

# Environmental Scoping and Management Plan

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The Proposed Farm Purchase, Infrastructure (Fences and Water Supplies) and Rangeland (Bush Thinning) Improvement for Enhanced Livestock Production on Farm Eindpaal No. 164, about 35 km Northwest of Gobabis in the Omaheke Region

**NOVEMBER 13**



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**DOCUMENT INFORMATION AND APPROVAL**

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<b>ECC Application Reference number</b>	APP-002390	
<b>Location</b>	Farm Eindpaal No. 164, about 35 km Northwest of Gobabis in the Omaheke Region	
<b>Proponent</b>	Mrs. Madelize van Zyl 24 Bognor Street, Summerstrand - Port Elizabeth P. O. Box 22458, Windhoek, 9000	
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# executive summary

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## Project Overview

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Mrs. Madelize van Zyl (herein referred to as the proponent), is an entrepreneur who ventures in the beef value chain in Southern Africa, and who wishes to acquire, restore the livestock viability of degraded (bush encroached) Farm Eindpaal No. 164 to enhance its potential (carrying capacity) for the sustainable livestock production. Their primary objective, is to adopt best-practice and sustainable bush-thinning approaches that combines both mechanical and application of granular tree and shrubs herbicides i.e. Limpopo 200 GG Herbicide.

Farm Eindpaal No. 164 is situated approximately 35 km Northwest of Gobabis in the Omaheke Region (see **Figure 1**). The farm is accessible directly via the C30 district road exit north-west of Gobabis in the Summerdown district. Livestock production, has been suspended for the past couple of years as a result of bush-encroachment. The proposed agricultural activity triggers some listed activities in terms of the Environmental Management Act no. 7 of 2007 and the Environmental Impact Assessment Regulations of 6 February 2012 that may not be undertaken without an environmental clearance certificate (ECC).

Potential impacts may vary in terms of scale (locality), magnitude and duration e.g. minor negative impacts in the form of dust and noise pollution especially during the handling (loading and off-loading) will be experienced.

## Need for the Project

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Bush encroachment can be defined as thickening of aggressive undesired woody species, resulting in an imbalance of the grass: bush ratio, a decrease in biodiversity, a decrease in carrying capacity and eventual economic losses. The phenomenon of bush encroachment in Namibian savannas is regarded as part of the desertification process since the increase in the extent and density of woody vegetation occurs at the expense of other desirable grasses and forbs, resulting in an alarming reduction in productivity.

It is generally accepted that the decline in the carrying capacity of Namibia's rangelands could be anything from 100% or more. The overriding problem caused by high densities of invader bush is its absolute superiority in competing for water in the upper layers of the soil. It is of utmost importance that the productivity of our natural rangelands is maintained at the highest possible level. Namibia cannot afford to have a biological system where, because of bush encroachment and a veld in poor condition, more than 50% of the annual rainfall is lost. The practical implication is that, even if a farm gets 300mm of rain, it will effectively be reduced to 150mm. The frequency of artificial droughts created in this way cannot be afforded.

Overall, the Farming activities is expected to generate full time medium to long term direct employment for at least 5-10 workers. The majority of workers to be employed on the proposed Farming project are expected to be skilled and/or semi-skilled (general labourers and operators).

Critically, going ahead with the proposed activity creates potential for the following marginal net benefits:

- Contribution Taxes and Royalty
- Technological Skill and Knowledge transfer
- Creates the most needed employment opportunities

## **Project Description**

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Mrs. Madelize van Zyl wishes to acquire, restore the livestock viability of degraded (bush encroached) Farm Eindpaal No. 164 to enhance its potential (carrying capacity) for the sustainable livestock production. Their primary objective, is to adopt best-practice and sustainable bush-thinning approaches that combines both mechanical and application of granular tree and shrubs herbicides i.e. Limpopo 200 GG Herbicide.

The proposed development mainly consist of the following agricultural activities:

- The purchase of the farm from the previous owner, a waiver in this respect has been already obtained from the relevant competent authority through the Ministry of Agriculture, Water and Land Reform.
- Land surveying and potential partitioning of the existing three camps into more smaller ones in relation to the sustainable carrying capacity and obtaining of the subsequent approvals
- Upgrading of the existing water infrastructures i.e. boreholes (from windmills pumps to solar pumps, and associate facilities (pipelines, reservoirs and drinking troughs)).
- Enhancement of the grazing pasture, by way of implementing targeted bush-thinning, noting that the farm was previously guarded by veld-fires which destroyed most of the larger tree species – the farm currently infested with a high density of bush-encroachment, particularly *Acacia melifera* and *Tarchonanthus camphoratus* bushes.

Hence, the proponent wishes to apply both mechanical and chemical means of bush thinning in order to enhance the rangeland conditions for better stocking rate and livestock production.

## **Need for an Environmental Impact Assessment**

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While increased economic activities can stimulate demographic changes and alter social, economic and environmental practices in many ways. Adverse environmental and socio-economic impacts have become a major area of concern for the business community, their customers, and other key stakeholders. As a result, companies seek to manage these impacts as part of their ethical and sustainable business conduct. Similarly, identifying, avoiding, mitigating and managing impacts, is a necessary condition for Mrs. Madelize van Zyl to undertake its operation in compliance with the environmental legislative requirements in Namibia.

Therefore, Mrs. Madelize van Zyl appointed Enviro-Leap Consulting cc to conduct an environmental assessment and facilitate the process of obtaining and Environmental Clearance Certificate.

## **Approach to the EIA Process**

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The assessment process consisted of a site visit to the project location and public consultation meetings with the Interested and Affected Parties (I&APs). An environmental scoping and management plan (EMP) were compiled and constitute the application for an Environmental Clearance Certificate submitted to the Ministry of Environment and Tourism (Office of Environmental Commissioner).

## **Overall Recommendation**

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Based on the findings of the environmental scoping assessment, which concludes that all potential negative impacts associated to the proposed Mrs. van Zyl's agricultural operations are minimal and practical mitigation measures are available. Equally, the positive impacts can be harnessed to increase the net marginal benefits relating to the socio-economic aspects of the operations.

Enviro-Leap confidently recommended that the proponent may upon obtaining their Environmental Clearance Certificate (ECC), implement all appropriate management and mitigation measures and monitoring requirements as may be stipulated in their EMP and or as condition of the ECC. These measures must be undertaken to promote and uphold good practice environmental principles and adhere to relevant legislations by avoiding unacceptable impacts to the receiving environment.

Taking into consideration the findings of the environmental scoping assessment process and given the national and regional strategic requirements for infrastructure development and economic growth, it is the opinion of the EAP that the project benefits outweigh the costs and that the project will make a positive contribution towards steering Namibia on its pathway towards its vision of becoming an industrialized nation.

Provided that the specified mitigation measures are applied effectively, it is recommended that Mrs. Madelize van Zyl's are issued with an ECC in terms of the Section 32 of the EMA No. 7 of 2007 and it's EIA Regulations of 2012.

# **glossary**

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<b>AfDB</b>	<b>African Development Bank</b>
<b>BID</b>	<b>Background Information Document</b>
<b>BoN</b>	<b>Bank of Namibia</b>
<b>CA</b>	<b>Competent Authority</b>
<b>DEAF</b>	<b>National Department of Environmental Affairs and Forestry</b>
<b>EA</b>	<b>Environmental Authorization</b>
<b>ECC</b>	<b>Environmental Clearance Certificate</b>
<b>EAP</b>	<b>Environmental Assessment Practitioner</b>
<b>EIA</b>	<b>Environmental Impact Assessment</b>
<b>EMA</b>	<b>Environmental Management Act</b>
<b>GPS</b>	<b>Geographical Positioning System</b>
<b>MME</b>	<b>Ministry of Mines and Energy</b>
<b>MEFT</b>	<b>Ministry of Environment, Forestry and Tourism</b>
<b>IMF</b>	<b>International Monetary Fund</b>
<b>GPS</b>	<b>Geographical Positioning System</b>
<b>UN</b>	<b>United Nations</b>

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## 1. INTRODUCTION

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The Environmental Management Act No. 7 of 2007 (also referred to as the EMA) and its Regulations promulgated in the Government Gazette No. 4878 of 2012, stipulates that for each developmental activity, which is listed as those that may not be undertaken without obtaining an Environmental Clearance Certificate (ECC), an Environmental Assessment (EA) must be conducted. The proposed acquisition, restoration of the degraded (bush encroached) Farm Eindpaal No. 164 to enhance its potential (carrying capacity) for the sustainable livestock production triggers some listed activities in terms of the EMA.

Therefore, an environmental assessment must be conducted with an aim to identify, assess and ascertain potential environmental impacts that may arise as a result of undertaking the proposed operations. Hence, the environmental assessment is a process by which the potential impacts, whether positive or negative are predicted / identified, findings interpreted and communicating to interested and affected parties (I&APs) for inputs.

Additionally, this report presents findings of an environmental scoping process that evaluates the likely socio-economic and environmental effects the proposed operation, and further identifies suitable mitigation measures for avoiding or minimizing the predicted impacts. The envisioned EIA process was undertaken in a holistic approach encompassing different elements as shown in **Figure 1**.



*Figure 1: Anticipated Environmental Assessment Timeline*

### 1.1. PROJECT APPLICANT AND PROJECT OVERVIEW

Mrs. Madelize van Zyl wishes to acquire, restore the livestock viability of degraded (bush encroached) Farm Eindpaal No. 164 to enhance its potential (carrying capacity) for the sustainable livestock production. Their primary objective, is to adopt best-practice and sustainable bush-thinning approaches that combines both mechanical and application of granular tree and shrubs herbicides i.e. Limpopo 200 GG Herbicide.

The proposed development mainly consist of the following agricultural activities:

- The purchase of the farm from the previous owner, a waiver in this respect has been already obtained from the relevant competent authority through the Ministry of Agriculture, Water and Land Reform.



- Land surveying and potential partitioning of the existing three camps into more smaller ones in relation to the sustainable carrying capacity and obtaining of the subsequent approvals
- Upgrading of the existing water infrastructures i.e. boreholes (from windmills pumps to solar pumps, and associate facilities (pipelines, reservoirs and drinking troughs)).
- Enhancement of the grazing pasture, by way of implementing targeted bush-thinning, noting that the farm was previously guarded by veld-fires which destroyed most of the larger tree species – the farm currently infested with a high density of bush-encroachment, particularly *Acacia melifera* and *Tarchonanthus camphoratus* bushes.

Hence, the proponent wishes to apply both mechanical and chemical means of bush thinning in order to enhance the rangeland conditions for better stocking rate and livestock production.

## 1.2. PROJECT MOTIVATION (INCLUDING NEED AND DESIRABILITY)

It is estimated that approximately 26 million hectares, located in the north-central and central regions, are covered by encroacher bush (De-bushing Project, 2017). This phenomenon sees indigenous thorny bush and shrub species growing in such abundance that it increasingly suppresses the growth of grass, reduces biodiversity, and impacts the penetration of rainwater required to recharge underground water resources.

With reference to ‘the Forestry and Environmental Authorisation Process for Bush Harvesting Projects’ (MAWF & MET, 2017), “*Namibia used to be a land of open savannas. Now, more than half of the country is covered by thorny and impenetrable bush, greatly reducing the productivity of our land. As well as decreasing the carrying capacity of rangelands, encroacher bush also has a catastrophic effect on Namibia’s water resources, drastically decreasing water inflow into underground reserves. For these reasons, the Government of Namibia has committed itself to combat bush encroachment so that our rangelands can be restored*”. Farm Eindpaal is no exception to this phenomenon, hence the proposal by the farm owner to implement bush control and veld management activities. The map below indicates that approximately 55% of the country is encroached by bush. The study area is located in the district that is most encroached by bush.

Noting that the Farm Eindpaal was previously guarded by veld-fires which destroyed most of the larger tree species – the farm currently infested with a high density of bush-encroachment, particularly *Acacia melifera* and *Tarchonanthus camphoratus* bushes, livestock production, has been suspended for the past couple of years as a result of bush-encroachment.

Therefore, Mrs. Madelize van Zyl restore the livestock viability of degraded (bush encroached) Farm Eindpaal No. 164 to enhance its potential (carrying capacity) for the sustainable livestock production.

### 1.2.1. Need and Desirability

Overall, the proposed activity is expected to generate full time medium to long term direct employment for at least 5-10 workers. The majority of workers to be employed on the proposed Farming project are expected to be skilled and/or semi-skilled (general labourers and operators).

Critically, going ahead with the proposed activity creates potential for the following marginal net benefits:

- Contribution to Taxes and Royalty
- Technological Skill and Knowledge transfer
- Creates the most needed employment opportunities
- Attainment of the SDGs 1 and 8 in Namibia

### 1.3. REQUIREMENTS FOR AN ENVIRONMENTAL IMPACT ASSESSMENT

While increased economic activities can stimulate demographic changes and alter social, economic and environmental practices in many ways. Adverse environmental and socio-economic impacts have become a major area of concern for the business community, their customers, and other key stakeholders. As a result, companies seek to manage these impacts as part of their ethical and sustainable business conduct. Similarly, identifying, avoiding, mitigating and managing impacts, is a necessary condition Mrs. Madelize van Zyl s Investment cc to undertake its operation in compliance with the environmental legislative requirements in Namibia.

To ensure that development activities are undertaken in an economic, social and environmental sound / sustainable manner, the Namibian Constitution and Environmental Management Act No. 7 of 2007 provides for an environmental assessment process.

The purpose of the environmental assessment and therefore this report are to ensure compliance of the proposed operations with the environmental legislation in respect to managing potential impacts associated with the proposed Mrs. Madelize van Zyl's Investment cc Farming activities operations:

- Identifying potential socio-economic and environmental impacts
- Proposing management measures to avoid, prevent and of mitigate these
- Compile an Environmental Management for compliance monitoring and reporting on the implementation of the Environmental Clearance Certificate conditions

**Table 1:** List of activities identified in the EIA Regulations which apply to the proposed project

EMA 2007 Legislation	Description of activity	Relevance to the proposed agricultural development activities
Activity 4	4. The clearance of forest areas, deforestation, afforestation, timber harvesting or any other related activity that requires authorization in term of the Forest Act, 2001 (Act No. 12 of 2001) or any other law.	The clearance of vegetation areas to allow the quarrying activity to take place

Therefore, Mrs. Madelize van Zyl appointed Enviro-Leap Consulting to conduct an environmental assessment and facilitate the process of obtaining an Environmental Clearance Certificate.

#### 1.4. EIA TEAM

As previously noted, Enviro-Leap Consulting (see **Table 2** for the composition of ELC’s team for this EA) has been appointed by Mrs. Madelize van Zyl to undertake the EIA required for the proposed project. A public participation process (PPP) forms an integral part of the Environmental Assessment Process to aid in identifying issues and possible alternatives for consideration. Details on the PPP are included in section 4 of this Scoping Report.

*Table 2: The EIA Management Team*

NAME	ORGANISATION	ROLE/ SPECIALIST STUDY UNDERTAKEN
Environmental Assessment Practitioners		
Shadrack Tjiramba	Enviro-Leap Consulting cc	Environment Practitioner
Vilho Pendainge Mtuleni	Enviro-Leap Consulting cc	External Reviewer

#### 1.5. OBJECTIVES OF THE ENVIRONMENTAL SCOPING ASSESSMENT

The primary objective of this EA Report is to present stakeholders, I&APs and the Competent Authority, the DEA, with an overview of the predicted impacts and associated management actions required to avoid or mitigate the negative impacts; or to enhance the benefits of the proposed Mrs. Madelize van Zyl operations.

In broad terms, the 2012 EMA EIA Regulations (GG 4878) stipulates that an EIA Process must be undertaken providing to determine the potential environmental impacts, mitigation and closure outcomes, as well as the residual risks of any listed activity. Therefore, based on these (EIA Regulations), the objectives of the Environmental Assessment (EA) Process is to:

- determine the policy and legislative context within which the activity is located and note how the proposed activity complies with and responds to the policy and legislative context;
- identify the location of the development footprint within the preferred site based on an impact and risk assessment process inclusive of cumulative impacts and a ranking process of all the identified development footprint alternatives focusing on the geographical, physical, biological, social, economic, heritage and cultural aspects of the environment;
- determine the nature, significance, consequence, extent, duration and probability of the impacts occurring to inform identified preferred alternatives; and the degree to which these impacts (a) can be reversed; (b) may cause irreplaceable loss of resources, and (c) can be avoided, managed or mitigated; and
- identify suitable measures to avoid, manage or mitigate identified impacts;

In terms of legal requirements, a crucial objective of the Environmental Scoping or EIA Report is to satisfy the requirements of EIA Regulations in respecting to obtaining an Environmental Clearance Certificate.

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## 2. PROJECT DESCRIPTION

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This section provides an overview of the conceptual overview of the agricultural activities on Farm Eindpaal No. 164, methods and technology selection process for identifying the most suitable bush thinning techniques to be adopted.

### 2.1. OVERVIEW OF THE PROPOSED ACTIVITIES

The semi-arid natural conditions on Farm Eindpaal has a potential for a good beef cattle production up to 500 Large Stock Units (LSU). However, the current veld productivity is nowhere near its production potential as it has historically been incorrectly managed. Resulting to this is evident veld degradation, poor veld conditions and low farm productivity. There remain few pockets of better veld conditions on the farm, but urgent action is required to address bush encroachment and improve veld conditions on Farm Eindpaal. This is to ensure that the farm become profitable and self-sustaining with no need for subsidization.

The main species causing the encroachment problem are *Acacia mellifera* (Black thorn), *Acacia hebeclada ssp. Tristis* (Candle thorn), and *Tarchonanthus camphoratus* (camphor bush). The project objective is to establish appropriate systems for diverse and sustainable land management (veld management activities that include erosion control and post thinning monitoring) and livestock production on Farm Eindpaal. The approach that is to be employed is bush thinning with both a mechanical and chemical (herbicides) and an option of introducing *Cenchrus ciliaris L.* (foxtail buffalo grass).



**Figure 2:** Illustration of the degree of bush encroachment by the most common species on the farm i.e. *Acacia mellifera* (Photo 1) and *Tarchonanthus camphoratus* (Photo 2) species during the dry season

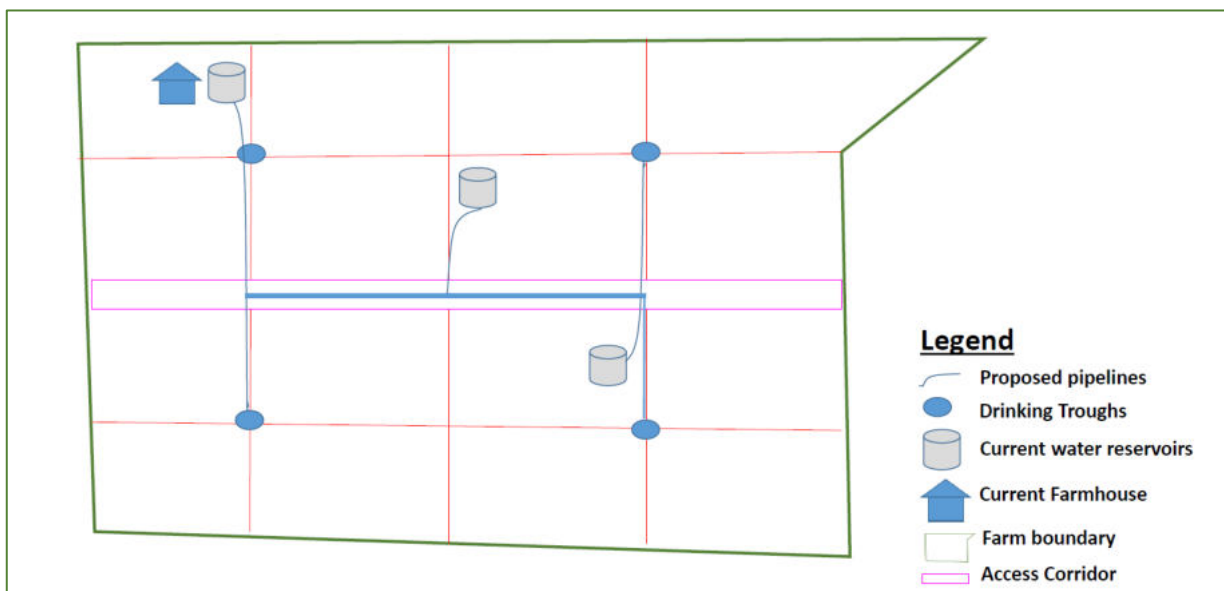
The proposed development mainly consist of the following agricultural activities:

- The purchase of the farm from the previous owner, a waiver in this respect has been already obtained from the relevant competent authority through the Ministry of Agriculture, Water and Land Reform.
- Land surveying and potential partitioning of the existing three camps into more smaller ones in relation to the sustainable carrying capacity and obtaining of the subsequent approvals
- Upgrading of the existing water infrastructures i.e. boreholes (from windmills pumps to solar pumps, and associate facilities (pipelines, reservoirs and drinking troughs)).
- Enhancement of the grazing pasture, by way of implementing targeted bush-thinning, noting that the farm was previously guarded by veld-fires which destroyed most of

the larger tree species – the farm currently infested with a high density of bush-encroachment, particularly *Acacia melifera* and *Tarchonanthus camphoratus* bushes.

Hence, the proponent wishes to apply both mechanical and chemical means of bush thinning in order to enhance the rangeland conditions for better stocking rate and livestock production.

To achieve efficient and effective livestock production, the proponent proposes to acquire the farm, re-survey and partition into eleven (11) smaller paddocks (**Figure 3**), upgrade the water supply infrastructure, fences and handling kraals (**Figures 4 and 5**), and employ the use of a pre-programmed drone (**Figure 6**), in order that the herbicides is applied carefully and evenly across the bush-infested rangeland of the farm.



**Figure 3:** Illustration of the draft sketch of the proposed partitioning and infrastructure layout



**Figure 4:** Illustration of the proposed cattle handling facilities (Kraals and crush-pens)



**Figure 5:** Illustration of the proposed cattle handling facilities (Kraals and crush-pens)



**Figure 6:** Illustration of the proposed drone obtained for the application of the herbicides, in the bag is the recommended Limpopo 200 GG Herbicides

## 2.2. PROJECT RATIONALE (MOTIVATION, NEED AND DESIRABILITY)

### 2.2.1 Project Motivation

The proposed activity responds to Namibia's strategic vision 2030 and the NDP5 of creating a conducive environment within which its citizens prosper and contribute to the national development goals by creating employment opportunities. Overall, this activity contribute to the nation's efforts of elevating poverty amongst the rural citizens.

Critically, going ahead with the proposed activity on MCs 73944 and 73945 creates a potential for the following marginal net benefits:

- Contribution Taxes and Royalty
- Technological Skill and Knowledge transfer
- Creates the most needed employment opportunities

### 2.2.2 Project Need and Desirability

Bush encroachment can be defined as thickening of aggressive undesired woody species, resulting in an imbalance of the grass: bush ratio, a decrease in biodiversity, a decrease in carrying capacity and eventual economic losses. The phenomenon of bush encroachment in Namibian savannas is regarded as part of the desertification process since the increase in the extent and density of woody vegetation occurs at the expense of other desirable grasses and forbs, resulting in an alarming reduction in productivity.

It is generally accepted that the decline in the carrying capacity of Namibia's rangelands could be anything from 100% or more. The overriding problem caused by high densities of invader bush is its absolute superiority in competing for water in the upper layers of the soil. It is of utmost importance that the productivity of our natural rangelands is maintained at the highest possible level. Namibia cannot afford to have a biological system where, because of bush encroachment and a veld in poor condition, more than 50% of the annual rainfall is lost. The practical implication is that, even if a farm gets 300mm of rain, it will effectively be reduced to 150mm. The frequency of artificial droughts created in this way cannot be afforded.

### 2.3. PROJECT LOCATION

The Farm Eindpaal No. 164 has a land area extent of approximately 4302 Hectares and situated about 35 km north-west of Gobabis in the Okorukambe (Steinhausen) Constituency of the Omaheke Region (**Figure 7**) and GPS coordinates provided in **Table 3**.

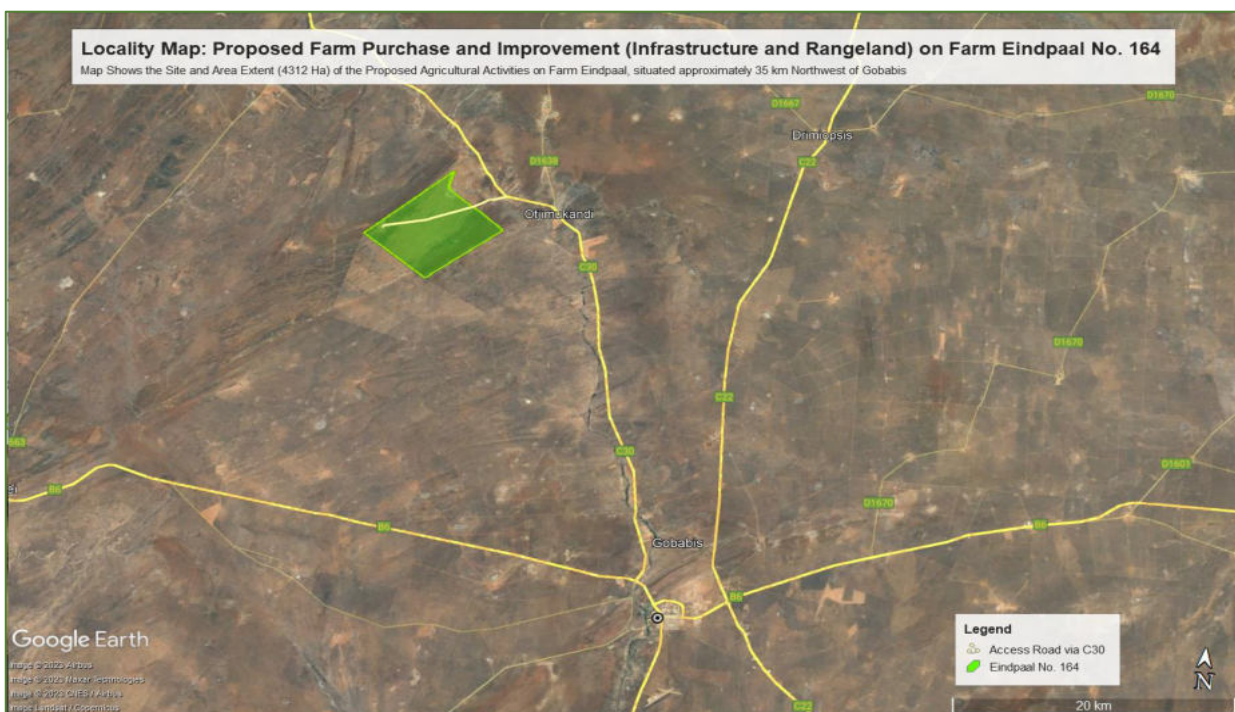


Figure 7: Show the location and area extent (4301 Ha) Farm Eindpaal No. 164, Omaheke Region

*Table 3: Corner coordinates of the proposed development site*

Corner point	Latitude	Longitude
A – Farm Eindpaal Corner Point 1	-22.224801°	18.773413°
B – Farm Eindpaal Corner Point 2	-22.195491°	18.724967°
C – Farm Eindpaal Corner Point 3	-22.142326°	18.784059°
D – Farm Eindpaal Corner Point 4	-22.156468°	18.781360°
E – Farm Eindpaal Corner Point 2	-22.185107°	18.825144°

The Farm is accessible initially via the Trans-Kalahari (B6) highway, connecting the Gobabis to the capital Windhoek, and about 4 km branching off in the north-western direction along the C30 district road. Approximately, 35 kilometers, the Farm access road is located on the left side and through Farm Hennopsrus No. 589.

## **2.4. SUPPORTING INFRASTRUCTURE**

### **2.4.1 Farmhouse and staff complement**

The farm already host a number of existing accommodation facilities, which the proponent wishes to upgrade to Morden housing designs i.e. these includes the main farmhouse, labourers quarters fitted with the necessary ablution and kitchen facilities. It furthers host a number of other cattle post housing for the labourers too.

Where practical and possible, it is strictly recommended that for unskilled labour, local community members are employed and thus accommodated at their existing homestead to mitigate and reduce potential conflict with the conservancy wildlife and livestock management protocols.

During the operational period, it is anticipated that about 10 – 15 persons will be employed, and may be accommodated on the farm during their employment period and allowed to visit relatives and families during their off-periods e.g. holidays.

Therefore, it is highly recommended that sufficient ablution facilities must be provided and limited to within the farmhouse and staff-quarters accommodation footprint.

### **2.4.2 Water supply**

Water will be required for both domestic consumption and for livestock production (drinking for the cattle), and fortunately the already has four existing boreholes currently in operation with an average of six to eight (6-8) cubic metre yields. However, given that these boreholes are currently pumped with outdated windmill pumps, the proponent wishes to upgrade these by replacing the windmills with solar-powered pumps.

For ease of management, the existing reservoirs will be replaced with large top-sealed reservoir into which all boreholes will be pumping water for distribution throughout the farm along one high volume pipeline. Although, it is not clear what the actual water requirement shall be, it assumed that since there is no deviation of animal stocking rate from the sustainable carrying capacity, the existing boreholes has sufficient capacity to sustain both the domestic and livestock water requirements.



### **2.4.3 Power supply**

In respect to domestic power needs, the farm is already connect to the national grid and as indicated in the previous section, power for water pumping will be by solar thus further contributing to a greener production practice. As far as practically possible, the proponent further plans on installing an off-grid solar system to complement the power need during emergency or when there is power outages.

### **2.4.4 Storage of Equipment and Hydrocarbons**

It is anticipated that various machinery and equipment will be required for certain of the Farming activities e.g. self-powered vehicles (tractors, bulldozers and hammer mills) that uses hydrocarbon fuels i.e. petrol / diesel engines. Hence, a minimal need for on-site fuel storage in either small mobile bowser or barrel drums on a concrete slab at the Farm is necessary.

Servicing of these vehicle will mainly be undertake by professional in Gobabis unless during emergency cases where professional call-outs will be called to the farm to perform such services. Nonetheless, the proponent takes cognisant of the need to provide emergency spill-kits and PPE on the farm. In case of any spillage, the correct environmental protocol as may be present in the Environmental Management Plan will be adhered to.

### **2.4.5 Waste (Domestic / Hazardous) Management**

In terms of waste generation and management, the predominant type of waste that will be generated during the Farming activities, in small volumes, is domestic waste i.e. packaging material (paper, wooden box, plastic sampling bags), and potentially hydrocarbons from diesel oil should a power generator needed. Domestic waste must be stored in heavy duty garbage bags and disposed of correctly at the Keetmanshoop waste disposal site.

**Domestic Waste:** Different waste containers will be provided onsite for waste sorting and safe disposal of waste generated onsite. These will be collected on a monthly basis and sent to nearest approved waste management facility in the area such as Gobabis.

**Sanitation:** ablution facilities with septic tanks will be put up for sanitation purposes for domestic use and will be emptied in good time according to manufacturers' instructions.

## **2.5. DECOMMISSIONING AND CLOSURE PHASE**

Taking into consideration that the proposed project does not involves any construction activities, decommissioning is not foreseen during the validity of the Environmental Clearance Certificate. Consequently, any impacts associated by default with this phase of a project are not applicable to the proposed activity.

However, should the proponent at any stage of the proposed project intend to construct any infrastructure, such must be subject to a separate environmental assessment and the mitigation measures to be identified in the appropriate Environmental Management Plan adhered to.

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### 3. DESCRIPTION OF THE AFFECTED ENVIRONMENT

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This chapter of the Scoping Report provides an overview of the affected environment for the proposed Farming activities. The receiving environment is understood to include biophysical, socio-economic and heritage aspects which could be affected by the proposed development or which in turn might impact on the proposed development.

#### 3.1 BIOPHYSICAL ENVIRONMENT

Namibia is characterized by four land type systems, the Namib, which runs along the entire west coast from the port town of Lüderitz, northwards into southern Angola; the Succulent Karoo which lies south of Lüderitz and extends across the Orange River into South Africa; the Nama Karoo which occurs immediately to the east of the previous two desert systems and covers most of the southern third of Namibia, tapering to a narrow belt from central Namibia northwards; and the Southern Kalahari which extends eastwards across to Botswana.

##### 3.1.1 Climatic Conditions

About 22% of Namibia's land is classified as desert (hyper-arid), 70% is classified as arid to semi-arid and the remaining 8% is classed as dry sub-humid (Mendelsohn et al. 2003). In Gobabis, which is the closest town to the study area the summers are long, hot, and partly cloudy and the winters are short, cool, dry, and clear. Over the course of the year, the temperature typically varies from 4°C to 32°C (**Figure 5**) and is rarely below -0°C or above 36°C.

The hot season lasts for 5.4 months, from September 23 to March 3, with an average daily high temperature above 30°C. The hottest month of the year in Gobabis is December, with an average high of 32°C and low of 18°C. The cool season lasts for 2.4 months, from May 24 to August 3, with an average daily high temperature below 24°C. The coldest month of the year in Gobabis is July, with an average low of 4°C and high of 23°C (Mendelsohn et al. 2003).

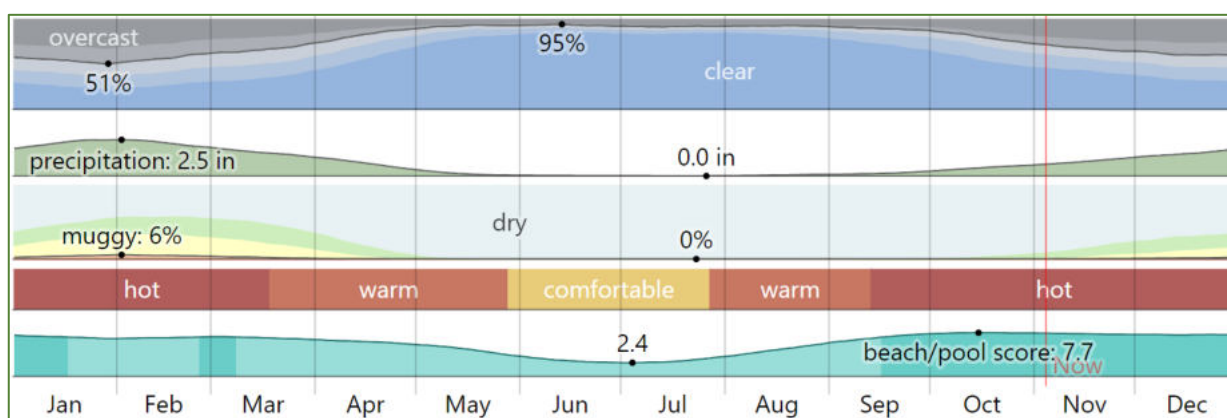
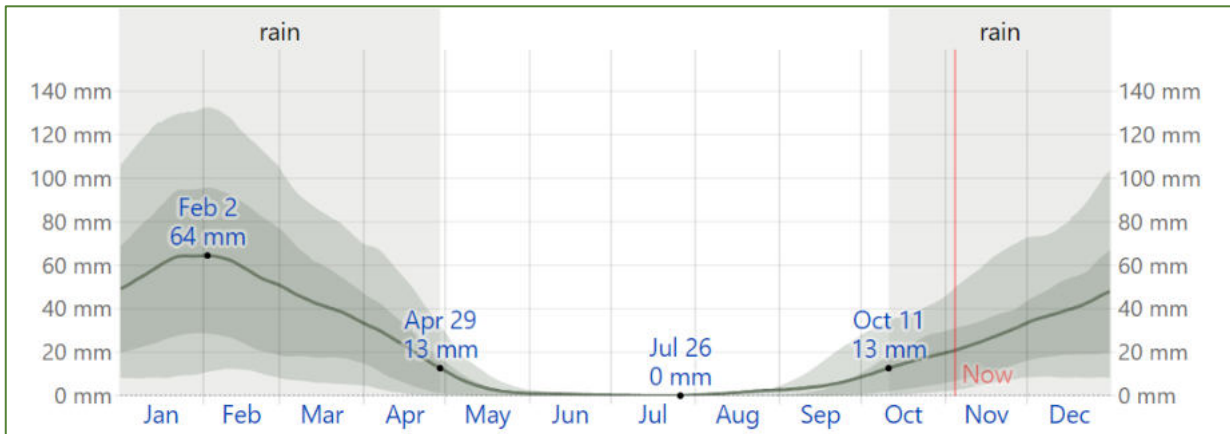


Figure 8: The summary of the climate in the Gobabis surrounding of Omaheke Region

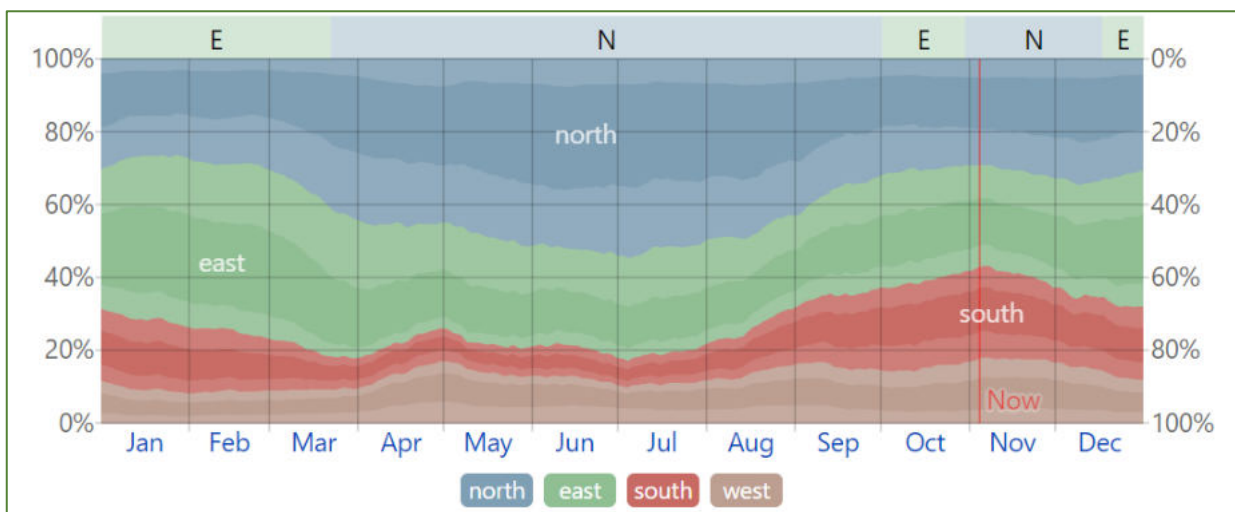
Rainfall is highly erratic and unpredictable with an inter-annual coefficient of variation that ranges from about 30% in the north-east to over 100% in the driest areas. Around the project area, a wet day is one with at least 1.00 millimeters of liquid or liquid-equivalent precipitation thus the chance of wet days in Gobabis varies significantly throughout the year.

The rainy period of the year lasts for 6.6 months, from October 11 to April 29, with a sliding 31-day rainfall of at least 13 millimeters. The month with the most rain in Gobabis is January, with an average rainfall of 60 millimeters. The rainless period of the year lasts for 5.5 months, from April 29 to October 11. The month with the least rain in Gobabis is July, with an average rainfall of 0 millimeters.



**Figure 9:** The summary of the rainfall, the average rainfall (solid line) accumulated over the course of a sliding 31-day period centered on the day in question, with 25th to 75th and 10th to 90th percentile bands.

At Gobabis, the predominant average hourly wind direction varies throughout the year. The wind is most often from the north for 6.3 months, from March 22 to October 1 and for 1.6 months, from October 30 to December 17, with a peak percentage of 54% on July 4. The wind is most often from the east for 4.1 weeks, from October 1 to October 30 and for 3.2 months, from December 17 to March 22, with a peak percentage of 32% on October 12 (Robertson et al, 2012).



**Figure 10:** The summary of the windrose (speed and direction), the mean wind direction is from each of the four cardinal wind directions, and the lightly tinted areas at the boundaries are the percentage of hours spent in the implied intermediate directions (northeast, southeast, southwest, and northwest).

### 3.1.2 Geology

The study area is situated on the vast Kalahari System (Geological Survey 1980; Thomas 1988; Mendelsohn et al. 2002; Mendelsohn & El Obeid 2003). This ancient basin has been gradually filled up with silt and clay sediments and windblown sands during the Tertiary to Quaternary Periods (32–39 Ma) (Geological Survey 1980). The windblown sands dominate the surface soils of the study area. Occasionally, exposed rock formations can be found – these are mainly sandstones, limestones, schists and dolomites of the much older Karoo and Damara Sequences.

The sandy landscapes are generally flat to rolling (with 6° – 9° slopes, **Figure 11**); these plains are incised by omuramba valleys or alternated with vegetated fossil (no longer actively moving) dunes. An omuramba (plural: omiramba) can best be described as a shallow watercourse with no visible gradient (King 1963).

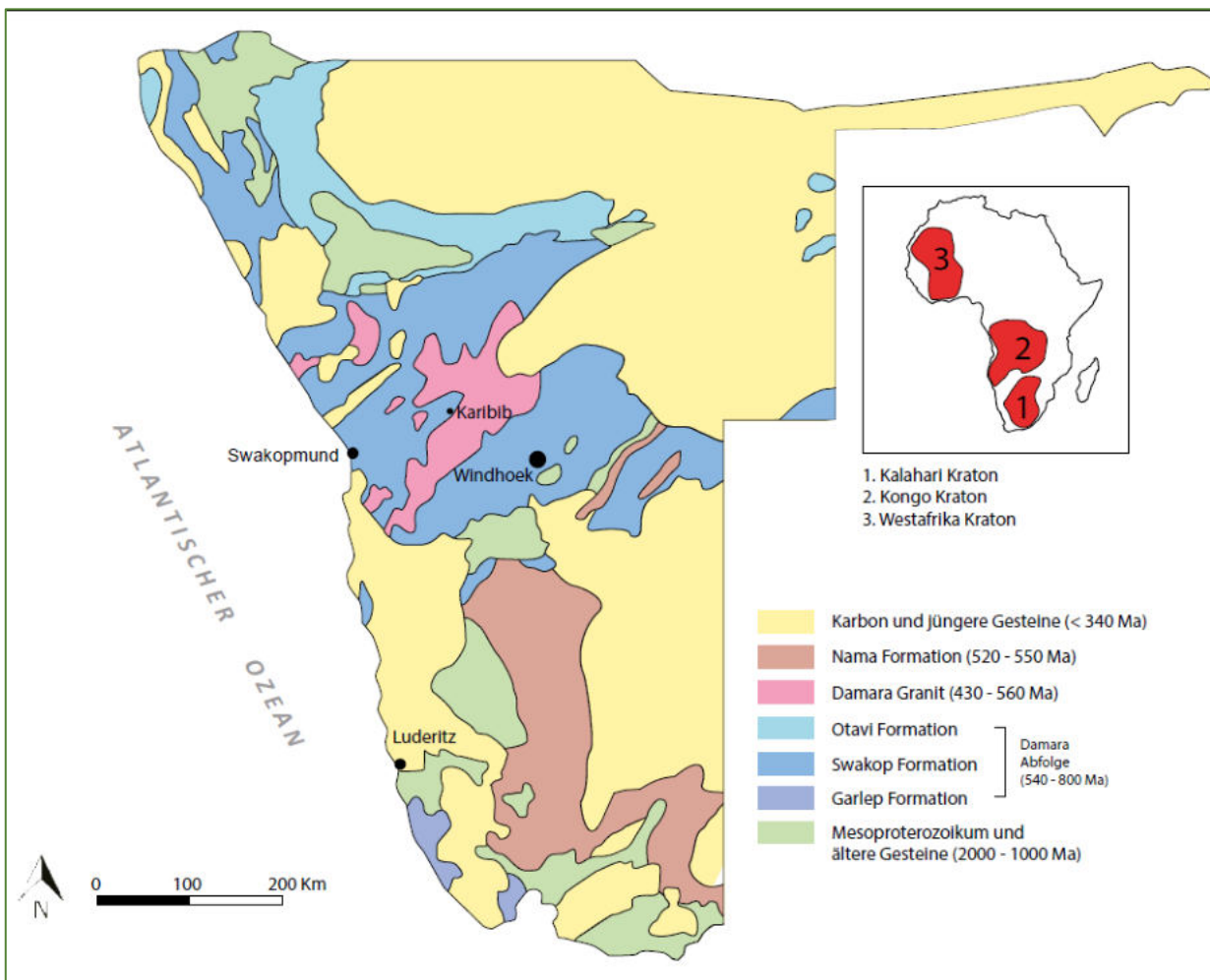


Figure 11: Simplified geology of Simplified geological map of Namibia. Modified after Clifford (2008).

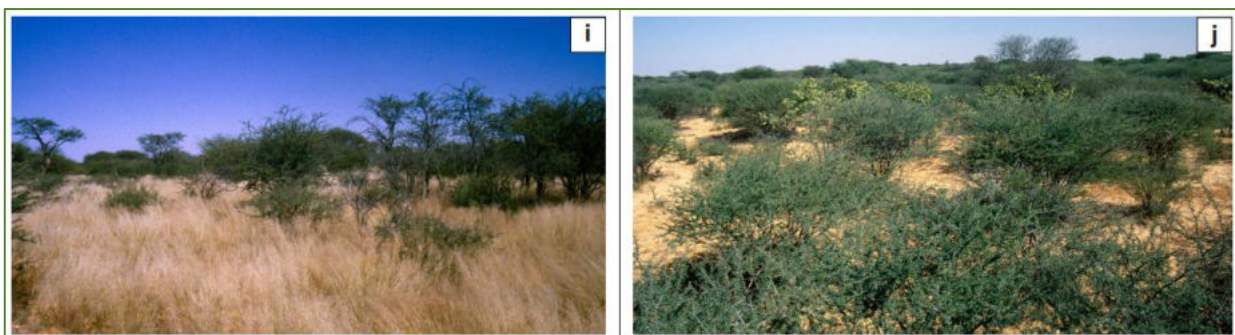
Leser (1972) differentiates between coarse-grained yellow sands, which were found mostly on plains, and finer-grained reddish sands, present especially on the fossil dunes. Apart from the omuramba valleys, which often have exposed or underlying calcretes and limestone ridges, occasional pans formed by the limited runoff in the area have grey clays to grey sands. A more thorough study of the soils and landscapes is presented by Strohbach et al. (2004).

The area is generally flat with undulating terrain, surface water is more pronounced in river streams, the porous sediment of the Kalahari allows rainfall water to sink quickly into the alluvial and fractured aquifers. The topography of the farm and surrounding area in general, varying between 1,792 and 1,259 m above mean sea level. Except for limited outcrops comprising the Witvlei- and Kuibis, the surface Quaternary cover appears to be uniform, and the entire landscape has a gentle gradient dipping towards the south and east. The general landscape to the south and east of the Farm is flatter, as the Kalahari landscape dominates.

### 3.1.3 Terrestrial Ecology and Sensitivity

Namibia's vegetation and biomes are classified into five major types, shown in, these are the Namib Desert, Nama Karoo, Succulent Karoo and the Trees and Shrub savannah. The proposed project area fall mainly within the Desert biome and thus the fauna and flora key receptors of environmental impact particularly in case of trampling and vehicle tracks, potential poaching and ground contamination resulting from the project activities.

The Farm area is covered with the central Kalahari vegetation type of the Acacia three-and-shrub savanna sub-biome (**Figure 12**). Where the soils are shallower and the landscape hillier, plant growth tends to be shrubby. Eastwards, where the soils become deeper and the landscape flattens, vegetation is characterized by large, open expanses of grass dotted by trees and bushes (Mendelsohn et al., 2002).



**Figure 12:** Typical examples of various associations and subassociations, (i) *Tarchonantho camphorate*-*Acacietum eriolobae*, (j) *Stipagrostio uniplumis*-*Acacietum melliferae rhigozetosum brevispinosi* (Source: Figures 4a, 4e and 4i-4s photographed by Marianne Strohbach)

Most of the woody vegetation vary between 1 and 5m in height. The most important environmental variable affecting the vegetation in this part of the country is rain and to a lesser extent frost, but micro-habitat conditions and rangeland management practices determine bush density and grass composition. Grazing resources are made up of a wide variety of grass species, which vary widely in palatability and abundance. Bush encroachment is noticeable, mainly on farmland exposed to continuous periods of selective grazing by livestock. Moreover, the densification of bush has led to a decreased carrying capacity on some farms in the area including on Farm Eindpaal.

It is estimated that approximately 26 million hectares, located in the north-central and central regions, are covered by encroacher bush (De-bushing Project, 2017). This phenomenon sees indigenous thorny bush and shrub species growing in such abundance that it increasingly suppresses the growth of grass, reduces biodiversity, and impacts the penetration of rainwater required to recharge underground water resources. With reference to ‘the Forestry and Environmental Authorizations Process for Bush Harvesting Projects’ (MAWF & MET, 2017),

Farm Eindpaal is no exception to this phenomenon, hence the proposal by the farm owner to implement bush control and veld management activities. The map below indicates that approximately 55% of the country is encroached by bush. The study area is located in the district that is most encroached by bush.

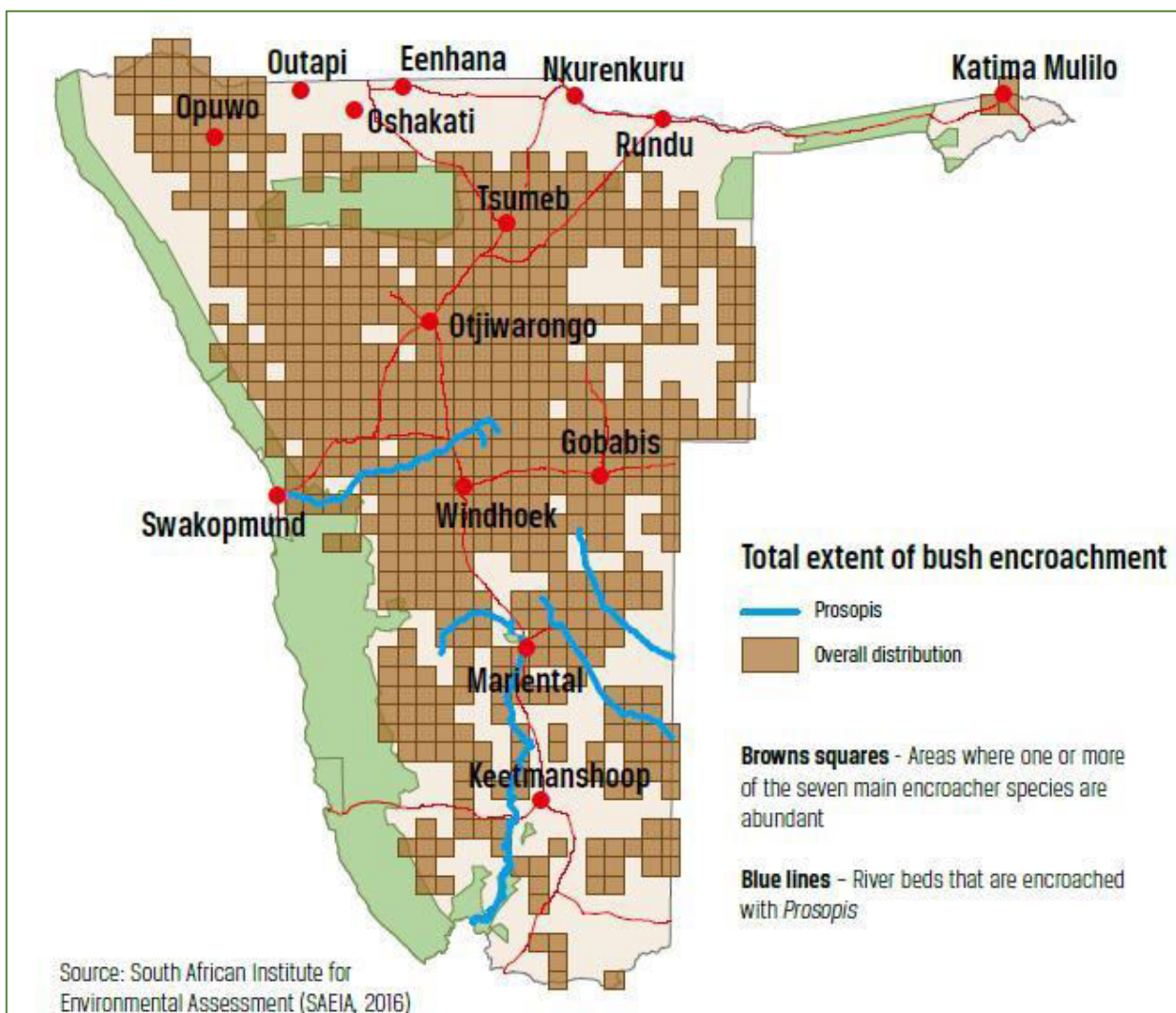


Figure 12: Shows distribution of dominant encroacher bush in Namibia

## 3.2 SOCIO-ECONOMICAL ENVIRONMENT

### 3.2.1 *Demographic Profile*

Namibia is one of the least densely populated countries in the world (2.8 person per km<sup>2</sup>). Vast areas of Namibia are without people, in contrast to some fairly dense concentrations, such as the central-north and along the Kavango River. Large parts of the Omaheke region is also without people, mainly because of the absence of surface water.

Although the Omaheke Region covers more than 10% of the land area of Namibia, it accommodates the smallest portion (3.4%) of the national population total in 2016 (NSA, 2017) and is the third least populated region of Namibia with a density of 0.9 persons per km<sup>2</sup>.

The population density of the Omaheke Region is three times lower than the national average, and the total population of the region was estimated at 74,629 in 2016 (NSA, 2017). Otjiherero is the most spoken language in the region (48% of all households) and the average household size in the Omaheke region comprises 3.5 persons. The literacy rate is 75% for people older than 15. 96% of all households have access to safe water, 56% have no toilet facility, 45% have electricity for lighting and only 63% of the population depend on open fires to prepare food (NSA, 2017).

In 2011 the population of Gobabis was 19,101 and with a generalized urbanization growth rate of 4.0% the current estimated population is estimated to be 27,187 residents.

### 3.2.2 *Heritage and Culture Profile*

In Namibia, archaeological resources are often vulnerable to developmental impacts. Typical sites do not only include those found in the mountains, hills and outcrops but also those generally found in the flat areas (Namib Desert) and or in riverbeds. Others includes surface scatters of stone artefacts, rock shelters with evidence of occupation, including rock art, graves, stone features such as hunting blinds and huts, and more recent site such as colonial battlefields, road-works and historical mines.

However, given the nature, scope and scale of the proposed activity and particularly that it entails minimum use mechanical equipment an archaeological specialist study was deemed not necessary although highly recommended for the next phase of the mine development projects. Critically, the proponent is cautioned to at all time strictly adhere with the search and find procedure in accordance with the stipulations of the Namibian National Heritage Act (No. 27 of 2004) in the highly unlikely event that artifacts are found on the Farm Eindpaal.

Therefore, it remains necessary that in the absence of extensive heritage and culture studies in the region there remains a possibility of encountering numerous undeclared artefacts / sites of heritage importance. A search and find procedure (**Appendix C**) must be strictly followed in accordance with the stipulations of the Namibian National Heritage Act in the highly unlikely event that artefacts are found in the sand mining area.

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## 4. APPROACH TO EIA PROCESS AND PUBLIC PARTICIPATION

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This chapter presents the approach to the Environmental Scoping Assessment process, for the proposed Mrs. Madelize van Zyl's Farming activities and gives particular attention to the legal context and guidelines applicable to this assessment. The assessment approach and the steps in the Public Participation component of this scoping report were undertaken in accordance with Regulations 29 and 30 of Government Notice No. 30 of 2012. Overall, this section highlights information including the approach to stakeholder engagement, identification of issues, overview of relevant legislation, and key principles and guidelines that provide the context for this scoping assessment process. Hence, in a nutshell, the purpose of the environmental assessment is to:

- Address issues that have been identified through the Scoping Process;
- Assess alternatives to the proposed activity in a comparative manner;
- Assess all identified impacts and determine the significance of each impact; and
- Recommend actions to avoid/mitigate negative impacts and enhance benefits.

### 4.1 OVERVIEW OF APPROACH ADPTED FOR COMPILING THE SCOPING AND EMP REPORTS

The objectives of the environmental scoping assessment are noted in Section 1 of this Report. Section 6 of this Scoping Report includes a summary of the findings, the overall conclusions and the recommendations. The Scoping Report was made available for a 30-day I&AP and authority review period, as outlined in the EMA Regulations of 2012. Although adverts were put in local newspapers **Confidente newspaper on 03 – 09 Nov 2023 and 10 – 16 Nov 2023, and then in The Villager newspaper on the 03<sup>rd</sup> and 08<sup>th</sup> November 2023** in order to notify and inform the public of the proposed projects and invite I&APs to register.

As previously noted, the Scoping Report includes an Environmental Management Plan (EMP, **Appendix B**). The EMP is based broadly on global environmental management principles and embodies an approach of continual improvement and mitigation actions.

These are drawn primarily based on the identified potential impacts for both the construction and operational phases of Mrs. Madelize van Zyl's proposed operations. If the project components are decommissioned or re-developed, this will need to be done in accordance with the relevant environmental standards and clean-up / remediation requirements applicable at the time.

### 4.2 LEGAL CONTEXT FOR THIS EIA

In accordance with the provisions of the Environmental Impact Assessment (EIA) Regulations No. 30 of 2012 gazette and the Environmental Management Act, (EMA), 2007, (Act No. 7 of 2007), the activity to be undertaken by Mrs. Madelize van Zyl may not be undertaken without an Environmental Clearance Certificate.



### 4.3 LEGISLATION AND GUIDELINES PERTINENT TO THIS ENVIRONMENTAL ASSESSMENT

As the main source of legislation, the Namibian constitution makes provision for the creation and enforcement of applicable legislation. In this context and in accordance with its constitution, Namibia has passed numerous laws (those of relevant to this project are listed in Table 2) intended to protect the natural environment and to mitigate adverse environmental impacts.

Namibia's policies provide the framework to the applicable legislation. Whilst policies do not often carry the same legal recognition as official statutes, policies can be and are used in providing support to legal interpretation when deciding cases. Below are several of the key legislations applicable to the governance of certain component / aspects of the proposed operation activity. Key acts and policies currently in force include:

- Namibia's Environmental Assessment (EIA) Policy for Sustainable Development and Environmental Conservation (1995)
- Environmental Management Act (No. 7 of 2007);
- Environmental Impact Assessment Regulations (Government Notice No. 30 of 2012)
- Namibia Agriculture Policy of 2015
- Namibia Vision 2030, and other national development plan e.g. Harambee Prosperity Plan
- Social Security Act, 1994 (Act No. 34 of 1994) and the Affirmative Action (Employment) Act, 1998 (Act No. 29 of 1998)

#### 4.3.1 Environmental Management Act No. 7 of 2007

The environmental management act No.7 of 2007 aims to promote the sustainable use of natural resources and provides the framework for the environmental and social impact assessment, demands precaution and mitigation of activities that may have negative impacts on the environment and provision for incidental matters. Furthermore, the act provides a list of activities that may not be undertaken without an environmental clearance certificate.

The purpose of the Environmental Management Act is:

- a) to ensure that people carefully consider the impact of developmental activities on the environment and in good time
- b) to ensure that all interested or affected people have a chance to participate in environmental assessments
- c) To ensure that the findings of environmental assessments are considered before any decisions are made about activities which might affect the environment see

**Figure 9.**

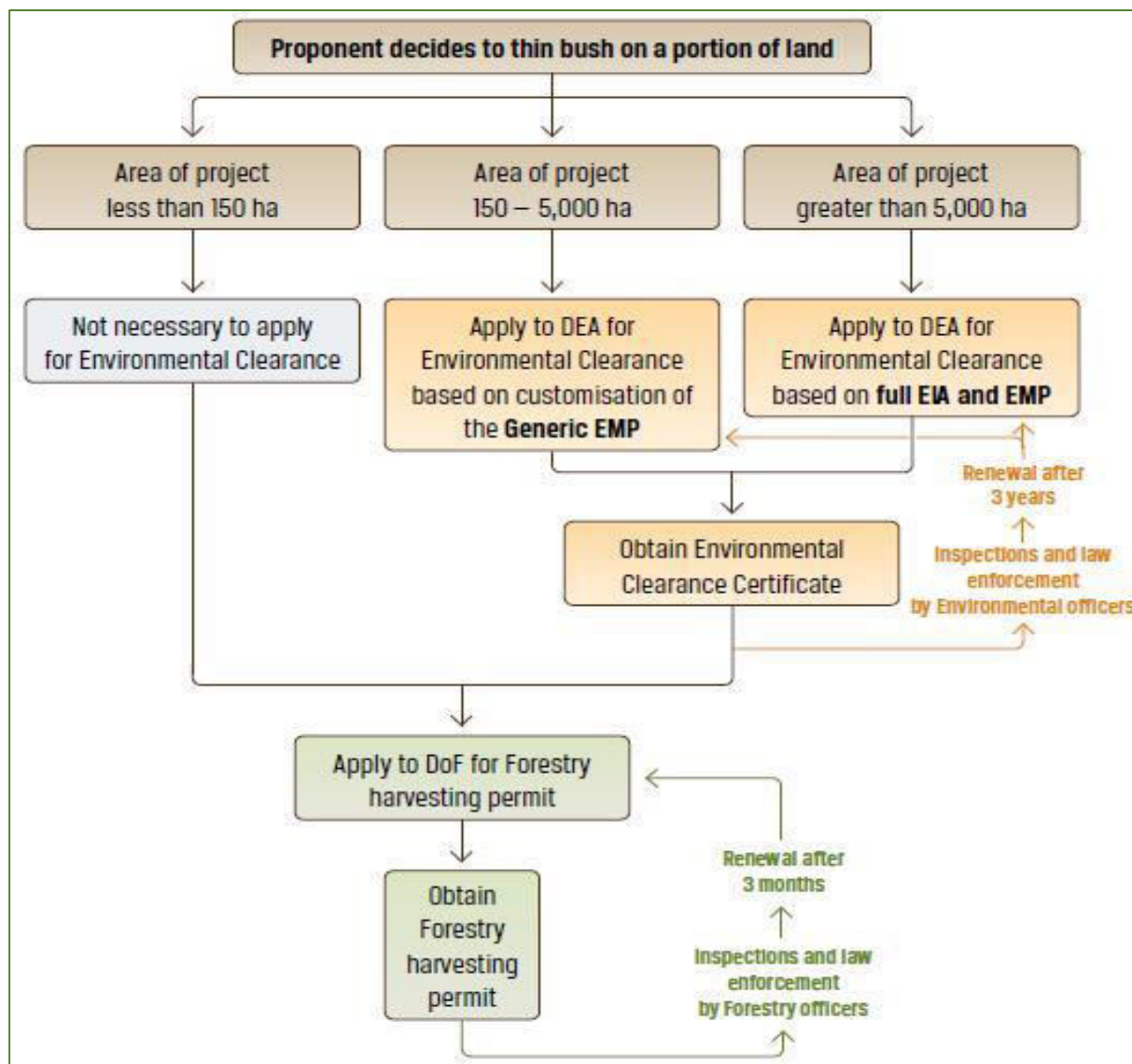


Figure 13: Illustration of the combined authorisation process by MET & MAWF

#### 4.3.2 Environmental Assessment Policy (1995)

The Environmental Assessment Policy for Sustainable development and Environmental Conservation emphasize the importance of environmental assessments as a key tool towards implementing integrated environmental management. Sets an obligation to Namibians to prioritize the protection of ecosystems and related ecological.

The policy subjects all developments to environmental assessment and provides guideline for the Environmental Assessment. The policy advocates that Environmental Assessment take due consideration of all potential impacts and processes mitigations measures should be incorporated in the project design and planning stages (as early as possible).

#### 4.3.3 Other Legal Requirements and relevance to the proposed activity

In addition to the EMA and the Environmental Assessment Policy, there exist other regulatory frameworks that MDL must comply with. This is due to the supporting infrastructure that are needed to compliment the proposed logistics hub. As such, MDL will

be required to obtain additional specific permits for the supporting infrastructure as listed in table 4 below. The process of obtaining the additional permits can be undertaken concurrently to the EIA process.

Furthermore, the proponent has the responsibility to ensure that the project activities conform to all other relevant legal documents and guidelines as listed in **Table 8** below).

*Table 8: Other relevant legislation and applicability thereof (Source: Risk Based Solution)*

Legislation	Relevance
Labour Act, 1992, (Act No. 6 of 1992) and Regulations Related to Health and Safety of Employees	<ul style="list-style-type: none"> <li>• Labour matters, rights and duties of employees.</li> <li>• Health and Safety of Employees Construction safety;</li> <li>• Electrical safety; Machinery safety;</li> <li>• Hazardous substances; Physical hazards and general provisions;</li> </ul>
Social Security Act, 1994 (Act No. 34 of 1994) and the Affirmative Action (Employment) Act, 1998 (Act No. 29 of 1998)	<ul style="list-style-type: none"> <li>• Establishment of the Social Security Commission</li> <li>• Administration of a pension and incidental matters fund – affirmative employment opportunities</li> </ul>
The Forest Act	<ul style="list-style-type: none"> <li>• Declaration of protected areas in terms of soils and water resources</li> <li>• Proclamation of protected species of plants and the conditions under which these plants can be disturbed, conserved, or cultivated.</li> </ul>
Nature Conservation Amendment Act	<ul style="list-style-type: none"> <li>• Declaration of protected areas and protected species.</li> </ul>

#### 4.3.4 Precautionary and Polluter Pays Principles

The Precautionary Principle is worldwide accepted when there is a lack of sufficient knowledge and information about proposed development possible threats to the environment. Hence if the anticipated impacts are greater, then precautionary approach is applied.

Equally, the Polluter Pays Principle ensures that the proponent takes responsibility of their actions. Hence in cases of pollution, the proponent bears the full responsibility and cost to clean up the environment.

#### 4.4 PRINCIPLES FOR PUBLIC PARTICIPATION / CONSULTATION

The PPP for this Scoping Process was driven by a stakeholder engagement process that includes inputs from authorities, I&APs and the project proponent. In respect to provisions of the EIA Regulations, “Public Consultation” means a process referred to in regulation 21, in which potential interested and affected parties are given an opportunity to comment on, or raise issues relevant to, specific matters. This stems from the requirement that people have a right to be informed about potential decisions that may affect them and that they must be afforded an opportunity to influence those decisions. Effective public participation also improves the ability of the Competent Authority (CA) to make informed decisions and results in improved decision-making as the view of all parties are considered.

Contrary, it is important to recognize and highlight two key aspects of public participation which must be considered at the outset:

- There are practical and financial limitations to the involvement of all individuals within a PPP. Hence, public participation aims to generate issues that are representative of societal sectors, not each individual. Consequently, the PPP is designed to be inclusive of a broad range of sectors relevant to the proposed activity.
- The PPP will aim to raise a diversity of perspectives and will not be designed to force consensus amongst I&APs. Certainly, diversity of opinion rather than consensus building is likely to enrich ultimate decision-making. Therefore, where possible, the PPP will aim to obtain an indication of trade-offs that all stakeholders (i.e. I&APs, technical specialists, the authorities and the development proponent) are willing to accept with regard to the ecological sustainability, social equity and economic growth associated with the project.

#### **4.5 PUBLIC PARTICIPATION PROCESS**

The key steps and or approach adopted for this particular Scoping assessment has been confirmed with the DEA through the registration of the proposed activity / operations on their Online EA system.

All advertisements, notification letters and emails etc. served to notify the public and organs of state, on both the call for registration as I&APs and of the availability of the Scoping and EMP reports for an opportunity to comment or provide input on the reports. Despite the national Lockdown due to the COVID19 pandemic, which affected the possibility for public meetings, adverts were placed consecutively (at 14 days interval) in local newspapers **Confidente** newspaper on **03 – 09 Nov 2023** and **10 – 16 Nov 2023**, and then in **The Villager** newspaper on the **03<sup>rd</sup>** and **08<sup>th</sup> November 2023** in order to notify and inform the public of the proposed projects and invite I&APs to register.

The correspondence sent to or received from I&APs and other competent authorities during the Scoping Phase were incorporated into the stakeholder engagement report appended to this report (**Appendix A**).

#### **4.6 AUTHORITY CONSULTATION DURING THE EIA PHASE**

Authority consultation is integrated into the PPP, with additional one-on-one meetings held with the lead authorities, where necessary. A pre-application meeting was scheduled with the relevant competent authorities prior to the Lock-down, however were later cancelled. It is proposed that the Competent Authority (DEA) as well as other lead authorities be consulted as necessary and at various stages during the application review process of the DEA. During the Scoping phase, the following authorities were identified and consulted (see **Appendix C**) for the purpose of consultation:

## 4.7 APPROACH TO IMPACT ASSESSMENT AND SPECIALIST STUDIES

Potential environmental impacts were identified through both desktop literature review and consultation with I&APs, regulatory authorities, specialist and Enviro-Leap Consulting. In case of social impacts, the assessment focused on third parties only (third parties include members of the public and other local and regional institutions) and did not assess health and safety impacts on workers because the assumption was made that these aspects are separately regulated by health and safety legislation, policies and standards.

The impacts are discussed under issue headings in this section. The discussion and impact assessment for each sub-section covers the construction, operational, decommissioning and closure phases where relevant. This is indicated in the table at the beginning of each sub-section. Included in the table is a list of project activities/infrastructure that could cause the potential impact per farming phase. The activities/infrastructure that are summarized in this chapter, link to the description of the proposed project (see Section 5 of the EIA report).

Mitigation measures to address the identified impacts are discussed in this section and included in more detail in the ERCP report that is attached in **Appendix B**. In most cases (unless otherwise stated), these mitigation measures have been taken into account in the assessment of the significance of the mitigated impacts only.

Both the criteria used to assess the impacts and the method of determining the significance of the impacts is outlined in **Table 9**. This method complies with the method provided in the Namibian EIA Policy document and the draft EIA regulations. **Part A** provides the approach for determining impact consequence (combining severity, spatial scale and duration) and impact significance (the overall rating of the impact). Impact consequence and significance are determined from **Part B** and **C**. The interpretation of the impact significance is given in **Part D**. Both mitigated and unmitigated scenarios are considered for each impact.

Table 9: Criteria for Assessing Impacts

PART A: DEFINITION AND CRITERIA		
Definition of SIGNIFICANCE	Significance = consequence probability	
Definition of CONSEQUENCE	Consequence is a function of severity, spatial extent and duration	
Criteria for ranking of the SEVERITY/NATURE of environmental impacts	H	Substantial deterioration (death, illness or injury). Recommended level will often be violated. Vigorous community action. IrrFarm Eindpaalaceable loss of
	M	Moderate/measurable deterioration (discomfort). Recommended level will occasionally be violated. Widespread complaints. Noticeable loss of resources.
	L	Minor deterioration (nuisance or minor deterioration). Change not measurable/will remain in the current range. Recommended level will never be violated. Sporadic complaints. Limited loss of resources.
	L+	Minor improvement. Change not measurable/will remain in the current range. Recommended level will never be violated. Sporadic complaints.
	M+	Moderate improvement. Will be within or better than the recommended level. No observed reaction.
	H+	Substantial improvement. Will be within or better than the recommended level. Favorable publicity.
Criteria for ranking the DURATION of impacts	L	Quickly reversible. Less than the project life. Short-term
	M	Reversible overtime. Life of the project. Medium-term
	H	Permanent beyond closure – Long-term.
Criteria for ranking the SPATIAL SCALE of Impacts	L	Localized-Within the site boundary.
	M	Fairly widespread–Beyond the site boundary. Local
	H	Widespread – Far beyond site boundary. Regional/national

**PART B: DETERMINING CONSEQUENCE**

SEVERITY = L					
DURATION	Long-term	H	Medium	Medium	Medium
	Medium term	M	Low	Low	Medium
	Short-term	L	Low	Low	Medium
SEVERITY = M					
DURATION	Long-term	H	Medium	High	High
	Medium term	M	Medium	Medium	High
	Short-term	L	Low	Medium	Medium
SEVERITY = H					
DURATION	Long-term	H	High	High	High
	Medium term	M	Medium	Medium	High
	Short-term	L	Medium	Medium	High
			L	M	H
			Localized Within site boundary Site	Fairly widespread Beyond site boundary	Widespread Far beyond site boundary
<b>SPATIAL SCALE</b>					

**PART C: DETERMINING SIGNIFICANCE**

PROBABILITY (of exposure to impacts)	Definite/Continuous	H	Medium	Medium	High
	Possible/frequent	M	Medium	Medium	High
	Unlikely/seldom	L	Low	Low	Medium
			L	M	H
<b>CONSEQUENCE</b>					

**PART D: INTERPRETATION OF SIGNIFICANCE**

Significance	Decision guideline
High	It would influence the decision regardless of any possible mitigation.
Medium	It should have an influence on the decision unless it is mitigated.
Low	It will not have an influence on the decision.

\*H = high, M = medium and L = low and + denotes a positive impact.

This section outlines the assessment methodology and legal context for specialist studies, as recommended by the DEA 2006 Guideline on Assessment of Impacts. In addition to the above, the impact assessment methodology includes the following aspects:

Spatial extent – The size of the area that will be affected by the impact/risk:

- Site specific;
- Local (<10 km from site);
- Regional (<100 km of site);
- National or International (e.g. Greenhouse Gas emissions or migrant birds).

Consequence – The anticipated consequence of the risk/impact:

- Extreme (extreme alteration of natural systems, patterns or processes, i.e. where environmental functions and processes are altered such that they permanently cease);
- Severe (severe alteration of natural systems, patterns or processes, i.e. where environmental functions and processes are altered such that they temporarily or permanently cease);
- Substantial (substantial alteration of natural systems, patterns or processes, i.e. where environmental functions and processes are altered such that they temporarily or permanently cease);
- Moderate (notable alteration of natural systems, patterns or processes, i.e. where the environment continues to function but in a modified manner); or
- Slight (negligible alteration of natural systems, patterns or processes, i.e. where no natural systems/environmental functions, patterns, or processes are affected).

Duration – The timeframe during which the impact/risk will be experienced:

- Short term (less than 1 year);
- Medium term (1 to 10 years);
- Long term (the impact will cease after the operational life of the activity (i.e. the impact or risk will occur for the project duration)); or
- Permanent (mitigation will not occur in such a way or in such a time span that the impact can be considered transient (i.e. the impact will occur beyond the project decommissioning)).

Probability – The probability of the impact/risk occurring:

- Very likely or Likely;
- Unlikely or Very unlikely; and
- Extremely unlikely

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## 5. ASSESSMENT OF ALTERNATIVES AND IMPACTS

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### 5.1 ASSESSMENT OF IMPACTS AND MITIGATION

This chapter discusses the alternatives, as well as the selection process of the preferred alternatives that have been considered and assessed as part of the Scoping Phase. The 2012 EIA Regulations (GG4878) define “alternatives”, in relation to a proposed activity, “as different means of meeting the general purpose and requirements of the activity, which may include alternatives to the:

- property on which or location where the activity is proposed to be undertaken;
- type of activity to be undertaken;
- design or layout of the activity;
- technology to be used in the activity; or
- operational aspects of the activity; and
- Includes the option of not implementing the activity”.

The Scoping Report therefore provided a full description of the process followed to reach the proposed preferred activity, site and location within the site. It further includes the following as a minimum:

- The consideration of the no-go alternative as a baseline scenario;
- A comparison of the reasonable and feasible alternatives; and
- Providing a methodology for the elimination of an alternative.

#### 5.1.1 NO-GO ALTERNATIVE

The no-go alternative assumes that the proposed project will not go ahead i.e. the proposed Mrs. Madelize van Zyl’s proposed agricultural activities does not realize. This alternative entails that the operations would not drive any environmental change and result in no additional environmental impacts on the FARM EINDPAAL site.

It favors the *status quo* or baseline against which other alternatives are compared and will be considered throughout the report. However, the likely negative environmental impacts of other current and future user that may still happen in the absence of the proposed activities includes: Natural dust and generation of particulate matter during windy event particularly resulting from other regional economic activities such as construction, mining and tourism, pollution and environmental degradation associated with current land use along and around the proposed project route and sites.

Therefore, in terms of the “No-go Alternative”, potential economic gains that may never be realized if the proposed project activities do not go-ahead include: loss in income for both the local community and the partnering investor, unemployment and the loss of socio-economic benefits derived from current and future export and import trading opportunities. Most importantly, is the reduced regional integration in terms of trade and investment, loss of direct and indirect contracts and employment opportunities, export earnings, foreign direct investments and various taxes payable to the Government.



### 5.1.5 CONCLUDING STATEMENT ON ALTERNATIVES

Namibian agriculture can be regarded as the backbone for society, providing food, jobs, and profits for business at local, national, and international level. Its beef sector, for instance, was used as a driving industry during the colonial era, and since the 1970s, cattle farming resulted in productivity gains.

Although beef revenue from the area south of the veterinary cordon fence is a small fraction of the national economy, today's cattle sector still plays an important role in the rural economy of Namibia. Its growth is interrelated with the entire economic process of the economy.

Challenges that impede the beef sector include erratic rainfall, land degradation, inaccessible underground water, bush encroachment, livestock disease, labour shortages, and the ever-increasing cost of production. All these challenges have implications on the long-term sustainability and profitability of the livestock sector. However, despite these challenges, the global demand for proteins, inclusive of beef, is surging. Global consumers are willing to pay premium prices for the sought-after type of beef Namibia is known to produce.

Despite government's commitment to the development of the sector, agriculture did not yield the anticipated growth, food security and wealth. The total factor productivity of the livestock sector declined, especially since 2007. In comparison, the land as separate production factor did not show such a drastic decline in productivity. Beef producers' profitability consequently declined, which contributed to the declining rural economies of Namibia, reflected in many villages and town's deterioration

In case of social impacts, the assessment focused on third parties only (third parties include members of the public and other local and regional institutions) and did not assess health and safety impacts on workers because the assumption was made that these aspects are separately regulated by health and safety legislation, policies and standards.

The No-Action Alternative comparative assessment, suggests that environmental impacts of a future in which the proposed activities do not take place, may be good for the receiving environment because there will be no potential negative or positive environmental impacts associated with the proposed activities (Livestock Farming).

## 5.2 ASSESSMENT OF IMPACTS AND MITIGATION

Mitigation measures to address the identified impacts are discussed in this section and included in more detail in the EMP report that is attached in **Appendix B**. In most cases (unless otherwise stated), these mitigation measures have been taken into account in the assessment of the significance of the mitigated impacts only

### 5.2.1 IMPACTS ON THE BIOPHYSICAL ENVIRONMENT

Potential impacts in respect to the Biophysical (**Table 10**) environment involves particularly the terrestrial environments and relate mainly to the proposed agricultural activities in regard to bush-thinning.

Potential impacts in respect to the Biophysical environments (**Table 10 - 12**) involves, given that the proposed activity entails or is limited to the application of a highly selective herbicides that only targets woody species of the invasive plant species and to a lesser degree the use of mechanical implements to level down the dead wood material creating a mulch in order to reduce potential evaporation, presents mainly secondary potential impacts. Details of the potential impacts are demonstrated in the following tables:

**Table 10: Impact on the Biophysical Environment – FARM EINDPAAL site Access and use of vehicles**

Impact Event	Disturbances on Biodiversity in respect to Bush-thinning					
Description	Temporary disruption of ecological services flow envisaged as the vegetation, although invasive, currently act a habitats to various fauna species as well as provide ground cover resulting in reduced ground-moisture evaporation.  Hence, ecosystems services in this respect will be impacted i.e. shelter, ground cover (encouraging soil erosion), and possible groundwater evaporation.					
Nature	Should the thinning process be followed by a dry-spell, the mulch material may decompose exposing the top-soil to possible wind erosion and possibly run-off should the drought be followed by heavy rainfall resulting in flash-floods.					
<b>Phases:</b> Phases during which the project has implications of bush-thinning on the biodiversity is anticipated on Farm Eindpaal are highlighted below; Significance assessment was carried out on potential loss of habitats and ground cover in respect short-term risk.						
Construction Phase	Operational Phase			Decommissioning Phase	Post Closure	
<ul style="list-style-type: none"> <li>Only upgrades of fences and water infrastructure is anticipated and this present no impacts</li> </ul>	<ul style="list-style-type: none"> <li>Application of herbicides is through the use of a drone, thus eliminating compaction</li> <li>Levelling of dry material to create ground mulch by use bulldozer</li> </ul>			N/A	N/A	
Severity	Taken together, the disturbances will have a minimum to medium severity and rather highly positive impact in the long-term as the natural ecosystem will be restored.					
Duration	The Significance of the potential negative impacts is very Low given that the project location has been already degraded and the proposed activity aims at rejuvenating the rangeland					
Spatial Scale	Low, localized if activities remains restricted to within the boundaries of Farm Eindpaal and application of the herbicides is in accordance with the use of the precision of the drone.					
Probability	Low to Medium, especially in respect to potential soil erosion and evaporation as the vegetation material will be left on the surface to act as mulching material.					
Unmitigated	Severity	Duration	Spatial Scale	Consequence	Probability of Occurrence	Significance
	L	L	L	L	L	L
Mitigated	Severity	Duration	Spatial Scale	Consequence	Probability of Occurrence	Significance
	L	L	L	H+	L	H+
Conceptual Description of Mitigation Measures	<ul style="list-style-type: none"> <li>Strict compliance with the EMP is recommended in respect to managing incidental events;</li> <li>Bush thinning activity must be limited to the pre-identified highly degraded footprint of the Farm Eindpaal</li> <li>As necessary, the proponent shall develop and implement an after-care programme to ensure that no further encroachment occurs.</li> </ul>					

**Table 11: Impact on the Biophysical Environment – Sampling / trenching for geological sampling**

Impact Event		Disturbances on Biodiversity in respect to temporary habitat disturbance				
Description	Although the farm rangeland is degraded in the form of bush encroachment, it currently offers certain ecosystem services such as shelter to various faunal species, and these will be affected by temporary disturbance of habitats. However, as the ecosystem is restored – a re-emergence of the endemic species may be a bonus.					
Nature	Depending on potential impacts relating to vegetation thinning and or material leveling by use of heavy implements (bulldozers), some mammal and reptile species may be forced to evacuate the area into neighboring farms. Consequential impacts therefore are: <ul style="list-style-type: none"> <li>Noise from machineries and potential spill of hydrocarbons</li> <li>Disturbance of habitats (protected plant species) and species displacement</li> <li>Potential littering with solid waste</li> </ul>					
<b>Phases:</b> Phases during which the project has implications of sampling / impacts apply are highlighted below; Significance assessment was carried out on the sampling / trenching phase which presents a long term risk.						
Construction Phase	Operational Phase	Decommissioning Phase		Post Closure		
<ul style="list-style-type: none"> <li>No Construction envisaged at this stage</li> </ul>	<ul style="list-style-type: none"> <li>Accessing of Farm Eindpaal area for leveling of woody material, surveying and</li> <li>Upgrading of fences and water infrastructure</li> </ul>	N/A		N/A		
Severity	Taken together, the disturbances will have a medium severity given that limited number of vehicles will be used and no new access track will be created, these can be drastically minimized to very low with mitigation measures.					
Duration	The Significance of the potential impacts is very high given the project location i.e. near a national park and within a town					
Spatial Scale	Low, localized if activities are restricted to the known pegmatite belts area within the FARM EINDPAAL area thus limiting potential impacts spatially					
Probability	Low to Medium, especially in respect to wildlife / livestock collision and poaching as project staff will be at all times accompanied by Game Guards					
Unmitigated	Severity	Duration	Spatial Scale	Consequence	Probability of Occurrence	Significance
	M	L	L	H	L	M
Mitigated	Severity	Duration	Spatial Scale	Consequence	Probability of Occurrence	Significance
	L	L	L	L	L	M
Conceptual Description of Mitigation Measures	<ul style="list-style-type: none"> <li>Strict compliance with the Forestry Act and Regulations in respect to vegetation clearing and EMP is recommended in respect to managing incidental events;</li> <li>Temporary bins and spill kits must be provided to ensure that all waste material including hydrocarbons are well contained prior to final disposal at approved sites in either Otjimbingwe or Usakos</li> <li>Unless in an emergency, no equipment (vehicles) should be serviced in the field thus preventing unnecessary spillage of hydrocarbons</li> </ul>					

**Table 12: Impact on the Biophysical Environment – Waste Management (Effluent, Solid and Hydrocarbons)**

Impact Event		Waste generation and disposal				
<b>Description</b>	Operational activities relating to mainly the lodging and to a lesser degree the actual Farming production present an opportunity for the generation of both mainly domestic solid waste (litter material) and hydrocarbons (fuel and lubricants).					
<b>Nature</b>	<p>In general, agricultural activities generates very little domestic solid waste which includes but may not be limited to:</p> <ul style="list-style-type: none"> <li>Litter materials i.e. plastic bags, cartons, food packages and</li> <li>Effluents and sewer may only be generated at the farmhouse and from the staff quarters where the facilities are connect to the necessary ablution i.e. a bathroom with flushing toilets are used</li> <li>Minor hydrocarbons spillage(fuels and lubricants), possible contamination of soils and groundwater, in case of hydrocarbon spillage mainly from maintenance of equipment and vehicles</li> </ul>					
<b>Phases:</b> Phases during which the project has implications of waste generation are highlighted below; Significance assessment was carried out on the sampling / trenching phase which requires on-site stays.						
<b>Construction Phase</b>	<b>Operational Phase</b>	<b>Decommissioning Phase</b>		<b>Post Closure</b>		
<ul style="list-style-type: none"> <li>No Construction envisaged at this stage</li> </ul>	<ul style="list-style-type: none"> <li>Lodging is envisaged at existing farmhouse, staff quarters and cattle posts</li> </ul>	N/A		N/A		
<b>Severity</b>	Taken together, waste generation in respect to the proposed activities presents impacts that are of very-low severity as in general little is generated.					
<b>Duration</b>	The duration of the potential impacts is bound to the duration of the proposed operations thus short-term in nature					
<b>Spatial Scale</b>	Low, waste generation shall be limited mainly to the lodging areas and subject to property owners and thus not entirely influence by the proposed project					
<b>Probability</b>	Very Low, shall be limited mainly to the lodging areas and subject to property owners and thus not entirely influence by the proposed project					
<b>Unmitigated</b>	<b>Severity</b>	<b>Duration</b>	<b>Spatial Scale</b>	<b>Consequence</b>	<b>Probability of Occurrence</b>	<b>Significance</b>
	L	L	L	M	L	L
<b>Mitigated</b>	<b>Severity</b>	<b>Duration</b>	<b>Spatial Scale</b>	<b>Consequence</b>	<b>Probability of Occurrence</b>	<b>Significance</b>
	L	L	L	L	L	L
<b>Conceptual Description of Mitigation Measures</b>	<ul style="list-style-type: none"> <li>Given that lodging is recommended to be at existing facilities, this aspect shall be managed as part of the current property owners compliance requirements</li> <li>In the field, hydrocarbon waste shall be contained (in spill kits) and stored in appropriate heavy-duty plastic cabbage , transported to the nearest waste-oil recycling / solid waste disposal facility in Otjimbingwe or Usakos Towns</li> <li>A sufficient number of spill kits shall be acquired and strategically placed, particularly near every sampling site to ensure that timely response to any potential fuel and lubricant spills is conducted (should the project require any sampling activities to be undertaken). These shall include an on-site used oil disposal bin(s)</li> <li>Equally, effluent waste shall be managed in compliance with the lodging host’s requirements, although during any sampling activities – temporary dry-pit toilet facility must be provided at every site.</li> </ul>					

## 5.2.2 IMPACTS ON THE SOCIO-ECONOMIC ENVIRONMENT

Table 13: Environmental Impact: Human Health and Safety

Impact Event	Disturbances to the social environments					
Description	During the Farming stage, social impacts are most likely to be minimal and often positive. At this stage, usually the level of interaction between project staff and or project equipment with the local community is significantly minimum and therefore potential health and safety risks very low.					
Nature	The inter-migration of farm staff in-and-out of the region may present minimal potential risks of disease transmission particularly in respect to pandemic outbreak and other contagious diseases between the local community and contractors. The most significant impact in respect to health is the potential for increasing the strain on the already under capacitated local health services facility should project staff fall ill while in the field.					
Phases: Phases during which sources of social (health and safety) impacts apply are highlighted below;						
Construction Phase	Operational Phase		Decommissioning Phase		Post Closure	
N/A	<ul style="list-style-type: none"> <li>Use of the lodging and other social facilities, as well as other social interactions</li> </ul>		N/A		N/A	
Severity	In the unmitigated scenario, the potential risk for transmission of contagious / infectious diseases is High					
Duration	The Significance of the potential impacts is subject to the compliance with national health protocols, however given the minimal interaction of project staff and the local community impacts are classified as incidental and short-term.					
Spatial Scale	Medium, in case of near-miss incidents (were cases are not detected) the risk may be medium to high but localized if for instance project staff undergo prior testing for Corvid-19 before coming for fieldwork.					
Probability	Low, especially given that there are clear guideline and protocols governing health and safety of both contagious diseases and if they are well observed					
Unmitigated	Severity	Duration	Spatial Scale	Consequence	Probability of Occurrence	Significance
	H	M	M	H	L	H
Mitigated	Severity	Duration	Spatial Scale	Consequence	Probability of Occurrence	Significance
	M-L	L	L	M	L	H
Conceptual Description of Mitigation Measures	<ul style="list-style-type: none"> <li>Strict compliance with the EMP is recommended in respect to managing incidental events;</li> <li>Carry sufficient First Aid equipment to ensure that minor injuries reduces need to access local health facility and therefore minimizing potential strain on local services</li> <li>Strict compliance with national health protocols as and when directive are issued in respect to any disease outbreak and or recurring pandemics such as HIV / AIDS and Corvid-19</li> <li>Strict ban on use of any toxic substances within and during the working environment must be prohibited and serious punitive actions taken against any transgressors is recommended.</li> </ul>					

**Table 14: Impact on the Social Environment – Air and Noise Pollution**

Impact Event		Disturbances to the social environment				
Description	Should analyses by an analytical laboratory be positive, geological boreholes or trenches are drilled / dug and geological samples collected for further analysis. This will determine the depth of the potential mineralization. If necessary new access tracks to the drill sites will be created and drill pads will be cleared in which to set the rig. Two widely used sampling options may be adopted, these are the reverse circulation sampling and/or diamond-core sampling, and alternatively trenches may be dug for sampling.					
Nature	Depending on the scale of sampling / trenching (intensity), potential noise impacts relating to the use of large vehicles such as a drill rig truck and or excavator may be generated. Consequential impacts therefore are: <ul style="list-style-type: none"> <li>Noise from ground / bush material levelling by use of machineries may be anticipated</li> </ul>					
<b>Phases:</b> Phases during which sources of social (Air and Noise Pollution) impacts apply are highlighted below;						
Construction Phase	Operational Phase	Decommissioning Phase		Post Closure		
<ul style="list-style-type: none"> <li>Land preparation and setting-up of drill sites</li> <li>Setting-up Base-camp for project staff</li> </ul>	<ul style="list-style-type: none"> <li>Accessing of Farm Eindpaal for work by the contractors and farm employees</li> <li>Upgrading of fences, water facilities and bush thinning</li> </ul>	<ul style="list-style-type: none"> <li>Structure demolition and ground leveling activities</li> <li>Temporary lodging for decommissioning staff</li> </ul>		N/A		
Severity	Taken together, the disturbances will have a high severity in the unmitigated scenario. In the mitigated scenario, many of these disturbances can be prevented or mitigated to acceptable levels, which reduces the severity to low.					
Duration	The Significance of the potential impacts is subject to the proposed operation's life-time, however the identified impact's duration is incidental and short-term.					
Spatial Scale	Low, localized although cumulative as haulage along the designated routes may lead to increased traffic. The noise aspect is mainly limited to the feedlot facility site which far from residential areas.					
Probability	Very Low, the only noisy activities associated with the proposed operation are limited to the construction and decommissioning					
Unmitigated	Severity	Duration	Spatial Scale	Consequence	Probability of Occurrence	Significance
	L	L	L	M	L	H
Mitigated	Severity	Duration	Spatial Scale	Consequence	Probability of Occurrence	Significance
	L	L	L	L	L	H
Conceptual Description of Mitigation Measures	<ul style="list-style-type: none"> <li>Strict compliance with the EMP is recommended in respect to managing incidental events;</li> <li>Noise complaint register must be kept and maintained regularly with mitigation measures adopted accordingly.</li> <li>All excessive noise generating activities must be strictly carried out during the day between 08h00 (am) and 17h00 (pm) week days only.</li> <li>Conditions of the Environmental Clearance Certificate and Surface-use Agreement (with the relevant Traditional Authority and Park) must be accordingly adhere to.</li> <li>As much as possible, it is recommended that vehicles with the most minimum footprint are used such as smallest excavator and or portable drill rig (drawn on a trailer).</li> </ul>					

Table 15: Impact on the Social Environment – Culture, Heritage and Scenic values

Impact Event		Disturbances to the heritage and scenic value of the environment				
Description	The rapid on-ground survey and desktop review for cultural and heritage sites, reveals that generally there were low/no occurrence of known cultural heritage or archaeological sites, hence the assumption is that the occurrence of undiscovered sites within the Farm Eindpaal area is low.					
Nature	Any sites that did exist here would either have been discovered already during previous investigations (due to the accessibility of the site to archaeologists) or have been destroyed during previous Farming and mining operations and or other land-uses such farming and tourism undertaken in the area.					
Phases: Phases during which sources of social (cultural, heritage and scenic values) impacts apply are highlighted below;						
Construction Phase	Operational Phase	Decommissioning Phase	Post Closure			
<ul style="list-style-type: none"> <li>Land preparation and construction activities</li> <li>Temporary lodging for construction staff</li> </ul>	<ul style="list-style-type: none"> <li>Land surveying mapping, trenching for laying-down pipeline, and material leveling</li> </ul>	<ul style="list-style-type: none"> <li>Structure demolition and ground leveling activities</li> <li>Temporary lodging for decommissioning staff</li> </ul>	N/A			
Severity	Severity is Low, disturbances relating to field-based will be low with extremely unlikely probability of occurrence without mitigations					
Duration	The significance of the potential impacts is subject to the proposed operation's life-time (in this case short-term), hence potential impacts is incidental in nature					
Spatial Scale	Localized, although chances of damaging artifacts are very high when encountered, the probability of finding these on the FARM EINDPAAL area are low and may be limited to certain rock outcrops and along river valleys.					
Probability	Very Low, the nature of operation significantly limits Farming activities to one known pegmatite belt that falls within the mining area.					
Unmitigated	Severity	Duration	Spatial Scale	Consequence	Probability of Occurrence	Significance
	L	L	M	H	L	H
Mitigated	Severity	Duration	Spatial Scale	Consequence	Probability of Occurrence	Significance
	L	L	L	H	L	M
Conceptual Description of Mitigation Measures	<ul style="list-style-type: none"> <li>Strict compliance with the EMP is recommended in respect to managing incidental events</li> <li>Contractors working on the site should be made aware that under the National Heritage Act, 2004 (Act No. 27 of 2004) any items protected under the definition of heritage found in the course of development should be reported to the National Heritage Council</li> <li>The chance finds procedure as outlined in the EMP must be implemented at all times, and.</li> <li>Detailed field survey should be carried out if suspected archaeological resources or major natural cavities / shelters have been unearthed during the proposed Farming and test mining operations.</li> <li>A stakeholder complaint register must be kept and maintained regularly with mitigation measures adopted accordingly, recording all concerns relating impacts of the proposed Farming activities on the cultural and scenic value of the environment which may be reported by interested and affected parties.</li> </ul>					

Table 16: Impact on the Economic Aspect

Impact Event		Disturbances on social and economic aspects				
Description	Potential economic gains that may never be realized if the proposed project activities does not go-ahead include: loss in potential alternative income for the town, unemployment and the loss of socio-economic benefits derived from future mining development opportunities.					
Nature	However, it is imperative that the community is made aware that a major possible impact of Farming is the unrealistic expectations about the development of a mine. It's important for local communities to bear in mind that most Farming activity will not advance to mine development.					
Phases: Phases during which sources of social (potential social and economic gain) impacts apply are highlighted below;						
Construction Phase	Operational Phase	Decommissioning Phase		Post Closure		
<ul style="list-style-type: none"> <li>Land preparation and construction activities</li> </ul>	<ul style="list-style-type: none"> <li>Use of the social facilities, as well as other social interactions</li> <li>Farming operations</li> </ul>	<ul style="list-style-type: none"> <li>Structure demolition and ground leveling activities</li> </ul>		<ul style="list-style-type: none"> <li>Retrenchments, retirement and job losses due to closure</li> </ul>		
Severity	In the unmitigated scenario, this implies in the case where the activity take not take effect, no economic benefits shall realize hence, the severity in respect to unemployment shall be very high. However, with the implementation of the proposed operations, the severity of unemployment shall be reduced to medium.					
Duration	The Significance of the potential impacts is subject to the proposed operation's life-time, with a long-term potential					
Spatial Scale	Low, localized and only limited to the Otjimbingwe or Usakos Towns Town community					
Probability	Low – Medium, probability in respect to job creation on both the temporary ( during Farming) and long-term ( during Mine development and operation) phases					
Unmitigated	Severity	Duration	Spatial Scale	Consequence	Probability of Occurrence	Significance
	L-M	L	L	L	L	L
Mitigated	Severity	Duration	Spatial Scale	Consequence	Probability of Occurrence	Significance
	L	M+	M+	H+	H+	H+
Conceptual Description of Mitigation Measures	<ul style="list-style-type: none"> <li>It is critical that timely and continuous communication and dissemination of information with the local community is ensured to alleviate potential sense of social marginalization, drive gender equality and enhance the understanding and perception of the benefits associated with Mrs. Madelize van Zyl activities</li> <li>To enhance the positive impacts relating to marginal net benefits for the micro-economy (local residence of Gobabis Town and Omaheke at large) and national economy at larger, legislative provisions to Affirmative Action and Labour Welfare must be observed</li> </ul>					



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## 6. CONCLUSIONS AND RECOMMENDATIONS

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### 6.1 CONCLUSIONS

The proposed activity responds to Namibia's strategic vision 2030 and the NDP5 of creating a conducive environment within which its citizens prosper and contribute to the national development goals by creating employment opportunities. Overall, this activity contribute to the nation's efforts of elevating poverty amongst the rural citizens.

Bush encroachment can be defined as thickening of aggressive undesired woody species, resulting in an imbalance of the grass: bush ratio, a decrease in biodiversity, a decrease in carrying capacity and eventual economic losses. The phenomenon of bush encroachment in Namibian savannas is regarded as part of the desertification process since the increase in the extent and density of woody vegetation occurs at the expense of other desirable grasses and forbs, resulting in an alarming reduction in productivity.

It is generally accepted that the decline in the carrying capacity of Namibia's rangelands could be anything from 100% or more. The overriding problem caused by high densities of invader bush is its absolute superiority in competing for water in the upper layers of the soil. It is of utmost importance that the productivity of our natural rangelands is maintained at the highest possible level. Namibia cannot afford to have a biological system where, because of bush encroachment and a veld in poor condition, more than 50% of the annual rainfall is lost. The practical implication is that, even if a farm gets 300mm of rain, it will effectively be reduced to 150mm. The frequency of artificial droughts created in this way cannot be afforded.

A key consideration in respect to the proposed project alternatives, is that of Farm Eindpaal location / site particularly considering that it falls within a farming. Primarily, the key objective in respect to land-use here is generation of economic benefits from farming activities i.e. livestock and or game farming.

Hence, the pre-dominant land-use in these environments is usually non-intrusive and includes alternative tourism operations. However, tourism may have not proven to be the sole economically rewarding land-use option given the prolonged effects of natural disasters and pandemics. This has created an uncertainty which resulted in communities looking beyond farming and tourism for alternative income streams and thus increased mining activities are observed in the area.

In case of social impacts, the assessment focused on third parties only (third parties include members of the public and other local and regional institutions) and did not assess health and safety impacts on workers because the assumption was made that these aspects are separately regulated by health and safety legislation, policies and standards.

The No-Action Alternative comparative assessment, suggests that environmental impacts of a future in which the proposed activities do not take place, may be good for the receiving

environment because there will be no potential negative or positive environmental impacts associated with the proposed activities (agricultural production).

Overall, potential impacts may vary in terms of scale (locality), magnitude and duration e.g. minor negative impacts in the form of visual intrusion, dust and noise pollution especially during the field-based activities i.e. sampling and or trenching.

Below is a summary of the likely positive impacts that have been assessed for the different phases of the proposed Mrs. Madelize van Zyl's agricultural activities:

- Socio-economic development and capacity building through partnering with foreign operators / investors, skills transfer and training on the mining development sector shall be achieved (Likely impacts are high).
- Creation of employment opportunities and strengthening /expansion of SME business
- Consequential Infrastructure development e.g. development of a Mine should viable deposit be discovered.

The following is a summary of the likely negative impacts that have been assessed for the different phases of the existing sand mining project:

- Ambient Air Quality and Noise Pollution (Likely impacts are Low).
- Ecological and biodiversity loss (Likely impacts are localized and low).
- Health and safety (Overall likely impacts are low with the adoption and compliance of appropriate mitigation measures).
- Accidental Spill of Hazardous substance (Likely impacts are low with proper implementation of the environmental management plan in place).
- Cultural Heritage, Archaeological and Scenic value (Likely impacts are low with proper implementation of the environmental management plan in place).

## **6.2 RECOMMENDATIONS**

Based on the findings of the environmental scoping assessment, which concludes that all potential negative impacts associated to the proposed Mrs. van Zyl's agricultural operations are minimal and practical mitigation measures are available. Equally, the positive impacts can be harnessed to increase the net marginal benefits relating to the socio-economic aspects of the operations.

Enviro-Leap confidently recommended that the proponent may upon obtaining their Environmental Clearance Certificate (ECC), implement all appropriate management and mitigation measures and monitoring requirements as may be stipulated in their EMP and or as condition of the ECC. These measures must be undertaken to promote and uphold good practice environmental principles and adhere to relevant legislations by avoiding unacceptable impacts to the receiving environment.

Taking into consideration the findings of the environmental scoping assessment process and given the national and regional strategic requirements for infrastructure development and economic growth, it is the opinion of the EAP that the project benefits outweigh the costs

and that the project will make a positive contribution towards steering Namibia on its pathway towards its vision of becoming a Logistic Hub.

Provided that the specified mitigation measures are applied effectively, it is recommended that Mrs. Madelize van Zyl is issued with an ECC in terms of the Section 32 of the EMA No. 7 of 2007 and it's EIA Regulations of 2012.

### 6.3 STAKEHOLDER ENGAGEMENT AND MONITORING

It is important that channels of communication are maintained over the life-time of the proposed agricultural project, and with all key stakeholders, members of the general public (including I&APs), as well as the local and traditional authorities, **Table 17** shows the stakeholders engagement recommendations.

**Table 17:** Actions relating to stakeholder communication

Issue	Management commitment	Phase
Development and maintenance of a Stakeholder engagement plan	On obtaining the Environmental Clearance Certificate and other relevant authorization it is recommended that the proponent undertakes a stakeholder engagement process to develop a Communication and Monitoring Plan for continuous reporting and feedback	All
Understanding who the stakeholders are	Maintain and update the stakeholder register, including stakeholders' needs and expectations. Ensure that all relevant stakeholder groups are included building on pre-identified and registered I&APs.	All
	A representative database would include all relevant local government, service providers and contractors, indigenous populations, local communities, Traditional Authorities (TAs), NGOs, shareholders, the investment sector, community-based organizations, suppliers and the media.	All
	Ensure that marginalized and vulnerable groups are also considered in the stakeholder communication process.	All
	Record partnerships as well as their roles, responsibilities, capacity and contribution to development.	All
Liaising with interested and affected parties at all phases in the mine life	Devise and implement a stakeholder communication and engagement strategy.	All
Responsibility	Mrs. Madelize van Zyl and Enviro-Leap Consulting (On-contract)	

A stakeholder engagement plan is an important tool in ensuring that a good working relationship is maintained between the proponent and the community within which the activities are undertaken. It is crucial that this plan is developed in the same transparent manner and approach as the environmental assessment, and that it remains a living document which allows the stakeholder to engage with throughout the duration of the proposed activity.

Equally, it must be at all time readily available on request to all interested and affected parties for review and must provide clear procedures for how and where it can be accessed.

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## REFERENCE

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## **APPENDIX A: ENVIRONMENTAL MANGEMENT PLAN**

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### **OVERALL OBJECTIVES OF THE EMP**

The following overall environmental objectives have been set for the Mrs. Madelize van Zyl Farming and mining development project:

- To comply with national legislation and standards for the protection of the environment.
- To limit potential impacts on biodiversity through the minimization of the footprint (as far as practically possible) and the conservation of residual habitat within the mine area.
- To keep surrounding communities informed of farming activities through the implementation of forums for communication and constructive dialogue.
- To develop, implement and manage monitoring systems to ensure good environmental performance in respect of the following: ground and surface water, air quality, noise and vibration, biodiversity and rehabilitation.

### **KEEPING EMPS UP TO DATE**

This Environmental Management Plan (EMP) document is designed to meet legal requirements and avoid or minimize the impacts associated with the implementation of Mrs. Madelize van Zyl Farming development. It is the intention that this EMP should be seen as a “living document” which will be amended during the operation, as the activities might change or new ones be introduced.

Should a listed activity(s) as defined in the Environmental Impact Assessment Regulations: Environmental Management Act, 2007 (Government Gazette No. 4878) be triggered (as a result of future modifications/changes at the mine), this EMP will be updated as a result of another EIA process as stipulated in the regulations.

## IMPACTS MANAGEMENT / MITIGATION MEASURES

Table 18. Impact on the Biophysical Environment – Farm Eindpaal vegetation restoration

Issue	Management commitment	Phase
Understanding who the stakeholders are	<ul style="list-style-type: none"> <li>• Maintain and update the stakeholder register, including stakeholders' needs and expectations.</li> <li>• A representative database would include all relevant local government, service providers, indigenous populations, Traditional Authorities (TAs), NGOs or community-based organizations</li> <li>• Ensure that marginalized and vulnerable groups are also considered in the stakeholder communication process.</li> <li>• Record partnerships as well as their roles, responsibilities, capacity and contribution to development.</li> </ul>	All
Liaising with interested and affected parties at all phases in the mine life	Devise and implement a stakeholder communication and engagement strategy.	All
Responsibility	Mrs. Madelize van Zyl and Enviro-Leap Consulting (On contract basis)	

Table 19. Impact on the Biophysical Environment – Farm Eindpaal vegetation restoration

Impact Event	Disturbances on Biodiversity in respect to Bush-thinning	
Desired mitigation outcome	The objective of the mitigation in respect to impacts on biodiversity is to ensure that as much as possible, disturbance on biodiversity is avoided and prevented while the proposed agricultural activities is undertaken.	
Proposed Mitigation Measures	<ul style="list-style-type: none"> <li>• Strict compliance with the EMP is recommended in respect to managing incidental events;</li> <li>• Bush thinning activity must be limited to the pre-identified highly degraded footprint of the Farm Eindpaal</li> <li>• As necessary, the proponent shall develop and implement an after-care programme to ensure that no further encroachment occurs.</li> </ul>	All
Responsibility	Mrs. Madelize van Zyl and Enviro-Leap Consulting (On contract basis)	

**Table 20.** Impact on the Biophysical Environment – Farm Eindpaal vegetation restoration

Impact Event	Disturbances on Biodiversity in respect to temporary habitat disturbance	
Desired mitigation outcome	The objective of the mitigation in respect to impacts on biodiversity is to ensure that as much as possible, disturbance particularly on wildlife (poaching) and flora (clearing / damage) species is reduced and or prevented.	
Proposed Mitigation Measures	<ul style="list-style-type: none"> <li>• Strict compliance with the Forestry Act and Regulations in respect to vegetation clearing and EMP is recommended in respect to managing incidental events;</li> <li>• Should the proponent require clearing, removal and transplantation of any protected plant species – services of an appropriately qualified botanist / ecologists must be sought and relevant permissions obtained prior to any such activity being undertaken</li> <li>• A plant survey must be conducted and all protected species clearly marked and protected prior to setting-up any sampling site and or digging any trench for geological sampling</li> <li>• Temporary bins and spill kits must be provided to ensure that all waste material including hydrocarbons are well contained prior to final disposal at approved sites in either Otjimbingwe or Usakos</li> <li>• Unless in an emergency, no equipment (vehicles and drill rigs) should be serviced in the field thus preventing unnecessary spillage of hydrocarbons</li> </ul>	All
Responsibility	Mrs. Madelize van Zyl and Enviro-Leap Consulting (On contract basis)	

## 5.2.2 IMPACTS ON THE SOCIO-ECONOMIC ENVIRONMENT

**Table 21.** Impact on the Biophysical Environment – Waste Management (Effluent, Solid and Hydrocarbons)

Impact Event	Waste generation and disposal	Phase
Desired mitigation outcome	The objective of the mitigation in respect to waste generation is to ensure that the best scenic value and integrity of the affected environment maintained and or enhanced by reducing chances of littering through proper use of waste management facilities.	
Proposed Mitigation Measures	<ul style="list-style-type: none"> <li>• Environmental awareness is an important aspect of environmental management, therefore all project staff and service providers must be educated of the environmental compliance requirements and urged to comply accordingly on induction with the project site.</li> <li>• In the field, hydrocarbon waste shall be contained (in spill kits) and stored in appropriate heavy-duty plastic cabbage , transported to the nearest waste-oil recycling / solid waste disposal facility in Gobabis or Windhoek</li> <li>• A sufficient number of spill kits shall be acquired and strategically placed, particularly near every sampling site to ensure that timely response to any potential fuel and lubricant spills is conducted (should the project require any sampling activities to be undertaken). These shall include an on-site used oil disposal bin(s)</li> </ul>	All
Responsibility	Mrs. Madelize van Zyl and Enviro-Leap Consulting (On contract basis)	

**Table 22.** Environmental Impact: Human Health and Safety

<b>Impact Event</b>	<b>Prevention and mitigation of any health and safety hazards / risks</b>	<b>Phase</b>
<b>Desired mitigation outcome</b>	The objective of the mitigation in respect to health and safety hazards is to ensure that the health, safety and protection of both the project staff and community receive priority in terms of budgetary provision and compliance	
<b>Proposed Mitigation Measures</b>	<ul style="list-style-type: none"> <li>• Strict compliance with the EMP is recommended in respect to managing incidental events;</li> <li>• Carry sufficient First Aid equipment to ensure that minor injuries reduces need to access local health facility and therefore minimizing potential strain on local services</li> <li>• Strict compliance with national health protocols as and when directive are issued in respect to any disease outbreak and or recurring pandemics such as HIV / AIDS and Corvid-19</li> <li>• Strict ban on use of any toxic substances within and during the working environment must be prohibited</li> </ul>	All
<b>Responsibility</b>	Mrs. Madelize van Zyl and Enviro-Leap Consulting (On contract basis)	

**Table 23:** Impact on the Social Environment – Air and Noise Pollution

<b>Impact Event</b>	<b>Disturbances to the social environment</b>	<b>Phase</b>
<b>Desired mitigation outcome</b>	The objective of the mitigation in respect to ambient air quality and sense of place / noise and chance is to ensure that all possible receptors are identified and practical measures are put in place to reduce these impacts and or respond with appropriate mitigation to complaints	
<b>Proposed Mitigation Measures</b>	<ul style="list-style-type: none"> <li>• Strict compliance with the EMP is recommended in respect to managing incidental events;</li> <li>• Noise complaint register must be kept and maintained regularly with mitigation measures adopted accordingly.</li> <li>• All excessive noise generating activities must be strictly carried out during the day between 08h00 (am) and 17h00 (pm) week days only.</li> <li>• Conditions of the Environmental Clearance Certificate and Surface-use Agreement (with the relevant Traditional Authority and Town) must be accordingly adhere to.</li> <li>• As much as possible, it is recommended that vehicles with the most minimum footprint are used such as smallest excavator and or portable drill rig (drawn on a trailer).</li> </ul>	
<b>Responsibility</b>	Mrs. Madelize van Zyl and Enviro-Leap Consulting (On contract basis)	



**Table 25: Impact on the Economic Aspect**

<b>Impact Event</b>	<b>Disturbances on social and economic aspects</b>	<b>Phase</b>
<b>Desired mitigation outcome</b>	The objective of the mitigation in respect to economic impacts relating to the proposed activity, is to ensure that potential negative economic impacts on other and existing land-use are prevented, reduced and or mitigated and the positive ones enhanced.	
<b>Proposed Mitigation Measures</b>	<ul style="list-style-type: none"> <li>• It is critical that timely and continuous communication and dissemination of information with the local community is ensured to alleviate potential sense of social marginalization, drive gender equality and enhance the understanding and perception of the benefits associated with Mrs. Madelize van Zyl 's activities</li> <li>• To enhance the positive impacts relating to marginal net benefits for the micro-economy (local residence of Otjimbingwe or Usakos Towns Town and the region at large) and national economy at larger, legislative provisions to Affirmative Action and Labour Welfare must be observed</li> </ul>	All
<b>Responsibility</b>	Mrs. Madelize van Zyl and Enviro-Leap Consulting (On contract basis)	

**Table 24: Impact on the Social Environment – Culture, Heritage and Scenic values**

<b>Impact Event</b>	<b>Disturbances to the heritage and scenic value of the environment</b>	<b>Phase</b>
<b>Desired mitigation outcome</b>	The objective of the mitigation in respect to impacts on cultural and archaeological heritage integrity is to ensure that at all times, project staff are vigilant of the potential to intrude, disturb and or damage important artifacts and therefore must avoid wandering onto any protected and or sensitive known or identified site.	
<b>Proposed Mitigation Measures</b>	<ul style="list-style-type: none"> <li>• Strict compliance with the EMP is recommended in respect to managing incidental events</li> <li>• Contractors working on the site should be made aware that under the National Heritage Act, 2004 (Act No. 27 of 2004) any items protected under the definition of heritage found in the course of development should be reported to the National Heritage Council <ul style="list-style-type: none"> <li>• The chance finds procedure as outlined in the EMP must be implemented at all times, and.</li> <li>• Detailed field survey should be carried out if suspected archaeological resources or major natural cavities / shelters have been unearthed during the proposed Farming and test mining operations.</li> </ul> </li> </ul>	
<b>Responsibility</b>	Mrs. Madelize van Zyl and Enviro-Leap Consulting (On contract basis)	

**Table 26:** Site Closure and Rehabilitation

Impact Event	Disturbances on social and economic aspects	Phase
Desired mitigation outcome	The Proponent will commit to establishing a rehabilitation plan as part of the mine closure plan. A conceptual mine closure plan with costing is under development must be compiled in association with Enviro-Leap and forms part of the environmental compliance and monitoring programme.	
Proposed Mitigation Measures	<ul style="list-style-type: none"> <li>• Mrs. Madelize van Zyl shall submit regular (annual Environmental Reports) to the relevant Ministry stating the Farming activities and environmental performance of the project.</li> <li>• Staff of the MET or Ministry of Mines and Energy may at any time inspect the Farming area. Internal and external monitoring should involve the safety and environmental officer and members of the MEFT.</li> <li>• Should the decision be taken that the project is not economically viable the area will be rehabilitated. The rehabilitation measures that are set out in the Rehabilitation Plan (to be compiled and approved by MEFT) are binding to all personnel on site including the crew and contractors.</li> </ul>	Closure
Responsibility	Mrs. Madelize van Zyl and Enviro-Leap Consulting (On contract basis)	

# APPENDIX B: PUBLIC CONSULTATION



## MUNICIPALITY OF HENTIES BAY NOTICE

### INTENTION TO ALIENATE PORTION 3103 HENTIES BAAI EXTENSION 12 ZONED "INSTITUTIONAL" TO MESSRS SINA'S HEALTH CARE CONSULTING CC

By virtue of Council Resolution C009/26/07/2023/7th/2023 and in terms of Section 63 (2)(b) of the Local Authorities Act, (Act 23 of 1992) as amended, read in conjunction with Section 30 (1)(1) of the Local Authorities Act 1992 (Act 23 of 1992) as amended, notice is hereby given that the Municipal Council of Hentiesbaai intends to alienate Erf 3103 in Hentiesbaai extension 12 measuring 29580 (Equivalent to 2.958 hectares) at a cost of N\$ 15.00 p/m<sup>2</sup> amounting to a total purchase price of N\$ 443,700.00 (Four Hundred and Forty-Three Thousand Seven Hundred Namibian dollars), by way of private treaty to Messrs Sina's Health Care Consulting cc for the purpose of establishing a medical facility.

Further take note that the locality and the layout plan of the property lies open for inspection during office hours at the offices of the Municipal Council situated at the corner of Jakkalsputz Road and Nickey Iyambo Avenue.

Any person(s) having objection(s) to the intended alienation of the portion may lodge such objection(s) fully motivated to the undersigned, within fourteen (14) days after the second placement of the advert.

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Practitioners: DR. Albertina N. Amupala & Dr. Maano P. Kambunga

#### Location 2:

Room 303, Eros (Mediclinic)

Telephone: 0837231950

Email: [adminmedclinic@toscareongpractice.com](mailto:adminmedclinic@toscareongpractice.com),  
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### CALL FOR REGISTRATION AS INTERESTED AND AFFECTED PARTIES

ENVIRONMENTAL SCOPING FOR THE PROPOSED FARM INFRASTRUCTURE AND RANGELAND (BUSH THINNING) IMPROVEMENT FOR ENHANCED LIVESTOCK PRODUCTION ON FARM EINDPAAL NO. 164, OMAHEKE REGION

#### 1. PROJECT SITE AND DESCRIPTION

Mrs. Madelize van Zyl wishes to acquire, restore the stocking capacity of the degraded (bush encroached) Farm Eindpaal No. 164 to enhance its potential for sustainable livestock production. The key component of the proposed activity entails the upgrade of water infrastructure, fences and targeted thinning of invader-bush by us of moth mechanical and chemical methods. Once, the rangeland and infrastructure are restored – the farm shall be stock with livestock on free ranging beef production

#### 2. PUBLIC PARTICIPATION PROCESS

Enviro-Leap Consulting invites all Interested and Affected Party (I & AP) to register and receive Environmental Assessment (BID, Scoping and EMP) documents relating to the proposed project for their comments and input.

#### 3. COMMENTS AND QUERIES

Interested and Affected Parties are herewith request to register by writing to us at the address below no later than **30 November 2023**.

#### 3. COMMENTS AND QUERIES

Please register and direct all comments, queries to:  
Mr. Shadrack Tjiramba, Environmental Assessment Practitioner  
Email: [eap.trigen@gmail.com](mailto:eap.trigen@gmail.com)

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Town planning and infrastructure development should be adapted to our informal economy, with its numerous micro-entrepreneurs striving to make a living.

These entrepreneurs have already shown us where they want to be positioned, offering us a blueprint to follow.

When constructing new roads or developing infrastructure, we should consider how to accommodate vendors at the trading points they have established.

We shouldn't drive them away after we've developed the infrastructure; instead, we should integrate them.

It is a common practice that when good infrastructure is developed, small entrepreneurs are displaced, and prime spots are allocated to larger, external businesses.

This exclusionary approach is flawed.

If we truly want to formalise the informal sector by helping these entrepreneurs transition their operations, it starts with providing them with suitable working spaces.

Our economy is excluding the masses from participating formally due to a lack of access to proper working spaces.

Those with limited working capital to pay rental fees are pushed onto the streets and to the fringes of towns, far from the markets.

Consequently, we perpetuate unemployment and crime among ourselves, and, more importantly, we deliberately discourage entrepreneurship.

A welcoming economy and leadership prioritise small businesses and emerging entrepreneurs. Namibia should wholeheartedly embrace vendors because they play a vital role in distributing our local ly-made products, breaking them into smaller units that low-income individuals can afford.

So why are we excluding them from our structural

#### CALL FOR REGISTRATION AS INTERESTED AND AFFECTED PARTIES

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planning? They can be seen struggling under the scorching sun, all because we are reluctant to embrace the structure of the economy and the resilience of our people.

At the heart of economics lie utility and profit maximisation. We must ask ourselves if we are facilitating these two core principles in our terms and how we can assist these entrepreneurs.

Building an inclusive economy is an art, and making it work for your people is an expression of compassion and the Ubuntu spirit.

As the oppressive heat gives way to rain, vendors endure it all outside a mall, simply because we resist embracing the structure of our economy and the spirit of our people.

*The views expressed in this column do not necessarily reflect the opinion of the editorial board or The Villager and its owners.*

*To contact the author of this piece, please email [gerastus16@gmail.com](mailto:gerastus16@gmail.com).*

*With love and economics from Okwalondo.*

It's time to implement mitigation measures that will ensure the resilience of our agricultural sector, enabling it to produce an ample supply of food for our people and reducing our reliance on imports.

Every month, approximately 300,000 people in our country suffer from food insecurity because their harvests fall short of sustaining them, and the prices of food in stores have become unaffordable.

To exacerbate the situation, many of these food-insecure individuals are historically crop farmers sitting on fertile land.

However, due to inadequate rainfall, they can't produce. We are now fully aware of this risk factor, and it demands a strategic solution.

This situation requires a coordinated effort from responsible stakeholders.

But entities like the Environmental Investment Fund (EIF) with the assistance of the Food and Agriculture Organisation (FAO), should be commended for the effort they put into establishing programs for climate change mitigation.

Although commendable, their effort is isolated and limited.

I believe it is imperative that we implement such programs nationwide to empower every household and small-scale farmer to build resilience.

But such intervention requires proper collaboration and coordination from these entities and responsible ministries including the Office of the Prime Minister, the Ministry of Finance, Agribank, the Ministry of Agriculture, and the Ministry of Environment.

It is disheartening that the government always seems to somehow find millions to spend on drought relief but the same government always doesn't have money to fund water infrastructure development to de-risk the agricultural sector.

We know how the drought emergency is used by the connected few to swindle taxpayers money.

I believe instead of spending millions every year on drought relief, we should rather invest such money in water infrastructure to reduce our dependence on rain and capacitate our farmers to produce.

The Ministry of Agriculture should procure more borehole drilling trucks and distribute them to all crop-producing regions with access to underground water, ensuring that smallholder farmers have year-round water access.

In the current fiscal year, we have allocated a total of N\$643 million to supplement drought relief provisions under the Office of the Prime Minister, covering both food distribution and support to affected farmers.

I propose redirecting these funds towards climate mitigation measures, strengthening farmers' capacity to produce year-round with minimal dependence on rainfall.

*Continues on Pg 15*

**CALL FOR REGISTRATION AS INTERESTED AND AFFECTED PARTIES**

**ENVIRONMENTAL SCOPING FOR THE PROPOSED FARM INFRASTRUCTURE AND RANGELAND (BUSH THINNING) IMPROVEMENT FOR ENHANCED LIVESTOCK PRODUCTION ON FARM EINDPAAL NO. 164, OMAHEKE REGION**

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**2. PUBLIC PARTICIPATION PROCESS**


Enviro-Leap Consulting invites all Interested and Affected Party (I & AP) to register and receive Environmental Assessment (EIA, Scoping and EMP) documents relating to the proposed project for their comments and input.

**3. COMMENTS AND QUERIES**

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**CALL FOR REGISTRATION AS INTERESTED AND AFFECTED PARTIES**

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**CALL FOR REGISTRATION AS INTERESTED AND AFFECTED PARTIES**

**THE ENVIRONMENTAL SCOPING FOR THE PROPOSED ULTRA-MODERN CAPE FRIA PORT AND ATLANTIC CITY MASTER PLAN (LAND ACQUISITION AND REZONING, TOWNSHIP PLANNING AND SUB-DIVISION, LAND SERVICING AND CREATION OF STREETS), CAPE FRIA IN THE KUNENE REGION**

**1. PROJECT SITE AND DESCRIPTION**

Kaoko Fria Investment (PTY) Ltd and Partners proposed the development of an Ultra-Modern Cape Fria Port and Atlantic City in different phases starting with Phase 1 which consist of the Township Planning, Sub-Division, Land Servicing and Creation of Streets.

At this stage the Environmental Assessment Scope is limited to the Environmental Scoping level of activities associated to the Planning Phase of the proposed Cape Fria Port and Atlantic City development.

**2. PUBLIC PARTICIPATION PROCESS**

Enviro-Leap Consulting invites all Interested and Affected Party (I & AP) to register and receive Environmental Assessment (BID, Scoping and EIA ToRs as the process advances) documents relating to the proposed project for their comments and input.

**3. COMMENTS AND QUERIES**

Interested and Affected Parties are herewith request to register by writing to us at the address below no later than **15 December 2023**.

**3. COMMENTS AND QUERIES**

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## APPENDIX C: CONSENT FROM RELEVANT AUTHORITY



REPUBLIC OF NAMIBIA

MINISTRY OF AGRICULTURE, WATER AND LAND REFORM

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Fax: (+264-61) 228240  
Enquires: **Mr. P.C. Nangolo**  
Tel: (+264-61) 2965102/3

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Private Bag 13343  
Windhoek  
Namibia

### CERTIFICATE OF WAIVER

(Section 16 of the Agricultural (Commercial) Land Reform Act, 1995 and Regulation 3)

I, **Carl HG Schlettwein** the Minister of Agriculture, Water and Land Reform of the Republic of Namibia, certify that the State waives its preferent right to purchase agricultural land, as conferred by Section 17 of the Agricultural (Commercial) Land Reform Act, 1995 (Act No. 6 of 1995), in respect of the property described below, which has in terms of that section been offered for sale to the State by the owner mentioned below, and does not intend to acquire that agricultural land at the time of the offer.

This Certificate of Waiver does not entitle the owner to sell or otherwise dispose off the mentioned property to a foreign national without the prior written consent of the Minister of Agriculture, Water and Land Reform, as required by Section 58(1) of the Agricultural (Commercial) Land Reform Act, 1995, (Act No. 6 of 1995), having been obtained by the foreign national who intends to acquire that property.

In terms of subsection (1) of Section 17 (A) of the Agricultural (Commercial) Land Reform Act, 1995, (Act No. 6 of 1995) this Certificate of Waiver is valid for a period of one year from the date of issue, unless extended by the Minister of Agriculture, Water and Land Reform under subsection (2) of Section 17 of the Agricultural (Commercial) Land Reform Act, 1995 (Act No. 6 of 1995).

#### **DESCRIPTION OF PROPERTY:**

CERTAIN : Farm Eindpaal No.164, measuring 4301.2836 hectares

REGISTRATION DIVISION : "L"

REGION : Omaheke

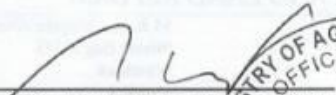
DEED OF TRANSFER NO : T 5433/2000

*All official correspondence must be addressed to the Executive Director*

OWNER : EINDPAAL FARMING CC  
Registration Number: CC/2000/0666

DATE OF OFFER : 28 March 2023

Signed at Windhoek, on 25<sup>th</sup> Day of July 2023

  
CARL HG SCHLETTWEIN (MP)  
MINISTER



All official correspondence must be addressed to the Executive Director



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# RESUME OF EAP

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...a leap towards better environmental compliance.

## PROFESSIONAL PROFILE

**Mr. SHADRACK TJIRAMBA**  
Research and Environmental Management Specialist

ID Number :	80011910445	EMAIL:	<a href="mailto:eap.trigen@gmail.com">eap.trigen@gmail.com</a>
Country of Residence :	Namibia	Cell:	+264-816229933
Nationality:	Namibian		

## PROFESSIONAL OVERVIEW

### Experience Internationally:

Countries worked: Namibia, South Africa.

### Languages:

English (*fluently written, spoken and read*);  
Otjiherero (*fluently spoken, written and read*)  
Afrikaans (*well spoken, fairly written and read*),

## ACADEMIC QUALIFICATIONS:

2009	The University of Cape	Western Cape	Post-Graduate Diploma Sustainable Land Management (NQA Level 8) Sustainable Development, Resource Economics, 2009), South Africa
2007	University of South Africa (UNISA)		Bachelor of Laws (LLB)
2005	Polytechnic of Namibia		B-Tech Land Management, 2005

## EMPLOYMENT RECORD:

May 2020-Current: Enviro-Leap Consulting Cc  
Position: Lead Consultant Environmental Management

- Compile and review environmental assessment reports (environmental scoping and management plans (EMP)) for our clients in accordance with the requirements of the Environmental Management Act, No.7 of 2007 and its regulations of 2012
- Compile and review environmental policies and audits
- Reviewed and updated the Solid Waste Management Policy for Dundee Metals Mining
- Conduct environmental compliance inspections and audits
- Facilitate stakeholder engagement
- Coordinate closure and rehabilitation of development projects, such as mining sites, hazardous substance spill sites
- Prepared training manuals and facilitated workshops for Communal Land Boards

August 2015 – July 2018 (fixed-term 3 years)

Position: Project Coordinator-Basket Fund, GIZ (Deutsche Gesellschaft Fur Internationale) Responsibilities:

- Coordinate project activities in the Omaheke and Otjozondjupa Region's
- Provide technical expertise/advise to various regional councils, land boards, traditional authorities, local level planning committees
- Coordinate the processes of revising and developing the Namibian environmental legislations (plans, strategies, regulations and Act amendments), as well as dissemination of information on these tools
- Prepare tender documents
- Coordinate project procurement needs in line with GIZ procurement policies.
- Financial reporting in line with financial guidelines for grant agreement GIZ
- Coordinate, manage the planning and implementation of project consultants' key performance areas.
- Supervise project staff and resource allocation
- Reporting in line with donor requirements

 O. Box 25874, Windhoek  +264 81 622 9933  [eap.trigen@gmail.com](mailto:eap.trigen@gmail.com)

**January 2019 – June 2019**

**Position: Social Policy Consultant – Gender Mainstreaming: Benguela Convention Commission. Responsibilities:**

- Conducted and compiled a draft Situation Analysis Report, summarizing the findings of desk review, gender survey through the field mission and interviews
- Compiled a draft Action Plan for BCLME III Project and Gender Policy for BCC
- Hosted and facilitated a situation analysis findings validation workshop
- Produced final Situation Analysis Report, Gender Action Plan for BCLME III Project, including a proposed gender-responsive Project Results Framework with gender-responsive outputs, sex- disaggregated indicators, baseline and targets. Gender Policy for BCC

**August 2011 to Dec 2012**

**Project Coordinator-MCA Agriculture & Environment:**

- Managed the Millennium Challenge Accounts Namibia Agriculture and Environment project's activities.
- Co-Developed, implemented and monitored local-level integrated activities and annual work plans for the CBNRM.
- Undertook and provided training and technical support to the targeted conservancies as per the objectives of the CBNRM
- Ensured project compliance with donor requirements through production of and submission of technical reports according to Donor procedures trainings for land management for farmers

**February 2004 – March 2009**

**Researcher: Land, Environment and Development Project-Legal Assistance Centre. June 2006 – November 2009**

- Assist with desktop and field research on land, environmental and urban housing (informal settlements).
- Assist in the compilation of research questionnaires
- Conduct interviews
- Assist with project administration
- Liaise with stakeholders NGO's, Government Agencies, Farmer's Associations, Ministry of Environment
- Draft research reports

#### CERTIFICATION

I, the undersigned, Shadrack Tjiramba, hereby certify to the best of my knowledge that the information provided herein correctly describe me, my qualifications and experience.

Date: 26 September 2022

Signature: 