


ENVIRONMENTAL & SOCIAL IMPACT ASSESSMENT REPORT

ENVIRONMENTAL IMPACT ASSESSMENT - PROPOSED TOWNSHIP ESTABLISHMENT ON PORTION A OF FARM VOLMOED NO. 1000, LOCATED 75KM SOUTH-EAST OF WINDHOEK, NAMIBIA

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Notice

This EIA Report was produced by Erongo Consulting, for Messrs Robotrino Investments for the development of the **Proposed Township Establishment On Portion A Of Farm Volmoed No. 1000, 75km Located 75km South-East Of Windhoek, Namibia.**

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“Balancing Growth with Resilience”

Document Status

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PROJECT TITLE	Proposed Township & Related Infrastructure Establishment / Development On Portion A Of Farm Volmoed No. 1000, Located 75km South-East Of Windhoek, Namibia
PROJECT TYPE	Environmental & Social Impact Assessment Study
PROJECT LOCATION	Located 75km South-East Of Windhoek, Rehoboth Municipal Area, Hardap Region, Namibia
COMPETENT AUTHORITY	Environmental Commission (Ministry of Environment & Tourism / MET)
PROJECT EAP / REVIEWER	Erongo Consulting Group Vrede Rede Street, Tamariskia, Swakopmund P.O. Box 7118, Swakopmund, Namibia Tel. +264-085-277-2797, 081-277-2797 Email: erongoconsulting@gmail.com / www.erongoconsultinggroup.co.za/com
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1. INTRODUCTION

1.1 Background

The proponent is planning to develop a township and related infrastructure On Portion A of Farm Volmoed No. 1000, Located 75km South-East Of Windhoek in Rehoboth Rural / Local Authority in the Hardap Region of Namibia.

This EIA Report serves as motivation for a consent application to subdivide a portion of Farm Volmoed, located 75km South-East of Windhoek. The farm falls under the Rehoboth Council area of jurisdiction. Approval is sought for the subdivision of 78.990Ha from 1263.424Ha into portion A and remainder. The purpose of the subdivision is to transfer the 78.990Ha to 31 beneficiaries, in the form of plot sizes varying between 1.3 and 5 hectares, who commit to undertaking agricultural operations.

1.2 Permitted Development

The project would be undertaken by Mr. V. James, who is the proponent. Farm Volmoed has been a family farm to the Möwes family for the last two generations. The applicant purchased the original 963.424Ha farm from his mother in 2007. In 2011 he purchased a further 300Ha from one of the neighbouring farmers in order to expand the capacity of the farm, tallying the current size of 1263.424Ha.

The Statutory or Legislative Rights allow the proponent to undertake this development. The Permitted Development approach also entails the obtaining of Prior Approval Consents from the various planning authorities to erect, construct, alter or extend any infrastructure, or the formation, laying out or alteration of a means of access to any highway used by vehicular traffic.

Although substantial parts of the Project are not expected to give rise to significant environmental effects in terms of the the Namibian Environmental Management Act 7 of 2007, the proponent, through Erongo Consulting Group, have undertaken to provide Environmental Assessment of the entire project. This approach has been adopted in order to provide robust and consistent supporting documentation for use with the various stakeholders or authorities including applications that will be required along the length of the project.

1.3 Purpose of the EIA Report

The purpose of the EIA Report is to describe how the EIA of the project will be undertaken, set out the topics that will be assessed and the geographic and spatial scope within which they will be considered. The report also sets out an overview of the methods that are were used to determine the potential significant environmental effects that will occur temporarily during the project implementation – digging of trenches, drilling, vegetation clearing - and occur permanently because of its physical presence and operation.

1.4 Consultancy Terms of Reference

The Terms of Reference (TORs) for the proposed project is technically and legally based on the requirements set out by the Namibian Environmental Management Act (2007) and the accompanying EIA Regulations (2012) and Section 50 of the Local Authorities Act of 1992, Act 23 of 1992, as amended. The process covered the following steps:

- *A description of all tasks to be undertaken as part of the assessment process, including any specialist studies to be included if needed;*
- *An indication of the stages at which the Environmental Commissioner is to be consulted;*
- *A description of the proposed method of assessing the environmental issues and alternatives*
- *An identification of all legislation and guidelines that have been considered in the preparation of the scoping study;*
- *Description of the environment that may be affected by the activity and the manner in which the physical, biological, social, economic and cultural aspects of the environment may be affected by the proposed activity*
- *A description of environmental issues and potential impacts, including cumulative impacts that have been identified*
- *A draft Environmental Management Plan that complies with EMA and its Regulations;*
- *The nature and extent of the Public Consultation processes to be conducted during the assessment process.*

It should be noted that the ToR and scope of services required the Environmental Impact Assessment and production of EMP for the proposed development, and this included extensive and exhaustive public consultation process.

1.5 The Environmental Assessment Practitioner

Erongo Consulting Group is a leading Namibian environmental and management Consultancy Company founded by previously disadvantaged Namibians.

The company combines local experience with a regional and global knowledge base constantly striving to achieve inspiring and exacting solutions that make a genuine difference to our clients, the end-users, and society at large. The company works across the following markets: Buildings, Transport, Planning & Urban Design, Water, Environment & Health, Energy and Management Consulting.

We partner with our clients to create sustainable societies where people and nature flourish. With our unique combination of technical excellence and socio-economic insights we deliver enduring structures, resource-efficient solutions and socially cohesive communities for today and tomorrow.

We have a multidisciplinary approach to what we do and what we aspire to achieve. We work to create a sustainable society where improved quality of life and economic growth is enabled by innovative and durable solutions to the most pressing needs, challenges and concerns for businesses, public institutions and people.

Often these challenges are related to the physical environment in which life unfolds – natural resources, infrastructure, buildings and structures, urban spaces – and our ambition is to help drive a sustainable transition towards a more resource efficient future.

1.6 Consultation

Specific consultations (direct and indirect) have been undertaken to inform this EIA process. Newspapers, Facebook Pages, WhatsApp, Notice Boards and posters were used to reach out to Interested and Affected Stakeholders. The intentions for consultation during the EIA process have been included within each of the topic assessment chapters. The Newspaper article calling for Public Consultation appeared in the **New Era of 14 and 22 May 2020**.

The proponent engaged Erongo Consulting Group prior to the commencement of the main activities. Therefore, it should be noted that this exercise was carried out and drafted before any development has taken place on the ground.

The EIA Consultant could only identify issues observed on site as well as from discussions with and investigations from stakeholders who were directly and indirectly affected by the whole development.

General consultation process for the project included a series of high-level discussions with Rehoboth Town Council, Ministry of Agriculture, Land and Forestry, Authority, Ministry of Environment and Tourism, and, in some cases, members of the neighbourhood through which the Project would take place.

1.7 Report Content and Structure

In arranging the content of this Report, and therefore also of the Environmental Management Plan (EMP) that will follow, the aim has been to set the chapters in a sequence that presents information to the reader in a logical order. This also facilitates cross reference between chapters with related content.

It should be noted that the information in the Report is based on the currently available baseline information provided by the Proponent and the Town Planner, Dunamis Consulting and our independent judgment as the EIA Practitioners.

2. PROPOSED PROJECT DESCRIPTION

The development will directly take place on Farm Volmoed, located some 75km South-East of Windhoek in the Rehoboth Town Council area of jurisdiction. The boundaries of each of the development are clearly depicted on the Google Earth picture, Figure 1.1. The project Latitude is 22°55'00" S, whilst the Longitude is 17°32'35 E.

Farm information and proposed subdivision details

ITEM	DESCRIPTION
Farm Name	Volmoed
Farm Number	1000
Total Area	1263.424 Ha
Proposed Subdivision Area	78.990 Ha
Number of Subdivided Plots	31
Size of each plot	1.3 – 5 hectares

2.1 Description of the Proposed Activity

The proponent wishes to subdivide a portion of farm Volmoed, located 75km South-East of Windhoek. Approval is sought for the subdivision of 78.990Ha from 1263.424Ha into portion A and remainder. The purpose of the subdivision is to transfer the 78.990Ha to 31

beneficiaries, in the form of plot sizes varying between 1.3 and 5 hectares, who commit to undertaking agricultural operations. The proposed area forms about 6.25% of the entire farm, which has been allocated for subdivision in the context of the current farm boundary.

The proposed development cannot take place without an Environmental Clearance Certificate as promulgated by the Environmental Management Act 7, of 2007 and its Regulations as well as the Four Cornerstone of the Earth Summit.

The proposed development fits into the Rehoboth Town Planning Scheme. Parking spaces will be provided in accordance with the required number of parking spaces this development will generate.

2.2 Description of the Site



Figure 1.1: The location of the site in relations to the existing structures (Farm Volmoed, 2020)

The identified piece of land is not yet zoned and is regarded as an isolated piece of farm land which hasn't been earmarked for any future development by the Möwes Family / Farm Volmoed. It is not surrounded by any (mixed) zoning.

2.3 Location of Activity on Site

The proposed activity is to rezone and subdivide a portion of farm Volmoed of 78.990Ha from 1263.424Ha into portion A and remainder. The purpose of the subdivision is to transfer the 78.990Ha to 31 beneficiaries, in the form of plot sizes varying between 1.3 and 5 hectares, who commit to undertaking agricultural operations establish. The proposed development layout is designed to fit the shape and size of the site making it suitable for proposed township establishment and related infrastructure.

The site is close to the existing farm infrastructure / developments thus the development fits well with the existing land uses. The site is on 1263.424Ha piece of farmland, and the terrain virgin, rugged and rectangular in design. There is sufficient bulk services closer to the site in terms of water, sewerage, electricity and communication cables.

The proposed activity may affect the following geophysical aspects:

- **Negative:** Dust particles will be created during the construction phase.
- **Positive:** These particles of dust can be blown away by the wind reducing the chances of people inhaling it;
- **Negative:** The physical size of the site restricts development potential in terms of density;
- **Negative:** The proposed development will increase electrical and water consumption which are both derived from non-renewable resources in Namibia.

2.3.1 Biological Aspects

The site is located in a farm environment that has been in existence for a long time. This environment has slowly transformed from the natural environment to a human habitat now, which has caused minimal wipe out of the natural habitat. Ostrich farming, cattle ranching and market gardening has covered up most of the environment (farmland).



Figure 2.1: The pictures above show some of the cattle on the farm as they are being prepared for the annual auction; as well as the tamed ostrich

Due to the existing character of the area, it is therefore anticipated that the proposed development will not cause any negative biological or environmental impact.

The proposed activity may affect the following biological aspects:

- **Negative:** None observed.
- **Positive:** No impacts will be generated by this rezoning and eventual development because development will take place in a semi-barren farmland

- **Positive:** The development is not located to any biologically sensitive areas

2.3.2 Social and Economic Aspects

The current operations of Farm Volmoed comprises partial commercial and partial sustenance farming. As part of the commercial component, the farm holds 80 heads of cattle at any given time. On an annual basis pre-selected cattle are sold to either: neighbouring farmers, at auctions or to Meatco directly. Furthermore, Volmoed is a recently registered and approved vendor with Pick 'n Pay in Windhoek, where packaged firewood delivered on a weekly basis. The firewood business forms part of the commercial component of the farming operations and is part of the larger licenced de-bushing project aimed at increasing grazing capacity on the farm.



Figure 2.2: *Packaged firewood from farm Volmoed scheduled for delivery to Pick 'n Pay, Windhoek*

The vegetable garden forms part of the sustenance component of the farming operations, where tomatoes, green peppers, spring onions, beetroot, carrots, corn and chillies are successfully grown and harvested for personal consumption. This illustrates the fertility of the soil on the farm. Lucerne is also grown to supplement the grazing for the cattle.



Figure 2.3: *Vegetable garden forms part of the sustenance component of the farming operations*

It has been noted that most properties in the area are commercial or business, and as such, the proposed development complements such developments.

Another project currently underway on the farm is the installation of game fencing which is 80% complete. The remaining 20% which has since been completed. The purpose of the game fencing installation is to be able to accommodate oryx, springboks, zebras and

giraffes, in addition to the kudus and ostriches that already roam the farm, by the end of 2020.

Although the current farming operations have been proven to be effective for the last two generations, it has not been as profitable, considering that net profits have not exceeded 30% since the applicant purchased the farm. The limitations to the farm in terms of capacity as well as available capital for further expansion have not remained undetected. The capacity limitations are mainly associated with cattle farming, however a list of micro-farming opportunities that can successfully be implemented within the limitations, has been identified, explored and researched. The list of potential micro-farming operations has been compiled below:

- Poultry farming
- Poultry processing, packaging & distribution
- Pig farming
- Pig processing, packaging & distribution
- Fruit and vegetable cultivation
- Fruit and vegetable processing, packaging & distribution
- Fish farming
- Fish processing, packaging & distribution
- Charcoal manufacturing, packaging & distribution
- Goat's cheese production, packaging & distribution
- Meat processing, packaging & distribution
- Concrete brick manufacturing
- Tourism accommodation

There is no doubt that these micro-farming operations can be undertaken, as proof of concept of many of the above-listed operations has already been shown on the farm. Fruit and vegetable farming forms part of current farming operations; poultry and pig farming has also been implemented on the farm in the past by the applicant's parents. Furthermore, charcoal production on a small scale is currently underway on one of the neighbouring farms. However, if these operations were to be vertically integrated such that the end products of each operation can be directly marketed and sold to shops in substantial quantities, the capital expenditure would be very high for one person to firstly finance and secondly to manage.

Considering the available resources in terms of land and expertise in these micro-farming operations, it was inferred that if a small portion of land were to be availed to small-scale farmers to invest in these agricultural activities, it would be more effective, manageable and beneficial to many more families. By availing these subdivided portions of land and expertise in these farming activities, there would not only be job creation, as these operations would need employees to manage them effectively, but there would also be more value addition along the economic supply chain of the country.

When considering the effect that the partial subdivision of farm Volmoed will have on the nearby communities, namely Bloukrans and Hatsamas, the aspect of job and opportunity creation is an important one. In these communal settlements there are many skilled artisans and labourers, however with the current farming operations in the vicinity,

employment opportunities are limited. By creating many more business opportunities through the subdivision of farm Volmoed, one would inadvertently be creating job opportunities in these communities.

The proposed activity may affect the following social aspects:

- **Negative:** construction activities can be eyesore to bordering farms (though they are some 5 to 10 km away), as well as a few farm workers.
- **Negative (aesthetic):** the "neighbourhood" will be changed as the site had been "vacant" for some time now.
- **Neutral:** the proposed development will set the example for future properties; cumulative impact on the social environment can either be positive or negative.
- **Positive:** the development will increase value of the properties in the area, making people take more pride in their community
- **Positive:** A mixed-use development reduces the need to travel between living and working space, improving quality of life.

2.3.4 Cultural Aspects

There are no historical or heritage sites in the vicinity or within the 5-10km radius. No buildings have no architectural significance or any importance within the immediate environment or the 2 km radius to the local community.

The proposed activity may affect the following economic aspects:

- **Negative:** The development will have minimal negative aesthetic view on the whole area.
- **Positive:** No objections were received from the public; therefore, the proposed activity is in accordance with the community's values, norms, and cultural principles.

2.4 Mitigation of Effects on Current Operations

It would be a fair assessment to consider the loss of grazing due to the sale of subdivided land. The applicant has considered the impact that it may have on the current cattle farming operations as well as potential mitigation measures. Unbeknownst to this subdivision consent application, mitigation measures have been implemented for last few years.

The farm has capacity to accommodate 105 LSU at 12Ha/LSU during a year with moderate rainfall. This capacity can increase in years of good rainfall. To preserve grazing as well as to improve the overall quality of the cattle that is offered to market, the applicant has implemented three main strategies. First, he has kept the total number of cattle on the farm at 23.81% below capacity to create a buffer for when grazing becomes critical in seasons when rainfall is poor. This first strategy has a knock-on effect of reduced operating expenses due to reduced number of cattle incurred expenditure. Second, he has grown a small Lucerne plantation, as shown in Figure 6, to help supplement the grazing in the field.

The third component involves feeding the cattle that are scheduled for sale at the annual auction or elsewhere, with a Feedmaster Rangeland Grower Meal™. The Feedmaster

Rangeland Grower Meal™ is nutritional and high protein content, locally sourced, feed that significantly improves the quality of cattle, especially in terms of weight. This combined strategy has proven effective for the last five years, as the annual profitability has shown to increase by yielding a higher price per kilogram for annual cattle sales, while preserving grazing in times of drought.

Considering that the farming strategy involves preserving 23.81% of the available grazing, if one were to sell off 6.25% (78.990Ha) of the total farmland, there would still be an excess of 17.56% grazing land available. With that in mind, the proposed subdivision of the farm would not impact on the farming operations due to the farming strategy currently in place.

3. DESCRIPTION OF THE RECEIVING ENVIRONMENT

The Chapter provides an overview of the baseline biophysical and social environmental conditions, with which the proposed project will interact. This information has been sourced from observations made during a site visit and existing literature from previous research conducted in the area. This chapter also identifies sensitivities pertaining to key environmental features as well as potential impacts resulting from the proposed project in relation to these sensitivities.

3.1 Biophysical Environment

3.1.1 Climate

Rehoboth is a town in central Namibia just north of the Tropic of Capricorn. Located 90 kilometres south of the Namibian capital Windhoek, Rehoboth lies on a high elevation plateau with several natural hot-water springs. It receives sparse mean annual rainfall of 240 millimetres (9.4 in), although in the 2010/2011 a record 731 millimetres (28.8 in) were measured. In 2005, it had a population of 21,378 later increased to 28,843 in 2011, according to the 2011 Namibian Population and Housing Census.

Hardap Region borders the Erongo Region to the south-west. It extends from the Atlantic Ocean all the way across to the border of Botswana. Most of the region is characterised by arid adapted biomes, ranging from the hyper-arid southern Namib Desert through a dwarf shrub savannah to the southern Kalahari. Hardap Region, like the rest of Namibia, is an arid to semi-arid area. The average annual rainfall for the area varies between 0 mm in the Namib Desert to the west, to 300 mm towards the eastern parts of the region (MET, 2011).

The southern parts of Hardap receive an average rainfall of 100 mm, increasing to 300 mm for the Rehoboth area further north. Extremely high maximum temperatures above 36°C are recorded for this region – overall among the highest in Namibia. At the other extreme, the coldest average minimum temperatures are recorded for this region at below 20°C in eastern Hardap. With the exception of water provided from the Hardap Dam and the

Oanob Dam, all water used for domestic and agricultural consumption is from groundwater. Eastern Hardap Region contains a productive porous aquifer, which allows for significant horticultural development around the Stampriet area (MET, 2011).

About 75 percent of the total land area of Hardap is privately owned. The westernmost 15 percent of the area is part of the Namib-Naukluft Park and in the central-southern area, 10 percent is communal farmland. Overall the region is one of the least densely populated in Namibia, with an average of 1 person per km² (MET, 2011).

3.2 Social Environment

The section aims to identify trends that are related to the importance of the assessment and determine potential impacts and/or implications of each that are relative to the project. It is important that the key-socio-economic trends in Rehoboth Rural / Hardap Region are understood as a basis for the assessment as they are of major importance.

The 2011 Namibia Population and Housing Census (PHC) results show that Hardap had a population of 79 507 people of which 38 935 were women and 40 572 were men. The population of Hardap grew at an annual rate of 1.5 percent between 2001 and 2011. Half of the population lived in urban areas (60%) compared to the 40% that lived in rural areas. This was largely explained by a large migration of the regional population from rural to urban areas in search of job opportunities particularly among young adults. The population is composed of 19 307 households, with an average household size of 4.0 persons per household.

3.3 Geophysical Aspects

The proposed site is located in Rehoboth Rural, which is some 75km from Windhoek in the Hardap Region. The climate is warm and dry. The area experiences south-westerly winds throughout the year and strong north-easterly winds during winter months (June – August).

Soil conditions consist of compressed barren holomorphic soils, rich in salt content which are common in Rehoboth. Various anthropogenic material and particulates such as ceramics, plastics, and heavy metals can be found on site.

Due to urbanization and development, the site has been transformed into a human habitat and urban environment. The site and surrounding area contain man-made buildings, foundations, underground services and paved streets that have changed the geography of the natural environment.

4. NAMIBIAN LEGAL REQUIREMENTS

The Policy, Legal, and Administrative framework requirements for EIA are defined by select Namibian and international relevant policies and laws which may influence or regulate certain aspects of project.

4.1 Legislative Framework

The pursuit of sustainability, with respect to any development, is guided by a sound legislative and policy framework. This section provides a review of applicable and relevant Namibian legislation, policies and guidelines. This review serves to inform the proponent of the requirements and expectations, as laid out in terms of these instruments, to be fulfilled before the proposed project may commence. The findings of the abovementioned review are summarised below.

Table 4.1: Namibian Legislation relevant to the project

LEGISLATION/ GUIDELINE	RELEVANT PROVISIONS	IMPLICATIONS FOR THIS PROJECT
– Namibian Constitution First Amendment Act 34 of 1998	<i>"The State shall actively promote... maintenance of ecosystems, essential ecological processes and biological diversity of Namibia and utilization of living natural resources on a sustainable basis for the benefit of all Namibians, both present and future" (Article 95(1)).</i>	Ecological sustainability should inform and guide this EA and the proposed development.
– Environmental Management Act EMA (No 7 of 2007)	<ul style="list-style-type: none"> – Requires that projects with significant environmental impact are subject to an environmental assessment process (Section 27). – Details principles which are to guide all EAs. 	The EMA and its regulations should inform and guide this EA process.
– Environmental Impact Assessment (EIA) Regulations GN 28-30 (GG 4878)	<ul style="list-style-type: none"> – Details requirements for public consultation within a given environmental assessment process (GN 30 S21). – Details the requirements for what should be included in a Scoping Report (GN 30 S8) and an Assessment Report (GN 30 S15). 	
<ul style="list-style-type: none"> – Forestry Act 12 of 2001 – Nature Conservation Ordinance 4 of 1975 	<ul style="list-style-type: none"> – Prohibits the removal of any vegetation within 100 m from a watercourse (Forestry Act S22 (1)). – Prohibits the removal of and transport of various protected plant species. 	Even though the Directorate of Forestry has no jurisdiction within Townlands, these provisions will be used as a guideline for conservation of vegetation.
– Labour Act 11 of 2007	Details requirements regarding minimum wage and working conditions (S39-47).	The proponent should ensure that all contractors involved during the construction, operation and maintenance of the proposed project comply with the provisions of these legal instruments.
– Health and Safety Regulations GN	Details various requirements regarding health and safety of laborers.	

156/1997 (GG 1617)		
– Public Health Act 36 of 1919	Section 119 states that “no person shall cause a nuisance or shall suffer to exist on any land or premises owned or occupied by him or of which he is in charge any nuisance or other condition liable to be injurious or dangerous to health.”	
– National Heritage Act 27 of 2004	Section 48(1) states that “A person may apply to the [National Heritage] Council [NHC] for a permit to carry out works or activities in relation to a protected place or protected object”.	Any heritage resources (e.g. human remains etc.) discovered during construction requires a permit from the NHC for relocation.
– Burial Place Ordinance 27 of 1966	Prohibits the desecration or disturbance of graves and regulates how bodies may be unearthed or dug up.	Regulates the exhumation of graves.
– Water Act 54 of 1956	The Water Resources Management Act 24 of 2004 is presently without regulations; therefore the Water Act No 54 of 1956 is still in force: <ul style="list-style-type: none"> – Prohibits the pollution of underground and surface water bodies (S23 (1)). – Liability of clean-up costs after closure/ abandonment of an activity (S23 (2)). 	The protection of ground and surface water resources should be a priority. The main threats will most likely be concrete and hydrocarbon spills during construction and hydrocarbon spills during operation and maintenance.
– Town Planning Ordinance 18 of 1954	Subdivision of land situated in any area to which an approved Town Planning Scheme applies must be consistent with that scheme (S31).	The proposed use of the project site must be consistent with the Rehoboth Town Planning Scheme (2012).
– Townships and Division of Land Ordinance 11 of 1963	Details the functions of the Township Board including what they consider when receiving an application for Township Establishment (S3).	The proposed layout and land uses should be informed by environmental factors such as water supply, soil etc. as laid out in Section 3.
– Road Ordinance 1972 (Ordinance 17 Of 1972)	<ul style="list-style-type: none"> – Width of proclaimed roads and road reserve boundaries (S3.1) – Control of traffic on urban trunk and main roads (S27.1) – Rails, tracks, bridges, wires, cables, subways or culverts across or under proclaimed roads (S36.1) – Infringements and obstructions on and interference with proclaimed roads. (S37.1) – Distance from proclaimed roads at which fences are erected (S38) 	The limitations applicable on RA proclaimed roads should inform the proposed layout and zonings where applicable.
– Atmospheric Pollution Prevention Act (Act No 45 of 1965).	<ul style="list-style-type: none"> – Limitations imposed on working hours, or prohibiting certain activities or methods of working 	<ul style="list-style-type: none"> – The proponent must ensure the contractors address explosive reagent safety and best practices related to environmental management awareness.
– Explosives Act 26 of 1956 Explosives Regulations;	<ul style="list-style-type: none"> – The Notices will be done according to the Act on the blasting times and use of blasting materials 	<ul style="list-style-type: none"> – Blast crews and engineering staff should be aware that nitrates and ammonia are generally the compounds of greatest concern for water

5. ALTERNATIVES

The proponent has been engaging the Ministry of Agriculture, Water and Forestry to determine the best site for the proposed Township and Related Infrastructure development. The identified piece of land came out as the most suitable considering its size and location, and “the need to have that very piece of land get developed”.

5.1 No-Go Alternative (Do Nothing Alternative)

Should the proposed development not take place, serious consequences can be expected, as there will be slow pace of development in line with the Harambee Prosperity Plan and other developmental initiatives as anticipated by the Central Government of Namibia and the UN. The initiative is meant to promote tourism development in the resort town in Swakopmund and Namibia at large. This might indirectly affect socio-economic development and may lead to service protests by the local communities.

The site is barren and not utilise for any economic purposes, and its far away from the farm residential structures / infrastructure or activities.

It should be noted that the identified piece of land is currently not developed, and the proposed development is the only suitable infrastructure to be accommodated on the site.

5.2 Site Alternative

Due to land availability and service connections, the proposed site, Alternative 1, is the only site that has been identified for the township and related infrastructure development or establishment during the consultation process with the Proponent. Therefore, no alternative sites have been identified or considered during this study.

5.3 Technology Alternative 1:

Due to the type of project, no alternative technology can be considered.

5.4 Selection Process

Consultation meetings have been held with the Proponent and relevant role-players to determine the most suitable area available for the establishment of the township. Economic restraints, existing infrastructure and available land were major constraints on the selection process.

Location alternatives

The Site was chosen on its merit of due to suitability and also as a result of the current land use. The Area is currently undeveloped and is the perfect area for the proposed development considering its strategic location. Besides, there is no such area on Farm Volmoed that can accommodate such a development.

6. IMPACT ASSESSMENT

6.1 Approach and Methodology employed for assessment

6.1.1 The EIA Process

Environmental Impact Assessment (EIA) is a systematic process that identifies and evaluates the potential impacts (positive and negative) that a Project may have on the biophysical and socio-economic environment and identifies mitigation measures that need to be implemented in order to avoid, minimise or reduce the negative impacts and also identifies measures to enhance positive impacts. The EIA is not fully a linear process, but one where several stages are carried out in parallel and where the assumptions and conclusions are revisited and modified as the project progresses.

The following sections provide additional detail regarding the key stages in this EIA process. These stages are:

- 1) Scoping Phase;
- 2) Specialist Study Phase; and
- 3) Integration and Assessment Phase.

6.2 Scoping Phase

The first phase of the EIA process is a Scoping Study, with an emphasis on public involvement. The various tasks and consultation activities undertaken by the Consultant thus far are described and summarised below.

6.2.1 Initial Site Visit and Project Initiation

As part of the project initiation, Erongo Consulting Group, the EAP, carried out an initial site reconnaissance visit in May 2020. The purpose of the site visit was to familiarise the project team with the project proposal and affected project area and to begin the environmental and social screening and scoping process.

Table 6.1: Public Participation Tasks

ACTIVITY	DESCRIPTION AND PURPOSE
– Preparation of a preliminary stakeholder database	A preliminary database has been compiled of authorities (local and provincial), Non-Governmental Organisations and other key stakeholders. This database of registered I&APs was expanded during the ongoing EIA process.
– Erection of site notices	Site Notices were deemed not necessary or relevant considering that the development is taking place within the farmland
– Distribution of BIDs	Background Information Documents (BIDs) were distributed to all I&APs.
– Release of Draft Scoping Report for Public Comment	The Draft Scoping Report was released for public comment. All comments received have been included in this Final Scoping Report.

– Newspaper Advertisement	The release of the Draft Scoping Report was advertised through the Facebook Pages, EAP website and bulk emailing
– Compilation of Comments and Responses Report	Through the public participation process a Comments and Responses Report has been compiled
– Notification of submission Final Report	Notification of the submission of the final Scoping Report to the MET was sent to registered I&APs.
– Notification of issuance of Environmental Clearance Certificate	The I&APs will be notified through the normal channels on the issuance of the Environmental Clearance Certificate. Newspaper adverts will also be utilised.
– Notification of Blasting	The Notices will be done according to the Explosives Act 26 of 1956 Explosives Regulations; and all related blasting permits shall in terms of section 9 (1) (a) of the Act, to use blasting materials

6.3 Specialist Studies Phase

During the Specialist Study phase, the Consultant gathered data relevant to identifying and assessing environmental impacts that might occur as a result of the Project. They assisted the project team in assessing potential impacts according to a predefined assessment methodology included in the Scoping Report. The Consultant also suggested ways in which negative impacts could be mitigated and benefits could be enhanced.

6.4 Integration and Assessment Phase

The final phase of the EIA is the Integration and Assessment Phase. The assessment of impacts proceeds through an iterative process considering three key elements:

- 1) **Prediction of the significance** of impacts that are the consequence of the Project on the natural and social environment.
- 2) **Development of mitigation measures** to avoid, reduce or manage the impacts.
- 3) **Assessment of residual significant impacts** after the application of mitigation measures.

A synthesis of the studies, which addresses the key issues identified during the Scoping Phase, is documented in this ESIA. Relevant technical studies are included as appendices to this ESIA.

The Draft ESIA was made available to I&APs for a public comment period and registered and identified I&APs were notified of the release of the Draft EIA and where the report can be reviewed.

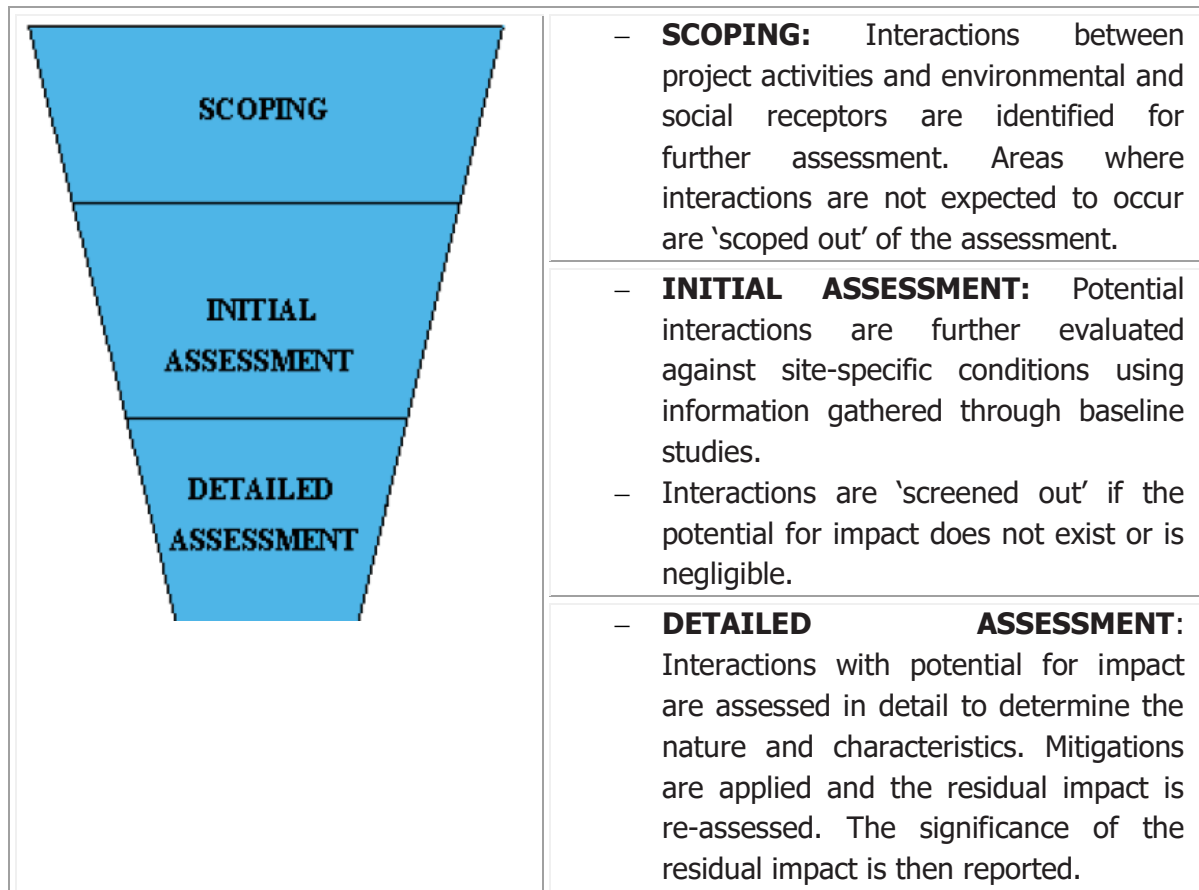
Comments received on the Draft EIA have been assimilated and the EIA project team provided appropriate responses to all comments. All registered I&APs will be notified when an Environmental Authorisation has been issued by MET.

6.5 Impact Assessment Methodology

6.5.1 Impact Assessment Process

The following diagram describes the impact identification and assessment process through scoping, screening and detailed impact assessment. The methodology for detailed impact assessment is outlined below.

Figure 6.1: impact identification and assessment process



6.5.2 Impact Assessment Methodology

The purpose of impact assessment and mitigation is to identify and evaluate the significance of potential impacts on identified receptors and resources according to defined assessment criteria and to develop and describe measures that will be taken to avoid or minimise any potential adverse effects and to enhance potential benefits.

Definition of Key Terminology

- **Project** - The features and activities that are a necessary part of the Project Proponent's development, including all associated facilities without which the Project cannot proceed. The Project is also the collection of features and activities for which authorization is being sought.
- **Project Site** - The (future) primary operational area for the Project activities. Private transport corridors (i.e., those dedicated for use solely by Project operational activities) are included as part of the Project Site.

- **Project Footprint** - The area that may reasonably be expected to be physically touched by Project activities, across all phases. The Project Footprint includes land used on a temporary basis such as construction lay down areas or construction haul roads, as well as disturbed areas in transport corridors, both public and private.

Table 6.2: Impact Types and Definitions

Nature or Type	Definition
Positive	An impact that is considered to represent an improvement on the baseline or introduces a positive change.
Negative	An impact that is considered to represent an adverse change from the baseline or introduces a new undesirable factor.
Direct impact	Impacts that result from a direct interaction between a planned project activity and the receiving environment/receptors (e.g. between occupation of a site and the pre-existing habitats or between an effluent discharge and receiving water quality).
Indirect impact	Impacts that result from other activities that are encouraged to happen as a consequence of the Project (e.g. in-migration for employment placing a demand on resources).
Cumulative impact	Impacts that act together with other impacts (including those from concurrent or planned future third-party activities) to affect the same resources and/or receptors as the Project.

An impact is any change to a resource or receptor brought about by the presence of a project component or by the execution of a project related activity. The evaluation of baseline data provides crucial information for the process of evaluating and describing how the project could affect the biophysical and socio-economic environment.

Impacts are described according to their nature or type, as summarised in *Table 6.3*.

Table 6.3 Significance Criteria

IMPACT MAGNITUDE	
Extent	<p>On-site – impacts that are limited to the boundaries of the development site.</p> <p>Local – impacts that affect an area in a radius of 25km around the development site.</p> <p>Regional – impacts that affect regionally important environmental resources or are experienced at a regional scale as determined by administrative boundaries, habitat type/ecosystem.</p> <p>National – impacts that affect nationally important environmental resources or affect an area that is nationally important/ or have macro-economic consequences.</p>
Duration	<p>Temporary – impacts are predicted to be of short duration and intermittent/occasional.</p> <p>Short-term – impacts that are predicted to last only for the duration of the construction period.</p> <p>Long-term – impacts that will continue for the life of the Project but ceases when the project stops operating.</p> <p>Permanent – impacts that cause a permanent change in the affected receptor or resource (e.g. removal or destruction of ecological habitat) that endures substantially beyond the project lifetime.</p>

Intensity	<p>BIOPHYSICAL ENVIRONMENT: <i>Intensity can be considered in terms of the sensitivity of the biodiversity receptor (i.e. habitats, species or communities).</i></p> <p>Negligible – the impact on the environment is not detectable.</p> <p>Low – the impact affects the environment in such a way that natural functions and processes are not affected.</p> <p>Medium – where the affected environment is altered but natural functions and processes continue, albeit in a modified way.</p> <p>High – where natural functions or processes are altered to the extent that they will temporarily or permanently cease.</p> <p>Where appropriate, national and/or international standards are to be used as a measure of the impact.</p> <p><i>Specialist studies should attempt to quantify the magnitude of impacts and outline the rationale used.</i></p>
	<p>SOCIO-ECONOMIC ENVIRONMENT: <i>Intensity can be considered in terms of the ability of people/communities affected by the Project to adapt to changes brought about by the Project.</i></p> <p>Negligible – there is no perceptible change to people’s livelihood.</p> <p>Low - people/communities are able to adapt with relative ease and maintain pre-impact livelihoods.</p> <p>Medium – people/communities are able to adapt with some difficulty and maintain pre-impact livelihoods but only with a degree of support.</p> <p>High - affected people/communities will not be able to adapt to changes or continue to maintain-pre-impact livelihoods.</p>
Likelihood - the likelihood that an impact will occur	
Unlikely	The impact is unlikely to occur.
Likely	The impact is likely to occur under most conditions.
Definite	The impact will occur.

Once a rating is determined for magnitude and likelihood, the following matrix can be used to determine the impact significance.

Table 6.4 Significance Rating Matrix

		SIGNIFICANCE		
		LIKELIHOOD		
MAGNITUDE		Unlikely	Likely	Definite
	Negligible	Negligible	Negligible	Minor
	Low	Negligible	Minor	Minor
	Medium	Minor	Moderate	Moderate
High	Moderate	Major	Major	

Table 6.5 Significance Colour Scale

Negative ratings	Positive ratings
Negligible	Negligible
Minor	Minor
Moderate	Moderate
Major	Major

Table 6.6: Significance Definitions

SIGNIFICANCE DEFINITIONS	
Negligible significance	An impact of negligible significance (or an insignificant impact) is where a resource or receptor (including people) will not be affected in any way by a particular activity, or the predicted effect is deemed to be 'negligible' or 'imperceptible' or is indistinguishable from natural background variations.
Minor significance	An impact of minor significance is one where an effect will be experienced, but the impact magnitude is sufficiently small (with and without mitigation) and well within accepted standards, and/or the receptor is of low sensitivity/value.
Moderate significance	An impact of moderate significance is one within accepted limits and standards. The emphasis for moderate impacts is on demonstrating that the impact has been reduced to a level that is As Low As Reasonably Practicable (ALARP). This does not necessarily mean that 'moderate' impacts have to be reduced to 'minor' impacts, but that moderate impacts are being managed effectively and efficiently.
Major significance	An impact of major significance is one where an accepted limit or standard may be exceeded, or large magnitude impacts occur to highly valued/sensitive resource/receptors. A goal of the EIA process is to get to a position where the Project does not have any major residual impacts, certainly not ones that would endure into the long term or extend over a large area. However, for some aspects there may be major residual impacts after all practicable mitigation options have been exhausted (i.e. ALARP has been applied). An example might be the visual impact of a development. It is then the function of regulators and stakeholders to weigh such negative factors against the positive factors such as employment, in coming to a decision on the Project.

Once the significance of the impact has been determined, it is important to qualify the degree of confidence in the assessment. Confidence in the prediction is associated with any uncertainties, for example, where information is insufficient to assess the impact. Degree of confidence can be expressed as low, medium or high.

Mitigation Measures and Residual Impacts

For activities with significant impacts, the EIA process is required to identify suitable and practical mitigation measures that can be implemented. The implementation of the mitigations is ensured through compliance with the regulatory Frameworks. After first assigning significance in the absence of mitigation, each impact is re-evaluated assuming the appropriate mitigation measure(s) is/are effectively applied, and this results in a significance rating for the residual impact.

6.6 Identification of Mitigation Measures

For the identified significant impacts, the project team, with the input of the client, has identified suitable and practical mitigation measures that are implementable. Mitigation that can be incorporated into the project design, in order to avoid or reduce the negative impacts or enhance the positive impacts, have been defined and require final agreement with the client as these are likely to form the basis for any conditions of approval by MET.

6.7 Specialist Study Methodology

6.7.1 Botany, Terrestrial Ecology and Avifauna

Botany, terrestrial ecological and avifaunal specialist study was undertaken. As part of this study, a desktop study was carried out of publicly available scientific publications to investigate the ecology and biodiversity of the affected project area. A site visit was undertaken where the different biodiversity features, habitat, vegetation and landscape units present at the site were identified and mapped in the field.

This included generating a fine-scale vegetation map for the site which identified and mapped the different plant communities present. Walk-through-surveys were conducted across the sites (corridors) and all plant and animal species observed were recorded. Searches for listed and protected plant species at the site were conducted and the location of all listed plant species observed was recorded. The impact assessment phase involved the determination of the nature of likely impacts of the development and recommendations on mitigation.

Table 6.7 Archaeology, Heritage and Palaeontology

A paleontological, archaeological and cultural heritage study was undertaken.

STUDY	DESCRIPTION
Palaeontology	A desktop paleontological study was undertaken for the identified site. The impact assessment phase involved the determination of the nature of likely impacts of the development and recommendations on mitigation.
Archaeology	A desktop study was carried out of publicly available scientific publications to determine the archaeological history of the affected project area. In addition, an archaeological field survey was undertaken of the affected project area. Archaeological materials and structures were inventoried, with approximate age and descriptions recorded as necessary. The impact assessment phase involved the determination of the nature of likely impacts of the development and recommendations on mitigation.
Heritage	Publications of the history of the affected project areas were investigated and informed the specialist study. A heritage field survey was undertaken in order to identify existing heritage structures in the affected project area. The impact assessment phase involved the determination of the nature of likely impacts of the development and recommendations on mitigation.

6.7.3 Landscape and Visual

A landscape and visual impact assessment study was undertaken. Site visits were undertaken where visual features and the landscape setting of the site were recorded. An assessment was also made as to what degree people who make use of these locations would be sensitive to change(s) in their views, brought about by the Project. These

receptors were then identified, as well as Key Observation Points (KOPs) (those sensitive receptors who had views of the Project) particularly those relating to intersections of major roads, arterial and scenic routes, as well as urban areas, settlements and farmsteads.

The landscape character was then surveyed in terms of scenic quality (landscape significance) and receptor sensitivity to landscape change (of the site) in order to define the visual objective for the project site. Photomontages using panoramic photographs were used to determine the degree of visibility of the Project and change in views of the surrounding landscape. The impact assessment phase involved the determination of the nature of likely impacts of the development and recommendations on mitigation.

6.7.4 Agriculture

An agriculture impact assessment study was also considered, although in this whole project it was not of much impact or relevance considering the nature of the whole project, and setting as Swakopmund is a semi desert, barren environment with not much agricultural activities taking place

6.7.5 Socio-Economic

The socio-economic study was undertaken. The study began with the compilation of a baseline description. The baseline description was derived from a range of secondary data (including but not limited to census data, existing reports, development plans and other strategic planning documents) and primary data collection. The primary data used for the baseline is based on information provided by the Client / Proponent and issues raised through the public consultation process.

The impact assessment phase incorporated the identification and assessment of socio-economic impacts (direct, indirect and cumulative) that may result from the closure of various corridors (construction and operation phases) of the project. Mitigation measures that address the local context and needs were recommended as the final phase of the study.

6.8 Assumptions and Limitations

Environmental Impact Assessment is a process that aims to identify and anticipate possible impacts based on past and present baseline information. There is, inevitably, always some uncertainty about what will actually happen in reality. Impact predictions have been made based on field surveys and with the best data, methods and scientific knowledge available at this time. However, some uncertainties could not be entirely resolved. Where significant uncertainty remains in the impact assessment, this is acknowledged and the level of uncertainty is provided.

In line with best practice, this ESIA has adopted a precautionary approach to the identification and assessment of impacts. Where it has not been possible to make direct predictions of the likely level of impact, limits on the maximum likely impact have been reported and the design and implementation of the project (including the use of appropriate mitigation measures) will ensure that these are not exceeded. Where the

magnitude of impacts cannot be predicted with certainty, the team of specialists have used professional experience and available scientific research from solar facilities worldwide to judge whether a significant impact is likely to occur or not. Throughout the assessment, this conservative approach has been adopted to the allocation of significance.

6.8.1 Gaps and Uncertainties

Inevitably knowledge gaps remain. For instance, there is an incomplete understanding of cumulative impacts as it is not known how the project will get consolidated onto the main town plan.

Gaps in Project Description

- Regarding the location of the site, the assessment is based on a refined layout / rezoning derived from revisions of earlier layouts, to accommodate environmental sensitivities. Although the final layout has been confirmed,
- At this stage it is unknown, although unlikely, whether a borrow pit for rock or soil material or blasting activities will be required for the closing off of the mine.

Gaps in Baseline Information

- Ecological limitations; a limitation associated with the sampling approach was the narrow temporal window of sampling. Ideally, a site should be visited several times during all the different annual seasons to ensure that the full complement of plant and animal species present are captured, as well as the temporary usage of the corridor by some school children who frequently use these corridors were on holidays, including beer hall patrons who had gone for holidays

However, this is rarely possible due to time and cost constraints and therefore, the data captured is representative of the species at the site. The vegetation at the time of the site was in a reasonable condition for sampling. This represents a sufficiently conservative and cautious approach which takes account of the study limitations.

Gaps in Understanding of Impacts

- It should be noted that the township and related infrastructure development projects or activities within the farmlands are not popular in Namibia, and in this case the impacts associated with them have not been scientifically researched in the context of their occurrence in this country, and therefore the specialists have used the precautionary principal where necessary in undertaking their respective impact assessments.

All impacts included in the table below fall within the scope of this project and responsibility of the client or proponent. Each of the potential impacts is screened and subjected to the criteria stipulated above. The significance of each potential impact is determined based on the criteria below.

Detailed descriptions of mitigation measures for impacts that require mitigation are contained in the EMP (**Appendix B**).

Impacts for which insufficient information is available are discussed at the end of this section.

POTENTIAL IMPACT	DESCRIPTION	EXTENT	DURATION	INTENSITY	PROBABILITY	CONFIDENCE/ SUFFICIENT INFORMATION AVAILABLE?	SIGNIFICANCE	SIGNIFICANT MITIGATION DEEMED POSSIBLE?
Aesthetic issues	The change in the existing landscape may be an eye sour to existing residents due to blockage of open views.	Immediate area	Temporary	Low	Improbable	Yes	Low	Yes
Employment creation	The construction activities associated with the project is due to create local employment opportunities.	Local	Temporary	Medium	Definite	Yes	Low	Yes
Noise (construction phase)	Construction activities can create noise for local nearby / neighbouring farmers	Local	Temporary	Low	Highly probable	Yes	Low	Yes
Dust (construction phase)	The ingress and egress of construction vehicles can create dust.	Local	Temporary	Low	Highly probable	Yes	Low	Yes
Traffic (Operational phase)	Increase in traffic in the area is expected due to construction activities	Local	Permanent	Medium	Definite	Yes	Low	Yes

Effluent generation	Once the development is established, effluent will be generated from the facility	Local	Long-term	Medium	Definite	Yes	Low	Yes
Impact on scarce water resources	The Proponent has to make provision for providing additional water to the newly established township and related infrastructure	Local	Long-term	Low	Improbable	Yes	Low	Yes
Generation of waste	The establishment will generate waste.	Local	Long-term	Medium	Definite	Yes	Medium	Yes
Impact on existing properties	The proposed development is believed to impact on exiting property values in the area.	Local	Long-term	Low	Probable	Yes	Low	Yes

Table 6.8: Detailed Screening and Assessment of impacts

7. PUBLIC PARTICIPATION [AT A GLANCE]

7.1 Introduction

The role of stakeholder engagement in this development was greatly explored by the consultant, who explored the different elements of a Stakeholder Engagement Framework, while considering the steps, stakeholder categories, and possible options for public participation in the whole process. It is important to note that there is no single 'magic bullet' solution that exists for stakeholder engagement. Each situation requires thorough design and planning specifically tailored to the objectives sought for the relevant stage of a project or program. Depending on the unique situation and context, a range of different stakeholder engagement and public participation methods were employed.

The term participation typically refers to some aspect of local community involvement in the design, implementation and evaluation of a project or plan (Brown & Wyckoff-Baird, 1992). According to Smith (1983), public participation encompasses a range of procedures and methods designed to consult, involve, and inform the public to allow those that would be potentially affected by a decision or policy to have input into the process. The latter are also known as stakeholders, which include (IFC 2007):

"...persons or groups who are directly or indirectly affected by a project, as well as those who may have interests in a project and/or the ability to influence its outcome, either positively or negatively. Stakeholders may include locally affected communities or individuals and their formal and informal representatives, national or local government authorities, politicians, religious leaders, civil society organizations and groups with special interests, the academic community, or other businesses"

Stakeholder engagement broadly refers to a framework of policies, principles, and techniques which ensure that citizens and communities, individuals, groups, and organizations have the opportunity to be engaged in a meaningful way in the process of decision-making that will affect them, or in which they have an interest.

Thus, public participation can be recognised as a practice of stakeholder engagement. Stakeholder engagement and public participation are a means of achieving:

- Participatory democracy (e.g. community empowerment and providing the opportunity to develop knowledge for making informed choices)
- Transparency in decision-making process
- Community empowerment and support
- Reduced conflict over decisions between decision-makers and public groups, and between the groups
- Public participation may involve both individual and group input.

Table 7.1: Public Participation Five Elements

Courtesy: International Association for Public Participation (2007)

Element	Description
(a) Inform	Provided the general public with balanced and objective information to assist them in understanding the problem (housing shortage), alternatives, opportunities and/or solutions, which is the servicing of land.
(b) Consult	Obtained public feedback on analysis, alternatives and/or decisions.
(c) Involve	to work directly with the public throughout the process to ensure that public concerns and aspirations are consistently understood and considered
(d) Collaborate	Partnered with the public in each aspect of the decision, including the development of alternatives and the identification of the preferred solution.
(e) Empower	Placed final decision making in the hands of the public.

7.2 Newspaper Advertising

Given the dispersed nature of the identified piece of land, and its isolation, and the means of communication outlined above, it was deemed NOT necessary and to display a makeshift **Notice Board** near the identified site. The Consultant advertised using the targeted approach by using both the locally and nationally read and accepted Newspapers to reach out to I & Aps.

Call for Public Participation

The initial period for Public Participation ran between 15 and 29 May 2020. The newspaper advert appeared on 14th and 22st of May 2020 in the New Era Newspaper.

No issues or comments were raised by potential I& Aps despite extensive communication to engage them.

8. ASSUMPTIONS, LIMITATIONS AND CONCLUSION

8.1 Introduction

Environmental Impact Assessment is a process that aims to identify and anticipate possible impacts based on past and present baseline information. There is, inevitably, always some uncertainty about what will actually happen in reality. Impact predictions have been made based on field surveys and with the best data, methods and scientific knowledge available at this time. However, some uncertainties could not be entirely resolved. Where significant uncertainty remains in the impact assessment, this is acknowledged and the level of uncertainty is provided.

In line with best practice, this ESIA has adopted a precautionary approach to the identification and assessment of impacts. Where it has not been possible to make direct predictions of the likely level of impact, limits on the maximum likely impact have been reported and the design and implementation of the project (including the use of appropriate mitigation measures) will ensure that these are not exceeded. Where the magnitude of impacts cannot be predicted with certainty, the team of specialists have used professional experience and available scientific research from solar facilities worldwide to judge whether a significant impact is likely to occur or not. Throughout the assessment, this conservative approach has been adopted to the allocation of significance.

8.2 Gaps and Uncertainties

Inevitably knowledge gaps remain. For instance, there is an incomplete understanding of cumulative impacts as it is not known how will the project will be consolidated onto Portion A to and directly feed into the Master Plan.

8.3 Gaps in Project Description

Regarding the location of the site, the assessment is based on a refined layout derived from revisions of earlier layouts, to accommodate environmental sensitivities.

8.4 Gaps in Baseline Information

Ecological limitations; a limitation associated with the sampling approach was the narrow temporal window of sampling. Ideally, a site should be visited several times during all the different annual seasons to ensure that the full complement of plant and animal species present are captured.

However, this is rarely possible due to time and cost constraints and therefore, the data captured is representative of the species at the site. The vegetation at the time of the site was in a reasonable condition for sampling. This represents a sufficiently conservative and cautious approach which takes account of the study limitations.

8.5 Conclusion

It can be concluded that, an Environmental Clearance Certificate be issued by the Environmental Commissioner / Government of the Republic of Namibia, Considering the information presented above it can be concluded that farm Volmoed is currently a productive farm that derives profits from the sale of cattle and firewood to the market. The farm further has the potential to expand its operations to other agricultural activities, after already having explored and proven viability of a few of the micro-farming operations presented above, but is constrained in terms of management capacity and capital expenditure to successfully implement these operations.

To overcome these challenges the owner (applicant) of farm Volmoed proposes to subdivide a 78.990Ha portion of the 1263.424Ha farm, with consent from the Agricultural Land Subdivision Committee, and requests to transfer the 78.990Ha to 31 beneficiaries in the form of plot sizes varying between 1.3 and 5 hectares. These plots have been identified and evaluated as a fair size to implement any of the above listed micro-farming activities with reasonable commercial success. In addition, with the sale of the subdivided portions of land and subsequent implementation of micro-farming activities, one of the key benefits that will be derived, over and above of the establishment of new tax paying businesses, is the community upliftment and employment creation in the surrounding communal settlements of Hatsamas and Bloukrans.

Although, the subdivision and subsequent sale of plots will effectively reduce the size of the farmland, it will not impact the current farming operations due to the mitigation strategy that is currently in place. In addition, the subdivided area is not smaller than the original 963.424Ha of farmland that the applicant acquired from his mother in 2007, which was already proven to be enough for cattle farming. Moreover, and more importantly, with the profits derived from the sale of the subdivided land, the applicant can ultimately expand the farming operations by purchasing land from willing sellers in the surrounding areas.

The applicant trusts that the above motivation meets the MET's expectations and criteria to grant consent for the subdivision of the farm and subsequent sale of agricultural land as part of sustainable development. Already, the Agricultural Land Subdivision Committee has given no objection.

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