ENVIRONMENTAL IMPACT ASSESSMENT FOR THE PROPOSED ACTIVITY IN RUNDU

Establishment of the Flexible Land
Tenure Schemes in the Ndama-South
Informal Settlement in Rundu,
Kavango-East Region.

List of triggered activities identified in the EIA Regulations which apply to the proposed project

Activity 5.1 (d) Land Use and Development Activities

The rezoning of land from the use for nature conservation or zoned open space to any other land use.

Activity 5.2 Land Use and Development Activities.

The establishment of land resettlement schemes.

Activity 10.1 (a) Infrastructure

The construction of oil, water, gas and petrochemical and other bulk supply pipelines (The project involves the installation of bulk services)

Activity 10.1 (b) Infrastructure

The construction of Public roads (The proposed project includes the construction of roads)

Activity 10.2 (a) Infrastructure

The route determination of roads and design of associated physical infrastructure where — it is a public road; (The proposed project includes the route determination of roads)

BACKGROUND INFORMATION DOCUMENT

1 PURPOSE OF THIS DOCUMENT

The purpose of this Background Information Document (BID) is to brief Interested & Affected Parties (I&AP's) about the Environmental Impact Assessment (EIA) being undertaken for the proposed development activities in Rundu.

The BID also provides an opportunity for I&APs to register for the EIA process and to submit any initial comments or issues regarding the proposed project.

2 BACKGROUND INFORMATION

The Rundu Town Council hereinafter referred to as the proponent intends to undertake the following activities:

- a) Establishment of the Flexible Land Tenure Schemes in the Ndama-South Informal Settlement in Rundu, Kavango-East Region.
- a) Creation of block erven and streets within the Flexible Land Tenure Scheme Boundaries of the Ndama-South Informal Settlement in Rundu.
- b) Provision of associated bulk services.

In terms of the Environmental Management Act (No. 7 of 2007) and Environmental Impact Assessment Regulations (Government Notice No. 30 of 2012), the listed activities indicated above were triggered by the proposed project.

The proponent commissioned this EIA and appointed Stubenrauch Planning Consultants (SPC) to undertake the necessary activities to enable an application for an Environmental Clearance with the Environmental Commissioner as prescribed by the Environmental Management Act (No. 7 of 2007) and Environmental Impact Assessment Regulations (Government Notice No. 30 of 2012). In line with Regulation 21(2) of the



mentioned EIA Regulations, this BID is distributed to potential I&APs as part of the public consultation process for this EIA.

This Environmental Assessment will therefore be undertaken to determine the potential environmental and socio-economic impacts associated with the proposed development activity.

3 DEVELOPMENT DESCRIPTION

3.1 Locality

The town of Rundu is located in central north-eastern part of Namibia as depicted in Figure 2 below. It lies on the south bank of the Okavango River, which forms the border between Angola and Namibia.

The Ndama-South Informal Settlement is located south of Rundu town, adjacent to the formalized Ndama Township Extensions which are located directly south of the B8 Main Road to Katima Mulilo as indicated in **Figure 2** below.

According to the settlement analysis conducted by the Deutsche Gesellschaft für Internationale Zusammenarbeit GmbH (GIZ) in 2021/2022, the size of the settlement is estimated to be approximately **299.94ha** in extent.

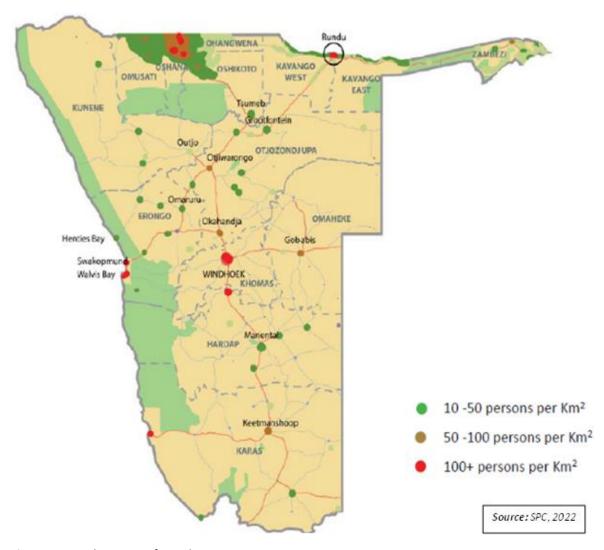


Figure 1: Locality of Rundu at the National and Regional context

Figure 1: Locality Map of Rundu



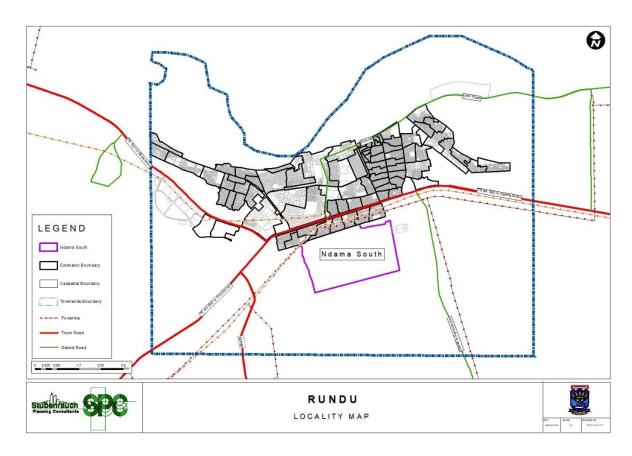


Figure 2: Locality Map of Ndama-South Informal Settlement in Rundu

3.2 Zoning

Town and Townlands areas owned by a Local Authority are normally reserved for future town expansion purposes. The Rundu Town Council has earmarked the Ndama-South Informal Settlement which is the largest and densely populated informal residential area in Rundu for the implementation of the FLTS in terms of the Flexible Land Tenure Act, 2012 (Act 4 of 2012).

3.3 Ownership

The Ndama-South Informal Settlement is located within the urban areas owned by the Rundu Town Council and are under the administration of the Rundu Town Council. Furthermore, the RTC as the registered owner of the land on which the Ndama-South Informal Settlement is located has legal rights to establish the FLTS on the earmarked settlement and administer any form of development that aim to sustainably uplift the social and economic standards of the area.

3.4 Project Background

Namibia experiences a daunting housing backlog, a situation that calls for accelerated housing development efforts. Namibia is classified as a lower to middle-income country. However, the most recent estimate of income distribution showed that Namibia still is one of the most skewed in the world (as per Gini-coefficient inequality measure) NHP 2009. A large proportion of the population therefore lives in poverty and lacks access to essential services. This is mainly caused by the influx of people to urban areas in search for jobs and better livelihoods. However, as people flock to urban areas, they mostly settle informally on any available piece of land as most of them cannot afford fully serviced urban land, consequently increasing the footprint of the urban informality. This has resulted in many urban dwellers occupying land without having obtained approval from the landowners and without having any form of tenure security, thereby exposing themselves to high chances of being evicted by the relevant authorities.

In terms of poverty and inequality, Namibia is characterized by extremely high, although slightly decreasing, income inequality. It is then noted that Namibia remains at the top of the list in terms of the GINI Index. Furthermore, 88% of households in Namibia have a monthly household income of less than N\$ 10,000, and even employees in Namibia's public service sector who are considered middle income, including nurses, teachers, police officers, and military personnel experience difficulties in accessing adequate housing (NHP 2022).

The town of Rundu is located in the central north-eastern part of Namibia as depicted in **Figure 1** below. It lies on the south bank of the Okavango River, which forms the border between Angola and Namibia. The Rundu town was founded by the South African government and served as an administrative Centre for the Kavango Region since 1963. Rundu is the main urban settlement in the Kavango East Region and the second largest town in Namibia by population. The town is recognized as a Town Council in terms of the Local Authorities Act, 1992 (Act No 23 of 1992).

Rundu, the capital of the Kavango-East Region with an estimated population of about 63 431 (Rundu Structure Plan 2013 - 2040) and an area measuring 164.1 kilometres, is experiencing a backlog in the provision of affordable housing. According to the report on the economic profile of Rundu compiled

by First Capital Namibia in 2018, the backlog in the provision of affordable housing in Rundu is estimated at a total demand of around 12,460 houses. The report further highlighted that Rundu is the town with the highest number of shacks after Windhoek, whereby about 8150 families in Rundu live in informal settlements (August 2018). The mushrooming of informal settlements in Rundu results from the rapid in-migration of people in search of better opportunities and livelihoods.

Although Rundu is the administrative Centre of the Kavango-East, it is still largely serving the Kavango-West Region. The town is the main and only commercial Centre of both regions and the rapid influx of people from the rural areas to the town of Rundu results in accelerated demand for social and municipal services which places the town administration under enormous pressure and financial strain.

The town or Rundu comprises of six (6) urban areas: Kasote and Sauyemwa in the west, Rundu and Kehemu in the central area, Kaisosi to the east and Ndama in the south with settlements and villages in the outskirts of the urban area. The six urban areas are all governed by the Rundu Town Council that consists of seven (7) politically elected and appointed Councilors and the Chief Executive Officer.

There are approximately **22,677** planned erven falling within **94** Township extensions in Rundu, while approximately **15,544** informal structures are erected on unplanned and un-serviced land within Kasosi (**2,790**), Kasote (**3,790**) and Ndama (**8,957**) (Deutsche Gesellschaft für Internationale Zusammenarbeit (GIZ), 2021).

The geographical footprint which falls under the administration of the Rundu Town Council comprises of approximately **15,517.72ha** in extent, most of which is currently occupied by traditional homesteads and is being utilized for seasonal subsistence agricultural farming by the residing communities.

The Rundu Town Council generates their income from the rates and taxes which the Council charges on formalized and planned townships and registered erven. Within the informal areas no property rates and taxes are charged. Another source of income is from the land sales, land leases, water sales and Business Fitness charges. To ensure that there is adequate funding for service provision, the Rundu Town Council reserves additional funding from the line ministry.

The town of Rundu has grown into a multilingual and multicultural city, however dominated by the vaKavango people under the traditional administration of five kingdoms, namely, the Kwangali, Mbunza, Shambyu, Gciriku and Mbukushu Kingdoms.

3.5 Proposed Development

The Ministry of Agriculture, Water and Land Reform (MAWLR) is implementing the Flexible Land Tenure System (FLTS) in various Local Authorities around Namibia. The implementation is conducted in line with the provisions of the Flexible Land Tenure Act, 2012 (Act 4 of 2012) (FLTA) and its Regulations of May 2018. The objectives of the FLTA are:

- a) To create alternative forms of land title that are simpler and cheaper to administer than existing forms of land title.
- b) To provide security of title for persons who live in informal settlements or who are provided with low-income housing.
- c) To empower the persons concerned economically by means of these rights.

The Rundu Town Council in conjunction with the Deutsche Gesellschaft für Internationale Zusammenarbeit GmbH (GIZ), has commissioned an Environmental Impact Assessment (EIA) for the establishment of a Flexible Land Tenure Scheme in Rundu, Kavango East Region. An Environmental Impact Assessment (EIA) is to be conducted in terms of EMA for the creation of block erven and streets as well as the provision of associated Municipal bulk services within the Flexible Land Tenure Scheme Boundaries of Ndama-South Informal Settlements. The aim is to address the housing deficit and tenure insecurities that the Rundu town currently faces. This initiative is supported by the Ministry of Urban and Rural Development (MURD) and the Deutsche Gesellschaft für Internationale Zusammenarbeit GmbH (GIZ) through their Inclusive and Sustainable Urban Development Project (ISUD) which aims to support the co-creation of functional and resilient neighbourhoods through the upgrading of informal settlements.

3.5.1. Flexible Land Tenure Process

The Rundu Town Council has earmarked the Ndama-South Informal Settlement which is the largest and densely populated informal residential area in Rundu for the implementation of the FLTS in terms of the Flexible Land Tenure Act, 2012 (Act 4 of 2012). The Flexible Land Tenure Act (FLTA) was passed in 2012, and the Regulations were published in 2018. The FLTS was born from a need for a land delivery system that can make security of tenure affordable to those living in informal settlements around the country. Thus, the FLTS is intended to function largely in parallel to existing legislation with the surveying and registration of land administered through a Land Rights Office. The basis for all Flexible Land Tenure Schemes is the creation of a block erf, depicting the outside boundaries of a settlement. Within the block erf the system allows the creation of starter or land hold schemes.

The Flexible Land Tenure Act, 2012 (Act No.4 of 2012), creates new tenure system for land in urban areas by establishing two new forms of land title:

- A. Starter Title
- B. Land Hold Title

The Rundu Flexible Land Tenure Schemes

Rundu Town Council, hereafter referred to as the proponent is of the intention to establish the Flexible Land Tenure Schemes for the following identified areas:

Ndama-South Informal Settlement

Description of Identified Area

1. Ndama-South Informal Settlement

- The area on which Ndama-South is located has been previously used for subsistence agricultural production and farming, mainly for household consumptions.
- The residents of Ndama-South do not have any form of ownership of the land they are currently residing on.

- The area is not yet surveyed, nor serviced and it is currently being formalized and registered.
- ➤ Has limited to no access to services and facilities that are necessary for the efficient functioning of a settlement.
- The size of the settlement is estimated to be approximately **299.94ha** in extent, with a number of households estimated to be over 5000.
- Only 48.8% of the households in Ndama-South have access to toilet facilities which are self-built and not connected to the municipal sewer reticulation system. Many residents often resort to open defecation, risking the health and wellbeing of the residents as well as the natural and urban environment of Rundu.
- ➤ Not all the households within the Ndama-South settlement have access to individual water taps as only 36% of the household have their own taps. The ones who do not have own private taps either get water from other available water sources such as public taps, tanker trucks (when made available), the river or from the neighbors who have private water taps.
- The area does not have proper road infrastructure and movement networks.
- > The population of Ndama-South is estimated to be approximately 10374, comprising of various age groups as depicted in **Figure 3** below.

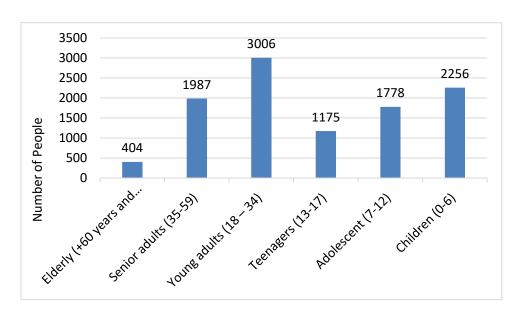


Figure 3: Population of Ndama-South Informal Settlement.

Infrastructure, amenities and livelihood

The Ndama-South Informal Settlement does not have proper roads infrastructure and movement networks. The residents navigate their ways through the settlement via the narrow paths with deep sand that they have created within the settlement.

The lack of proper movement networks makes it impossible for service vehicles such as the fire trucks and ambulances to navigate efficiently through the settlements in a time of need and it is also

challenging for individuals with small vehicles to drive through the settlement due to the heavy deep sand.

The subject area has limited to no access to services and facilities that are necessary for the efficient functioning of a settlement.

According to the settlement analysis conducted by the Deutsche Gesellschaft für Internationale Zusammenarbeit GmbH (GIZ) in 2021/2022 in the subject area of Ndama-South Informal Settlement, exposed that most of the residents do not have adequate access to steady income generating opportunities as most of them are either self-employed, informally employed or unemployed. This issue poses a threat to the living standards of the residents as they are likely unable to afford the daily basic human needs.

It further exposed that most of the residents are self-employed and most of them earn an income between N\$500 – N\$1500 per month which is mostly spent on food.

3.5.1 Engineering services

Electricity, water and sewer

The FLTA does not require that municipal services are to be installed at a starter title scheme nor does it specify that such must be of a certain standard or quality. Hence the installation of services can be phases by the respective communities as the funds become available; while also benefitting from the possibility to install services which would normally not be approved under the conventional planning process (CPP) development initiative.

The implementation of the FLTS in Ndama-South Informal Settlement will be conducted through the informal settlement upgrading process which reduces the pressure of engineering cost on the LA by allowing for community members to undertake the servicing of the project themselves. Typically, this would mean that the community would save until they have the appropriate funding after which they would then start with the construction of the priority services with the guidance of the relevant service providers and Rundu Town Council Engineering Department, and incrementally upgrade the services as the funding becomes available.

ENVIRONMENTAL ASSESSMENT PROCESS

- ➤ Establishing environmental risks of the intended project
- > Establishing mitigation protocol
- Preparing the draft Environmental Assessment Report (EAR) and Environmental Management Plan (EMP)
- Public reviewing of Draft EAR and EMP
- Preparing the final EAR & EMP and submitting to MEFT
- Awaiting decision from Authorities
- Communicating decision to Interested
 & Affected Parties
- Availing opportunities to Appeal.

Further, the installation of engineering services by the community themselves would seem to be less costly as the cost for labour can be excluded since the community will provide labour at no or at reduced cost to the project.

The reticulation systems of engineering services of water, sewer and electricity provided within the Rundu town boundaries have adequate capacity to be extended to and accommodate the settlements of Ndama-South once they have been formalized accordingly.

Once the Ndama-South Informal Settlement becomes formalized, the Council will appoint a civil engineer to attend to the design and installation of the municipal services within the areas. The design for the water and sewer services will be done in accordance and to the satisfaction of the Engineering and Technical Services Department of the Rundu Town Council. The electricity connection to the two areas will be done in accordance and to the satisfaction of NORED which currently provides electrical power to the town of Rundu.

Storm Water

Stormwater is drained as per the natural drainage system on the site and additional storm water drainage and management measures will be employed in accordance with the Rundu Town Council Drainage System.

4 ENVIRONMENTAL BASELINE INFORMATION

The environmental and social setting of the proposed project area is briefly described in this section. The detailed description of these environmental features will be fully presented in the environmental scoping report.

4.1 Biophysical Environment

4.1.1 Climate

The climate of Rundu is sub-tropical, tempered by the altitude, with a hot, rainy season from November to March and a long dry season from April to October (Cecchini, 2021). Situated in north-eastern Namibia, the Kavango East Region enjoys generally more rainfall than the rest of the country to the south and west. Annual average rainfall varies between about 450 and 600 mm, with a clear increasing trend from south to north. Rains fall almost entirely in summer, with the months from May to September usually being dry, and the first early rains coming to the region in October and November. Highest rainfalls usually occur in January and February (Stubenrauch Planning Consultants, Geocarta Namibia, SAIEA, AHT Group AG, 2015).

The Kavango East is usually warm to hot. Average maximum temperatures are above 30°C for nine months of the year, and average minimums are below 10 °C during the coolest months June, July and August. Temperatures below freezing are occasionally recorded but are rare and are usually only experienced in low-lying valleys such as found along the Kavango River and Omurambas (Stubenrauch Planning Consultants, Geocarta Namibia, SAIEA, AHT Group AG, 2015).

The warm dry conditions mean that evaporation is high. Rundu, for example, can expect to receive 590 mm of rain (the annual average), with a potential evaporation of about 2000 mm/a. Wind speeds are generally very low, and in most months, it is completely calm for over half the time.

4.1.2 Topography, Geology and Soils

The Kavango East Region is a gently undulating plain of unconsolidated sands, sloping gradually down northwards to the Kavango River and eastwards to the lowest areas along the river before it enters Botswana (Ministry of Lands and Resettlement, 2015). The sandy plain is incised by the Kavango River and other smaller ephemeral river channels, the most prominent one being the Omuramba-Omatako that runs roughly northwards to meet the Kavango River east of Rundu.

Rundu can be defined as predominantly flat with a topographic ridge line sweeping around the north of the town along the edge of the flood plain and turning back into the town as it follows the ephemeral water course (Stubenrauch Planning Consultants, 2013).

4.1.3 Hydrology, Hydrogeology and Drainage system

Surface water in Namibia is generally very limited and regarded as precious resources where they are available all year round. The most important water source in the Kavango East Region is the perennial Kavango River, which is the major source of water for the rural communities concentrated along the river (Ministry of Lands and Resettlement, 2015). Boreholes and dug-wells are concentrated along the Kavango River, the Omatako Valley and the main roads from Grootfontein to Rundu (Ministry of Agriculture Water and Rural Development, 2011). In addition, abstraction from the Kavango River provides water to Rundu Town, other smaller towns and agricultural schemes within the region.

5 POTENTIAL IMPACTS

The following potential impacts have been identified so far:

- Traffic Impacts: During construction the movement of construction material to and from site
 may cause additional traffic. Traffic may also be increased in the area once the areas are
 fully developed.
- **Disturbance:** During construction the surrounding property owners and community members may be disturbed by the construction activities.
- Waste: During construction and operation, waste may be generated on site which would have to be disposed of at an approved landfill site.
- **Ground and surface water impacts:** may be experienced during construction due to the use of machinery and chemicals to construct the roads and services infrastructure as well as during operational activities.
- **Dust and noise** may be generated during construction activities.

- **Visual Impact**: The area is currently mostly undeveloped as such there may thus be a change in visual characteristics of the site once it becomes developed.
- **Employment Creation:** During construction temporary jobs may be created for the construction of the associated services.

More potential impacts of the proposed activity will be identified upon consultations with the public and further research on the area.

6 PUBLIC CONSULTATION

The Environmental Impact Assessment process involves interaction with people who are interested in, or who could be affected by the proposed development and/or operational activities of the proposed Rundu development.

To further obtain inputs into the developments to take place, communication will be sent out to various potential I&APs and Line Ministries in addition to the public notices to be placed in the newspapers, on the sites and around the subject area to obtain comments on the proposed developments.

7 ALL STAKEHOLDER/INTERESTED & AFFECTED PARTIES (I&AP)

Public participation process gives you the opportunity to:

- Obtain information about the proposed project
- Raise any environmental issues relating to the project

How can you be involved?

- By responding to the invitation advertised in the newspapers
- > By registering as an I&AP, for your name to be added to our register list
- Submitting your comments or requests in writing.

We are inviting the public to participate by contributing issues and suggestions regarding the proposed projects on or before **19 October 2023.** For further information, or concerns, I&APs can complete the register below:

8 REGISTRATION AND COMMENTS

Participant Name:	Organization/Affiliations:
Position:	Telephone:
Fax:	E-Mail:
Postal Address:	
Comments/Suggestions and Questions:	

Please fill in particulars and return completed document to be registered as an Interested & Affected Parties (I&AP) to:

Stubenrauch Planning Consultants (SPC)

Tel: 061 25 11 89

E-Mail: bronwynn@spc.com.na