

RUSTENBURG LOCAL MUNICIPALITY

JUNE 2025

AMENDED REPORT



VOLUNTARY LOCAL REVIEW JUNE 2025

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Opening Statement

The Rustenburg Local Municipality (RLM) is the only municipality in the Northwest Province participating in the Voluntary Local Review (VLR) process and in fulfilment of some of the 17 Sustainable Development Goals (SDGs). This is the first (1st) VLR produced by the RLM which may be deemed a pilot project, of which RLM is reflecting on how the Integrated Development Plan (IDP) is linked to Sustainable Development Goals and how projects implemented by other stakeholders responds to the SDGs.

Key Messages for Rustenburg Local Municipality:

- The municipality's social, economic, and environmental dimensions have to a large extent been influenced by the presence of mining activities within its jurisdiction. Mining activities are mainly concentrated along the geological belt, known as the Bushveld Complex. The mining industry in the municipality provides a huge proportion of employment opportunities. The Bushveld complex is one of the most heavily mineralized districts in the world and the platinum mines in this region are the largest producers of platinum in the world.
- The municipality is committed to ensuring that the implementation of SDGs is inclusive, transparent and sustainable as stated in its vision and mission statements. All stakeholders will be part of the implementation team within their respective areas of expertise.
- The municipality will continue to contribute to improving the quality of life for its citizens by stimulating economic growth, improving the quality of services through adopting best practices, ensuring sustainability and inclusive government.
- The SDGs have been localized for implementation. The municipal Integrated Development Plan (IDP) is aligned to the Service Delivery and Budget Implementation Plan (SDBIP).
- Tourism continues to play an increasingly important role within the municipality. The unique topography of the Magaliesburg offers several opportunities for tourism. These include opportunities for eco-tourism as well as tourism associated with a variety of historical and cultural interests. The areas include the Kgaswane game reserve; Vaalkop dam nature reserve; Kroondal heritage site; and the Bafokeng sports palace. The municipality is also part of the Magaliesburg biosphere which was proclaimed an international biosphere reserve by UNESCO on 9 June 2015, having been recognized for its exceptional natural, cultural and human characteristics.

Highlights

Efforts to fulfil the Sustainable Development Goals are backed by civil society, private sector, organizations as well as the public sector. This VLR is the second submission report produced by the Municipality and therefore, it provides progress registered after submission of the initial report. It provides an update on projects that are linked to the SDGs, even though some did not form part of selected goals. It is the municipality's wish to have everyone on board in order to have a collective effort towards the realisation of meeting the targets for the SDGs. At the ultimate end, if we all take responsibility for fulfilling the SDGs, it becomes possible to attain and meet the targets. Together we can when we leave no one behind. Main benefits derived from the VLR process include amongst others, the importance of reporting on VLRs and linkages between SDGs, planning processes, implementation and monitoring and evaluation.

Efforts made to mobilise all stakeholders in the VLR process and SGD's implementation included:

- Item which served before Council on the 31st January 2024.
- Engagement with internal and External Stakeholders – 16 and 17 November 2023
- Education and Awareness programmes.
- Social media statement by Office of the Executive Mayor.
- Environmental Sustainability Camp of 300 teachers of the North West Province

Concrete success stories for RLM

South African land transport has in the recent past undergone an extensive transformation process, which has resulted in the introduction of new policies and legislation. The introduction of the new constitution for the country has set the scene for a fundamental restructuring process of various legislative frameworks. The publication of the White Paper on National Transport Policy in 1996 has laid the foundation for the re-alignment of transport policy at all spheres of government.

In view of the above, the development of the vision, goals and strategies for the Rustenburg Integrated Transport Plan had to consider current transport policies and legislation. Secondly, cognizance was taken of the Rustenburg Integrated Development Plan as well as other city development strategies to inform the city's transport vision, mission, goals and strategies. To date, RLM has 10 buses using Euro 4 rated diesel and operate in 16 routes in the

Central Business District (CBD). Over and above that, 35 minibus taxis are operating under Phase1A in the Greater Tlhabane Area using 80 bus stops and 10 routes. A bus depot and fare collection system have been implemented. The RLM is a Water Services Authority (WSA) and distribute electricity in some part of municipal areas together with Eskom.

Challenges faced during VLR and how they were addressed

Plans	Challenges	Means of addressing challenges
Sourcing of data	RLM relied mostly on STATSSA Data, which is insufficient.	Citizen and admin generated data was used and still to undergo SASQAF quality check.
Data analysis	No financial resources to appoint researchers.	Through partnerships.
Political Leadership buy-in	Consideration of the Municipal Participation on the VLR by Council	Council is on board and has approved the VLR item which is a standing Item at the Executive Management Meetings.
Budget for SDGs vs IDP	The process is seen to be additional work and colleagues do not embrace it.	Mainstreaming the SDGs in the IDP.

CHAPTER 1

1.1 Introduction

The Rustenburg Local Municipality (RLM) is a category B municipality, situated in the Northwest Province. It is made up of 45 wards with a total geographical area of the RLM is 3,423 km² and serves as a Water Service Authority. Distribution of electricity is done by both the RLM and Eskom in some parts of the Municipal areas. The Municipality serves a population of 562 031 people. The South African Local Government Association (SALGA) issued an invitation to all municipalities to apply for participation on the VLR and within the Northwest Province only the Rustenburg Local Municipality was selected.

1.2 Methodology and process for preparation of the review

The institutional structures in place for the preparation of the Rustenburg Voluntary Local Review are as follows:

- ▶ Municipal Council.
- ▶ Technical Committee appointed by the Accounting Officer after expressing an interest to Partake in VLR Process.
- ▶ Portfolio Committee on Integrated Development Planning, Performance Management System and Legal
- ▶ Multi-stakeholder Forum (Government Depts, Mining Houses, Vulnerable group – Women, disabled people, youth, elderly; Civil Society, Financial Institutions, Academia, Faith-Based Organisations, Traditional Authorities).
- ▶ Internal SDGs Working Committee (Represented by Planning and Human Settlement, Special Projects, Technical and Infrastructure, Community Development, Strategy and Planning).
- ▶ Marketing and Awareness Committee.

1.3 Steps taken to include all stakeholders include:

Meetings.

Focus groups consultations.

Written Communications.

Social Media.

Education and awareness programmes on SDGs

1.4 Data collection methodology included:

Desktop

Questionnaire

Stakeholders Engagement

1.5 Methodology used to include vulnerable groups that are mostly “left behind”

The Special Projects Unit of the Municipality identified such groups and one-on-one engagement method with the groups was used. Engagement with Internal SDGs Working Committee is done as and when through physical meetings, email and calls. The coordination is centralised at the Technical Committee appointed by the Accounting Officer. Implementation is done through Internal SDGs Working Committee.

1.6 Overview of the Municipality’s sustainability on implementation of the SDGs as regard to the main strengths and weaknesses that RLM has:

Municipality is functioning as both the Water Services Authority (WSA) and Water Services Provider (WSP). Despite RLM being the WSA, there is a challenge of providing basic services equitably due to mushrooming of informal settlements. There are three traditional authorities which the municipality is expected to service but one of them i.e. the Royal Bafokeng Nation supplies water to its inhabitants.

RLM is a mining town and it enjoys the support through the implementation of Social Labour Plans (SLPs). The Municipality is challenged by retrenchments in the mining industry and this impacts the municipality in revenue collection.

The introduction of integrated transport services known as Rustenburg Rapid Transport (RRT) reduced number of taxis in the city, thereby reducing emission, congestion and accidents.

1.7 Steps followed by RLM in the implementation of VLR:

RLM Working Group is responsible for the coordination of the process and the responsibility was assigned by the Accounting Officer (Municipal Manager) and endorsed by Municipal Council. The following steps were taken to include local stakeholders in the process:

- Mapping of relevant Stakeholders
- Issuing of Invitations to attend the engagement session in the SDG programme.
- Questionnaires to stakeholders to populate projects implemented against the SDGs selected by the Municipality.
- Item to Council – Item 12 of the 31st January 2024
- Engagement with internal and External Stakeholders – 16 and 17 November 2023
- Education and Awareness programmes
- Social media statement by Office of the Executive Mayor

Participating stakeholders were identified according to the goals selected by the Rustenburg Local Municipality and those that address the core functions of the Municipality. The table below indicates the selected stakeholders participating in the development of VLR:

Internal Stakeholders	National Government Stakeholders	Provincial Government Department	Non-Governmental Organisations
Office of the Executive Mayor – Special Projects and Communications Units	Statistics South Africa	Statistics South Africa	United Nations Department of Economic Development and Social Affairs

Planning and Human Settlement Directorate – Housing Provision and Development Planning	Office of the Presidency – National Planning Commission	Department of Economic Development, Environment, Conservation and Tourism	Orbit TVET College - Rustenburg Campus
Technical and Infrastructure Directorate – Water, Sanitation and Electrical Infrastructure Units	Department of Home Affairs	South African Social Security Agency	Mining Houses (Sibanye Still water, Anglo-Platinum Mine, Impala, Bafokeng Platinum Mine, Glencore Alloys)
Community Development – Waste Management, Community Facilities and Integrated Environmental Management Units		Bojanala Platinum District Municipality	Mine Rehabilitation and Green Economy Holdings
Office of the Municipal Manager – Strategy and Planning		Department of Sports, Arts, Culture and Recreation	African Women Leaders Network
Local Economic Development		Department of Cooperative Government and Traditional Affairs	Traditional Council
			Faith-Based Organisations
			People with Disabilities
			Youth Representatives
			S A Organisers

The primary obstacle encountered by the RLM during the stakeholder invitation process was that certain stakeholders were unable to express their availability for the engagement process. Nevertheless, a phone follow-up was conducted.

1.8 Lessons learnt from VLR

- ▶ Importance of Reporting on VLRs.
- ▶ Linkages between SDGs, planning processes, Implementation and Monitoring and evaluation.
- ▶ Incremental process
- ▶ Indicators to be aligned with municipal priorities and objectives

CHAPTER 2

2.1 The implementation and prioritisation of sustainable development goals by the Rustenburg Local Municipality

The Rustenburg Local Municipality chose the following goals as a starting point and envisages to broaden the scope in phases: (Source: The 2030 Agenda for Sustainable Development Goals: Transforming our World)

Goal 5 : Achieve gender equality and empower all women and girls.

Goal 6 : Ensure availability and sustainable management of water and sanitation for all.

Goal 8 : Promote sustained, inclusive, and sustainable economic growth, full and productive employment and decent work for all.

Goal 11 : Make cities and human settlements inclusive, safe, resilient and sustainable.

Goal 13 : Take urgent action to combat climate change and its impacts.

Goal 17 : Strengthen the means of implementation and revitalize the global partnerships for sustainable development.

The rationale behind chosen goals is that the Municipality has direct impact on them, however, other goals chosen will be addressed through goal 11 during this reporting cycle.

2.2 Implementation of SDG 11: Make cities and human settlement inclusive, safe, resilient and sustainable

The aim of SDG 11 is to create sustainable cities and communities that are inclusive, safe, resilient, and sustainable. It recognises that the municipality is growing at an alarming rate, with more than half of the city's population currently living in urban areas. SDG 11 highlights the need for affordable housing, sustainable transport, access to green and public spaces, and the preservation of cultural and natural heritage. Achieving SDG 11 is critical for building sustainable and liveable cities that can support the well-being and prosperity of the residents while also safeguarding the planet. A multistakeholder approach that encompasses governments, civil society, the private sector and individuals must be used to address issues like urbanisation, climate change, inequality, and inadequate infrastructure.

A key challenge that impacts progress on SDG 11 is the inadequate and unreliable provision of energy. Unfortunately, low-income households are particularly affected, as they often resort to alternative energy sources such as wood, gel (solid fuels) and paraffin. This not only poses a health hazard to the individuals themselves but also exacerbates air pollution. Increased inflation results in higher prices, while the cost of basic service delivery also increases. This means that people have less purchasing power, affecting access to capital for home loans. Some communities and businesses that are able to go off grid instal solar and other alternative energy devices, which in turns deprives the municipality revenue generation. Environmental forces such as recent flooding caused large-scale damage to infrastructure and affected access to basic service delivery, impacting the achievement of SDG 11.

The VLR report of RLM reports on how the municipality is doing in giving meaning to the achievement of the targets that are listed under SDG 11: Sustainable Cities and Communities which aims to "Make cities and human settlements inclusive, safe, resilient and sustainable". The report details progress and challenges on nine of the 10 targets of SDG 11. The section reflects how the LM has performed in the institutionalisation of Sustainable Goal 11 and the targets that are applicable to it. SDG 11 has not been fully achieved in the RLM, but work is done towards meeting targets and there is visible progress in this regard.

Targets for Goal 11: 11.1: By 2030, ensure access for all to adequate, safe and affordable housing and basic services and upgrade slums.

SDG Target	Indicator	Related indicators
11.1: By 2030, ensure access for all to adequate, safe and	11.1.1: Proportion of urban population living	Direct relation

SDG Target	Indicator	Related indicators
affordable housing and basic services and upgrade slums	in slums, informal settlements or inadequate housing	6.1.1 Access to Improved Water; 6.2.1 Access to Improved Sanitation; 7.1.1 Access to Electricity; 8.3.1 Informal Employment; 8.5.2 Unemployment Rate 8.6.1 Youth Unemployment; 10.2.1 Population below Median Income; 10.1.1 Grow rates of the poorest 40%; 11.2.1 Public Transit Stop Coverage; 11.5.1 Population Affected by Hazardous Events; 11.6.1 Solid Waste Collection; 11.7.1 Accessibility to Open Public Area; 11.7.2 Public Space Safety for Women; 16.1.1 Homicide rate; 16.1.3 Population subjected to Violence.
11.2. By 2030, provide access to safe, affordable, accessible and sustainable transport systems for all, improving road safety, notably by expanding public transport, with special attention to the needs of those in vulnerable situations, women, children, persons with disabilities and older persons		
11.6: By 2030, reduce the adverse per capita environmental impact of cities, including by paying	11.6.1: Proportion of municipal solid waste collected and managed	

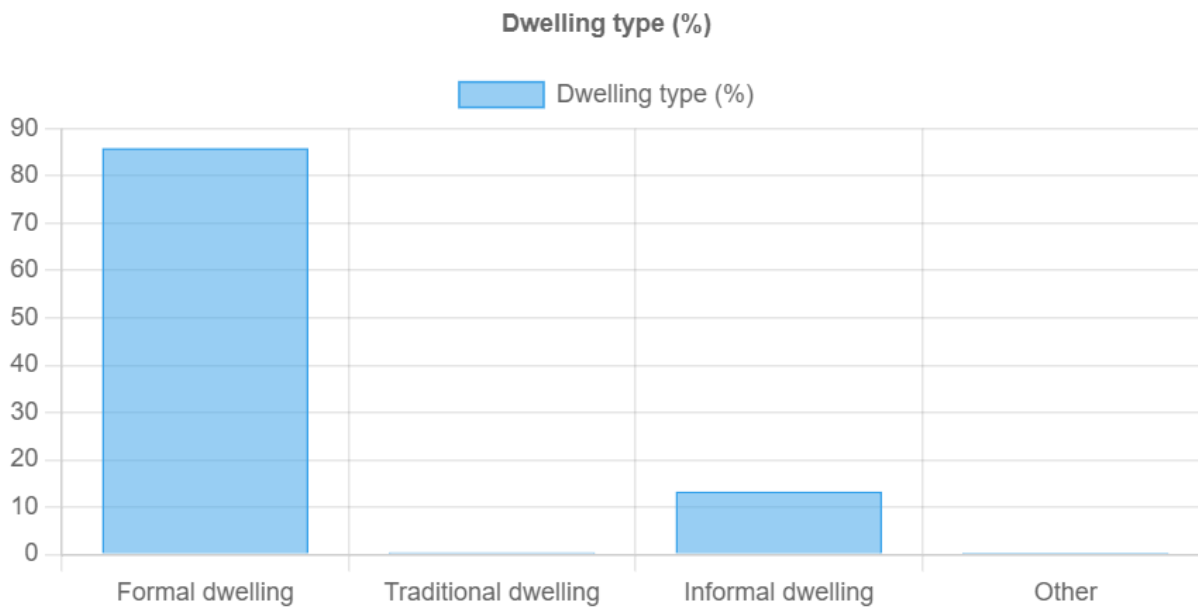
SDG Target	Indicator	Related indicators
special attention to air quality and municipal and other waste management	in controlled facilities out of total municipal waste generated, by cities	
5.5 Ensure women's full and effective participation and equal opportunities for leadership at all levels of decision making in political, economic and public life.	Indicator 5.5.1: Proportion of seats held by women in local governments.	
6.1. By 2030, achieve universal and equitable access to safe and affordable drinking water for all	Indicator 6.1.1: Proportion of population using safely managed drinking water service.	
6.2. By 2030, achieve access to adequate and equitable sanitation and hygiene for all and end open defecation, paying special attention to the needs of women and girls and those in vulnerable situations	Indicator 6.2.1: Proportion of the population using safely managed sanitation services, including a hand-washing facility with soap and water.	
8.3. Promote development-oriented policies that support productive activities, decent job creation, entrepreneurship, creativity and innovation, and encourage the formalization and growth of micro-, small- and medium-sized enterprises,	Indicator 8.3.1: Proportion of informal employment in total employment by sector and sex	

SDG Target	Indicator	Related indicators
including through access to financial services		
8.6. By 2020, substantially reduce the proportion of youth not in employment, education or training	Indicator 8.6.1: Percentage of youth (aged 15–24 years) not in education, employment, or training	
11.6. By 2030, reduce the adverse per capita environmental impact of cities, including by paying special attention to air quality and municipal and other waste management	Indicator 11.6.2: Annual mean levels of fine particulate matter (i.e., PM2.5 and PM10) in cities (population weighted) Indicator 11.6.2A: National Air Quality Indicator (NAQI)	Indicator 13.1: Resilience and adaptive capacity Indicator 13.3: Improve education and awareness and capacity on climate change mitigation.

2.3 Implementation of goal 11 and related indicators: Make cities and human settlements inclusive, safe, resilient and sustainable.

Implementation of goal 11, target 11.1, Indicator 11.1.1 – Proportion of urban population living in slums, informal settlements or inadequate housing.

According to the recent census by Statistics South Africa (2022), 85,9 percent of the population of RLM lives in formal housing dwellings and this is an increase of 68,7 percent in 2011. It is essential to indicate that the residents that live in informal settlements get supplied with services such as water, sanitation and refuse removal. The following graph depicts the dwelling by type.



It is safe to mention that the need for the achievement of SDG 11 in the RLM has been aligned with the municipality's strategic vision, the Provincial Growth and Development Strategy (PGDS), Vision 2030 (City Master Plan), particularly its pillar of Creating a Spatially Transformed City. According to this pillar, the municipality and its stakeholders should work towards addressing imbalances of the past such as apartheid spatial patterns by providing adequate housing and affordable services in conducive living environments.

Currently the municipality has a total of **38 informal settlements, with at least 24 000 households. So far 29 of the informal settlements are supplied with water through tinkering. The municipality is looking at installation of jojo tanks which will be filled regularly across all informal settlements.**

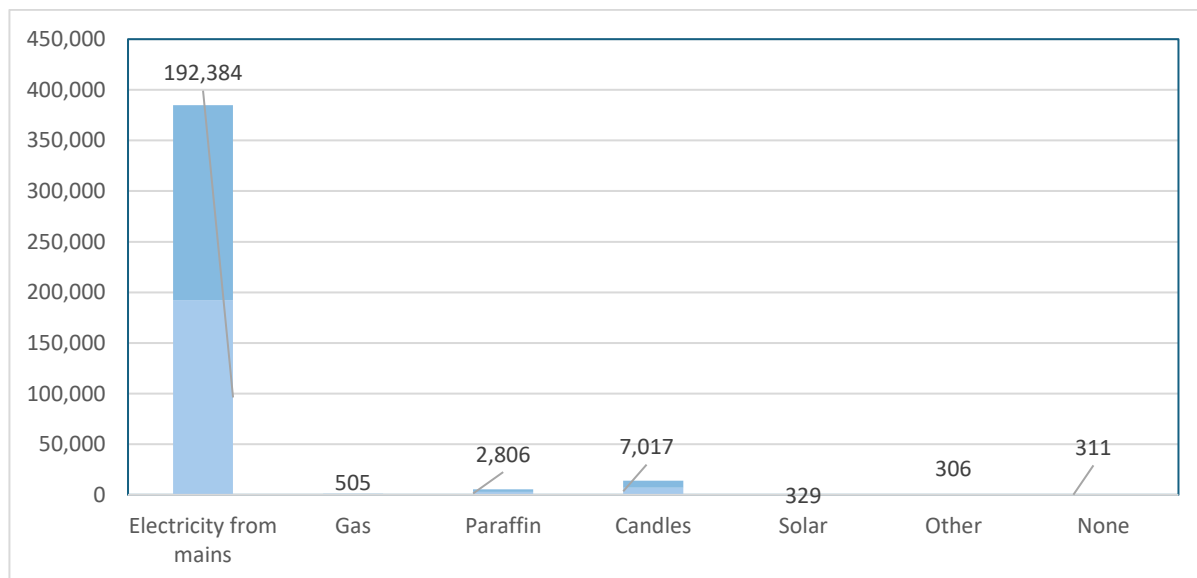
The RLM has been working with the Provincial Department of Human Settlements and constructed and handed over 9766 houses. 12, 467 serviced sites were developed and handed over in the same period. The housing projects that RLM has implemented include Bokamoso, Marikana, Seraleng and the Boitekong Housing Project. The Municipality has scaled up its development of sustainable communities through human settlements development by partnering with the Housing Development Agency for the delivery of more houses over the next 5 years.

RLM has not chosen SDG 7, however it has been linked with indicator 11.1.1 which states proportion of urban population living in slums, informal settlements or inadequate housing. Indicator 7.1.1 of goal addresses access to electricity as linked and aims to ensure access to affordable, reliable, sustainable and modern energy for all people globally. The major challenge faced by the municipality is illegal connections and theft and vandalism of electrical infrastructure. The production of clean energy that is accessible, affordable, and reliable as envisaged

as part of SDG 7 will assist in mitigating the health and environmental hazards and is linked to income generation. At the core of SDG 7 is the drive to reduce greenhouse gas emissions from fossil fuels, thus contributing towards climate change mitigation.

Key challenges in progressing towards achieving SDG 7 have been the COVID-19 pandemic and rolling blackouts (or loadshedding).

Name	Frequency	%
Electricity from mains	192 384	94,5%
Gas	505	0,2%
Paraffin	2 806	1,4%
Candles	7 017	3,4%
Solar	329	0,2%
Other	306	0,2%
None	311	0,2%



Implementation of goal 11, target 11.2, Indicator 11.2.1 – Proportion of population that has convenient access to public transport by sex, age and persons with disabilities

According to Target, 11.2 of the SDGs the world role-players need to ensure that the following is achieved by 2030: “Provide access to safe, affordable, accessible and sustainable transport systems for all, improving road safety, notably by expanding public transport, with special attention to the needs of those in vulnerable situations, women, children, persons with disabilities and older persons.”

The RLM has considered that achieving spatial integration and transformation also means having an overlay between human settlements, the central business districts and transport infrastructure. This has seen the municipality undertake projects that are aimed at developing public transport facilities, expanding the road network and coordinating the necessary investment from other public transport players such as the South African National Road Agency (SANRAL), the Taxi industry and operating bus companies. According to the approved Master Plan vision 2030, the RLM should work towards the achievement of Target 11.2 of SDG 11 through creating a globally connected city. The municipality is and has been busy with the construction of the Bus Rapid Transport (BRT) Project. This project is currently operational from the nearby township of Tlhabane to the CBD.

The RLM has made some strides in the upgrade of its road network for daily commuting population. Besides the BRT project, the municipality is in addition maintaining roads through ongoing pothole repair programme. The work done does not mean the municipality is financially in a position to upgrade and maintain all roads to a desired level at once. Bridges that were wiped by floods were reconstructed and are currently in use by commuters and pedestrians.

Rustenburg has a total road network distance of **1,911.732 km** of which **1340 km** are tarred (paved) and **859.134 km** are gravel (unpaved). The road network distance excludes the Provincial and National roads. The municipality is developing the Comprehensive Integrated Transport Plan together with the roads and stormwater master plans which would guide the expansion and development of the said infrastructure. The majority of the paved roads range from good to fair surface conditions implying that these roads had fair condition. The gravel or earth roads range from fair to poor gravel quality and quantity implying that these roads had poor condition.

The need for re-gravelling was therefore found to be very high. Roads with poor profiles were found to be without Camber and this resulted in water ponding.

According to the Visual Condition Assessment conducted, the average Visual Gravel Index (VGI) for RLM unpaved roads was calculated to be forty one percent (41%) which implied that most of the roads were in poor state. The average Visual Condition Index (VCI) and Reseal Condition Index (RCI) for paved roads were calculated to be 69% and 61% respectively which implies that the road network was in the fair condition.

A Visual Condition Assessments of paved roads in Rustenburg local municipality shows Approximately 965,55 Km assessed, and this comprises of approximately 750 km of flexible paved roads, approximately 0,75 km of concrete paved roads, and approximately 214,8 km of block paved roads. Regarding the block paved roads assessed, approximately 109,33 KM are S-A block type and 105,55 KM are S-B block type.

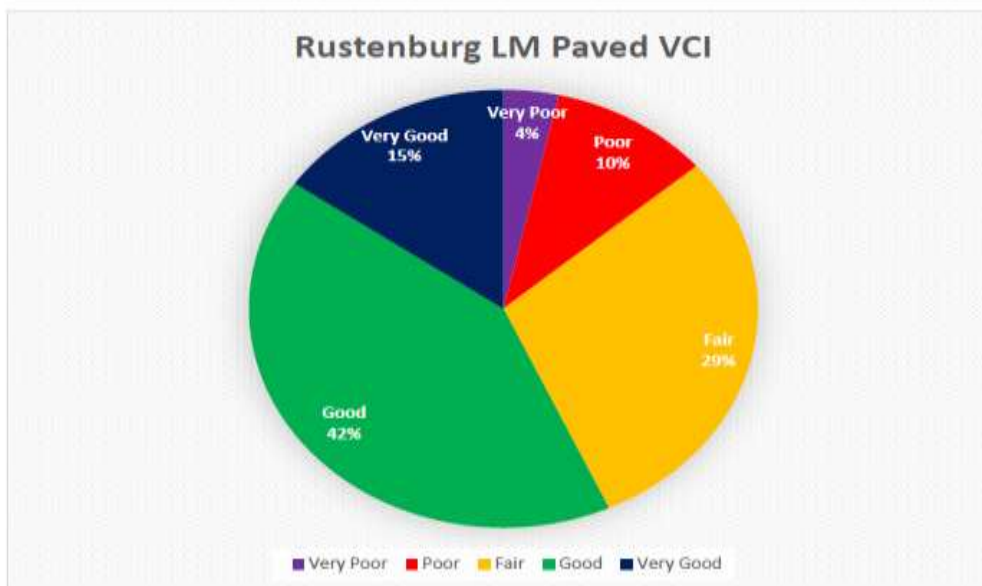
The majority of the paved roads range from good to fair surface conditions implying that these roads had fair motorable condition. The gravel or earth roads range from fair to poor gravel quality and quantity implying that these roads had poor motorable condition.

The need for Re-gravelling was therefore found to be very high as stated and received in the latest data from the Rural roads asset management systems (RRMAS). These indicators provide the municipality with key road

condition information, cost of maintenance and re-gravelling. Roads with poor profiles were found to be without Camber and this resulted in water ponding. RRAMS data provided in conjunction with Bojanala District municipality has provided the following data:

- Approximately 4 % are in very poor condition, which may mean assets are in imminent danger of structural failure.
- Approximately 10 % are in poor condition,
- Approximately 29% kilometres are in fair condition,
- Approximately 42% kilometres are in good condition, and
- Approximately 15% kilometres are in very good condition.
-

The average VCI of paved roads in Rustenburg LM is approximately 72.



RUSTENBURG LM PAVED VCI

OBSERVATIONS AND RECOMMENDATIONS

- The paved roads are reasonably well maintained and therefore routine maintenance is required to keep them in a good condition.
- For the unpaved, the roads are not quite well maintained and therefore, there is a need for regravelling and improvement of storm water drainage.
- More attention should be given to the maintenance of storm water drains;
- In order to effectively improve the road network, a Stormwater Master Plan is a necessity.
- Rustenburg Local Municipality being a fast growing municipality, with an annual compound economic growth rate of 6%, traffic into the CBD has increased and therefore the main road into the CBD, Nelson Mandela is stressed and cannot be widened to accommodate the growing traffic. A need to develop alternative(s) route(s) into the CBD is a necessity.

Large portions of land within the RLM consist of rural residential, agriculture and Mining related uses. Urban development is concentrated around Rustenburg CBD with mining land and associated residential areas to the north-east of Rustenburg CBD and the Magalies Mountain Range located to the south of the CBD. Increased mining activity in the area resulted in increased demand for housing, retail developments and support services which require office space. These new developments generate additional trips on the road network, putting further pressure on the road network which is already operating at capacity in certain areas. Also, mining products are transported within and across the RLM mainly by road.

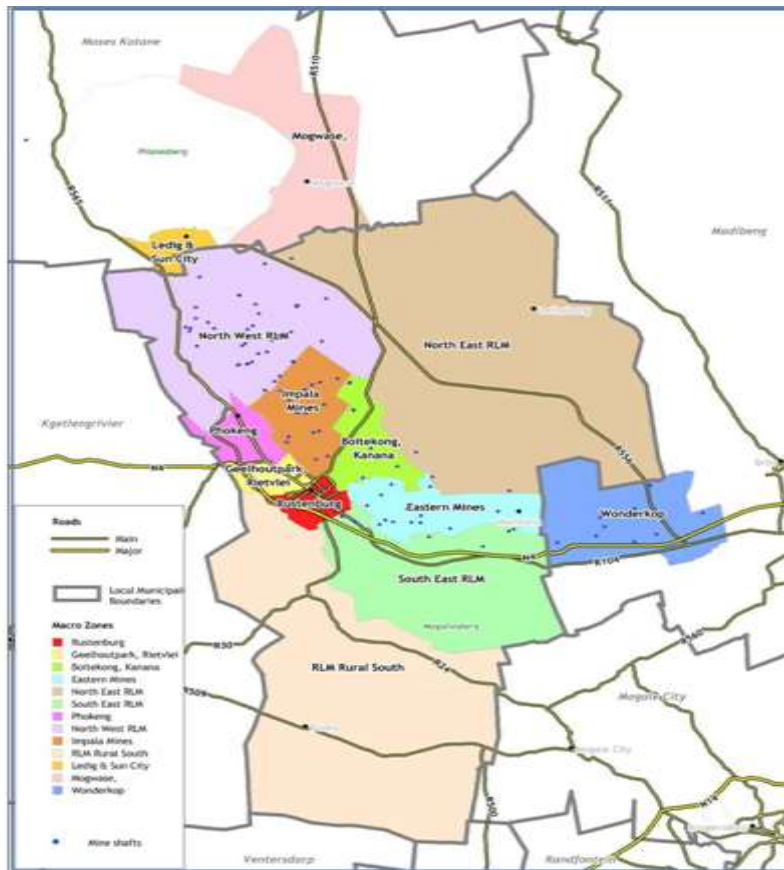
The N4 traverses the Municipality in an east west direction passing Rustenburg to the south connecting RLM with Gauteng and the North West province.

Roads are determining factors in the location of development as they provide access, ensure connectivity and provide ease of movement through an area. The main roads that link Rustenburg with the greater region and influence the growth direction of settlements in the area are the N4, R565, R510, R104, and R24.

The RLM commissioned a study to conduct a household travel survey. The purpose of the survey was to:

- Provide information for an understanding of transport patterns & demand in the area; and
- Inform the planning process of the integrated Rapid Public Transport Network.

Figure below shows the description of the boundary of RLM, macro zones and traffic zones.



RLM, MACRO ZONES AND TRAFFIC GEOGRAPHIC INFORMATION (SOURCE: RUSTENBURG CTP, FEB 2018)

The RLM has a total of up to 35 public transport facilities. These are mainly for taxis and buses. The infrastructure surveys conducted in 2014 at these facilities have shown that a lot of these facilities are informal, with a few being semi-formal or formal. The majority of the facilities (78%) are informal, while formal and semi-formal facilities are only 22%.

The studies conducted show that public transport in the RLM is mainly provided by buses and taxis. Taxi and bus travel account for more than 51% of total travel for all purposes and walking 17%. There are no commuter rail services. Metered taxi services provide very limited services, usually around big malls and big taxi/bus facilities. Due to the intensity of mining, company transport also exists, although not all companies provide such a service to its employees.

There are 22 taxi associations operating in RLM with a total estimated fleet of 3 212. These are either local or long-distance operations. Bojanala Bus service is one of the two dominating bus companies in RLM. It has only one Tlhabane depot in RLM. It has a fleet of 222 commuter buses (mainly 63-seater) serving the North West province. Of the total fleet, approximately 134 buses operate in the RLM. The second dominating bus company in RLM is the Thari Bus services. Although not as big as the Bojanala Bus services, Thari operates a small number of routes. The bus company is contracted by the North West Province Department of Transport to provide commuter services in the BPDm municipal area.

There are currently metered taxi services operating in RLM. These services are mainly found in the CBD, the Waterval and Boitekong Mall. The current fleet is estimated to be approximately 110 with the average age being 10 years. An implementation plan to use 2000 model year cars is anticipated to be initiated in the near future.

No commuter rail services exist in the RLM as indicated by PRASA. The CIP does not contain any commuter transport provisions due to the lack of current services therefore an intermodal planning community dealing with commuter rail transportation is also not required. However, this should be revised once commuter rail services are re-established in the region.

There is only one airfield in Rustenburg which is owned by RLM and complies with the South African Aviation Authority (SACAA) regulations. Below shows the location of the airport in RLM.



Rustenburg Rapid Transport (RRT) Network

The Rustenburg Integrated Public Transport Network (IPTN) was proposed and approved in 2007. In 2012, the first phase of the project IPTN began construction which concentrated in Rustenburg and later extend to surrounding areas along R104 and R510 and in Rustenburg CBD.

A fully implemented RRT system is shown below. This system is a mixture of direct services and the traditional trunk-feeder type system to provide the best mix of operational performance for the user with operational efficiency for the operator.



FIGURE 1: RUSTENBURG IRPTN FULL NETWORK, SOURCE: RRT OPERATIONAL PLAN, JUNE 2018)

Phase 1 covers the areas of Tlhabane, South of CBD (including Protea Park, Cashan, Safari Tuine and Waterval Mall), Sunrise Park, Boitekong and Meriting to Freedom Park. Phase 1 is further divided into **Phase 1A, 1B and 1C**

Phase 2 extends the RRT service to the north along the R510

Phase 3 extends to the west towards Phokeng along the R565.

Phase 4 of the project will be the final phase of the project, implementing the bus service to complete the RRT network.

The following will be key features once the system is complete:

- Bus Rapid Transit on the identified 33.3 kilometres of Trunk Corridors with segregated median located lanes, closed median located stations, level boarding and pre-payment prior to boarding, electronic fare collection, fare integration and associated security, universal access, comfort and real-time information at stations and vehicles.
- Low entry vehicles to be in three (3) sizes – 18 meter articulated, 12 meter and 9 meter. All vehicles with doors on sides, universal access and on-board electronic fare collection equipment to allow for closed transfers at median stations on the trunk route, full system integration and maximum operational flexibility.

- Level boarding at all stations (trunk and feeder) with low platform heights (about 30cm). Closed system and stations on trunk route. Open stations outside trunk route with on-board fare verification.
- Zone based fare system integrated across entire IRPTN system with AFC.
- Traffic Management Centre to control the IRPTN system and integrate with emergency services and traffic control
- ITS that includes a broad range of services for the management of transportation systems enabled by the use of information and communication technologies to make the system safe, efficient and reliable without necessarily physically altering the existing transport infrastructure.

To date the following progress has been made in this regard:

- All 22 taxi associations in Rustenburg, operating around the RLM and outside the municipal boundary were engaged during project initiation stages between 2009-2011.
- 10 buses and 35 minibuses are operating Phase 1A service in the Greater Tlhabane Area using 80 bus stops and 10 routes. A bus depot and fare collection system have been implemented.
- 9 Taxi Associations have been identified as affected by the RRT routes and have formed a representative Structure - The Taxi Negotiating Forum and have full time experts who provide technical support to them and 2 taxi associations have removed about 459 vehicles to make way for Phase 1A & 1C of the system.
- To date the Yarana system is operational on 18 routes on Phase 1A & 1C, with a mix fleet consisting of vehicles fitted with Automated Fare Collection devices (Busses, MBT) and Mop-up vehicles which is a cash-based service.
- Bojanala Bus as an affected operator has been engaged is forming part of the Negotiation Structure
- MoUs have been entered into with both the Taxi and Bus Operator structures.
- It is envisaged that the affected and eligible operators will cease their current taxi operations in favour of equity within the Bus Operating Companies that will run bus operations in areas and routes planned to be served by the RRT.
- Rather than embark on additional infrastructure, it is felt that a better approach would be to transform the public transport strategy in stages, through empowering and restructuring existing public transport operators while developing and improving efficiencies of existing systems and improving existing infrastructure.

Implementation of goal 11, target 11.6: weekly refuse disposal service, Indicator 11.6.1 – proportion of urban solid waste regularly collected and with adequate final discharge out of total urban solid waste generated, by cities.

The greater Rustenburg area has approximately 120 000 service points of which approximately 100 000 points are serviced by the appointed waste collection contractors. Areas not receiving basic waste Management services include:

- Some Informal Settlements
- Rural areas

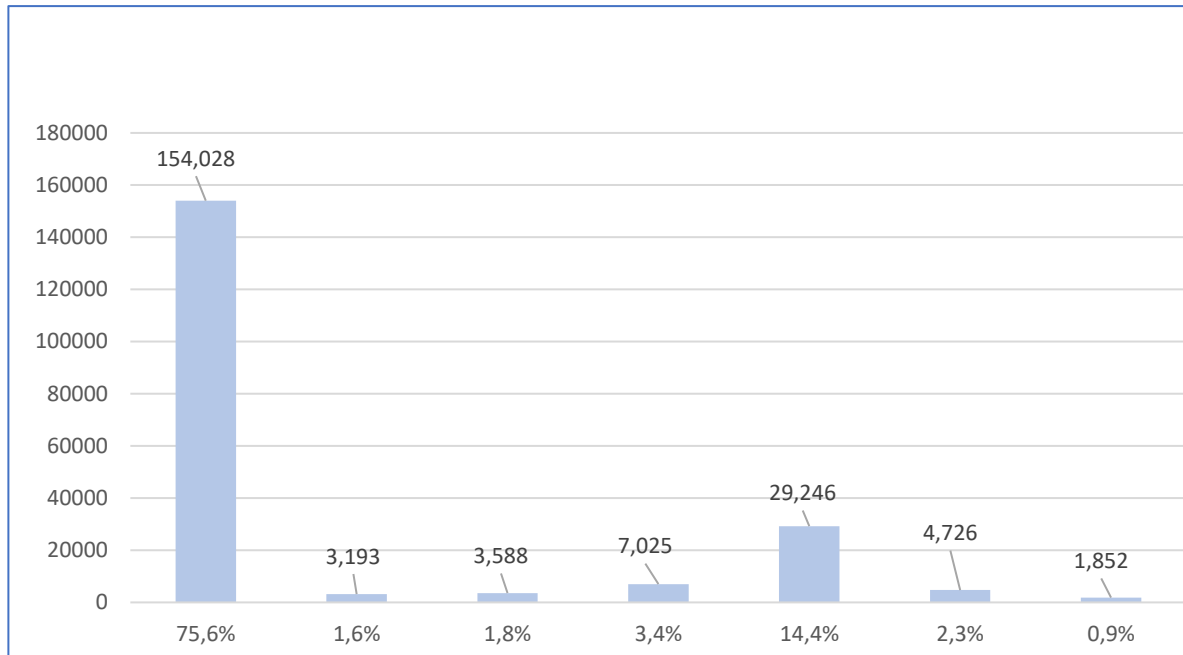
- Farm houses
- Villages serviced by the Royal Bafokeng Administration

The outsourcing of the waste collection services has assisted the municipality in regionalizing the service and reducing the transport and monitoring cost for the municipality. The collection of waste from a bigger part business premises is done through a public- private partnership, whereby service provider registers with the municipality to collect waste from business premises. Private waste collectors are registered with the Municipality in terms of Section 45 of the Rustenburg Local Municipality's Integrated Waste Management By-law. Private waste collectors are charged disposal fee at the landfill site as per the approved tariffs. Currently garden waste is disposed at the dedicated area at the Waterval Landfill Site. With the operationalisation of STRUMOSA drop off area and currently operating from Monday to Sunday, residents can dispose off garden waste ONLY, free of charge. Supplementary to the waste collection services, the Municipality provides alternatives waste service, mostly to areas that are not serviced, through clearing of illegal dumping, partnership with communities by providing and removing of skip bins and community-based projects for various waste management activities.

In terms of waste disposal facilities, RLM has one operational regional waste disposal facility, Waterval Landfill Site. The Waterval Landfill Site receives domestic municipal waste as well as organic waste. No hazardous waste are accepted at the Waterval Landfill Site. Strumosa Waste Drop Off facility also accepts garden waste for non-commercial community member, free of charge. Generators of non-domestic waste including medical waste have their own service providers that collect and transport hazardous waste to Hazardous waste facilities in Gauteng and Klerksdorp.

Name	Frequency	%
Removed by local authority at least once a week	154 028	75,6%
Removed by local authority less often	3 193	1,6%
Communal refuse dump	3 588	1,8%
Communal container/central collection point	7 025	3,4%
Own refuse dump	29 246	14,4%
No Rubbish Disposal	4 726	2,3%
Other	1 852	0,9%

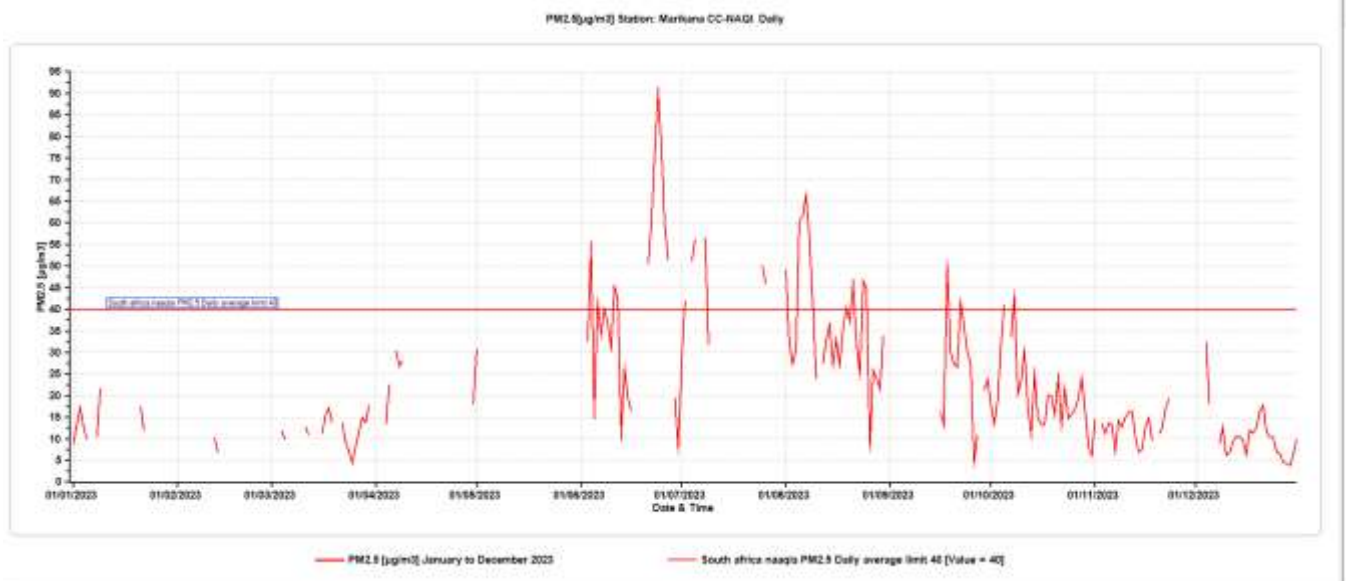
Source: Statssa Census, 2022



Implementation of goal 11, target 11.6, indicator 11.6.2A - National Air Quality Indicator (NAQI)

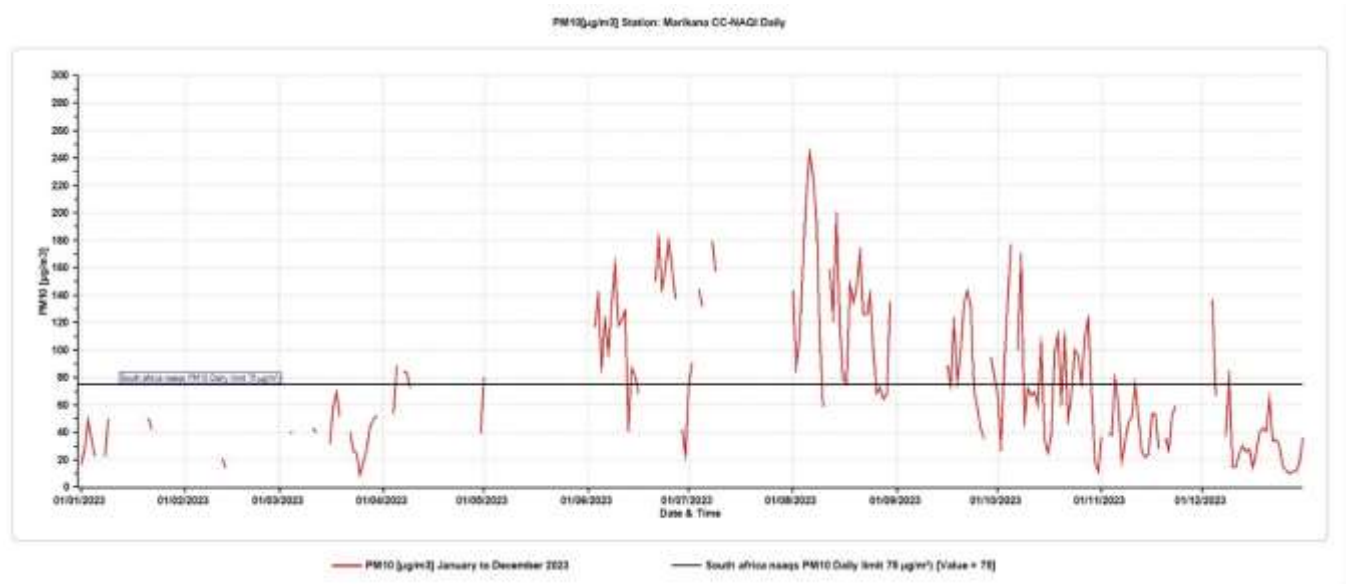
In 2018, the Department of Forestry, Fisheries, and the Environment (DFFE) established a NAQI Station Management Programme as a nationwide intervention to address challenges that provinces and municipalities were experiencing with the management and maintenance of the National Ambient Air Quality Monitoring Network (NAAQMN). Marikana Air Quality Monitoring Station of the Rustenburg Local Municipality was chosen for the NAQI Project.

Statistical analysis of particulate matter (PM2.5) data collected at the Rustenburg Local Municipality, Marikana monitoring network for the period 01/01/2023 to 01/12/2023.



Source: South African National Air Quality Standards, 2023

Statistical analysis of particulate matter (PM10) data collected at the Rustenburg Local Municipality, Marikana monitoring network for the period 01/01/2023 to 01/12/2023



Source: South African National Air Quality Standards, 2023

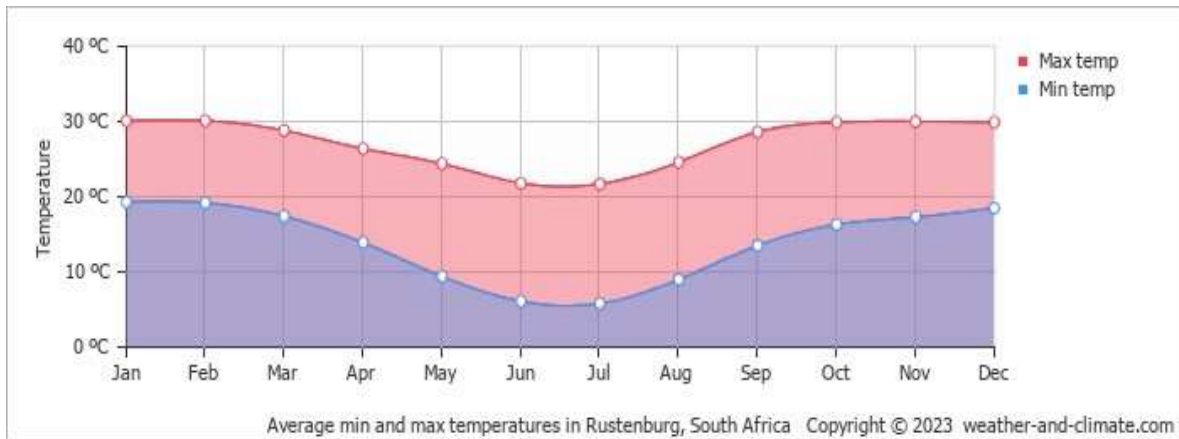
Rustenburg Local Municipality Climatic Conditions.

Rustenburg receives an average rainfall of about 605mm of rain per year, with most rainfall occurring mainly during mid-summer and an average temperature of 18°C. The City normally receives the lowest rainfall (6.5mm)

in June and the highest (178.37mm) in January. The monthly distribution of average daily maximum temperatures (charts below) shows that the average midday temperatures for Rustenburg range from 20°C in June to 30°C in January. The region is the coldest during July when the mercury drops to 1.70°C on average during the night.

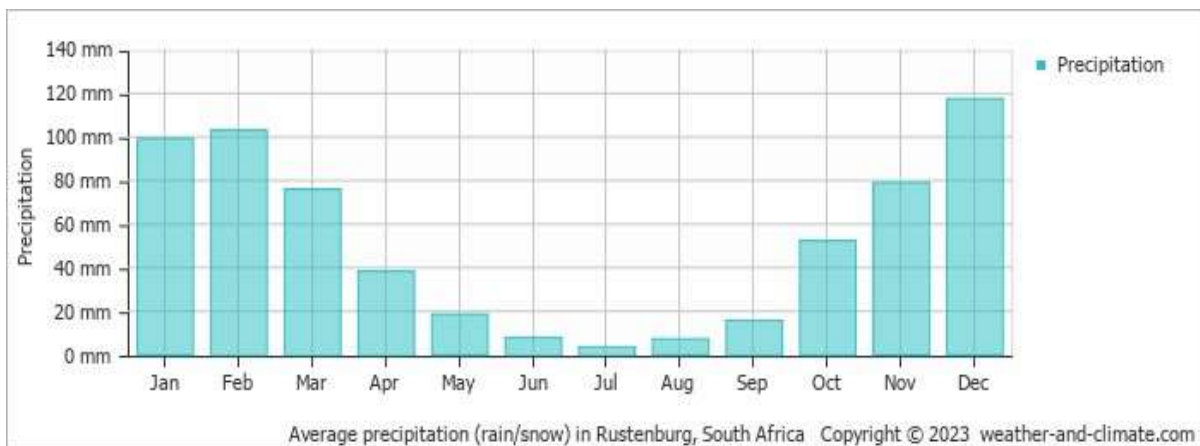
Temperature and Rainfall

Average Rustenburg temperatures



AVERAGE MIN-MAX TEMPERATURES IN RUSTENBURG

Rainfall



AVERAGE PRECIPITATION IN RUSTENBURG

2.4 Implementation of goal 5, target 5.5, indicator 5.5.1 – proportion of seats held by women in local governments

SDG 5, Achieve Gender Equality and Empower all Women and Girls, seeks to address the unequal and precarious position of women in South Africa, in alignment with the priorities outlined in the Constitution, as well as the NDP, regarding South African women's access to freedom, human rights, a safe and secure society, and participation in opportunities. Equality for women in South Africa means equal access to education, equal access to economic resources and employment opportunities, recognition and valuation of unpaid care and domestic work, and access to political participation, leadership and decision-making processes. The top political leadership of RLM is comprised of three women, the Executive Mayor (Cllr Sheila Mabale-Huma), Single Whip (**Cllr. Makhanda R R**) and Speaker of Council (Cllr Lebogang Ndou-Pule). The following are members of the Mayoral Committee and are political heads of specific portfolios. The table below shows gender representation within the Mayoral committee.

No.	PORTFOLIO	MEMBERS OF MAYORAL COMMITTEE FOR DIRECTORATE	GENDER
1	Cllr. Merriam Phalole	Budget and Treasury	Female
2	Cllr. Abisai Seleka	Community Development	Male
3	Cllr. Maleho Gaonakala	Directorate: Corporate Support Services	Male
4	Cllr. Isabela Macone	IDP, PMS and Legal Services	Female
5	Cllr. Thabang Rampou	Local Economic Development	Male
6	Cllr. Poppy Lebethe	Planning and Human Settlement	Female
7	Cllr. Boipelo Marekoa	Public Safety	Female
8	Cllr. Selebaleng Pule	Roads and Transport	Female
9	Cllr. Virginia Mputle	OEM: IGR and Special Projects	Female
10	Cllr. Karabo Phutu	Technical and Infrastructure Services	Male

The Special Projects Unit of the Municipality is based in the Executive Mayor's office and deals with issues such as:

- People living with disabilities,
- Women, Youth and children,
- NGOs and NPOs and others.

Activities such as Mayoral children's day where Early Childhood Development Centres (ELCs) compete in different sporting codes and are given awards. The Mayoral bursary fund is targeting the youth of all races and gender that performed well in matric are assisted with furthering their studies.

2.5 Implementation of goal 6, target 6.1, Indicator 6.1.1 – Proportion of population using safely managed drinking water services and 6.2, Indicator 6.2.1 – Proportion of population using (a) safely managed sanitation services and (b) a hand washing facility with a soap and water.

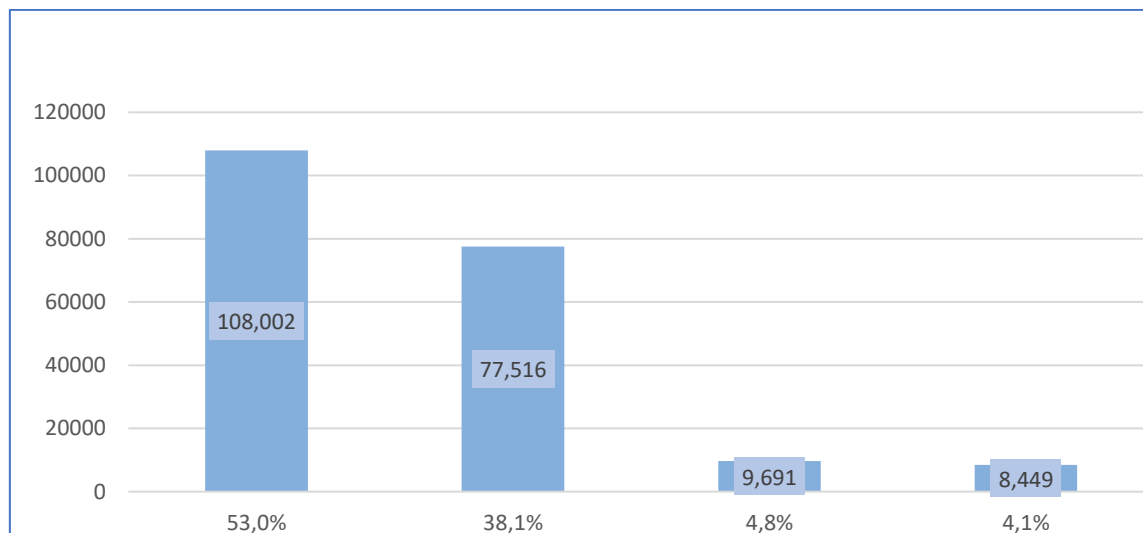
SDG 6 "Clean Water and Sanitation" seeks to ensure the availability and sustainable management of water and sanitation for all by 2030. Access to clean water and sanitation is a fundamental human right. The global and South African contexts highlight the urgent need for action to address the challenges of water and sanitation access, particularly for marginalized and vulnerable populations. Achieving SDG 6 requires a coordinated and sustained effort from governments, civil society, the private sector, and individuals to promote sustainable water management and governance practices, invest in water and sanitation infrastructure, and promote sustainable behaviours and practices.

In the South African context, the challenges of water and sanitation access are particularly acute. South Africa is a water-scarce country, with limited water resources and high levels of water demand. In addition, South Africa is facing significant environmental and economic challenges that impact its ability to achieve SDG 6. One of the major challenges is the impact of climate change on water resources, with prolonged droughts and occasional flooding impacting agricultural production, and destroying infrastructure. The challenges of water scarcity and water stress are exacerbated by high levels of poverty and inequality, which make it difficult for many people to access safe and sustainable water and sanitation services. Rustenburg Local Municipality (RLM), as a Water Services Authority, has the mandate and responsibility to conform to the Water Services Act (WSA) 108 of 1997, and also adhere to prescribed compulsory national norms and standards in accordance with Sections 9 and 10 of the Act. RLM ensures that all water conservation and water demand management initiatives are implemented and that these are reflected within the annual budget, the Integrated Development Plan (IDP), and the Water Services Development Plan (WSDP). RLM provides water services to approximately 700 000 residents including the mining industry and other commercial industries. The key sources for the abstraction of water are Rand Water, Magalies Water, and the Rustenburg Water Trust (RWST). The greatest advantage that enables RLM to provide portable drinking water is the highly skilled technical team that works tirelessly and diligently to ensure that sustainable water provision is provided to its consumers for both industrial purposes and consumption.

Rustenburg Local Municipality understands its full responsibility and accountability to ensure that service delivery is rendered efficiently and effectively to all communities within the municipal periphery, which encompasses compliance and regulations governing the drinking water quality fraternity. RLM has a water master plan in place that makes provision for the envisaged population growth and industrial development, as Rustenburg is qualified as one of the rapidly growing cities in the country.

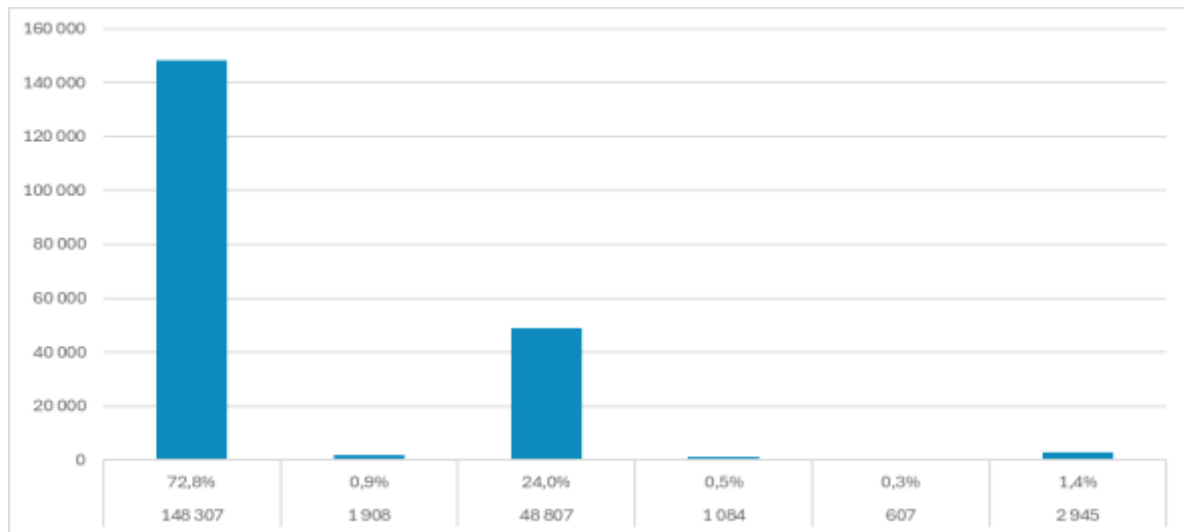
Indicator 6.1 Access to piped water in the dwelling.

Name	Frequency	Percentage (%)
Piped (tap) water inside the dwelling	108 002	53.0%
Piped (tap) water inside the yard	77 516	38.1%
Piped (tap) water on community stand	9 691	4.8%
No access to piped water	8 449	4.1%



Indicator 6.2 Flush toilets connected to sewerage

	Frequency	%
Flush toilet	148 307	72,8%
Chemical toilet	1 908	0,9%
Pit toilet	48 807	24,0%
Bucket toilet	1 084	0,5%
Other	607	0,3%
None	2 945	1,4%



Rand Water, Magalies Water and Rustenburg Water Services Trust monitors' water quality distributed from their Water Treatment Works to Rustenburg Local Municipality. Rustenburg LM monitors the quality of water at all the distributions to ensure that the water supplied to the residents of Rustenburg meet the standards for drinking water and is safe for human consumption.

The Water Conservation and Water Demand Management Strategy is a fundamental step in promoting water use efficiency and is consistent with the National Water Act (Act 36 of 1998) which emphasises effective management of our water resources. Rustenburg is currently one of the fastest-growing cities in South Africa due to being the major platinum producer. With increased population comes greater demand and pressure on the existing water infrastructure and services.

Rustenburg Local Municipality is supplied with an average of 137 ML/day from the Bulk Water Suppliers. One of the roles of the Water Services Authority is to incorporate WC/WDM in its Water Services Development Plan (WSDP) and ensure its implementation by Water Services Providers (WSP). Therefore, RLM water unit embarked on projects to address WC/WDM. RLM Water unit initiated several projects aimed at addressing the replacement of AC pipes through WC/WDM which has subsequently reduced water loss margins. The unit in conjunction with Magalies Water embarked on a war on leaks programme in Boitekong and other affected areas to reduce water losses.

2.6 Implementation of goal 8, targets 8.3, Indicator 8.3.1 – Proportion of informal employment in total employment, by sector and sex.

SDG 8 aims to address and enable the promotion of economic growth and decent employment by tracking performance and providing quantitative reporting of the country's economic activities to inform evidence-based policy formulation. The 2030 Agenda emphasises decent employment and economic growth as an encompassing measure of an economy's or region's progress.

Name	2022	2011
Working age population (15-64 years)	71,3%	72,5%
Elderly (65+ years)	4,0%	3,4%
Dependency ratio	40,3	37,9

LED plays a central role in fighting the triple challenges of poverty, inequality and unemployment by striving to stimulate economic growth, development and transformation. In this case, LED is striving to develop Rustenburg local economy into a diversified and vibrant world class economy. LED programmes that are expected to make a huge economic impact and registered progress on each:

STRATEGIC GOAL AND FOCUS AREA	PLANNED TARGETS	PROGRESS TO DATE
Rustenburg Gateway Precinct - African Convention Centre & Hotel	Land acquisition / availability and investment promotion	Council resolution for a 5ha land at Civic Centre for a convention centre and hotel.
Rustenburg Gateway Precinct Trade and Investment Promotions Development Centre	Trade and investment promotional products identified and ring-fenced	LED one-stop office for implementation for catalytic projects and enterprise development has been constructed at the showgrounds and will be resourced to support the catalytic investment function and SMMEs.
Rustenburg Gateway Precinct – Flea Market	Operation of flea market	Flea market has been completed and officially opened with local crafters trading until the COVID-19

STRATEGIC GOAL AND FOCUS AREA	PLANNED TARGETS	PROGRESS TO DATE
		regulations that affected the tourism sector leaving crafters with no business at the market. The Directorate is leading a programme to promote the facility and to ensure that there are activities at the Visitors Information Centre.
Rustenburg Gateway Precinct – Rustenburg Showgrounds	Development of the Farmer Support/ Agri-Park Model. Facility to be used to promote activities and support the tourism sector.	Farmer Production Support Unit approved to be hosted at the showgrounds for livestock farming support including agriculture shows and auctions. Long term lease pending approval for race track & other amenities.
Industrial Park (SEZ) including Fresh Produce Market and Aerodrome	Proclamation, re-zoning and investment promotion	Township Establishment underway for the development of the Waterval Industrial Park pending revision of the Environment Impact Assessment. Alternative land identified through land donations from Sibanye to host the SEZ or industrial park – donation in progress. Council has approved the transfer of land to North West development Corporation to be used for the purpose of establishing an Industrial Area/SEZ in Rustenburg Local Municipality.
CBD Regeneration and Precinct Plans	Final plans with National Treasury	Rustenburg ext.30 developed with Rustenburg Mall completed.

STRATEGIC GOAL AND FOCUS AREA	PLANNED TARGETS	PROGRESS TO DATE
		Additional development pending finalisation of the transfer of the additional land made available to investor.
Education Hub – University of Technology & Centre of Excellence in Mining	Land availability, investment promotion and recruitment of higher learning institution	Directorate attending to several enquiries. Few proposals received previously not responding to the Municipality' expectations. Currently considering other proposals with one written intent received.
Packaged Projects	Feasibility studies and bankable business plans for 6 projects	No approved development to date on the 5 approved precincts. Precinct plans proposed to be revised / repackaged for aggressive investment campaign
Annual Review of Investment Incentives	Annual review of investment incentives	Approved incentive policy guidelines to be reviewed with comprehensive implementation plan.
Market Development for SMMEs (links to masterplan projects)	Identification and packaging of market opportunities from the municipality and the mines	Signed Agreement with DPWI for the implementation of the Contractor Development Programme. Establishment of partnership with Enterprise Development and sector specialists for the development implementation of LED Programmes.
Identification and Profiling of SMMEs	Acquire SMME database and register SMMEs and job seekers across all wards.	SMME database platform to be developed. Profiling and marketing of

STRATEGIC GOAL AND FOCUS AREA	PLANNED TARGETS	PROGRESS TO DATE
		<p>SMMEs on the LED social media platforms.</p> <p>Council has approved the establishment of the Rustenburg Business Council, the process of establishing the structure has begun.</p>
SMMEs and Co-operatives to be assisted with business development support interventions	Development of sustainable businesses across all sectors. Support of the Informal trading sector	<p>Directorate to continue conducting enterprise days and cooperatives development workshops across all Wards. Programme to develop cooperatives across all wards and to facilitate financial and non-financial support through sector stakeholders. Cooperatives to be profiled for market access through various municipality platforms and private sector opportunities. Various programmes developed and being implemented to support SMME to become sustainable – i.e. Vuk’uphile contractor development; Incubation in engineering, mining & manufacturing incubation; Green economy programme, Enterprise Development Support Programme.</p>

STRATEGIC GOAL AND FOCUS AREA	PLANNED TARGETS	PROGRESS TO DATE
		Support of the informal trading sector in partnership with stakeholders.
To facilitate the creation of jobs through SMME & Cooperatives development, tourism, agriculture, industrial, and, infrastructure projects	Sustainable jobs to be created. To reduce unemployment.	Over 3000 jobs have been created through the Municipality' LED and capital projects including private sector investments
Agriculture and Agro-processing	Ensure participation in Agri-Parks/FPSU and launch Marikana Agri-Hub	<p>Agriculture Development Support Programme implemented with following flagship projects developed and currently attracted various stakeholders to support the local agriculture sector:</p> <ul style="list-style-type: none"> - Sunflower Production - Farmer Support Production Unit - Amaranths Research and Commercialisation - Animal Production <p>Sunflower production currently at pilot stage with up to 1000 ha of land targeted for 2021/22 season and land size to increase over years.</p>
Housing	Land acquisition / availability and investment promotion	Council has identified and approved land to be developed for housing.

STRATEGIC GOAL AND FOCUS AREA	PLANNED TARGETS	PROGRESS TO DATE
Alternative Energy Production	Land acquisition / availability and investment promotion	To identify land and to promote Rustenburg as an Investment Destination for alternative energy.

2.7 Implementation of goal 13, target 13.2, Indicator 13.2.1 – Number of countries with National determined contributions, long-term strategies, National adaptation plans and adaptation communications as reported to the secretariat of the United Nations Framework Convention on Climate Change (UNFCCC), as linked to goal 11, target 11.6, indicator 11.6.2A

Rustenburg Local Municipality has an approved Climate Change Management Plan and Green House Gas Inventory that addresses the following:

Assessment of vulnerabilities

Adaptation to climate change refers to a process of adjusting to actual and expected climatic changes, or to the effects of climate change on social and ecological systems. Adaptation aims to moderate harm to human well-being associated with those changes, and to exploit potentially beneficial opportunities. To understand adaptation in the development context, the RLM must also take vulnerability into account. Vulnerability refers to the degree to which populations face harm from climatic changes.

Many factors including environmental, socioeconomic, and institutional factors contribute to climate vulnerability. Some people may be more vulnerable because their livelihoods make them especially sensitive to changing climatic patterns.

Water Resources

Climate change will stress water resources. Water is an issue in every South African municipality, but the nature of the potential impacts varies. Drought related to reduced precipitation, increased evaporation, and increased water loss from plants, is an important issue in the RLM. Water quality problems and impacts on aquatic ecosystems and species are likely to be amplified by climate change.

Agriculture

Crop and livestock production will be increasingly challenged. Agriculture is considered one of the sectors most adaptable to changes in climate. However, increased heat, pests, water stress, diseases, and weather extremes will pose adaptation challenges for crop and livestock production.

Terrestrial Ecosystems

Imbalances and/or modifications to ecosystems will increase due to distinction of most animal and plant species. These will affect vegetation and wildlife within the RLM.

Human Health

Threats to human health are expected to increase. Health impacts of climate change include heat stress, waterborne and food-borne diseases, poor air quality, extreme weather events, and diseases transmitted by insects and rodents. Robust public health infrastructure could reduce the potential for negative impacts from climate change.

Social and Environmental Stresses

Climate change will interact with many social and environmental stresses. Climate change will combine with air and water pollution, population growth, overuse and/or depletion of resources, urbanization, and other social, economic, and environmental stresses to create larger impacts than from any of these factors alone.

RLM Climate Change Management Plan and GHG Inventory -Revised Status Quo 2013

The key aspects vulnerable to climate change in the RLM, and the sectors accounting for the vulnerabilities can be represented in order of decreasing priority as Water and Energy, Transportation, Public Health and Ecosystems.

Adaptation

Given the many different drivers of vulnerability and the diversity of possible climatic changes, adaptation may entail any number of different activities. For example, a farming community may plant new crops that have a higher heat tolerance or resistance to drought. Safeguarding water resources: Water resources become stressed as the effects of climate change become more pronounced. Conflict between human and environmental demands is likely to intensify. Water basin management can be used to identify and adapt to these demands.

Disaster management

Disaster management strategies have been developed and implemented for the vulnerable community. These strategies include early warning procedures for natural disasters such as floods or droughts that are forecast to increase in frequency and magnitude. Strategic planning to minimize the impact of natural disasters in inhabited locations should also be considered. Strategies for robust protocols that alleviate the impacts of natural disasters in order to minimize loss of human life, economic assets and negative effects on rural societies, can also be implemented.

Diversifying economic activities

To minimize overall sensitivity to climate change, the municipality needs to diversify its economies to minimize the impact of market fluctuations.

Protecting health

As the climate changes, the potential for vector-borne diseases also changes. This is likely to have major impacts on health. The origins of such diseases and how they can be combated effectively are not yet clear, as the scientific background is not yet well understood. The RLM needs to improve their health care and emergency medical care systems.

Specific adaptation measures in the land use sector

In terms of its impact on agriculture, climate change threatens the suitability and productivity of crops and livestock. Further research into and deployment of drought resistant crops could increase food security and prevent malnutrition and starvation caused by the impacts of climate change. In terms of the forestry sector, climate change jeopardizes wood and non-wood production. Projects in this sector often aim to combat soil erosion and desertification by promoting agroforestry and preventing woodland destruction. In such cases, adaptation focuses on enhancing the natural regeneration of degraded forest lands, supporting reforestation, promoting agroforestry and the adoption of sustainable forest harvests, and on management approaches.

Protecting natural resources and ecosystems

The identification, restoration, protection and linking of conservation areas plays an important role in protecting biodiversity. In many cases, the continued availability of ecosystem services can be ensured by working towards adaptation in other sectors such as forestry.

The key sectors and/or directorates within the RLM relevant for successful adaptation programmes include Health, Water and Energy, Transport, Disaster Management, Agriculture and Land Use.

Mitigation

Land Degradation, desertification and persistent drought processes undermine the capacity of ecosystems to provide food, water and other services, leading to major declines in the welfare of vulnerable populations. Integrated approaches to tackling land degradation/desertification, drought and climate change therefore have multiple benefits, especially for vulnerable communities. Activities such as CDM projects in the agriculture, rural and land use sectors, have high potential to generate multiple benefits in terms of emission reductions/removals, in halting the expansion of land degradation and desertification, and in providing effective tools for drought mitigation.

The current mitigation initiatives in the RLM focus on waste minimisation, education and awareness, greening projects, water and energy conservation, and reforestation. The sectors involved in reduction initiatives are waste, energy, transport and agriculture. Possible mitigation initiatives that can be conducted by the RLM should therefore include the following:

(1) Agriculture - Cropland and grazing management

- Conservation measures
- Fertilizer switch or management to reduce N₂O emissions
- Biodigestion and other methane-based projects
- Livestock management Cropland and grazing management

(2) Forestry - Afforestation/reforestation

- Avoided deforestation
- Sustainable forest management

(3) Energy - Biofuel/bioenergy and fuel-switch projects (e.g., oil/gas)

- Small hydro projects (possibly combined with forestry activities such as watershed protection)
- Energy efficiency

The following GHG mitigation services related to the avoidance of land degradation and desertification have the potential to generate carbon credits either under the Kyoto markets Joint Implementation (JI), CDM mechanisms, or voluntary schemes:

- (4) Carbon sequestration through afforestation, reforestation and restoration of degraded lands, agroforestry, cropland and grazing management and silviculture, promoting increased carbon stocks in biomass or soil carbon enhancement (e.g. alternative tillage practices);
- (5) Carbon conservation through conservation of biomass and soil carbon in protected areas, improved forest management practices (e.g. reduced-impact logging), and fire protection and more effective use of prescribed burning in forest and agricultural systems;
- (6) Carbon substitution through increased transfer of forest biomass into durable wood products to replace energy-intensive materials (e.g. steel), sustainable use of biofuels, and enhanced harvesting and utilization of waste as biofuel (e.g. sawdust);
- (7) GHG reduction or avoidance through bio-digestion and other methane-based projects in the agriculture and rural sectors, and energy-related projects that earmark financial resources (e.g. from carbon credits) to finance community or land-use management activities.

Conclusion and efforts going forward

The first Voluntary Local Review of the Rustenburg Local Municipality mapped out efforts to implement the United Nations' 17 Sustainable Development Goals and 2030 Agenda. This can be seen as a learning process that assisted in inward looking and planning forward on how the goals can be achieved. As earlier mentioned, not all goals are addressed thus the report is limited to the 6 selected. Challenges faced in reporting work done by the municipality towards implementation of the goals gave a chance to come up with some recommendation going forward. They are as follows:

- Enforce adequate housing policies that promote affordable and decent housing with access to basic services.
- Implement informal settlement upgrading programs and urban redevelopment projects to improve living conditions.
- Promote income generating opportunities to empower vulnerable populations and improve their housing affordability and livelihoods.
- Foster community participation in decision-making processes related to urban development.
- Adopt integrated and holistic approaches that consider social, economic, and environmental aspects of sustainable urbanization.
- Emphasize the importance of land use planning to prevent inefficiencies and negative socio-economic and environmental impacts.
- Optimize land use and improve green infrastructure, such as parks and open spaces.

- Allocate adequate funding for waste management activities, including infrastructure construction, equipment procurement, staff training, community awareness programmes and overall planning and management, And
- Implement comprehensive urban planning strategies to guide development.

The RLM will continue improving and reporting implementation of SDGs on a regular basis.

References

1. RLM Climate Change Management Plan, 2013
2. RLM IDP 2025/2026
3. Statistics South Africa Census 2022