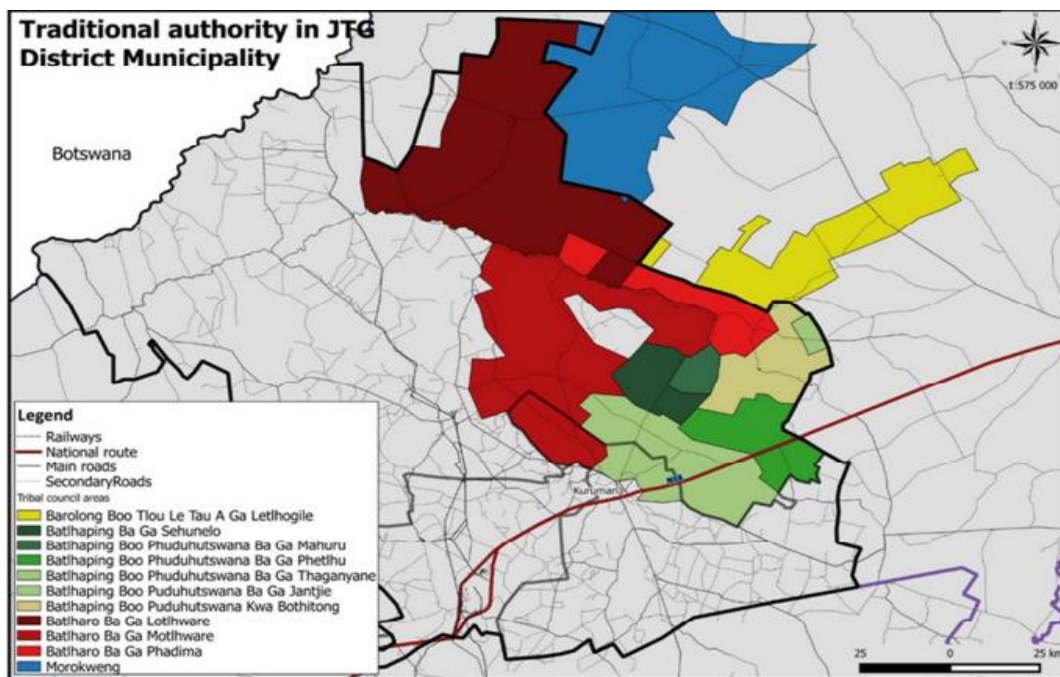


Figure 3: Map of Traditional Leadership Areas

(Source: JTGDM IDP 2022-2023)

3.2.2 Population

The population of the John Taolo Gaetsewe District Municipality accounts for 20.1% of the total population in the Northern Cape Province. It is the third largest population after the Frances Baard and ZF Mgcawu Districts. This position has been consistent between 2011, 2016 and 2022.

Table 2: Comparison of total Population - Local Municipalities of JTG District Municipality: 2012, 2017 AND 2022

Municipality	2012	2017	2022	Average Annual growth
Joe Morolong	80,400	80,200	82,800	0.29%
Ga-Segonyana	89,200	103,000	116,000	2.65%
Gamagara	42,900	52,100	58,500	3.16%
John Taolo Gaetsewe	212,512	235,587	257,121	1.92%

3.2.3 Land Use Composition

John Taolo Gaetsewe Municipal Area is characterised by a mixture of land uses, of which agriculture and mining dominate. JTGDMD was the richest mining region in the Northern Cape until a decline in mining employment and the near extinction of the asbestos mining industry in the 1980s. Today, minerals mined include manganese ore, iron ore and tiger's eye. The Sishen iron-ore mine is one of the largest open-cast mines in the world, and the iron-ore railway from Sishen to Saldanha is one of the longest iron-ore carriers in the world. The rural land in the district is used extensively for cattle, sheep, goat and game farming. The area is also well known for its good commercial hunting in the winter and holds potential as a tourist destination. The north-eastern region is comprised principally of high-density rural and peri-urban areas. In contrast, the western and southern areas are sparsely populated and consist mainly of commercial farms and mining activities. The main towns and villages within the district borders are Kuruman, Kathu, Deben, Dingleton, Olifantshoek, Vanzylsrus, Bothitong, Churchill, Manyeding, Laxey, Batlharos, Mothibistad, Hotazel and Heuningvlei (*JTG SDF Review, 2017*).

3.2.4 Economic Sectors and Employment

The key economic sectors in the district are mining, social services, agriculture, tourism, manufacturing, and construction. Mining is the largest employer, followed by the agricultural sector (StatsSA, 2022). Most of the District mines are concentrated around Hotazel (in Joe Morolong Local Municipality) and Sishen (in the Gamagara Local Municipal area). The companies that operate these mines are Kumba Resources, South32 and Assmang. The minerals being mined in the district are iron ore and manganese.

Table 3: Formal and Informal Employment by Broad Economic Sector - John Taolo Gaetsewe District Municipality, 2021

Sector	Formal Employment	Informal Employment
Agriculture	4,000	N/A
Mining	14,100	N/A
Manufacturing	1,080	238
Electricity	120	N/A
Construction	1,170	250
Trade	4,360	960
Transport	607	198
Finance	2,040	239
Community services	7,910	652
Households	3,360	N/A

More than 50% of the economically active population within the district are unemployed and have no income, and unemployment is one of the main reasons for poverty; therefore, more employment opportunities need to be established through local economic development programmes (LED) to better the living standard of the JTG population. 50% of the employed economic active population is within the mining, wholesale and retail trade and hospitality (catering and accommodation) sector. As a result, the upliftment of other economic sectors, e.g., agriculture and manufacturing, should be considered to create work opportunities for the unemployed economically active population.

3.2.5 Access to Energy and Electricity

Access to electricity increased to 90% of the total population in 2016, as compared to 88% in 2011. With regards to the energy/fuel source for cooking, heating and lighting, (1) 76% of the population in the JTGDMD use electricity for cooking; (2) 74% use electricity for heating; Electricity remains the primary source of energy in many households, and the demand is expected to increase with the increase in housing/residential developments. Notably, a significant number of households still lack access to electricity. The spatial development framework has indicated a propensity for electrification for future housing and residential development projects.

Table 4: Access to Electricity in JTGDMD

Municipality	Electricity for lighting only	Electricity for lighting and other purposes	Not using electricity	Total
Joe Morolong	3,125	17,459	1,235	21,819
Ga-Segonyana	447	31,047	1,342	32,837
Gamagara	436	15,235	998	16,669
JTGDM Total:	4,008	63,742	3,575	71,325

3.2.6 Education

The level of education has apparent implications for the employment potential and income of the people, and it has a direct influence on the local economy and the quality of life of local people; therefore, the establishment of institutions of higher learning such as Technical and Vocational Education Training (TVET) colleges and distance learning should be considered. Scholar transportation should be an interim arrangement with long-term goals of improving access.

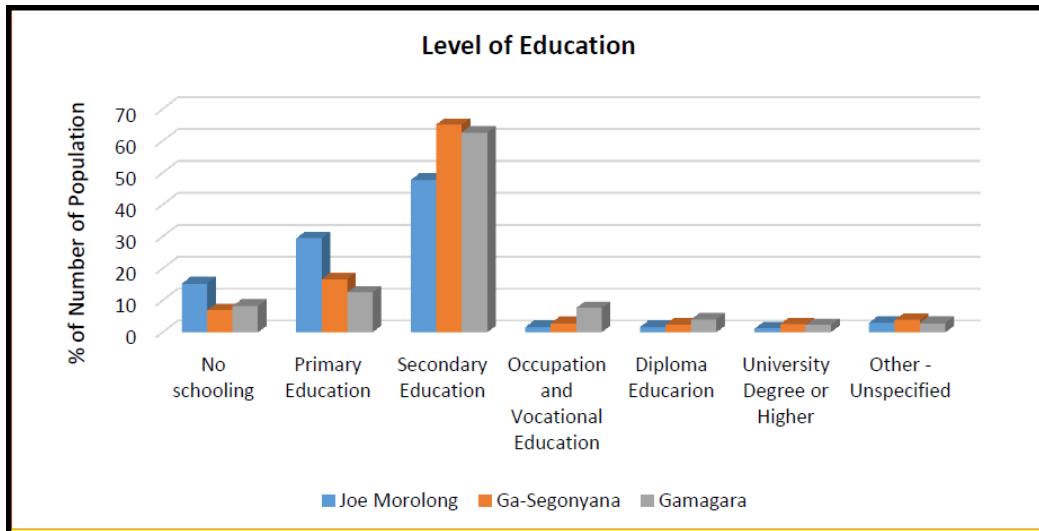


Figure 4: Level of Education for population aged 20 years and older within JTGDM

(Source: JTGDM IDP 2022-2033)

A total of 143 000 individuals in JTGDM were considered functionally literate in 2022, while 26 800 people were considered illiterate. Expressed as a rate, this amounts to 84.18% of the population, an increase of 0.12 percentage points since 2012 (72.49%). The number of illiterate individuals decreased on average by -3.41% annually from 2012 to 2022, with the number of functionally literate people increasing by 3.62% annually.

3.3 Ruth Segomotsi Mompoti District Municipality (RSMDM)

The Dr Ruth Segomotsi Mompoti District Municipality (previously Bophirima District Municipality) is a Category C municipality in North West Province. It is bordered by Ngaka Modiri Molema and Dr Kenneth Kaunda in the north and John Taolo Gaetsewe in the south, a cross-boundary within the Northern Cape. It is the largest district in the province, making up almost half of its geographical area, at about 43 753km². The district comprises five local municipalities: Naledi, Greater Taung, Kagisano-Molopo, Mamusa and Lekwa-Teemane. It is one of four districts in the province, with poor rural areas, formerly in the former Bophuthatswana homeland. The population is situated in more than 470 villages and towns dispersed in

a 250km radius (approximately 50km north to south and 200km east to west). This district presents unique management and organisational challenges.

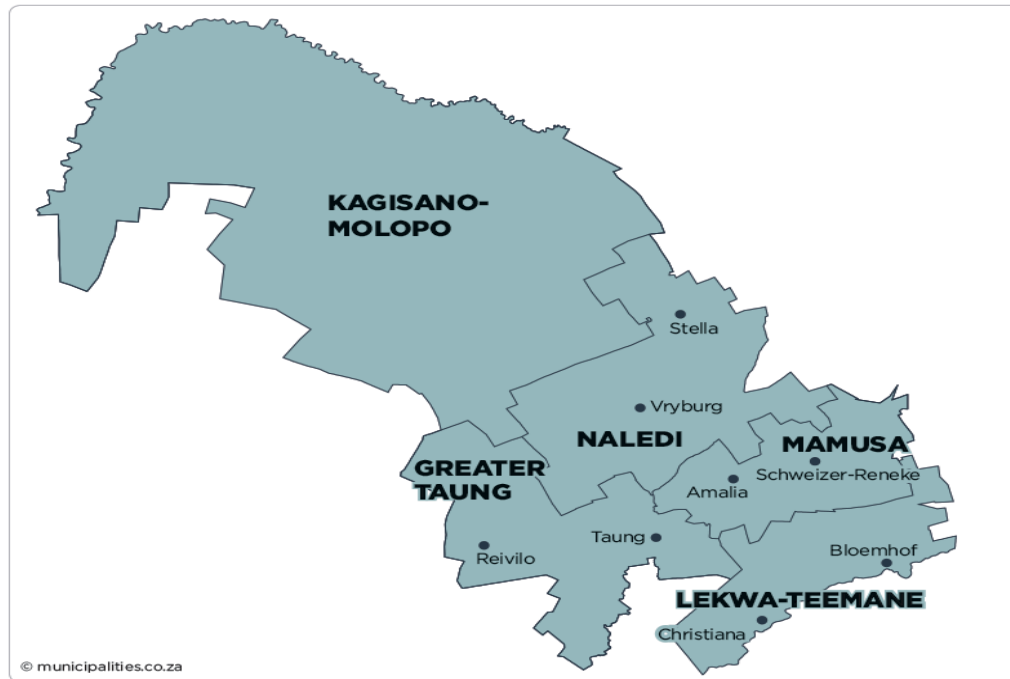


Figure 5: Map of Dr Ruth Segomotsi Mompati District Municipality

(Source: RSMDM IDP 2020-2024)

3.3.1 Traditional Leadership Areas

There are four (4) Traditional Authorities in the District distributed as follows: three (3) are in Greater Taung and one (1) is in Kagisano –Molopo Local Municipality. Information about the traditional leadership in Kagisano –Molopo Local Municipality was not included in the District Municipality IDP or the local municipality’s IDPs. As part of the stakeholder engagement process, information will be requested regarding the composition of traditional communities within the broader district municipality. See the table below.

Table 5: Traditional Authorities, including their Seats and Leaders in the District

No.	Traditional Authorities	Local Municipality
1.	Batlhaping Ba-ga-Phuduhuchwana	Greater Taung
2.	Batlhaping Ba-ga-Maidi	Greater Taung
3.	Batlhaping Ba-ga-Mothibi	Greater Taung
4.		Kagisano –Molopo

3.3.2 Population

The Dr Ruth Segomotsi Mompati District Municipality had a population size of 464 832 people in 2016. The total population for the North West Province is estimated to increase to 4 467 702 by 2026, growing at an average annual rate of 0.13 %. The municipal area's growth rate is smaller than that of the province between 2016 and 2019 (0.68 %). Population as per StatsSA Census is given in the Table below.

Table 6: Population Distribution in RSMDM

Local Municipality	Population	Area (km ²)
Greater Taung	177,642	5,635.47
Kagisano-Molopo	105,789	23,827.25
Lekwa-Teemane	53,248	3,681.20
Mamusa	60,355	3,614.84
Naledi	66,781	6,941.20

(Source: StatsSA Census 2011)

The Greater-Taung Local Municipality and Kagisano-Molopo Local Municipality are the two most populous regions within the District.

3.3.3 Land Use Composition

The district municipality comprises five local municipalities, namely Naledi, comprising Vryburg and Stella towns; Greater Taung, comprising towns of Reivilo and Taung; Mamusa comprising Amalia and Schweizer-Reneke towns, Lekwa-Teemane comprising Christiana and Bloemhof towns and lastly Kagisano Molopo being primarily rural/ agricultural land. Despite years of Integrated Development Planning processes in the Dr. Ruth S Mompati District Municipality, land reform and ownership patterns remain the core six challenges for the district. The DRRSM DM is characterised by a particular political legacy, with a portion of the municipality located in the area of the former Bophuthatswana homeland. This has led to a distorted spatial distribution of land, with the region comprising predominantly white-owned commercial farms and black subsistence farming, typically on state-owned land.

3.3.4 Economic Sectors and Employment

The main economic activities for the District are Community Services followed by Agriculture and finance. The largest economic sectors in the District include general government, Finance, insurance, real estate & business services and the Wholesale & retail trade, catering & accommodation sectors. The economy of the District performed better in 2019 compared to the preceding three years. The table below provides the sectoral GDP for the District in 2019. Additionally, the table outlines each sector's percentage share and the average GDP growth between 2016 and 2019.

Table 7: Sectoral GDPR in RSMDM

	In terms of GDPR
Agriculture, forestry & fishing	2.8
Mining & quarrying	0.3
Manufacturing	0.4
Electricity, gas & water	1.2
Construction	0.8
Wholesale & retail trade, catering & accommodation	1.1
Transport, storage & communication	0.8
Finance, insurance, real estate & business services	0.7
General government	1.5
Community, social & personal services	2.3

(Source: RSMDM IDP 2020-2023)

3.3.5 Employment

In 2019, those employed in the primary sector amounted to 22.49 % of the working population, 8.72 % in the secondary sector, and 68.79 % in the tertiary sector in the District. Dr. Ruth Segomotsi Mompoti Municipal area employed 87 559 people, equating to 1 047 less than the previous year. However, the District shed - 667 jobs from 2016 to 2019. The sectors that contribute the most to employment in the District include the Wholesale & retail trade, catering & accommodation, Agriculture, forestry & fishing and Community, social & personal services. In 2019, it was estimated that the Dr. Ruth Segomotsi Mompoti Municipal area lost 1 047 jobs. The table below indicates the employment per sector in 2019, together with the changes in employment in each sector:

Table 8: Employment Per Sector RSMDM

	Number of jobs 2018	Percentage Share	Average employment growth 2016-2019	Employment growth 2019
Agriculture, forestry & fishing	18 254	20,8%	-847	94
Mining & quarrying	1 442	1,6%	-199	-65
Manufacturing	3 938	4,5%	-215	-208
Electricity, gas & water	236	0,3%	-13	1
Construction	3 459	4.0%	-326	-412
Wholesale & retail trade, catering & accommodation	19 056	21,8%	350	-120
Transport, storage & communication	2525	2,9%	76	53

	Number of jobs 2018	Percentage Share	Average employment growth 2016-2019	Employment growth 2019
Finance, insurance, real estate & business services	7921	9.0%	380	-155
General government	13545	15,5%	-172	151
Community, social & personal services	17183	19,6	299	-386
Total	87559	100	-667	-1047

(Source: RSMDM IDP 2020-2023)

3.3.6 Education and Skills Levels

Skill levels can be used as an indicator of the level of education within an area or region. In 2019, the Dr. Ruth Segomotsi Mompati District Municipality had 22 119 low-skilled workers, 25 726 semi-skilled workers, and 12 236 skilled workers. Overall, between 2016 and 2019, the number of jobs in all categories increased. Mean years of schooling are increasing in the Dr. Ruth Segomotsi Mompati District Municipality. Overall, the adult literacy rate in the Dr. Ruth Segomotsi Mompati District Municipality increased from 2016 to 2019. The number of skilled workers within the area increased from 11 951 in 2016 to 12 236 in 2019. The table below indicates the differences within 4 years in skills categories.

Table 9: Number of workers by skill 2019

	Number of workers 2016	Number of workers 2019
Low-Skilled	21 888	22 119
Semi-Skilled	25 333	25 726
Skilled	11 951	12 236
Total	59 172	60 081

(Source: RSMDM IDP 2020-2023)

3.3.7 Access to Energy and Electricity

The graphical figure below indicates access to electricity over 3 years within different local municipalities, and it is clear that the consumption increases over a period of time. This can be attributed to various factors such as an increase in population, developments and infrastructure, etc.

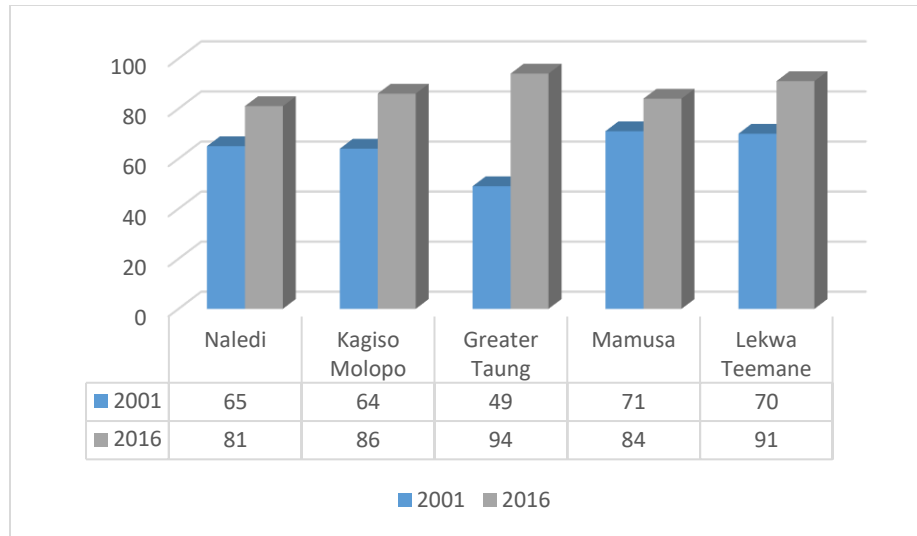


Figure 6: Access to Electricity over a Period of three Years

(Source: RSMDM IDP 2020-2023)

A detailed numerical representation is indicated in the table below as to the number of access to different sources of energy, including those who do not have any source in all 5 local municipalities within RSMDM. It should also be noted that while the number is increasing from the graph above, the graph below shows a considerable lack of access in various local municipalities.

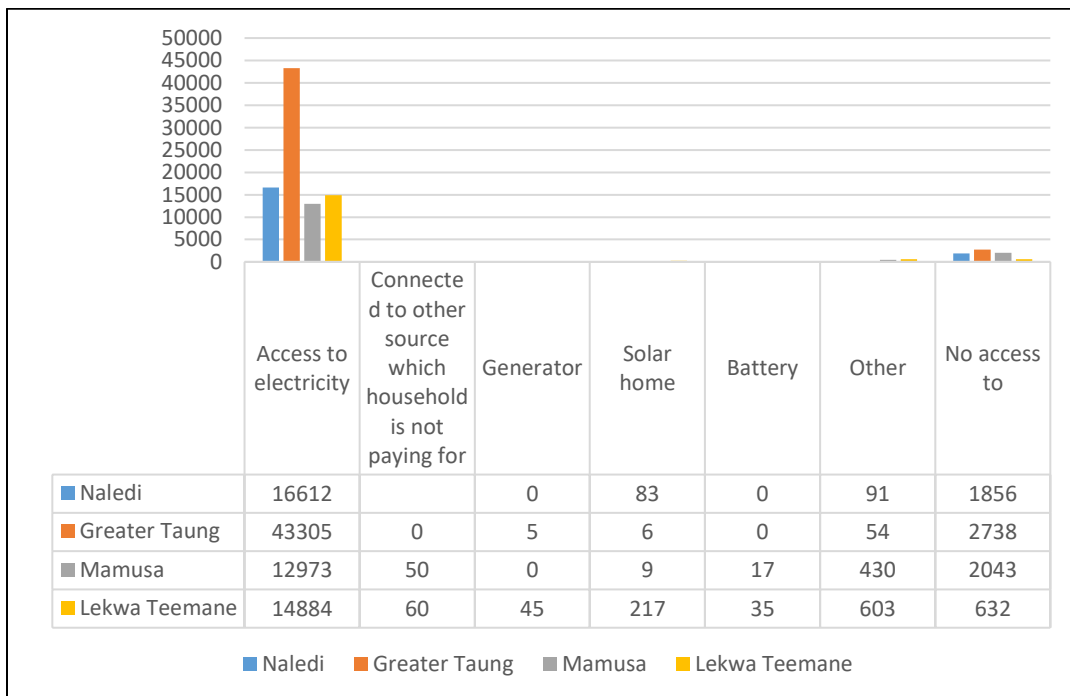


Figure 7: Lack of Access to Electricity

(Source: RSMDM IDP 2020-2023)

4 IMPACT ASSESSMENT

4.1 Aspects of Social Impact Assessment

Before impacts and risks can be assessed, they must be identified. There are six elements of categorisation when undertaking SIA that are used as guidelines to identify impacts and risks.

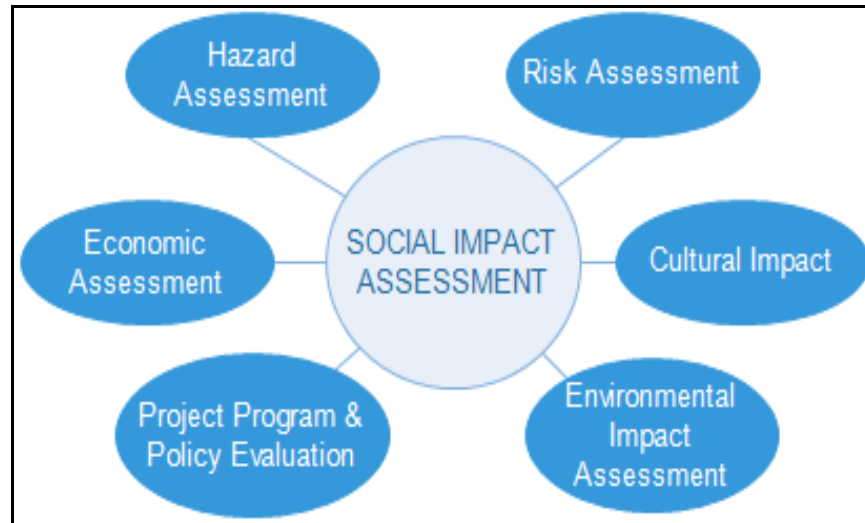


Figure 8: Six Elements of Impact Assessment

4.2 Assessment Technique

This section represents the methodology used and adopted in assessing the identified or anticipated impact on the environment. Guidelines and formulas have been developed for assessing or measuring identified or anticipated impacts on a given development's receiving environment. The assessment criteria used in evaluating the impacts of the proposed development are as follows:

- (a) The significance of the impacts assessed in line with the following descriptors:

Table 10: Nature of Impacts

Nature of the impact		
Positive	+	The impact will be beneficial to the environment (a benefit).
Negative	-	The impact will not be beneficial to the environment (a cost).
Neutral	0	Where a negative impact is offset by a positive impact, or mitigation measures, to have no overall effect.

Table 11: Intensity of Impacts

Intensity (Magnitude)		
Minor	2	Negligible effects on biophysical or social functions/processes. Includes areas / environmental aspects which have already been altered significantly and have little to no conservation importance (negligible sensitivity*).
Low	4	Minimal effects on biophysical or social functions / processes. Includes areas / environmental aspects which have been largely modified, and / or have a low conservation importance (low sensitivity*).
Moderate	6	Notable effects on biophysical or social functions / processes. Includes areas / environmental aspects which have already been moderately modified and have a medium conservation importance (medium sensitivity*).
High	8	Considerable effects on biophysical or social functions / processes. Includes areas / environmental aspects which have been slightly modified and have a high conservation importance (high sensitivity*).
Very high	10	Severe effects on biophysical or social functions / processes. Includes areas / environmental aspects which have not previously been impacted upon and are pristine, thus of very high conservation importance (very high sensitivity*).

Table 12: Extent of Impacts

Extent		
Site only	1	Effect limited to the site and its immediate surroundings.
Local	2	Effect limited to within 3-5 km of the site.
Regional	3	Activity will have an impact on a regional scale.
National	4	Activity will have an impact on a national scale.
International	5	Activity will have an impact on an international scale.

Table 13: Duration of Impacts

Duration		
Immediate	1	Effect occurs periodically throughout the life of the activity.
Short term	2	Effect lasts for a period 0 to 5 years.
Medium term	3	Effect continues for a period between 5 and 15 years.

Duration		
Long term	4	Effect will cease after the operational life of the activity either because of natural process or by human intervention.

Table 14: Probability of Occurrence

Probability of occurrence		
Improbable	1	Less than 30% chance of occurrence.
Low	2	Between 30 and 50% chance of occurrence.
Medium	3	Between 50 and 70% chance of occurrence.
High	4	Greater than 70% chance of occurrence.
Definite	5	Will occur, or where applicable has occurred, regardless or despite any mitigation measures.

Once the impact criteria have been ranked for each impact, the significance of the impacts will be calculated using the following formula:

$$\text{Significance Points (SP)} = (\text{Magnitude} + \text{Duration} + \text{Extent}) \times \text{Probability}$$

The significance of the impacts is therefore calculated by multiplying the severity rating with the probability rating. The maximum value that can be reached through this impact evaluation process is 100 SP (points). The significance for each impact is rated as High (SP≥60), Medium (SP = 31-60), and Low (SP<30) significance as shown in Table 14 below.

(b) Definition of significance rating.

Table 15: Significance of Predicted Negative Impacts

Significance of predicted NEGATIVE impacts		
No significance		The impacts do not influence the proposed development and/or environment.
Low	0-30	Where the impact will have a relatively small effect on the environment and will require minimal or no mitigation and, as such, have a limited influence on the decision
Moderate	31-60	Where the impact can have an influence on the environment and should be mitigated and as such, could have an influence on the decision unless it is mitigated.
High	61-100	Where the impact will influence the environment and must be mitigated, where possible. This impact will influence the decision regardless of any possible mitigation.

Table 16: Significance of Predicted Positive Impacts

Significance of predicted POSITIVE impacts.		
Low	0-30	Where the impact will have a relatively small positive effect on the environment.
Moderate	31-60	Where the positive impact will counteract an existing negative impact and result in an overall neutral effect on the environment.
High	61-100	Where the positive impact will improve the environment relative to baseline conditions.

The impact assessment will indicate their confidence in the predictions based on the availability of information and specialist knowledge. Other aspects that should be taken into consideration are:

- Impacts should be described before and after implementing the proposed mitigation and management measures.
- All impacts should be evaluated for their full life cycle for the proposed development, including construction and operational phases.
- The impact evaluation should consider the cumulative effects of other activities which have occurred or are in the process of occurring within the study area; and
- Legal requirements- Specialists should identify and list the specific legal and permit requirements that could be relevant to the proposed project.

4.3 Key Principles of Assessment

Considering the following is important when conducting and reviewing SIA:

- a) Matching the scale and focus of an SIA with the characteristics of the proposed development and the concerns of responsible authorities and potentially affected communities and individuals is important.
- b) Minimising adverse impacts while enhancing beneficial impacts.
- c) Using the "Precautionary Principle" and other internationally recognised SIA principles.
- d) Focusing on impacts that are at least partially attributable to the proposed development. 5. Involving various potentially affected communities in the SIA early and extensively.
- e) Conducting long-range, forward-looking studies that rely on the insight of past experiences.

4.4 Mitigation and Monitoring

Where negative impacts are identified, specialists should set mitigation measures (ways of reducing impacts). Where no mitigation is feasible, this should be stated, and the reasons were given. Where positive impacts are identified, ways of enhancing these impacts should also be mentioned. The specialists should set quantifiable standards to which the effectiveness of the mitigation can be measured. This may include input into monitoring and management programmes.

In line with their above-mentioned methodology, Margen Industrial Services has further provided identifiable social factors and risks that will be affected by the project's construction and operation/ post-construction. These social factors will be referred to as impacts and risks. In general, the transmission line will traverse several sensitive social areas such as high- to low-density residential areas, commercial farms and smallholdings, mines, business development, secondary and tertiary towns, and the crossing of the main road. Based on the technical process that needs to be followed as outlined above and the route assessment, social factors have been identified and are anticipated to impact the project.

These social factors are plotted in the table below and identified in terms of their optimisation or mitigation, positive or negative, and whether they are an impact or risk. The impacts will also be identified, depending on the relevance of whether they occur during the construction or operational phases of the project. A lengthy stay in one village may have a severe impact compared to when they are just staying for a week and pass.

4.5 Social Factors Identified as Positive or Negative Impacts and Risks to be Mitigated or Optimised

Table 17: Identification of Social Factors, Description, Analysis and Categorisation

Impacts and Risks	Positive OR Negative	Manage, Mitigate OR Optimise	Impact, Risk OR Both	Construction, Operational OR Both
Access Across Sites	Restriction and disruption of access across sites due to the powerline servitude is a NEGATIVE IMPACT	MITIGATE and MANAGE through consultations and negotiations	IMPACT to infrastructure development and amendments to development plans, sterilisation of land	BOTH Construction and Operational
Impact on Farming Operations	NEGATIVE IMPACT on farm grazing land during construction	MITIGATE through arrangements of access and negotiations	IMPACT due to disruption of farming activities.	Construction and Operational Phase
Health Issues	NEGATIVE IMPACT on communities living closer to the powerline construction sites due to concentration of construction companies and influx of migrant labour	MITIGATE and MANAGE through employment of local labour, Health and safety training and awareness and monitoring system	BOTH IMPACT and RISK with long term implications (residual impact)	Both Construction and Operational
Economic Issues	POSITIVE IMPACT in terms of reliable and adequate electricity supply in the region, sustain and improve economic growth	OPTIMISE and MANAGE by ensuring that the project design is done in a manner that aligns with sustainability principles and ensures that social and environmental factors recommended are integrated.	IMPACT with long term implications (residual)	Both Construction and Operational
Job Creation	POSITIVE and NEGATIVE IMPACT, jobs might be limited or not available for the local labour as contractors might bring their own labour. The project will be temporary and occurring in various locations of the powerline route. Skilled	OPTIMISE and MANAGE through employing unskilled and semi-skilled local labour. Appointing social facilitator, establish register for local recruitment	IMPACT with short-term implications/ opportunities	CONSTRUCTION Phase

Impacts and Risks	Positive OR Negative	Manage, Mitigate OR Optimise	Impact, Risk OR Both	Construction, Operational OR Both
	local labour can have an opportunity to be employed			
SMEs Opportunities	POSITIVE and NEGATIVE IMPACT, local companies can benefit through localisation of procurement opportunities. The project will be temporary and will happen in various locations of the powerline route and contracts could be long concluded in terms of procurement with companies not from the same communities.	OPTIMISE and MANAGE by inclusion of 30% local content in procurement contracts to be adhered to. Appointing social facilitator and establishing SME database	IMPACT with short term opportunities	CONSTRUCTION Phase
Traffic Disruption	NEGATIVE IMPACT, powerline route crosses various national and local roads which will result in traffic disruptions during delivery of heavy materials	MITIGATE and MANAGE by liaising with traffic and municipal department to schedule construction activities and communicate with road users especially essential services logistics, etc.	IMPACT with short term costs/duration	CONSTRUCTION Phase
Crime and Security	NEGATIVE IMPACT, generally in South Africa crime has become a serious problem especially on at construction sites and people taking advantage of influx of unknown outsiders in the community.	MITIGATE and MANAGE by appointing social facilitators to communicate with stakeholders and liaise with landowners in their property	IMPACT and RISK with a potential of spilling to other parts of the communities and remain even after the project has stopped	CONSTRUCTION and OPERATIONAL

4.6 Significant Impact Associated with Each Phase of the Powerline.

Table 18: Significance of Impact

Impact	Infrastructure/ Development/Work Activity/ Residential	Status	Extent	Magnitude	Duration	Probability	Significant
Access across site	Solar Plants, Residential Roads Obstruction	Neg -	Local	Moderate	Short term	Definite	Medium
Crime and security	Theft of equipment	Neg -	Local	High	Short term	Medium	Medium
Health	Safety, hygiene, flu virus and Disease Spreading	Neg -	Local	Moderate	Short term	Medium	Low
Farming operation	Subsistence crop farming	Neg -	Local	Low	Short term	Low	Low
Economy	Local, Regional and National Energy Capacity and Supply/ Business and Industrial Growth	Pos +	National	Moderate	Long term	Definite	High
Traffic	Obstruction, Congestion and Delays	Neg -	Regional	Moderate	Short term	Medium	Medium
Job creation	Opportunities for local employment	Negative	Local	Moderate	Short term	Medium	Low
SME's	Local Procurement and Job creation opportunities	Pos +	Local	Low	Short term	Low	Medium

4.7 Impact Assessments Findings

- Most of the impacts are negative, but the duration of occurrence is short-term, and the magnitude is either low or moderate;
- From the ratings, economic opportunities such as job-creation and SME procurement opportunities, though positive, appear to be short-term at the local level. The impact is also anticipated to be regional, national and long-term in terms of its contribution to energy availability;
- Crime and security are high in terms of magnitude, which is in line with crime statistics in a national context and is a problem in South Africa. However, the significance is medium, especially in that part of the country.
- In terms of farming operations, the significance is low. Still, the land within the powerline servitude might not be used for any economic activity because of the proximity to electromagnetic field exposure under the 400kV powerline. If this land under the powerline route cannot be used for any purposes, the area will be permanently sterilised.

4.8 Mitigation Measures

- Community Liaisons must be made available to sensitize the public about disruptions in operational schedule that will impact access to residential and other public activities whenever the project schedule should affect public activities and alternative arrangements be agreed upon with stakeholders to be affected in all the areas where such impacts should arise;
- Communication measures to include farming communities and in order to make arrangement for Contractors to access farmlands to avoid exposure to criminals;
- Security personnel must ensure that access to people's properties be controlled;
- Where possible, local SMME's and labourers/jobseekers be considered for those opportunities that can be made available for localization;
- Safety and Health precautions be encouraged in the form of primary health care and safety training.

5 STAKEHOLDERS AND PUBLIC PARTICIPATION PROCESS

5.1 Stakeholder Database

Stakeholder engagement and the public participation process are other qualitative ways of enriching social impact assessment studies. As part of the baseline assessment, a list of stakeholders was compiled, and an online and telephonic verification was conducted of all relevant stakeholders. The list will be updated continuously during public participation. The Environmental Assessment Practitioner notified the stakeholders by sending the Background Information Documents via email and physical submission. The first general comments regarding the project were received from John Taolo Gaetsewe District Municipality. A stakeholder comments register has been included to capture all comments received from various stakeholders for data-gathering purposes and record-keeping. A template is annexed for registering stakeholder comments during and post data gathering process.

5.2 Public Participation Process

Consultation with interested and affected parties (IAPs) is an inherent part of any impact assessment for a developmental project. The timelines for the public participation process and program are still to be completed after confirmation with relevant stakeholders, and public and stakeholder meetings have been held to ascertain their challenges, comments, and contributions. The report will be updated accordingly afterwards. The following is a tentative process flow of the public participation process in line with the phases of the powerline construction route.

- a. First Section of the powerline from Ferrum – Hotazel (Kathu 1st PPM; Hotazel 2ND PPM). 2 Meetings in JTGDM Northern Cape
- b. Second Section from Hotazel-Mookodi (Magobing 1st PPM; Ga-Motsamai 2nd PPM; Ga-Mopedi 3rd PPM; Ga- Sehubane 4th PPM; Makadibeng 5th PPM; Vryburg 6th PPM) JTGDM and RSMDM North-West.

6 CONCLUSIONS

Striking a balance between economic, social and environmental conservation is often challenging, considering the numerous stakeholders and differing motives. With the study in question is even more complex in the sense that the project is happening in various local municipalities and district municipalities as well as different provinces with different development plans and over and above that there is a considerable number of traditional communities in both district municipalities of the study which add another challenge into policy and legislative review. Considering the identified social impact of this project

and the need for the country to strengthen its electricity grid, consultation of parties is paramount and should find a way to strike a balance as long as sustainability principles are not compromised.

Looking at the proposed line, one sticking point is continuation of farming and other business related activities under the powerlines in some areas might be a No-Go option. However, some issues will need to be mitigated as they may significantly negatively impact the project and might halt the project if not mitigated, i.e. denied access to specific farms and/or communities. Although communities are not the same, they both seem to have the same need for electricity in their household; therefore, if they are appropriately engaged and the mitigation measures are implemented, the project might experience less disruption.

The project's success depends on open and transparent engagement between all identified stakeholders.

7 RECOMMENDATIONS

The following recommendations are proposed:

- Community Liaisons must be made available to sensitize the public about disruptions in operational schedule that will impact access to residential and other public activities whenever the project schedule should affect public activities and alternative arrangements be agreed upon with stakeholders to be affected in all the areas where such impacts should arise;
- Communication measures to include farming communities and in order to make arrangement for Contractors to access farmlands to avoid exposure to criminals;
- Security personnel must ensure that access to people's properties be controlled;
- Where possible, local SMME's and labourers/jobseekers be considered for those opportunities that can be made available for localization;
- Safety and Health precautions be encouraged in the form of primary health care and safety training.

8 REFERENCES

- DME, Integrated Resource Plan (2023), SA Government.
- Eskom, Transmission Development Plan (2022), SOE.
- IAIA Review, 2009.
- IDP John Taolo Gaetsewe District Municipality
- IDP Dr Ruth Segomotsi Mompati Municipality
- DEFF, National Environmental Management Act (1998), SA Government.
- Margen Industrial Services SIA Study (2020)
- SALGA: District Development Model, March 2021.
- United Nations: Sustainable Development Goals (2015).
- Vanclay, J (2022).

9 ADDENDUMS

9.1 Schedule of Consultation Public Participation Process

Ferrum - Hotazel	Comms	Meeting Dates	Venue	Contact Person
Kathu				
Hotazel				
Hotazel- Mookodi	Comms	Meeting Dates	Venue	Contact Person
Magobing				
Ga- Motsamai				
Ga-Mopedi				
Ga-Sehubane				
Makadibeng				
Vryburg				

9.2 Stakeholder Register Template

Sectors	Potential Stakeholders	Role/ Status in the Project	Anticipated/ Potential Impact	Key Interests /Issues	Potential Benefit/ Risks Issues to Stakeholder	Additional Stakeholders Identified by this Source
District/Local Municipality						
National and Provincial Govt Dept						
Mining Company						
Solar Energy Plants						
Small Scale Mining						
Agricultural Sector						
Construction Sector						

Technical Vocational Training /Learning Institution						
Public Private Partnership						
Business Forum						
Community forum						
Other I&AP's						

