

ENVIRONMENTAL SCOPING ASSESSMENT REPORT

Refurbishment for the Upgrade of Mavunje Campsite into a Low-Density Lodge Operation

Ngonga Area

Zambezi Region



March 2026

Compiled For:

Sawari Lodge Collections (Pty) Ltd
Mavunje Lodge
Ngonga Area

Project Information

<i>Project Title</i>	Environmental Scoping and Development of an Environmental Management Plan for Refurbishment and Upgrade of Mavunje Campsite into a Lodge Operation, in Ngonga Area, Zambezi Region
<i>App Ref</i>	APP-006508
<i>Reviews</i>	Version 2: 26 March 2026
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Executive Summary

1. Background

Namib Consulting Services CC was assigned by Sawari Lodge Collections Pty. Ltd to assist in the submission of an application for an environmental clearance certificate to the Ministry of Environment, Forestry and Tourism (MEFT). The application pertains to the proposed refurbishment of Mavunje Campsite, located in the Ngonga area of the Zambezi Region, transitioning it into a low-density lodge operation. The Mavunje site, that was previously utilized as a campsite, experienced stagnation in its operations, prompting plans in recent years for revitalization.

The refurbishment and subsequent operations must adhere to the requirements of the Environmental Management Act (Act No. 7 of 2007) and cannot commence without obtaining environmental clearance.

2. Development Proposal

The proposed plan aims to renovate the current site structures, predominantly composed of traditional reed, thatch, and mud. The development strategy prioritizes preserving the site's natural environment, ensuring that new structures are mainly built using natural materials like timber poles, thatch, or tensile coverings. The refurbished site will include seven guest rooms along with essential facilities such as a kitchen, main building, dining area, service building, and a reception area. Additionally, these will be augmented by a deck surrounding the main building, offering access to a swimming pool that overlooks a tributary of the Kwando River.

These structures are strategically designed to be situated in areas that are already disturbed, except for certain limited zones designated for the swimming pool, deck, and main building, which necessitate only minimal clearing.

3. Policy and Legislation

The proposed activity must adhere to several legislative requirements. Primarily, the Namibian Constitution, as the highest legal authority, encompasses provisions for human rights as well as environmental protection. Within this framework, various legislation imposes specific requirements relevant to the proposed activity. These include the Environmental Management Act, the Water Resources Management Act, the Hazardous Substances Ordinance, the Tourism Board Act, the Communal Land Reform Act, the National Policy on Tourism, and the Forest Act among the key ones.

4. Site Biophysical and Social Conditions

The proposed location is within a communal conservation area, however leasing rights to this site are currently held by a local family for purpose of tourism related activities. The surrounding environment is identified by the local community as a wildlife corridor also further supported by Ministerial strategy documents.

The site provides scenic view over a tributary of the Kwando River and features distinctive riparian vegetation such as reeds, grasses, and trees.

While the most recent social characteristics of the constituency are unavailable from the latest population census, however, a prevalent issue, as noted by local leaders, is the high rate of youth unemployment.

5. Public Participation

The public participation process focused on key stakeholders, considering that the project is an upgrade of an already disturbed site rather than a new development in a pristine environment. The identified key stakeholders include the Zambezi Regional Council, the Constituency Office, the Traditional Authority, the Ministries of Environment and Tourism, the Mashi Conservancy and Ministry of Land Resettlement, as well as local neighbors and the public. Notifications were sent through various channels, and feedback was received from some parties.

The proposed project is broadly supported by the community, as it is seen as an opportunity to improve the livelihoods of local youth and provide various forms of communal support. Moreover, community leaders underscored the critical role of integrating environmental stewardship into the development process.

6. Impact Identification, Evaluation and Mitigation

The assessment revealed a variety of impacts, both negative and positive, arising from the potential implementation of the proposed activity. The significance rate predominantly ranges from medium to high impacts, with rare occurrence of very-high impacts. Among the more significant adverse impacts are waste generation at various stages of project development, the possible release of hazardous substances into the environment, the emission of polluting and noxious gases, and disruptions to wildlife behavior, which may subsequently heighten human-wildlife conflicts. Conversely, the most notable beneficial impact is the opportunity for employment within the local communities.

The impacts mentioned above are characteristic of activities of this kind and can be effectively mitigated by systematically implementing the best standard practice measures established in this report.

7. Conclusion

Premised the moderate-to-high impact significance, which is largely manageable without necessitating substantial adjustments to the project's scope to address critical impacts, this scoping assessment report advises the development of a detailed Environmental Management Plan (EMP) to provide a structured framework for the execution of the proposed activity.

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Abbreviations

ECC	Environmental Clearance Certificate
EIA	Environmental Impacts Assessment
EMP	Environmental Management Plan
MEFT	Ministry of Environment, Forestry and Tourism
VDC	Village Development Committee

1. Introduction

1.1 Project Background

Sawari Lodge Collections Pty Ltd intends to refurbish and upgrade the Mavunje Campsite in the Ngonga area of the Zambezi Region into a tented Lodge facility. The establishment currently offers camping services designed to deliver a curated natural and scenic experience for its guests. Although it is a unique experience, the camp has consistently fallen short of attracting a wider clientele and meeting operational expectations over the years and thus, enhancements to the facility are necessary. The proposed development must comply with the Environmental Management Act (EMA, No. of 2007), which requires obtaining an Environmental Clearance Certificate (ECC) before the project can proceed.

The Proponent engaged Namib Consulting Services CC as an Environmental Consulting firm offering Environmental Assessment Services to conduct an Environmental Impact Assessment process for the proposed activity to meet the requirements of EMA by submitting an application to the Ministry of Environment, Forestry and Tourism (MEFT) for an ECC.

1.2 Purpose of the Scoping Assessment

The purpose of the Scoping assessment is to:

- Provide a detailed description of the various components involved in the proposed activity.
- Review policy, legislation, or standards that the proposed activity elicits and establish specific requirements.
- Detail the specific social and environmental conditions of the location where the proposed activity is to take place.
- Identify and evaluate alternatives to the proposed activity.
- Identify and consult Interested and Affected Parties (I&APs) and relevant stakeholders to solicit inputs.
- Identify and assess potential environmental and social impacts emanating from the various stages of project development including construction, operation, and decommissioning.
- Develop an Environmental Management Plan (EMP) or Terms of reference for specialist studies if so, established in this scoping report.

1.3 The EIA Process and Methodology

The Environmental Impact Assessment (EIA) process is mandated by the Environmental Assessment Policy of 1995. The necessary stages are detailed in Figure 1-1, and the precise steps for this process will follow those outlined in Table 1-1.

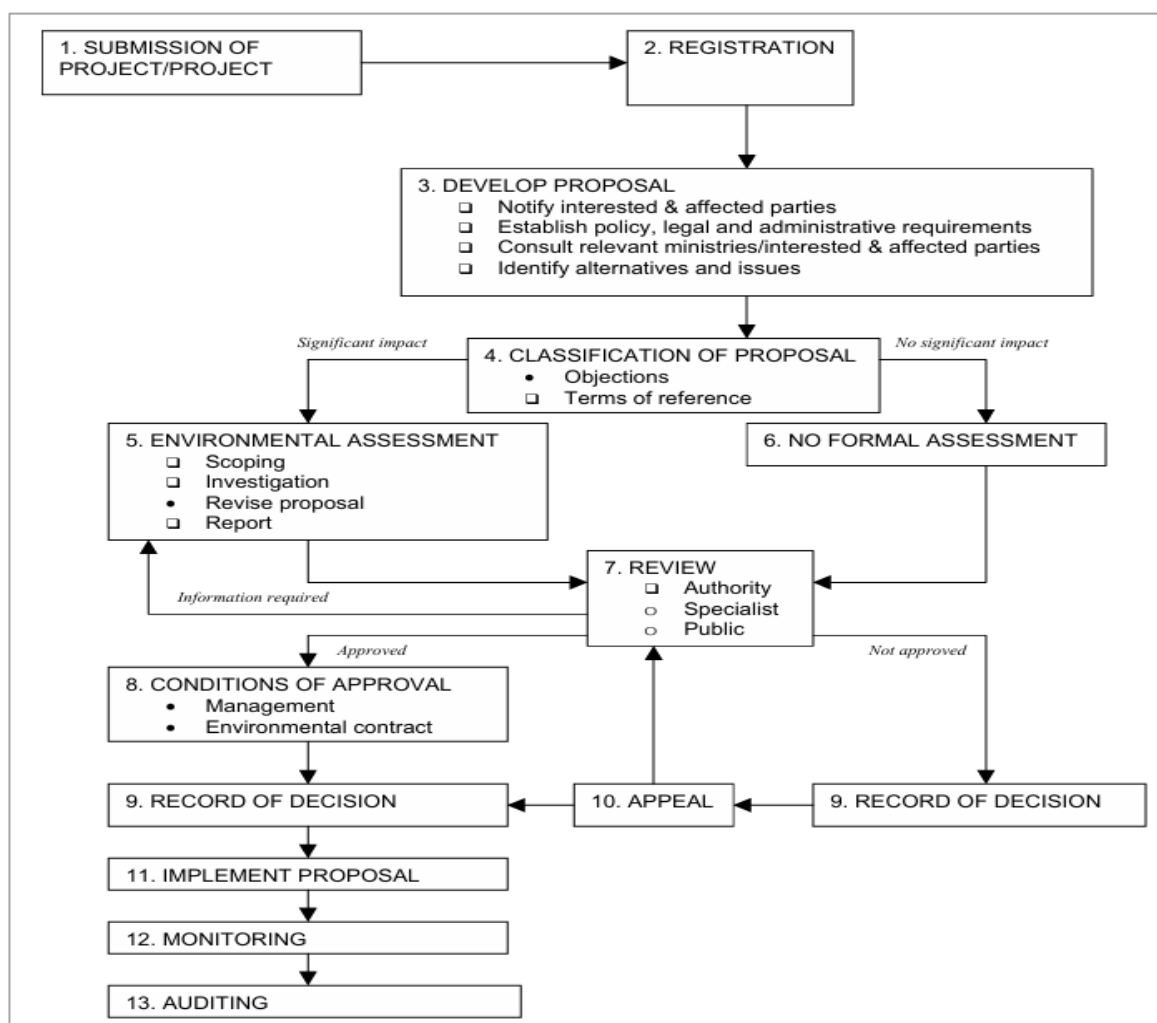


Figure 1-1 The EIA Process as per Environmental Policy of 1995

Table 1-1 Steps established as required for this proposed activity.

EIA Step	Requirement	Role
Project Registration	Completion of application form and submission to the Office of the Environmental Commissioner in MEFT	Environmental Assessment Practitioner (EAP)
Proposal Screening	Establish scope of the assessment. The requirements in the screening notice are provided in Annexure 2 in this report.	Office of the Environmental Commissioner (OEC)
Proposal Development	Notifying interested and affected parties	EAP
	Consult authorities and I&APs	EAP

	Establish requirements (policy, Legal or administrative)	EAP
	Identify and evaluate alternatives	EAP
Environmental Assessment	Scoping assessment and field investigations	EAP
	EMP	EAP
Decision	Conditions of approval/Environmental contract	OEC
	Record of Decision	OEC
	Appeal of decision	EAP/Proponent
Approved Decision	Implementation of EMP	Proponent
	Auditing and Reporting	Proponent/EAP

2. Project Description

2.1 Project Location

The Mavunje Campsite is situated in the Ngonga area of the Zambezi Region, within a landscape that is largely natural and focused on conservation. This site is part of an established low-intensity tourism zone connected to the Kwando ecosystem and the surrounding communal lands. The Mavunje Lodge development involves the refurbishment of the existing Mavunje Campsite, strategically located along the banks of the Kwando River wetland system. This site extends from the Kwando floodplain, opposite the Horseshoe area near Mudumu National Park, and offers views overlooking a lagoon. The proposed lodge will be established on a 14.9-hectare parcel of land, situated approximately 13 kilometers from Kongola. The site is accessible by turning west off the C49 main road prior to entering Mudumu National Park.

2.2 Land Ownership

The 14.9-hectare parcel of land is leased to Mr. Mishacke Munali Fulai for use as a tourism site, under the communal land administration system. Mavunje Campsite occupies a mere 3-hectare section of this land.

Landownership in communal areas is managed through customary systems, requiring approval of an allocation by the traditional authority (the Main and local tribal authority) and subsequent registration with the regional land board (i.e. the Zambezi Regional Land Board under the Ministry of Agriculture, Fisheries, Water and Land Reform).



Figure 2-1 Locality of Mavunje Campsite

2.3 Existing and Proposed Activities

2.3.1 Existing Activities

The current location had been developed to accommodate visitors seeking an outdoor experience that reflects ancient traditional lifestyles, set within a campsite environment. Guests were expected to bring their own camping gear, while the facility provided seven camping spots, each providing for dining, shower, cooking space, and a fireplace. In addition to these amenities, the site features a scenic viewing area, a docking zone, and walkways surrounded by typical vegetation (Figure 2-2).

The camping spots are spaced approximately 20 to 30m apart, with each site featuring structures built from thatch roofing, and walls made of alternate materials including wooden poles, reed, thatch, and mud. Each camping spot provided a sanitary facility designed connected to discharge waste into a single underground built septic tank.

The facility's current level of operational efficiency has not met expected sustainability standards, requiring a revised strategy and refurbishment to improve its performance.





Figure 2-2 Existing facilities at Mavunje Campsite

2.3.2 Proposed Activities

○ *Development Approach*

The proposed development entails the refurbishment of the current facility to upgrade it into a lodge, as illustrated in Figure 2-3. The development approach focuses on reuse of a previously disturbed campsite area with limited and contained development footprint. The surrounding area will be retained with some improvement of natural vegetation outside the development area, however with compatibility with the surrounding natural and conservation landscape. The overall intent is to avoid over development and to remain consistent with the existing character of the area. Subsequently, this development can be described as broadly brownfield development.

○ *Type of Planned Structures*

The planned site structures will comprise of seven (7) tented guestrooms, main building with deck area around overlooking swimming pool towards the river view, kitchen and dining building, service building, and reception building. These structures will be connected by pedestrian walkways around the site connected to the main access road for vehicles to the site.

The entire structures will be constructed of light weight timber posts/piles, and treated timber for flooring and walls. The roofing material will consist of either thatch or tensile coverings, while the use of mortar and brick will be limited to bathroom areas to ensure plumbing stability and adequate waterproofing.

The site is equipped with an existing septic tank for sewage management, and all facilities will be integrated with this system, eliminating the need for constructing additional infrastructure.

○ *Project Development Stages and Activities*

Premised on the above given plans, the development proposal follows the conventional project phases of pre-construction, construction, operation and potential decommissioning. In these phases the following sub-activities are envisaged:

(a) Pre-construction

- i. Site layout design and planning – this is based on the described development approach of infrastructure, type of material and location of each of the structures (Figure 2-2).
- ii. Land security for investment and operations – this step pertains to the investors engaging process to acquire formal agreement on lease periods required for investment and operation as well as meet other requirements for operation in the conservation area.
- iii. Pre-development legislative compliance – This activity entails undertaking systematic procedures to ensure adherence to legislative requirements necessary for the execution of the proposed operation. This encompasses, among other things, meeting the prerequisites for securing environmental clearance, specifically through the Environmental Impact Assessment (EIA) process.

(b) Construction

- The existing thatch, poles, mud, and reed structures at the camping spots will be removed from camping spots (Figure 2-3), clearing these sites for construction of new structures.
- Transport and delivery and storage of construction materials that will consist of timber, steel plates and bolts for joining, boards for walls and floor, thatch and tensile covering for roofing, among others.
- The construction process will include excavating holes for foundation deck base and supporting poles, deck boards for flooring and walls, and roofing works.

- Upon completion of all structures, these will be installed with water, sewer, and electric power services.
 - Water will be obtained from a borehole that will pump to an elevated reservoir and reticulated under gravity to facilities onsite.
 - Power will consist of solar generated power with backup of generator set.
 - All sanitation facilities across the site will be connected via conveyance pipelines to the septic tank.

(c) Operation

Once commissioned, the facility will see various activities coming into operation including:

- Hosting guests for overnight stays or for daytime leisure visits.
- Prepare and serve meals to both overnight guests and day visitors.
- Procure, transport and delivery of various materials necessary for operations, including food items, cleaning materials and other various substances including fuels.
- Storage of various materials onsite including food, fuels, cleaning materials and equipment.
- Provide river cruises and guided tours as part of land and river-based leisure activities.
- Water will be extracted from a borehole and delivered to an elevated tank to facilitate distribution throughout the entire lodge's facilities.
- Maintenance of the lodge and its surrounding areas, with a focus on activities that ensure the environment remains welcoming, well-maintained, and aesthetically appealing.
- Conveyance of liquid waste through reticulating system to the septic tank for storage

(d) Decommission

Post-lodge land use requires meticulous evaluation of the intended purpose to ensure that appropriate measures are taken for its final utilization. This process will require consultation with the various stakeholders of the area including leaseholder, the conservancy, traditional authority and MEFT.

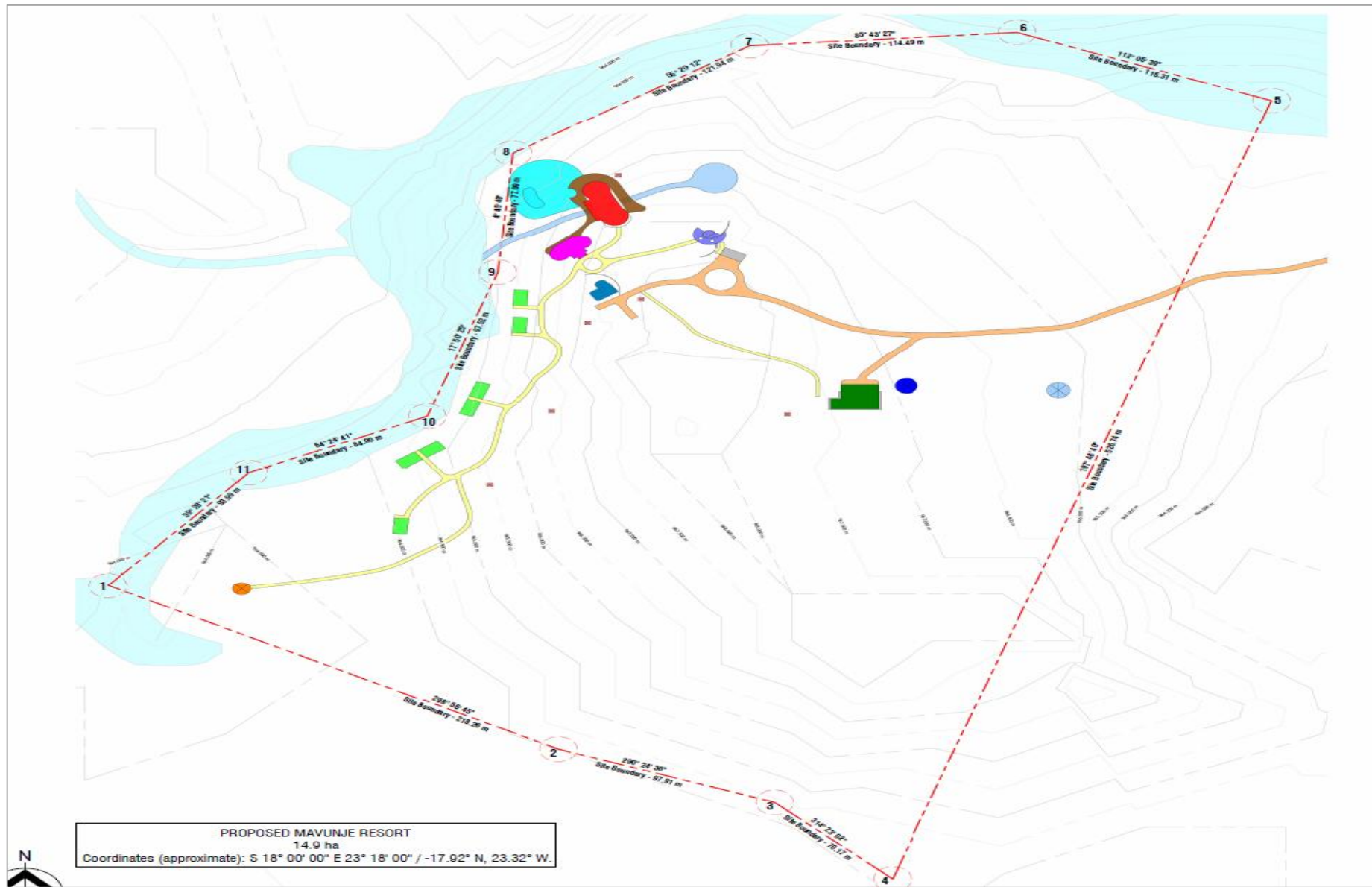


Figure 2-3 Proposed site layout

2.4 Project Need and Desirability

Namibia is renowned for its international tourism destination due to its various unique and popular geological features, wildlife attractions and popular sites across the country. The tourism industry is a major contributor to the gross domestic product (GDP) of Namibia and plays an important part in socioeconomic sustainability and wildlife conservation within the country. Mavunje Lodge Campsite is located on a strategic location adjacent the Kwando River and its floodplains within the proximity of Mudumu and Nkasa Rupara National Parks. This pristine location not only provides a unique experience for visitors but also serves as a crucial base for exploring the remarkable rich diversity of flora and fauna that thrive in this area as it lies on a major animals' corridor. The upgrade will bring the much-needed socioeconomic benefits for the region through creation of employment and other secondary services.

2.5 Project Alternatives

Three alternative options have been deemed viable for this proposed activity, namely: maintaining the status quo, alternative site or proceeding with the proposed development. These options provide that:

1. Maintaining the status quo – presents a scenario of disregarding the current development proposal and keeping the existing conditions unchanged.
2. Alternative site requires that a site other than the present be secured for the proposed activity.
3. Lastly, advancing with the proposed development involves implementing and realizing the developmental proposal in its current plan.

In developmental context, a sustainable approach is advocated as the optimal strategy for balancing economic benefits with environmental and social priorities. Firstly, maintaining the status quo preserves the current level of disturbance impact while perpetuating the economically inactive state of the existing facility. Given the heightened youth unemployment rates both nationally and within the constituency, this approach yields minimal benefits and cannot be regarded as a viable or sustainable solution.

Secondly, pursuing the proposed alternative site necessitates initiating a new process for land acquisition, which would delay the current development plan and provide no guarantees of securing a comparable site. Even if such a site is obtained, it could involve damaging an undeveloped area, potentially causing environmental disturbances. While this approach may still achieve certain social

and economic objectives, it risks prioritizing these goals at the expense of environmental considerations, resulting in an unbalanced approach.

Lastly, advancing with the current development proposal and site enhancements will revitalize operations, expand attractiveness to a broader client base, create job opportunities both locally and regionally, and support the service and retail industries through on-site offerings, all while minimizing potential environmental disturbances.

Based on information elaboration of alternatives, it is clear that the go-ahead alternative offers a favorable approach, effectively balancing the three pillars of sustainable development.

3. Review of Legal Framework

The following instruments have been deemed relevant to the proposed activity, and their applicability has been evaluated in the accompanying Table 3-1.

Table 3-1 Relevant legislations

Legislative Instrument	Objective	Applicability/Relevance
Namibian Constitution (1990)	Article 95 (1) on maintenance of ecosystems, essential ecological processes and biological diversity of Namibia and utilization of living natural resources in a sustainable way for the benefit of all Namibians, both present and future.	Requires a high level of environmental protection in respect of pollution control, waste management and protection of natural resources. Development activities need to safeguard the environment and its resources.
Environmental Management Act No. 7 Of 2007 And Environmental Impact Assessment Regulations GN of 2012 and	The Act aims to promote sustainable management of the environment and the use of natural resources. Lists the activities that cannot be undertaken without an environmental clearance certificate.	The envisaged activity is listed under Activity 6 of the Annexure under GN No. 29 of 2012, pertaining to tourism developments activities and specifically the operation of resorts, lodges, hotels or other tourism and hospitality facilities.
Environmental Assessment Policy of 1995	The policy sets out the steps of the environmental impact assessment process.	Undertaking of the EIA as set out per screening requirements is required to align to the steps set out in the EA policy.
Inland Fisheries Resources Act 1 of 2003	Provides for the conservation and protection of aquatic ecosystems and the sustainable development of inland fisheries resources; to provide for the control and regulation of inland fishing; and to provide for related matters.	Developments along river courses are required to consider the implications on aquatic resources and entrench measures to safeguard aquatic resources.
The Water Resources Management Act No 11 of 2013)	The objectives of the Act are to ensure protection and sustainable utilization of water resources.	Measure required to prevent pollution of water sources (surface and groundwater)

		Abstraction of water from a source for commercial activities requires license.
Namibia Tourism Board Act 21 of 2000	The Acts regulates the tourism sector and thus provides for registration and grading of accommodations facilities.	It is required to register as a tourism operation for grading purposes. Based on new changes, it will be required to apply for re-grading under Section 22 of the Act.
Labor Act Of 2007	The objectives of the Act outline the rights and obligations of employers and employees.	Requires recognizing rights of the workers' and employer in the working relation and accord necessary
Soil Conservation Act 76 of 1969	Intends to combat and prevent soil erosion, and for the conservation, protection and improvement of the soil, vegetation and the sources and resources of the water supplies. Under section 4 the Minister may by means of a direction order the owner of land to construct the soil conservation works.	Requires taking steps towards stability of soils in land developments to prevent erosion processes.
National policy on human-wildlife conflict management, 2009	To provide the framework for addressing human-wildlife conflict efficiently and effectively in order to promote both biodiversity conservation as well as human development.	Organizations, companies, State agencies including regional councils and parastatals and local development partners engaged in, planning or supporting land uses that might be affected by HWC must carry out appropriate measures to assess the likely extent of such conflict and to put in place appropriate mitigating measures.
Communal Land Reform Act 5 of 2002	Section 30 provides for the allocation of rights in respect of communal land. <i>(1) A right of leasehold may be granted for such period, not exceeding 99 years, as the board and the grantee of the right may agree.</i> <i>2) A right of leasehold granted for a period exceeding ten years is not valid unless it is approved by the Minister.</i>	Compliance with the requirements of the Act in terms of agreement for leasehold with the right holder(grantee), land board and ensure approval of the Minister.

	<i>(3) A right of leasehold may be renewed by agreement between the board and the leaseholder, but subject to the approval of the Minister in a case referred to in subsection (2).</i>	
Public and Environmental Health Act (No.1 of 2015)	The Public and Environmental Health Act serves to provide a framework for a structured uniform public and environmental health system in the country. The Act has the overall objective to promote public health and wellbeing through early detection of public health risks and ensure that these are addressed to prevent injuries and diseases and thus create a healthy environment. Subsequently, the Act requires that waste is disposed only at waste disposal sites or where required for appropriate treatment, with necessary measures to safeguard the environment and human health (Section 53).	Proper planning for waste storage and disposal is required. - Waste storage and disposal sites need to be well managed - Burning of waste is prohibited
National Solid Waste Management Strategy	The strategy aims to strengthen institutional and legal framework for management of solid waste serving as a guide to institutions such as local authorities on sound waste management practices.	Provides a guide to managing solid waste based on sustainable development principles. Guides on the principles to follow to ensure proper management of solid waste.
Nature Conservation Ordinance (No. 4 Of 1975) and Its Amendment Act of 1996	The Ordinance provides a framework for conservation of wildlife in its broad context. The amendment Act provides for the establishment of conservancies.	Adherence to the required conduct in designated conservation area. The operator is required to obtain consent to operate within a communal conservation area.
Convention on Biological Diversity (CBD)	Namibia is obliged under international law to conserve its biodiversity.	Projects is required to take proactive actions where the envisaged activity may cause damage to biodiversity.

Hazardous Substances Ordinance No. 14 of 1974	The Ordinance emphasizes on characteristics substances that can cause injury or ill-health or death to humans due to the nature of being toxic, corrosive, irritant, strongly sensitizing or flammable nature or the generation of pressure in certain circumstances. It groups various types of hazardous substances for specific controls. Strict control is placed on group I hazardous substances declared therein.	To effectively plan for the upcoming operations, it is essential to assess the types of hazardous substances that may be necessary, as well as to address related requirements for their importation, utilization, storage, and distribution.
National Heritage Act No. 27 of 2004	Provides for the protection and conservation of places and objects of heritage significance and the registration of such places and objects. Under Part V – Permits, Section 46, (1)(2) the Act prohibits to remove or demolish, damage or despoil; develop or alter; or excavate, all or any part of a protected place or object, or under subsection (3), relocate an object. Except if determined under exemption of Section 47 after submission of an application.	Review of national heritage site database to establish the status of the site earmarked for development. Ensure accidental findings of heritage objects where a sight is undesignated are addressed by a procedure.
National Policy on Climate Change for Namibia, 2010	The Policy provides for the legal framework and overarching national strategy for the development, implementation, monitoring and evaluation of climate change mitigation and adaptation activities. Mainstreaming climate change into development planning to ensure that it is always addressed at appropriate levels.	Requires broader consideration of climate change impacts, evaluating them and entrench mitigation measures to manage contributory factors whilst strengthen resilience.
Regional Councils Act No. 22 of 1992	The Act confers the powers to the Regional Councils to advance physical, social and economic development.	The regional council is made aware of the project and if necessary, support/consent to the proposed development as stakeholders.
Traditional Authorities Act No. 25, 2000	The Act provides for the establishment of traditional authorities and the designation, election, appointment and recognition of traditional	Recognition of the traditional system of governance through leaders as a key stakeholder and authority in their various areas of jurisdiction.

	leaders, further defining their powers, duties and functions of traditional authorities and traditional leaders.	Therefore, necessity that the local traditional representative of the tribe is consulted.
Atmospheric Pollution Prevention Ordinance, 1976	Provides for the prevention of the pollution of the atmosphere. The Act and its regulations control the release of noxious, dust and polluting or nuisance gases from machinery or equipment.	Ensure that operations strictly adhere to the emission standards for harmful and polluting gases, as well as for any nuisance gases, dust, or smoke
Forest Act No. 12 of 2001	The Act provides for the management and use of forests and forest production ultimately providing for the protection of the environment and the control and management of forest fires.	Section 22 prohibits the cutting of any living tree, bush or shrub growing within 100 meters of a river, stream or Watercourse except under a license.
National Policy on Tourism of 2008	The policy aims to provide a framework for the mobilization of tourism resources to realize long term national goals defined in Vision 2030, namely, sustained economic growth, employment creation, reduced inequalities in income, gender as well as between the various regions, reduced poverty and the promotion of economic empowerment.	The policy sets direction to encourage the establishment of tourism on communal land as an efficient means of involving communities in the tourism sector and thus for them to share in the benefits derived from tourism.

4. Public Participation Process

4.1 Identification of Stakeholders and Roles

Mavundje Campsite is a prior existing facility in the tourism and hospitality sector, categorizing it as a near brownfield development. The public participation process concentrated on engaging key stakeholders, whose roles were acknowledged and clearly defined as follows:

- The Zambezi Regional Council - Regional Authorities administering regional development and therefore are interested parties to the project.
- Ngonga Sub-Khuta - Local tribal authority administering land and people of the area and thus interested and potentially affected parties.
- Mashi Conservancy - overseeing wildlife resource management of the conservancy area
- Village Development Committee - coordinating developmental initiatives at village level with link to the constituency office. The stakeholders are interested parties to the proposed project.
- Ministry of Environment, Forestry and Tourism (Zambezi Region Office - neighboring land use (National Park) and overseer of the policy on tourism in communal conservancies.
- Judea Lyaboloma Constituency Office – the office coordinates local development with regional and constituency stakeholders.
- Nearby tourism facilities and the public – these are potentially interested and affected parties to the proposed activity.

4.2 Consultation Strategies

A multifaceted consultation strategy was implemented for the project (Figure 4-1 and Appendix 3).

1. Focused discussion consultations were engaged for the Ngonga Sub-Khuta and village development committee.
2. Focused notification and invitation to submit comments were presented to the following stakeholders:
 - The Zambezi Regional Council
 - Ministry of Environment, Forestry and Tourism (Zambezi Region Office).
 - Judea Lyaboloma Constituency Office
 - Kazile Island Lodge and Kazondwe Lodge
 - Mashi Conservancy Management Committee
3. General Public notification and invitation to submit comments – poster notices in conspicuous public places.

4.3 Consultation Outcomes

4.3.1 Focused Consultations

(a) Ngonga Sub-Khuta and VDC Engagement

A focused discussion meeting was convened at the residence of the Headman, attended by the Headman himself, the VDC chairperson, and the sub-Khuta secretary (Figure 4-1). They expressed their support for the project, emphasizing that it is long overdue and underscoring its importance for community welfare, particularly for the youth. They believe that this project will provide essential employment opportunities that are currently lacking, which is crucial given the high unemployment rate that is forcing many into criminal activities. The current set-up of the campsite remains insufficient, offering limited benefits to local communities. Therefore, the project's implementation is vital in addressing these issues (Appendix 4).

Equally, the leadership at this meeting emphasized the critical importance of safeguarding the region's flora and fauna. Given that the lodge is situated within a wildlife corridor, it is essential to ensure that animals can traverse the area safely.



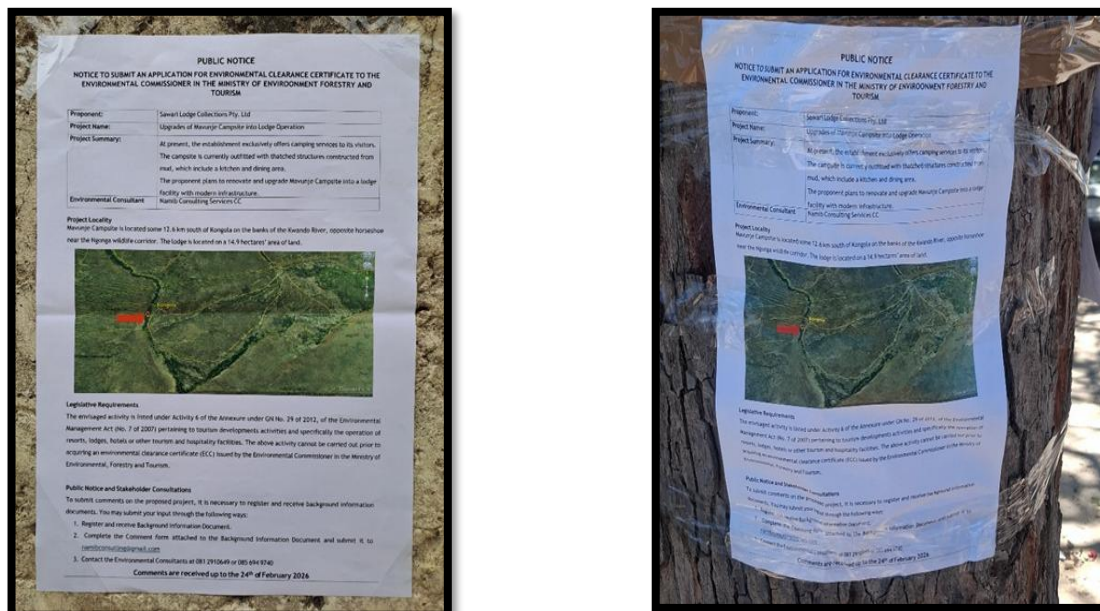


Figure 4-1 Focused discussion meeting with the local headmen (Induna) of the area and poster notices at Kongola settlement business center

(b) Mashi Conservancy Management Committee

The Mashi Conservancy endorsed the proposal to upgrade Mavunje campsite into a lodge, viewing it as a significant step toward establishing a joint venture, given that the lodge will operate within the conservancy's area. Additionally, they have expressed optimism about the employment opportunities that the lodge's operation will generate.

4.3.2 General Invitations for Comments

From the invitations letters and requests for comments from key stakeholders including the ZRC, MEFT (Park Management Office), the Judea Lyaboloma Constituency office, neighboring tourism facilities and public notices, several comments were received within the public participation period lasting from the 09 February 2026 to the 24 February 2026, however expanded further to ensure that all were able to submit when convenient.

Notable comments from these stakeholders include:

- The proposal is appreciated for its potential to contribute significant socioeconomic value to the region.
- Concern over extent of night illumination in the area.
- Infringement on wildlife corridor.
- Need to adhere to established operational protocols regarding fencing in conversation area.

The above issues needing intervention from the proposed development have been entrenched in the impacts of the proposed activities.

5. The Receiving Environment

5.1 Biophysical Characteristics

5.1.1 Climate

The overall climate of Zambezi region is characterized by Mendelson & Robetson (1997) as distinctly more tropical than any of the regions in Namibia, ultimately experiencing higher rainfall, and slight less evaporation and warmer winters. Rainfall averages at 700mm per annum in the far north-east parts of the region to about 500mm per annum in the southwestern parts.

The locality of the proposed activity seats in the precipitation range of 600 to 650 mm per annum, among the highest rainfall receiving areas of the country.

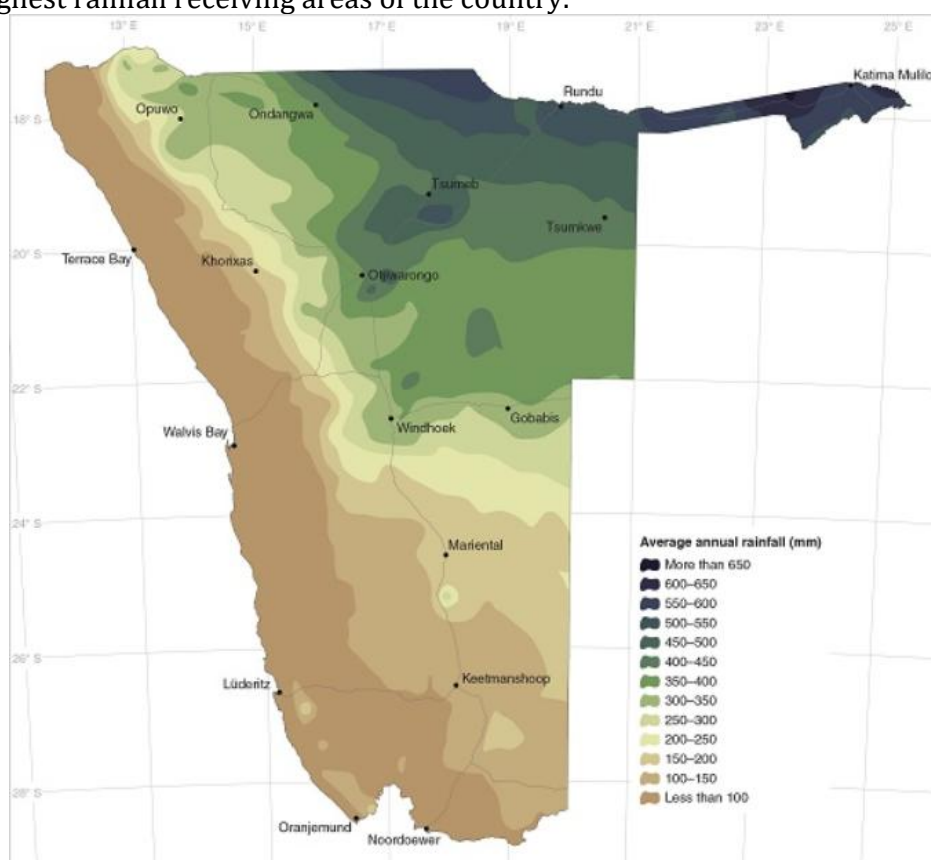


Figure 5-1 Rainfall profile of Namibia

5.1.2 Landscape

The Zambezi Region is predominantly characterized by flat terrain, stretching from the expansive areas in the east to the western areas, where the project site is situated. In the western areas, where the Kwando River is crossed, and in the northern regions extending into Zambia and Angola, there are noticeable variations in terrain, characterized by subtle undulating relief. The topography varies significantly, ranging from approximately 930 meters above mean sea level (mamsl) in the eastern regions to just over 1,000 mamsl in the northern areas, with a decrease to around 965 mamsl along the Kwando system.

The site itself is generally flat to gently sloping, with natural surface drainage consistent with the surrounding landscape. No major land reshaping is required. The natural character of the site remains largely intact.

5.1.3 Biodiversity

(a) Flora

The project location is characterized by vegetation structure of low shrubs, trees, and grass. Situated along the banks of the Kwando River, it overlooks the expansive Kwando floodplain. The flora consists mainly of trees and Shrub Savannah Biome. With the main vegetation type that includes the North-eastern Kalahari Woodlands, Riverine Woodlands and Islands, Mopane Woodland. Mopane (*Colophospermum mopane*), Leadwood (*Combretum imberbe*), Mangosteen (*Garcinia livingstonii*) tree and some grassy floodplains. Leadwood and Mopane are among listed trees under the forest management legislation.

(b) Fauna

Located approximately 15 kilometres west of Mudumu National Park, the landscape hosts a significant population of African elephants and features a diverse array of wildlife, including buffalo, lions, hippopotamuses, crocodiles, red lechwe, impalas, and meerkats. The 2021 strategy addressing maintenance, conservation, socio-economic development, and human-wildlife conflict management identifies an area in the vicinity of the proposed locality as a designated wildlife corridor. This aligns with the discussions highlighted during the meeting with the area's headmen. Data obtained from collar tracking of multiple species, such as lions, zebras, hyenas, and African wild dogs, indicates that elephants navigate the area more frequently; however, their movement is less concentrated compared to the adjacent national park and in comparison, to the earlier mentioned wildlife species (Figure 5-2).

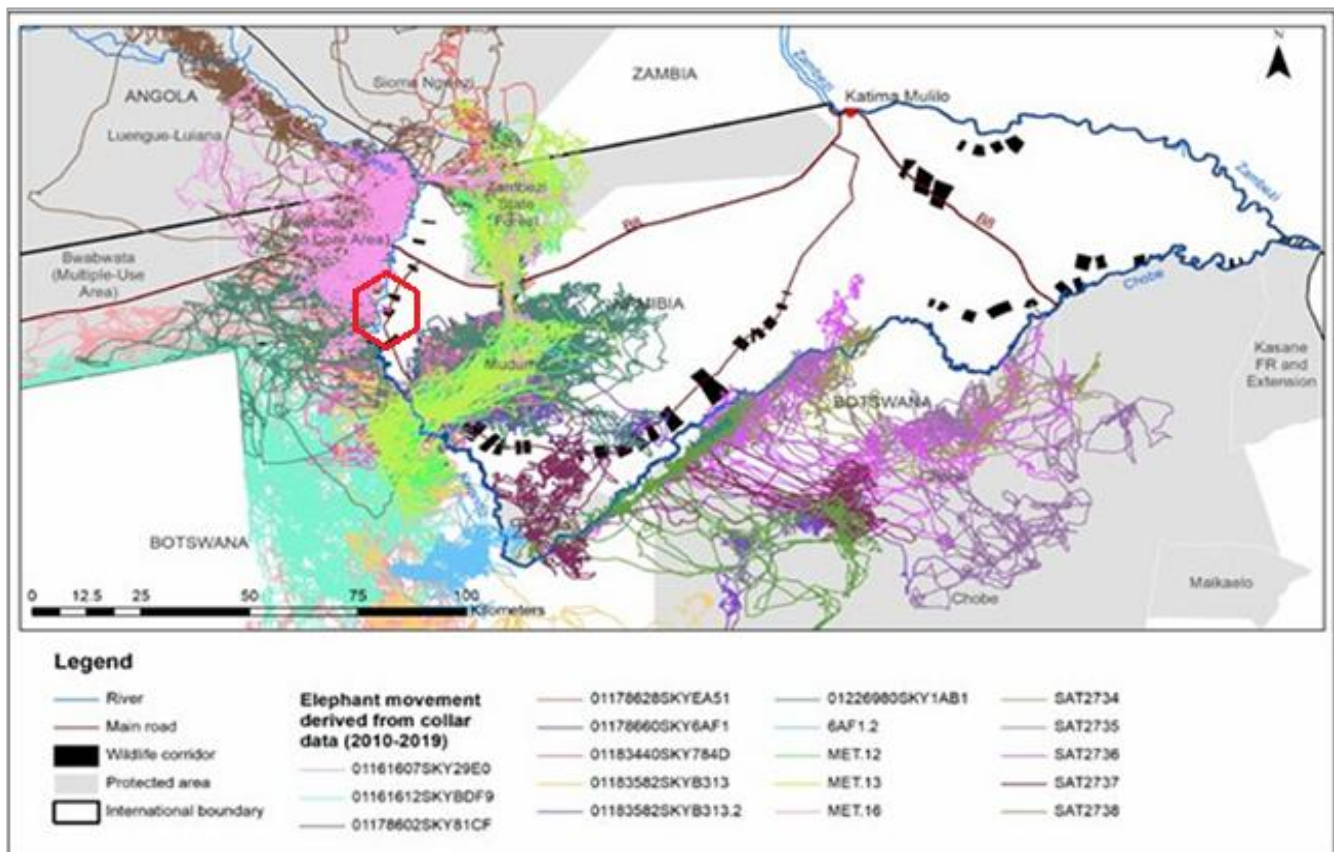


Figure 5-2 Elephant movement through the Ngonga Area (MEFT, 2021)

Apart from terrestrial life, the Kwando River supports over 73 fish species, including cichlids, characins, and mormyrids. Additionally, it provides a habitat for various bird species, such as the African fish eagle and African skimmer.

Apart from the above bird diversity, the Kwando River supports over 73 fish species and provides breeding and feeding grounds for a moderately rich fish fauna including a near-endemic radiation of large riverine cichlids. The fish species in the kwando include *Cyprinids*, *Cichlids*, *Characins*, *Mochokidae*, *Clariidae*, *Mormyridae* and *Schilbe* dominate the fish fauna. The most common species consists mainly of cichlids: *Oreochromis andersonii*, *Oreochromis macrochir*, *Coptodon rendalli*, *Serranochromis spp*, but also *Hydrocynus vittatus* (Recreational species), *Clarias gariepinus* and *C. ngamensis*, smaller species such as *Schilbe intermedius*, *Marcusenius altisambesi*, *Synodontis spp*, *Brycinus lateralis*, small Barbus. *Hydrocynus vittatus*, *Oreochromis andersonii*, catfish, Nembwe and dusk breams are the target recreational species for tourists who practice catch and release.

5.1.4 Geology and Soils

The Zambezi Region is characterized of the Kalahari Group formations extensively overlaying much of the eastern, northern to north-east parts of Namibia. The thickness of Kalahari deposits in this area is described as exceeding 150 m, however, the lithostratigraphic differentiation the deposits is yet described to date (Margane et al. 2005). The Zambezi region is characterized under the extensive

Kalahari basin that formed over 130 to 180 million years, much of the soils of the region are characterized by sand shaped into dunes. The soil texture primarily determines the classification of the soil. Westward of the region from the flood prone east, soils are more characterized by sand content (Mendelson and Roberts, 1997). These soils are called aerosols and are extremely poor in nutrients as water drains through the sandy texture easily and little water is held in the surface layers where most plants have their roots. An inspection of the area indicates the appearance of sandy loamy around and mainly sandy along the riverbank as described by Mendelson (1997; 2006).

5.1.5 Water Resources

(a) Surface water

Namibia is predominantly arid and commonly referred to as the driest country south of the Sahara. Most perennial rivers are primarily located along the northern and southern borders of the country. In contrast to the rest of the nation, the Zambezi Region is distinguished by its plentiful water resources, featuring perennial rivers and vast wetlands.

The location is situated along the Kwando River system, which adjoins the Linyanti wetland system and forms a border with Botswana. This area subsequently connects to the Chobe wetland system and, ultimately, the Zambezi system.

The significance of maintaining the health of the Kwando River system is crucial for both wildlife, river resources and the communities that rely on it. It is essential to recognize that Namibia is a downstream country within this catchment, originating in Angola. Effective management of the system necessitates multilateral cooperation at a national level with Angola, alongside prudent local practices to prevent overuse and pollution.

(b) Groundwater

The Kalahari Group formations overlay the region, where groundwater predominantly resides in porous aquifers. This facilitates access to water resources, especially in areas distant from the river. However, the hydraulic characteristics of these aquifers demonstrate significant variability over short distances. Additionally, certain areas are affected by the widespread presence of poor-quality water, predominantly characterized by high salinity levels.

5.2 Socio- Economic Characteristics

Mavundje Campsite is in the Judea Lyaboloma Constituency (see Figure 5-3) with a total population of 8,738, at a density of 5.1 person per square kilometers. While a comprehensive constituency profile is not presently accessible, the recent national census indicates that the region faces an

unemployment rate of 43.7%. Notably, 52% of the unemployed are females of working age, and only 17% of the youth are engaged in the labor force to some extent. This information highlights the significant unemployment challenges in the region, particularly affecting the youth and even more so among females, who represent a larger portion of the unemployed compared to males.

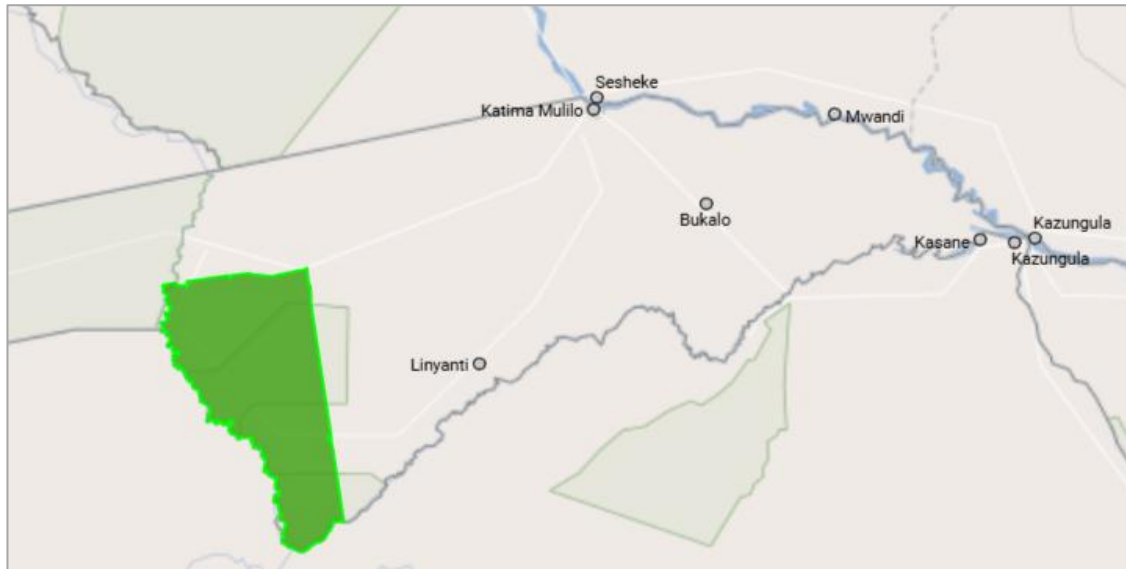


Figure 5-3 Judea Lyaboloma Constituency

Land use in this area comprises some parcels allocated for subsistence farming, however located away from the wetland area where the project location is sited. The entire area is encompassed within the Mashi Conservancy and borders the Mudumu National Park, extending inward of the region in an eastern direction, as depicted in Figure 5-4.

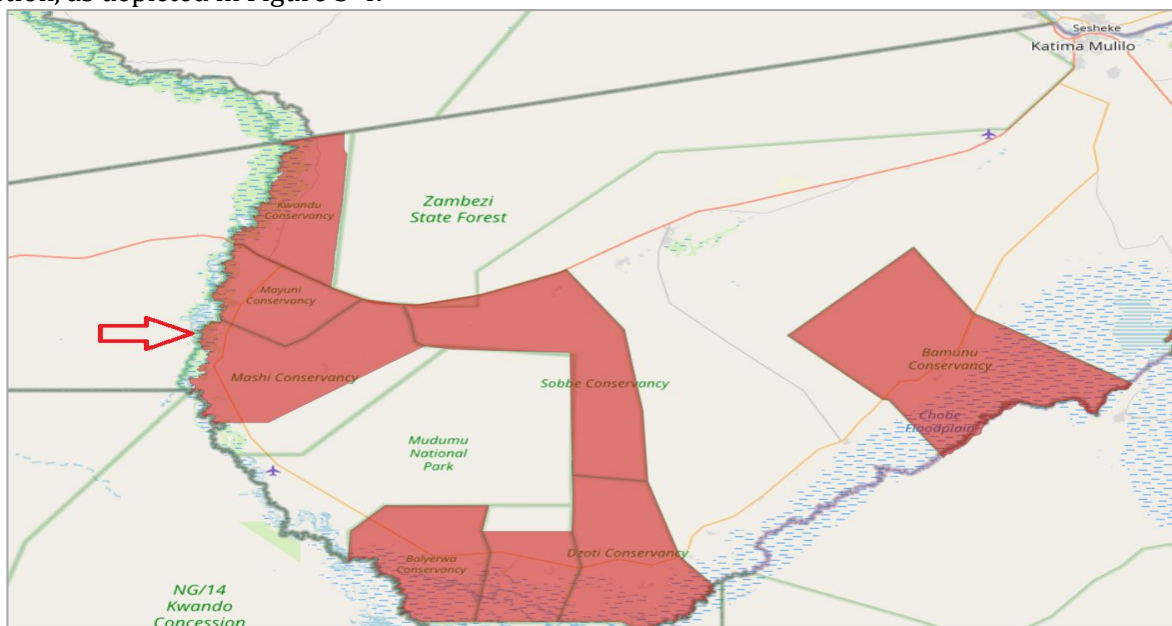


Figure 5-4 Characteristic land use (Source: NACSO)

6. Impact Assessment

6.1 Evaluation Methodology

A common tool applied in the evaluation of impacts of proposed developments activities are matrices. These present a set of measurement standards or parameters upon which to determine if a certain impact has significance that is of positive or negative nature. Parameters utilized in the evaluation may include the following: nature of the impact, the extent, duration, intensity, the probability, and significance of a potential impact or risk on the environment, society and economics and whether such effects are positive (beneficial) or negative (detrimental).

Each of the parameters (Extent, Intensity, duration, Probability and Significance) are explained in the Table 6:1, while Table 6:2 provides the significance level measurement.

Table 6-1 Description of impact evaluation parameters

CRITERIA	DESCRIPTION			
Extent	National (4) The whole country or global environment	Regional (3) Zambezi and neighboring region	Local (2) Within a radius of 2 km of the development site.	Site (1) Within the development site
Duration	Permanent (4) Mitigation either by man or natural process will not occur in such a way or in such a time span that the impact can be considered transient.	Long-term (3) The impact will continue/last for the entire operational life of the development but will be mitigated by direct human action or by natural processes thereafter. Variation becomes naturalized or revert to proceed to revert to natural state.	Medium-term (2) The impact will last for the period of the project phase, where after it will be entirely negated.	Short-term (1) The impact will either disappear with mitigation or will be mitigated through natural process in a span shorter than the construction phase
Intensity	Very High (4) Natural, cultural, and social functions and processes are altered to extent that they permanently cease (adverse) or benefits prevail	High (3) Natural, cultural, and social functions and processes are altered to extent that they temporarily cease (adverse) or benefits retained for a longer duration.	Moderate (2) Affected environment is altered, but natural, cultural, and social functions and processes continue albeit in a modified way (adverse or benefits)	Low (1) Impact affects the environment in such a way that natural, cultural, and social functions and processes are not affected
Probability	Definite (4) Impact will certainly occur	Highly Probable (3) Most likely that the impact will occur	Possible (2) The impact may occur	Improbable (1) Likelihood of the impact materializing is very low
Significance	Is determined through a synthesis of impact characteristics. Significance is also an indication of the importance of the impact in terms of both physical extent and time scale and therefore indicates the level of mitigation required. The total number of points scored for each impact indicates the level of significance of the impact.			

Table 6-2 Impact significance evaluation

Significance Rating Scale	Description
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Low impact (1-4 Insignificant/Low)	A low impact has no permanent impact of significance. Mitigation measures are feasible and are readily instituted as part of a standing design, construction, or operating procedure.
Medium impact (5-8 Significant /Moderate)	Mitigation is possible with additional design and construction inputs.
High impact (9-12 Very significant/High)	The design of the site may be affected. Mitigation and possible remediation are needed during the construction and/or operational phases. The effects of the impact may affect the broader environment.
Very high impact (13-16 Highly significant /Very high)	Permanent and important impacts. The design of the site may be affected. Intensive remediation is needed during construction and/or operational phases. Any activity which results in a “very high impact” is likely to be a fatal flaw.
Status	Denotes the perceived effect of the impact on the affected area.
Positive (+ve)	Beneficial impact
Negative (-ve)	Deleterious or adverse impact.
Neutral (/)	Impact is neither beneficial nor adverse
It is important to note that the status of an impact is assigned based on the status quo. Therefore, not all negative impacts are equally significant.	

6.2 Impact Identification, Evaluation and Mitigation

6.2.1 Impact Identification Procedure

Potential impacts are identified by applying a series of techniques that include:

- Stakeholder consultations – during consultations, stakeholders are likely outline impacts both adverse and beneficial that they envisage from the project.
- Site inspections visits – biophysical assessment provides information on the sensitivity of the site and thus providing basis for identification of the nature of impacts from proposed activities.
- Expert knowledge in the field – both academic and practical knowledge acquired over years in the field of environmental management provides the ability to predict potential impacts envisaged from a proposed development.

As Mavunje transitions from its existing campsite configuration to the proposed low – density tented lodge facility, specific impacts have been identified. These are comprehensively detailed in the succeeding section of the report. The above methodology is utilized in the determination of the impacts and their evaluation.

6.2.2 Impact Identification, Evaluation and Mitigation

Premised on the methodology of Tables 6-1 and 6-2, the table below identifies, evaluates and proposes mitigation measures.

PRE-CONSTRUCTION PHASE

Aspect/Activity	Description	Impacted Variable	Impact	Nature	Extent	Duration	Severity	Likelihood	Significance	Proposed Mitigation
Planning and design	This stage involves the drafting of structural design and site layout. This stage presents an opportunity to entrench aspects of environmental, social and economics to the proposed development to ensure sustainability.	Environment, Social and economics	Potential development of the project on solid sustainability principles.	+Ve	1	3	3	3	10	The development approach is founded on utilizing the existing footprints with minimal expansion, and the use of natural materials such as timber and thatch. Site layout has been designed to minimize disturbance footprint into new areas. However, the following still need review to enhance suitability: 1. The proposed septic tank as per the layout should be relocated away from the wetland to upland. 2. Include the safe decommission of existing septic tanks in the plan.
Securing land tenure for investment.	Communal land administration operates on a lease system for a specified duration. This duration of lease can fluctuate and might not	Social and Economic	Loss of investment opportunity from unfavorable land lease terms/duration	-Ve	2	1	1	2	6	Parties to agree a lease duration that adequately consider the time required for recovering the investment and sustaining the operations. Up to 99 years can be issued

Aspect/Activity	Description	Impacted Variable	Impact	Nature	Extent	Duration	Severity	Likelihood	Significance	Proposed Mitigation
	coincide with the necessary timeframe to recoup investment or that consented by the grantee.									on lease period however subject to ministerial approval for any period beyond 10 years.
Legal requirements	The proposed activity requires the proponent to meet several legislative requirements to ensure compliance, essential for the successful implementation of the proposed development.	Economic	Non-compliance with legal requirements.	-Ve	2	1	1	2	6	Establish all key legal requirements for the proposed activity for compliance.
Standard protocol for operating in Conservancy Area	Unlike in undesignated areas, operating a tourism facility in a conservancy area requires a joint venture agreement with the conservancy management committee.	Socioeconomic	Benefit sharing and local capacity development in entrepreneurship	+Ve	2	3	3	3	11	It is essential to establish a fair and balanced agreement between all parties to ensure the effective and successful operation of the facility.

CONSTRUCTION PHASE

Aspect/Activity	Description	Impacted Variable	Impact	Nature	Extent	Duration	Severity	Likelihood	Significance	Proposed Mitigation Measure
Construction of facilities (reception, kitchen, guestrooms, restaurant, service building, swimming pool, covered parking area)	Land preparatory works will entail removing existing structures, limited clearing of construction sites, excavation of holes for foundations.	Biodiversity, Landscape and Water	Removal and destruction of protected and endemic species.	-Ve	1	2	2	1	6	i. All protected species on the site should be identified and marked accordingly. These are <i>Colophospermum mopane</i> , and <i>Combretum imberbe</i> . ii. Contractors are made aware of protected plants/trees. iii. Place signage for easy identification.
	Use of power equipment may generate excessive noise and vibrations.	Biodiversity	Drive-away wildlife in proximity to the site	-Ve	1	2	2	2	7	i. Ensure all power equipment is in good operational condition to prevent excessive noise. ii. Avoid unnecessary use of equipment that produces excessive noise and vibrations. iii. No work should be carried out beyond dusk.
		People	Noise and vibration nuisance to people in the vicinity	-Ve	1	1	1	1	4	There are no villages located close to the site.

Aspect/Activity	Description	Impacted Variable	Impact	Nature	Extent	Duration	Severity	Likelihood	Significance	Proposed Mitigation Measure
	Proliferation of vehicle tracks and built-up soil material from excavations.	Landscape	Stimulate erosion of topsoil	-Ve	1	2	2	2	7	i. Ensure multipurpose access roads for various uses for large delivery vehicles and standard vehicles. ii. All vehicles strictly use demarcated access roads. iii. Ensure displaced soil materials are well stabilized to avoid causing erosion.
	Generate and release excessive dust and noxious gases	Biodiversity, Ambient air	Alter local air ambience conditions.	-Ve	1	2	1	2	7	i. Avoid unnecessary use of machinery and equipment that use petrochemicals. ii. Ensure all machinery and equipment are in good operational condition to prevent excessive noise.
		People	Nuisance to people in the vicinity	-Ve	1	1	1	1	4	There are no villages located close to the site.
	Accidental spillage or leaks of hydrocarbons/hazardous substances from machines or storage	Soil & subsurface resources	Pollution of soil and groundwater resources	-Ve	1	2	2	2	7	i. No refilling points located within 50m to the stream/channel. ii. Acquires drip trays and ensure utilization to prevent spillages or

Aspect/Activity	Description	Impacted Variable	Impact	Nature	Extent	Duration	Severity	Likelihood	Significance	Proposed Mitigation Measure
										where there are leakages from machinery or vehicles, or alternatively, pave areas where such activities take place. iii. Assess sources of spillage or leakage and seek to isolate the cause immediately. iv. Contaminated soil must be cleaned up and be disposed of as hazardous waste. v. Servicing vehicles and machinery must be carried out in designated areas with impermeable surfaces.
	Green-house-gases (GHG) emissions	Atmosphere	Intensify the GHG emissions, thereby leading to aggravating the effects of climate change.	-Ve	4	2	1	2	9	i. No equipment or machinery is kept running unnecessarily. These include among other vehicles, generators, compactors, compressors, and welding torches.

Aspect/Activity	Description	Impacted Variable	Impact	Nature	Extent	Duration	Severity	Likelihood	Significance	Proposed Mitigation Measure
										ii. All vehicles and machinery to be maintained in good working conditions through regular service. iii. All machines observed to release excessive smoke to be switched off, and necessary repairs be implemented before reused.
	Storage of materials used for construction works such as cement and steel, among others could be subject to theft and affected by weather changes specifically in rain season.	Economic and socioeconomic	Theft of material will undermine realization of the proposed development on time.	-Ve	1	1	1	2	5	i. Ensure 24-hour security services to ensure safety of the site. ii. Maintain inventory records of construction material onsite. iii. Collaborate with local stakeholders to build trust and sensitization on project benefits to the community, region and the country.
	These works will generate solid waste in the form of metal and steel off-cuts, brick and concrete rubble, and redundant packaging such as	Environment, People	Environmental degradation from unmanaged solid waste.	-Ve	2	3	2	3	10	i. Demarcate adequate waste collection sites. ii. Account for different types of waste generated onsite e.g. plastics, metals, rubble, paper of various textures.

Aspect/Activity	Description	Impacted Variable	Impact	Nature	Extent	Duration	Severity	Likelihood	Significance	Proposed Mitigation Measure
	plastics, cement bags and containers of construction materials.									iii. Designate a single disposal site within the lodge area. iv. Allow for reuse of some redundant materials such as containers.
	Labor relations, safety and health incidents (of various levels from minor to fatal from heights, trip and fall, scratches, confined space, fumes, unsecure equipment), conflicts among employees and employers and welfare on working sites.	Economic	Interruption to work schedules for project realization	-Ve	1	1	2	2	6	i. Ensure workers are remunerated on time. ii. Compliance with labor requirements for the construction sector.
		Safety and Health	Potential Injury or fatality to workers	-Ve	1	2	4	2	9	i. All construction workers are provided with appropriate and necessary PPE. ii. Ensure that all equipment is maintained in good working order to prevent risk of injuries due to malfunctioning. iii. Ensure availability of first aid onsite. iv. Maintain good housekeeping in all construction areas. v. Erect sign boards and use of danger tapes in various areas to warn of potential hazards.

Aspect/Activity	Description	Impacted Variable	Impact	Nature	Extent	Duration	Severity	Likelihood	Significance	Proposed Mitigation Measure
										vi. Allow trained personnel to use specialized power equipment. vii. Allow time for rest and refresh for workers (breaks for meals and hydration).
			Liabilities from safety and health incidents	-Ve	1	1	3	1	6	i. Address contractor obligations towards their employees in precontracts for health and safety liabilities. ii. Requires pre-engagement medical checkups from contractors.
		People's hygiene and environment aesthetics	Utilization of the surrounding area for personal sanitation in the absence of basic facilities.	-Ve	2	2	2	2	8	Provide lavatory facilities for workers in accordance with labor requirements.
	The proposed activity will require workers at various skillset levels including trades of masonry, roofing, clearing and trenching, admiration, finance and hospitality.	socioeconomics	Opportunities for contractors and locals	+Ve	3	2	2	2	9	i. Prioritize locals in both skilled and unskilled job opportunities. ii. Agree with contractor on involvement of locals

Aspect/Activity	Description	Impacted Variable	Impact	Nature	Extent	Duration	Severity	Likelihood	Significance	Proposed Mitigation Measure
Electric power supply	Lighting of lodge facilities	Social and Environment	Nuisance to neighbors	-Ve	2	3	2	2	9	i. Install low-intensity white light low-energy LED lamps as ideal for ambient lighting in tents. ii. Reduce glare by restricting beams to downward cones.
Security fencing of the site	While fencing secludes the area from invasion by wildlife specifically elephants, this could also impact on wildlife characteristics in the area	Biodiversity/Social	Alleviate exposure human-wildlife conflict.	+Ve	1	3	2	2	9	i. Engage the conservancy management committee on dos and don'ts in the conservation area.
			Interfere with wildlife movement within a wildlife corridor	-Ve	1	3	2	2	8	ii. Discuss the possibilities of fencing if necessary to alleviate HWC iii. Explore alternative ways of managing HWC should fencing around the area not acceptable conduct in the area.

OPERATION PHASE

Aspect/Activity	Description	Impacted Variable	Impact	Nature	Extent	Duration	Severity	Likelihood	Significance	Proposed Mitigation Measure
Operation of the lodge encompassing the following activities, lodging of visitors, day visitors, leisure activities, serving food, service and maintenance of facilities.	The operations of all facilities will generate solid waste and wastewater (grey and sewer water).	Landscape, people, stream, and wildlife	Pollution of the river ecosystem.	-Ve	2	3	3	3	12	i. All wastewater flows should be conveyed away from the stream and provided for in the septic system. ii. The septic system should be monitored to ensure no overflows and that pumping is carried out timely. iii. Ensure reticulating system is intact to prevent leaks into the local environment from broken piping.
			Unhygienic landscape conditions and a nuisance.	-Ve	1	3	2	2	8	i. Establish refuse collecting points across the site and within facilities. ii. Provide for waste separation according to types including food waste, plastics, paper, cans for improved handling and management. iii. Consider recycling of recyclable waste such as plastics, cans etc. while that such as food can be reused for

Aspect/Activity	Description	Impacted Variable	Impact	Nature	Extent	Duration	Severity	Likelihood	Significance	Proposed Mitigation Measure
										composting or alternatively supply to other users. iv. No waste should be discarded at an unmanaged site but secured in a fence area.
	The operation of various facilities onsite offer employment opportunities	Socioeconomic	Increased employment opportunities	+Ve	3	3	3	3	12	i. Prioritize locals in both skilled and unskilled job opportunities. v. Collaborate with local leadership on list of potential candidates for employment.
	Local businesses opportunities. The spinoffs for the locals from visitors are opportunities to engage in business opportunities (e.g. curios and traditional artifacts or cuisines).		Provide opportunities for locals and conservancy	+Ve	2	3	3	3	11	ii. Establish partnership with local groups such as cooperative or local organizations on business opportunities.
	Increased presence and movements of people on site and surroundings	Wildlife	Modify the behavior and distribution of wildlife within the area.	-Ve	2	3	2	2	9	i. Unauthorized or unplanned movement of individuals through the site and surroundings should be controlled.

Aspect/Activity	Description	Impacted Variable	Impact	Nature	Extent	Duration	Severity	Liability	Significance	Proposed Mitigation Measure
		People/ Wildlife	Increase incidents of human wildlife conflict	-Ve	2	3	3	3	11	ii. Place necessary signage where possible to prevent interference with wildlife behavior. iii. All leisure activities in the surrounding to be professionally guided. iii. Collaborate with MEFT local offices on proper operations in conversations area.
	Employees' welfare and working conditions	Safety and Health	Injury or illness of workers	-Ve	1	2	4	2	9	i. Workers must be provided with appropriate and necessary PPE. ii. Ensure that all equipment is maintained in good working order to prevent risk of injuries due to malfunctioning. iii. Ensure availability of first aid onsite. iv. Maintain good housekeeping in all operation areas. v. Erect sign boards and use of danger tapes in various areas to warn of potential hazards.

Aspect/Activity	Description	Impacted Variable	Impact	Nature	Extent	Duration	Severity	Liability	Significance	Proposed Mitigation Measure
										vi. Allow trained personnel to use specialized equipment. vii. Allow time for rest and refresh for workers (breaks for meals and hydration). viii. Ensure access to restrooms and rest areas.
	Maintenance of facilities and operations may involve storage and use of hazardous substances in various quantities, paints and thinners, hydrocarbons and others.	Environment	Pollution of environment	-Ve	2	3	1	2	8	i. Storage of hazardous substances must be controlled. ii. Cautious use of hazardous substances to ensure limited contact with open surfaces.
	The new site outlook. The refurbished site will assume an altered scenery to the present through having modern facilities and offering improved services.	People/ guests	Eyesore to aspirers of nature-based and traditional scenery	-Ve	1	3	1	1	6	i. Maintain development footprint to disturbed areas and limit extension of new areas except where unavoidable. ii. Place signage, if necessary, as reminders to prevent extension of footprint.

Aspect/Activity	Description	Impacted Variable	Impact	Nature	Extent	Duration	Severity	Likelihood	Significance	Proposed Mitigation Measure
			Appeal of modern facilities and leisure.	+Ve	4	3	3	3	13	Promote the facility's profile and the range of services provided across spectrum of platforms, local to international.
	The abstraction of water from a borehole for use can be overstretched without cognizance of resource conversation.	Water	Water resource depletion	-Ve	1	3	1	1	6	Promote awareness and implement conservation practices for water use at the site.

DECOMMISSION PHASE

Aspect/Activity	Description		Impact	Nature	Extent	Duration	Severity	Likelihood	Significance	Proposed Mitigation Measure
Post lodge operation land use	Land use post lodge operations are undetermined at the present however this is assumed will be oriented towards mixed use of conservation and community access for livelihood activities. If this is undetermined, the	Environment, people and economics	Deterioration of the site due to undetermined post land use decision.	-Ve	1	4	2	2	9	Engage stakeholders on long terms planning for post operations land use that is sustainable. Continuation of the operations with high local community involvement or ownership or partnership may provide a feasible option that is explorable in the lease agreements.

	area could be unproductive and deteriorate.									
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7. Project Impact Significance and Environmental Management Plan

The evaluation of impacts detailed in Section 6 of this report reflects a range of severity levels based on the applied criteria. Most adverse impacts are categorized between medium to high, without any impacts of very high significance except those of positive nature. These impacts are typical of activities within this sector, particularly those following the conventional project development stages. Over the years, growing environmental awareness and social advocacy have contributed to the development of more effective strategies for minimizing these impacts. Notably, the proposed approach to this activity is intentionally conservative, helping to ensure the scope and scale of its potential effects remain limited.

The foremost challenge in achieving effective impact mitigation lies in the level of effort allocated to implementing these measures and the necessary monitoring required to ensure their success. Consequently, this assessment concludes that while the proposed activity can be executed, there is a need for enhancement in the implementation of mitigation measures. Developing a management plan must integrate practical strategies for defining roles and responsibilities, enabling flexibility in their assignment, and ensuring the implementation of clear compliance standards.

Based on the evaluation above, it is concluded that the proposed project, with impacts primarily categorized as moderate to common, can be effectively supported by a well-structured management plan to ensure its feasibility.

8. Conclusion

The purpose of a scoping assessment is to gather information regarding the proposed activity, examine the environmental and social attributes of the development, review legislative requirements, consider alternative options, and identify and evaluate potential impacts. The assessment ultimately necessitates the formulation of either an environmental management plan to address the significant impacts or the initiation of specialized studies.

This report outlines that the proposed project adheres to a sustainability-focused development strategy, aiming to enhance the natural aesthetics of the site with minimal modifications or expansion while increasing its value. In synthesizing the project's expected activities, site characteristics, legislative requirements, and consideration of alternatives, it was determined that potential adverse impacts arising from their interaction are predominantly of medium-to-high level, with negligible instances of very high-level impacts. Based on the results of the analysis, these impacts can be

mitigated to reduce their severity and thus simultaneously increasing the value derived from the proposed site development. As a result, this assessment recommends the development of a comprehensive environmental management plan as an annexure to document, to detail the proposed essential management actions required to prevent, mitigate, or alleviate adverse impacts while enhancing the positive outcomes of the proposed project.

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Government of the Republic of Namibia, Constitution of Namibia, various legislations as provided legislative review table.

Appendices

Appendix 1: Background Information Document

Appendix 2: Proof of Project Screening

Appendix 3: Stakeholder Notifications

Appendix 4: Minutes of the Meetings and Submissions Comments

Appendix 5: Locality Map

Appendix 6: Stakeholder Engagement Register

Appendix 7: Environmental Management Plan