



"Protecting nature...Preserving life".

Co	ontents	
-	Table of contents	i
ı	LIST OF FIGURES AND TABLES	iii
I	list of acronyms	iv
1.	INTRODUCTION & BACKGROUND	1
3.	PROJECT PROPONENT	6
4.	PURPOSE OF THE ENVIRONMENTAL IMPACT ASSESSMENT	7
4.	SCOPE OF WORK	8
5.	CURRENT LAND USE OF THE AREA	10
6.	LIST OF STAKEHOLDERS	11
7.	THE NEED AND DESIRABILITY	13
8.	APPROACH AND METHODOLOGY	15
9.	DETAILS AND CV OF AUTHOR	16
10). LEGAL REQUIREMENTS	17
11	L. CONSTRUCTION OF AN ENVIRONMENTALLY FRIENDLY CAMPSITE	18
11	L.1 SITE SELECTION AND PREPARATION	18
12	2. SUMMARY OF THE MAIN MITIGATION MEASURES	20
	12.1 Main Mitigation Measures	20
13	3. DESCRIPTION OF THE EXISTING ENVIRONMENT	22
	13.1 Physical Environment	22
	13.1 Climate	23
	13.2 Rainfall and Vegetation 2023/2024 season	23
	13.3 Geology & Soil	23
	13.4 Fauna and Flora	24
	13.6 Land Tenure	25
14	1. CONSIDERATIONS AND ALTERNATIVES	25

15. PLANNING PROJECT SCHEDULING	25
16. EIA EVALUATION METHOD	26
17. POTENTIAL IMPACT IDENTIFIED	28
18. PUBLIC PARTICIPATION	32
1.1. OBJECTIVES OF THE PUBLIC PARTICIPATION PROCESS	32
1.2. ANNOUNCING THE OPPORTUNITY TO PARTICIPATE	32
1.3. STAKEHOLDER BRIEFING AND COMMUNITY CONSULTATION	34
1.4. RAISED ISSUES FOR INVESTIGATION BY EIA SPECIALISTS	34
1.5. FINAL SCOPING REPORT AND ISSUES AND RESPONSES	34
1.6. ONGOING PROGRESS REPORT	34
19. SOCIAL CONSIDERATIONS	35
20. RECOMMENDATION	36
21. CONCLUSION	37
Annexes Error	?! BOOKMARK NOT DEFINED.
Annex A: consent letters	Error! Bookmark not defined.
Annex b: attendence register for public meeting	Error! Bookmark not defined.
Annex c: approval letter from the traditional authority	Error! Bookmark not defined.
Annex d: approval letter from the ministry	Error! Bookmark not defined.
Annexe e: invitation letters to key stakeholders to attend a public stakeholde defined.	er meeting Error! Bookmark not
Annexe f: newspaper advertisement	Error! Bookmark not defined.
references	37

LIST OF FIGURES AND TABLES

Figure 1: Study Area

Figure 2: Artistic Impression for the Guest Suite

Figure 3: Layout for the Proposed Camp & Lodge Facility

Figure 4: Floor plans for the Guest Suite

Figure 5: Rainfall and Vegetation 2023,2024

Figure 6: Public Notice at Dzoti Conservancy Office

Figure 7: Public Notice at Dzoti Conservancy Office

Table 1: GPS Coordinates

Table 2: Stakeholder List

Table 3: Legal Framework

Table 4: Baseline Assessment

Table 5: Project Scheduling

Table 6: Impact Rating Criteria

DEA	Department of Environment Affairs
EA	Environmental Assessment
EAP	Environmental Assessment Practitioner
EC	Environmental Commissioner
ECC	Environmental Clearance Certificate
EIA	Environmental Impact Assessment
EMA	Environmental Management Act
ЕМР	Environmental Management Plan
ESA	Environmental Scoping Assessment
ESR	Environmental Scoping Report
GIS	Geographic Information System
TA	Traditional Authority
MEFT	Ministry of Environment, Forestry Tourism
TA	Traditional Authority

1. Introduction & background

1

This Environmental Scoping Report (ESR) has been prepared to address the potential environmental impacts that could arise from the construction and operation of the Adventure Cam and Lodge Facility at Kasungwe in Malengalenga within the Dzoti Conservancy area of the Zambezi Region. Malengalenga is situated in the Linyanti Constituency. The Malengalenga community, like many rural areas, faces socio-economic challenges including high poverty rates, reliance on subsistence agriculture, and limited access to resources and opportunities.

This project is led by Untouched Safaris Namibia and aims to enhance the livelihoods of the Dzoti people while fostering sustainable tourism and community engagement. Key aspects include:

- Campsite Development: The Adventure Camp and Lodge Facility will contain 8 to 12 Guest suites and staff accommodation.
- Untouched Safaris Namibia will run the project, and the Dzoti conservancy will receive a percentage of the Net Profit.

Background on the Dzoti Conservancy

Established in October 2009, Dzoti Conservancy spans approximately 287 km² and supports around 2,286 residents. Hunting is crucial for income, especially where tourism is limited, and it finances salaries for conservancy staff and community projects.

Economic Impacts

Between 2011 and 2018, hunting revenues were essential for covering operational costs exceeding N\$ 5.8 million and funded community initiatives, including compensation for human-wildlife conflicts and social projects. This initiative not only aims to improve economic conditions but also emphasizes conservation and community resilience through sustainable practices.

The Linyanti constituency, particularly the Dzoti Community in Malengalenga, offers significant potential for tourism development due to its rich biodiversity and presence of iconic wildlife species, including the "big five." This potential can translate into job creation and income opportunities for the local population.

However, the social and economic landscape in Namibian rural areas has evolved, with changing resource availability and accessibility impacting livelihood strategies. The high dependency ratio of 100% in the conservancy indicates that nearly half of the population is of dependent age, which correlates with high unemployment rates. Among those of working age, a majority are actively seeking employment, highlighting the pressing need for economic opportunities.

Education levels in the community are also concerning, with 44% of residents lacking formal education and 48% not having completed primary education. Despite these challenges, households engage in various livelihood activities. Livestock farming for personal use is the most significant activity, followed by formal employment and old age pensions. The shift towards income-generating strategies in the 1990s reflects a broader transition towards a cash economy.

Three key factors contribute to the sustainability of livelihood activities in the conservancy: strong social networks, diversification of income sources, and the establishment of community support institutions like the Dzoti Conservancy. These elements are crucial in enhancing natural resource management, which is vital for the resilience of local livelihoods. Overall, the conservancy model plays a significant role in fostering community development and improving the living conditions of its members.

The labor force statistics of 2023 indicate a troubling rise in unemployment in Namibia, climbing from 33.4% in 2018 to 36.9%. This upward trend is evident across both urban and rural areas, affecting males and females alike. The figures also highlight the issue of discouraged job seekers—individuals who have ceased looking for work after prolonged unsuccessful attempts.

2

In rural regions, a considerable portion of the workforce is engaged in informal employment, which is often characterized by low wages and limited job security. The impact of climate change, particularly through droughts and unpredictable rainfall, further threatens the livelihoods of communities such as Malengalenga, severely affecting agriculture and water resources. To cope, many residents resort to informal activities like petty trading, crafts, and fishing to supplement their income.

Before Namibia gained independence in 1990, communal areas lacked rights to wildlife resources. However, recent legislative changes have empowered communities to benefit from their wildlife and other local resources. This shift has fostered wildlife conservation and community development through both consumptive and non-consumptive practices, promoting sustainable development in the region.

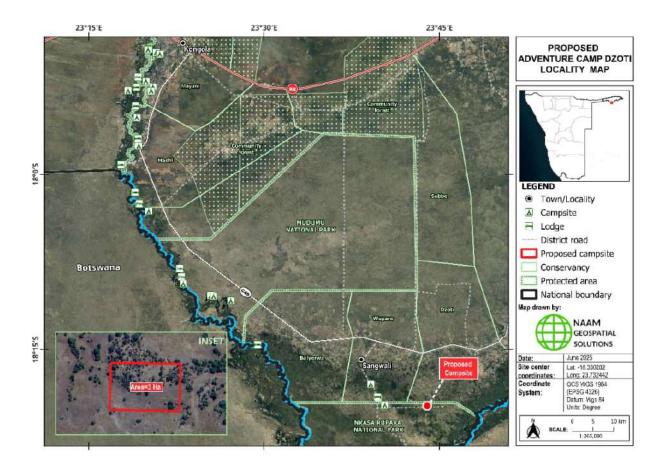


Figure 1: Study Area

The proposed site is well-suited for development due to its location within an already disturbed area, primarily affected by vehicle traffic from conservancy officials and park authorities. This prior disturbance minimizes the potential for significant negative environmental impacts. The site selection is informed by the unique characteristics of the marshes, which showcase the complex interactions among various environmental factors. Notably, recurrent flooding plays a critical role in shaping the park's ecology, supporting Namibia's largest seasonally inundated grasslands and a diverse array of wildlife and bird species.



Figure 2: Artistic Design for the Guest Suite

The development of an Adventure Camp & lodge Facility at Kasungwe in the Zambezi Region aims to integrate natural colors and materials into its construction and landscaping to minimize visual impact and harmonize with the environment. Key activities outlined for the construction and operation include:

 Minimal Vegetation Clearing: Efforts will be made to limit the clearing of vegetation, preserving the natural landscape.

4

- 2. No Leveling of the Site: The site is already flat, so no additional leveling will be necessary, further reducing disruption.
- 3. No Barrow Pits: There will be no digging of barrow pits, which helps maintain the integrity of the surrounding environment.
- 4. Water Borehole: A borehole will be drilled to source water for construction and campsite use, ensuring that water needs are sustainably met.
- 5. Dust Control Measures: The main access route will be updated and regularly watered to control dust during construction activities.

The Dzoti Conservancy, through the Silonga & Nkiye Sub-Khuta of the Mayeyi Traditional Authority, has agreed (Joint-Venture) with Untouched Safaris Namibia, an Environmental Study to comply with the Environmental Management Act (EMA) (Act No. 7 of 2007). This initiative is supported by Untouched Safaris Namibia, which emphasises sustainable tourism and community upliftment.

SM Dynamic has been tasked with conducting the Environmental Scoping Study and facilitating the Environmental Impact Assessment (EIA) process necessary for obtaining the Environmental Clearance Certificate. The study aims to adopt innovative approaches to natural resource management and ensure compliance with relevant legislation. The Namibian Constitution, particularly Articles 91(c) and 95, provides a framework for the sustainable use of natural resources for the benefit of all Namibians, both present and future.

The proposed campsite is situated in the Malengalenga area, encompassing approximately 17,000 m² (1.7 hectares) (Latitude: S 18.33016, Longitude: E 023.73240). This location presents an opportunity to balance development with ecological preservation in the Linyanti constituency.



Figure 3: Layout for the Proposed Camp & Lodge Facility

Table 1: Site GPS Coordinates

Proposed Site location		
#	Longitude	Latitude
А	-18.33016	23.73240
В	-18.42454	23.72984
С	-18.42318	23.73496
D	-18.42939	23.72293

3. Project Proponent

Untouched Safaris Namibia, in collaboration with the Mayeyi Traditional Authority, is spearheading an exciting development project to establish a campsite. Untouched Safaris Namibia is supporting this initiative by providing sponsorship for the construction and training of the Dzoti Community in managing and operating the campsite once it is complete. As a tour and safari operator, Untouched Safaris aims to enhance the local tourism experience for its high-end clients through this joint venture, combining cultural engagement with sustainable tourism practices. This partnership not only fosters community empowerment but also promotes the preservation of the region's unique heritage and natural beauty.

4. Purpose of the Environmental Impact Assessment

The ESR aims to evaluate the likely environmental impacts of the proposed camp & lodge facility, focusing on socio-economic, cultural, and human health factors. It serves as a preliminary assessment to guide the Environmental Impact Assessment (EIA) process, ensuring compliance with the Environmental Management Act No. 7 of 2007 (EMA) and its regulations.

Environmental Impact Assessment (EIA) Framework

The EIA process involves:

- Evaluation of Environmental Impacts: Assessing both beneficial and adverse effects of the campsite development.
- 2. **Consideration of Listed Activities**: The establishment of a campsite qualifies as a listed activity requiring Environmental Clearance Certification under Government Notice No. 30 of the EMA regulations.
- Public Participation: Ensuring that interested and affected parties can contribute to the assessment process.

The key objectives of the Environmental Management Act include:

- 1. **Impact Prevention**: Preventing significant adverse effects on the environment through timely consideration of impacts.
- Stakeholder Engagement: Facilitating opportunities for participation from stakeholders throughout the assessment process.

7

3. **Informed Decision-Making**: Ensuring that the findings from the EIA are thoroughly considered before making any decisions regarding the project.

The ESR serves as a foundational document for the proposed project, setting the stage for a comprehensive EIA that will address potential environmental impacts and promote sustainable development within the Dzoti Conservancy area. Further assessments and stakeholder consultations will be conducted to ensure the project's alignment with environmental standards and community interests.

4. Scope of work

The primary aim of this project is to conduct a comprehensive Environmental Impact Assessment (EIA) for the proposed adventure camp & lodge development. This assessment will identify potential environmental, social, and economic impacts associated with the project, ensuring informed decision-making and compliance with regulatory requirements.

A. Alternatives Assessment

Alternative Locations

- Advantages: Reduced impact on sensitive ecosystems, and improved access to amenities.
- Disadvantages: Increased distance from target visitors, higher transportation costs.

Camp & Lodge Design Options

- Advantages: Eco-friendly designs can minimize land disturbance and promote sustainability.
- Disadvantages: Higher initial costs and potentially limited visitor capacity.

Operational Models (e.g., seasonal vs. year-round)

Advantages: Seasonal operations can reduce environmental strain during off-peak times.

8

• **Disadvantages**: Limited revenue generation during off-seasons.

B. Potential Impacts Assessment

1. Construction Phase

9

- Land Disturbance
- Significance: High

Mitigation: Implement erosion control measures, and limit clearing to necessary areas.

Noise and Vibration

- Significance: Moderate
- Mitigation: Use of quieter machinery, and restricted working hours.

Waste Generation

- Significance: Moderate
- Mitigation: Develop a waste management plan and recycling programs.

2. Operational Phase

Water Usage and Quality

Significance: High

Mitigation: Use water-efficient fixtures, and regular water quality monitoring.

Biodiversity Impact

- Significance: High
- Mitigation: Maintain buffer zones and implement wildlife protection measures.

Community Impact

• Significance: Moderate

Mitigation: Engage with local communities and provide training and job opportunities.

C. Facilitation of Environmental Clearance Certificate (ECC) Application

SM Dynamic Environmental Consultants will assist in:

 Preparing Documentation: Compiling all necessary reports, assessments, and supporting data required for the ECC application.

• Stakeholder Engagement: Organizing public consultations to gather community input and address concerns.

 Submitting Application: Ensuring all forms and required information are accurately submitted to the relevant authorities.

 Follow-up: Coordinating with regulatory bodies to address any queries or additional requirements during the review process.

The EIA process will ensure the proposed campsite is developed with minimal negative impacts on the environment and community. By evaluating alternatives and implementing effective mitigation measures within the Environmental Management Plan (EMP), the project can achieve sustainability and compliance, paving the way for a successful application for the Environmental Clearance Certificate (ECC).

5. Current land use of the area

The Kasungwe area has a rich history as agricultural land but has faced challenges due to wildlife disturbances. Given that the land is under the Mayeyi Traditional Authority and permission for a campsite has been granted, this could present an opportunity for eco-tourism that supports conservation efforts while benefiting the local community.

- 11 Here are some potential considerations for the development of the proposed development:
 - 1. Wildlife Management: Implement measures to mitigate wildlife disturbances, such as fencing or using natural deterrents, to ensure both the safety of guests and the protection of local wildlife.
 - 2. **Community Involvement**: Engage the Mayeyi Traditional Authority and local residents in the planning and management of the campsite to ensure it aligns with their needs and cultural values.
 - 3. Sustainable Practices: Use eco-friendly construction materials and practices to minimize environmental impact and promote sustainability.
 - 4. Cultural Education: Incorporate elements of the local culture into the campsite experience, such as guided tours led by residents, to educate visitors about the Mayeyi traditions and the surrounding ecosystem.
 - 5. Economic Benefits: Consider how the campsite can provide economic benefits to the community, such as job creation and opportunities for local artisans to sell their crafts.
 - 6. Environmental Impact Assessment: Conduct an assessment to understand the ecological impact of the campsite and develop strategies to mitigate any potential negative effects.
 - 7. Marketing Strategy: Develop a marketing plan that highlights the unique aspects of the Kasungwe area, attracting eco-tourists interested in wildlife and cultural experiences.

By addressing these factors, the project can become a sustainable venture that supports both the local community and the preservation of wildlife in the area.

6. List of stakeholders

The key stakeholders were identified during the screening phase, and background information documents (BID) with project statement letters were shared through email and hand delivery. Formal Invitation letters were sent to all key stakeholders, inviting them to the public consultation meeting (See attached signed documents).

Table 2: Stakeholders list

12

Name	Designation	Email address/Contact No.	Organization
Humphrey Divai	Honorable Councilor Judea Lyamboloma Constituency	mbusha.services@gmail.com humphreydivai@yahoo.com	Zambezi regional Council
		Private Bag 5002, Katima Mulilo	
Janet Manja Matota	Advocacy Manager	janet@irdnc.org.na	IRDNC Katima Mulilo
Mr Leeverty Muyoba	Control Warden	Leeverty@gmail.com	MEFT Katima Mulilo
Induna Rufu	Induna Silonga Sub-Khuta	P O Box 1962 Katima Mulilo	Mayeyi Traditional Authority
Induna Shozi	Induna Nkiye Sub-Khuta	P O Box 2523 Katima Mulilo	Mayeyi Traditional Authority
Mr Dominic Lupito	Conservancy Chairman Dzoti Conservancy	P O Box 1532 Katima Mulilo	Dzoti Conservancy

The mitigation measures recommended in this report and the conditions of approval provided in the Ministry of Environment, Forestry and Tourism (MEFT) record of decision apply to three phases of the project cycles namely:

The Design Phase: These measures relate to the detailed layout, planning, and design of the campsite, and will largely be implemented by the proponent with the guidance of the EAP, prior to the commencement of any physical activities on the proposed new site.

The Construction Phase: These mitigation measures are applicable during site preparation and construction on site and will thus need to be implemented by the appointed contractors and subcontractors. The construction phase of the project is considered to include all activities related to the following:

Site preparation

Construction activities; and

Operational activities

The Operational Phase: These mitigation measures are applicable during the operation of the project and must therefore be implemented by the developer or by Untouched Safari qualified in the management of tourism operation industry.

The tasks that were undertaken in this Environmental Assessment covered the investigation of the following: an appraisal of the risks, vegetation, soil & geology, climate, water, and socioeconomic. The Scoping Report tog, ether with the Environmental Management Plan (EMP) will be submitted to the Environmental Commissioner for consideration in the application for the Environmental Clearance Certificate (ECC).

The following methods were adopted in this assessment to assess the environmental issues; data collection from the proponent and key stakeholders regarding the project site and a multicriteria method was used for new site selection.

THE NEED AND DESIRABILITY

The Dzoti Community, with approximately 2,000 inhabitants, is facing significant socio-economic challenges, particularly high unemployment rates among the youth. This situation not only affects their livelihoods but also contributes to social issues such as crime and risky health behaviours. The community's location near the Nkasa Rupara National Park, which is rich in biodiversity and wildlife, presents a unique opportunity for sustainable development.

14 **Socio-Economic Context**

The Malengalenga community, like many rural areas, struggles with high poverty levels, dependence on subsistence agriculture, and limited access to essential resources and opportunities. The proposed development aims to harness the area's natural resources and wildlife, providing both economic opportunities and a platform for conservation efforts.

Benefits of the Proposed Activity

- 1. Economic Opportunities: Establishing a campsite would create jobs and stimulate local businesses, offering the youth viable employment alternatives and reducing their reliance on unsustainable practices.
- 2. Wildlife Conservation: By promoting both consumptive (e.g., regulated hunting) and nonconsumptive (e.g., eco-tourism) uses of wildlife, the project encourages conservation efforts, fostering a sense of stewardship among community members.
- 3. Community Development: The campsite can catalyze broader community development initiatives, including skills training, education, and health programs, addressing the root causes of poverty.
- 4. Environmental Sustainability: The project aligns with environmental conservation goals, ensuring that the community benefits from its natural resources while protecting the biodiversity that attracts tourists.

Risks of Inaction

If the Department of Environmental Affairs (DEA) does not grant the Environmental Clearance Certificate (ECC) for the campsite development, the consequences for the Dzoti community could be dire:

- 1. Continued Decline in Livelihoods: Without new economic opportunities, community members may resort to illegal activities, including wildlife crimes, exacerbating the existing socio-economic challenges.
- 2. Increased Social Issues: The lack of viable employment options could lead to increased health risks, including the proliferation of activities such as prostitution, as individuals seek alternative means of survival.
- 3. Loss of Biodiversity: Without a framework for the sustainable use of wildlife, the pressure on local ecosystems could lead to significant biodiversity loss, undermining the very resources the community seeks to protect.

The development of an adventure camp in Dzoti represents a critical opportunity for economic empowerment, conservation, and community resilience. Granting the ECC would not only support the community in overcoming its current challenges but also foster a sustainable future in harmony with the rich biodiversity of the region. The potential benefits far outweigh the risks of inaction, making this project not only desirable but essential for the well-being of the Dzoti community and the operator.

APPROACH AND METHODOLOGY 8.

The assessment included the following activities.

- Site Assessment (site visits).
- Desktop Review.
- Conduct the EIA Process (Assessment and description of the study area, recommended sites, or the affected environment).
- Participation process (Public): Identification of the affected and interested stakeholders and authorities, Newspaper Advertisement, scheduled and hosted participation meetings and developed public consultation report (See Appendix).

Develop an Environmental Scoping Assessment Report and circulate it to interested and affected parties.

Develop EMP which will comprise of the following:

- Induction and code of conduct for all staff members on the provisions of EIA and EMP.
- Communication mediums and channels during survey operations.
- Health and Safety.
- Waste Management and Pollution Control.
- Environmental and ecological systems.

It is anticipated that, upon granting the Environmental Clearance Certificate, Untouched Safaris Namibia will finance the design and construction of a new project, ensuring compliance with the Environmental Management Act (EMA) and the Nature Conservation Act.

To maintain consistency and clarity throughout this report, it is recommended that a standardized Environmental Management Plan (EMP) be adopted for the methods section. This approach will facilitate the presentation of information in a uniform manner, allowing for simplified interpretation and effective implementation of the outlined processes.

9. Details and CV of Author

This report was prepared by Mr. Kluivert Mwanangombe, the Lead Environmental Practitioner at SM Dynamic Investment cc. Mr. Mwanangombe holds a degree in Environmental Engineering from the Cape Peninsula University of Technology, a Diploma in Land Use Planning from NUST, and an Honours Degree in Environmental Management from Stellenbosch University. He has over 13 years of experience in Environmental Management, primarily within the mining industry and local authorities. Additionally, he serves as a panel member on the National Solid Waste Advisory Committee and the e-Waste National Policy Formulation Committee.

Table 3: Legal Framework

LEGISLATION	PROVISION AND REQUIREMENTS
Article 95 of the Namibian Constitution	Provide overarching guidance in terms of the maintenance and sustainable use of natural resources for the benefit of all Namibians, both present and future.
Nature Conservation Act No.5 of 1996	To ensure for the provision of an economically based system of sustainable management and utilization of game in communal areas
Environmental Management Act No.7 of 2007	Ensures that the significant effects of activities on the environment are considered carefully and timeously. It promotes the sustainable management of the environment and the use of natural resources by establishing principles for decision making on matters relating to the built environment.
MEFT Policy Document on Community based Tourism Development – June 1995	This provides a framework for ensuring that local communities have access to opportunities in tourism development and are able to share in the benefits of tourism activities that take place in their land.
National Solid Waste Management Strategy, 2018	Provide for a coordinated funding, regulations, action plan for proper solid waste management and facilitate stakeholder collaboration.
Public Health and	The objective of this Act is to.
Environmental Act, 2015	Prevent injuries, diseases, and disabilities
	Promote individuals and community from public health risks
	Provide for early detection of diseases and public health risks
	Promote public health and wellbeing
Water Resources Management Act No.11 of 2023	This Act ensures that the proper wastewater treatment is provided, including requirement for wastewater discharge permit from the Directorate of Water Affairs.

Atmospheric Pollution Prevention Ordinance, No.11 of 1976	To provide for the prevention of pollution of the atmosphere, and for matters incidental thereto. The ordinance deals with administrative appointments and their functions; controls of noxious or offensive gases; atmospheric pollution by smoke, dust control, motor vehicles emissions; and general provisions.
The Soil Conservation Act No.76 of 1969	The Act provides guidelines for the prevention and combating of soil erosion, the conservation, improvement, and manner of use of the solid and vegetation and the protection of water sources.
Waste Disposal Site Guidelines, 2017	Provides guidelines and specifications for Sanitary Landfills and Criteria for Site Selection.
Basel Convention, Framework Convention on Climate Change	Aimed to ensure environmental sound management of hazardous waste and other waste through the reduction of their movement, for the purpose of reducing their impacts on human health and environment.

11. Construction of an environmentally friendly campsite

Site Selection and Preparation 11.1

To construct an environmentally friendly adventure camp & lodge facility in a national park/ conservation area, the developer will prioritizes minimizing their impact by choosing existing, durable surfaces for camping, using reusable gear, and packing out all refuse generated, including biodegradable waste, while respecting wildlife and adhering to the park regulations.

Below is the detailed breakdown of the site selection and preparation procedure to be followed by the developers:

Site Selection and Preparation

The developer will be required to choose existing, durable surfaces. Instead of creating new paths or clearing areas, camp on existing, well-drained areas or use designated facility.

- a) Minimize Disturbance on vegetation and soil by avoiding off-road drives and staying on established trails.
- b) Elevation structures: if necessary, use platforms or raised structures to minimize ground contact and allow for natural drainage.
- c) Blend with the environment: Use natural colours and materials in construction and landscaping to minimize visual impact.

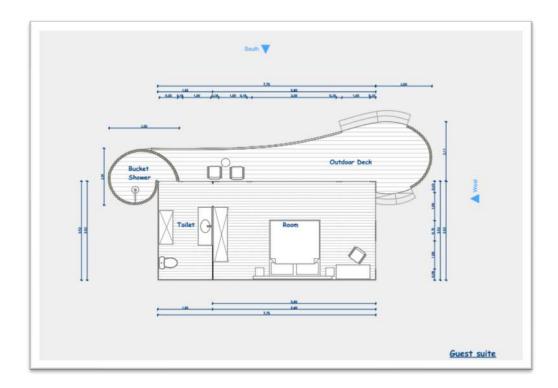


Figure 4: Floor plans for the Guest Suite

1. Waste Management

- a) Pack out everything: pack out all waste, including biodegradable waste like food scraps to prevent attracting wildlife and polluting the environment.
- b) Proper waste disposal: if recycling facilities are available, take advantage of them to reduce landfill waste.
- c) Compositing: If permitted by the authorities, consider composting biodegradable waste in a designated area. This will ensure proper decomposition and prevent the attraction of pests.

20 2. Water Conservation

- a) Conserve water: use waste sparingly and avoid wasting water.
- b) Use-water-saving techniques: take short showers, use water-saving showerheads, and was dishes and clothes away from water sources.
- c) Purify water: if you need to collect water from natural sources, ensure its properly filtered before consumption.

3. Energy and Lighting

- a) Use energy-efficient lighting: use battery-powered or solar-powered light instead of gas-powered ones.
- b) Conserve energy: turn off lights and electronics when not in use.
- c) Use renewable energy: consider solar panels or other renewable energy sources to power your campsite.

4. Sustainable materials

- a) Use reusable gear: bring reusable bottles, plates, utensils, and other gear to reduce waste.
- b) Choose biodegradable products: opt for biodegradable and composite products, such as bamboo plates and utensils.
- c) Use natural products: Use natural insect repellents and biodegradable soap and shampoo.

12. Summary of the main mitigation measures

12.1 Main Mitigation Measures

To try to understand the current tourism operations of this project, the consultants carried out a baseline assessment, table 5 below indicates main mitigation measure to be considered. These mitigation measures will be highlighted in detail in the Environmental Management Plan (EMP).

An EMP outlines how the project or activity will avoid, minimize, and manage its environmental impacts, ensuring compliance and environmental sustainability.

Table 4: Baseline Assessment

21

Impact	Mitigation Measures
Increased Employment Opportunities and Job Security	The development will create job opportunities for the local community members of the Conservancy. Upon construction and operational stages, local Conservancy members will be employed and consequently livelihood support for family members will be improved (short-term and long-term) — as on average support from one job benefit five family members.
Increased Local Economic Activities	Trading opportunities among the local people are expected to increase. Vegetable produce, poultry will be supplied to local lodges, providing both a short-term and long-term positive economic activity. Increased employment numbers within the Conservancy will also support local trade through increased income in the area.
Water supply availability	The development is unlikely to put pressure on water demand in the area and will not overwhelm the groundwater resources. The proponent intends to drill a borehole at the proposed site to be used solely for the campsite. The proponent will install necessary. After the construction phase, this borehole will supply water to wildlife
Occupational Health and safety	During the construction and operation phases, machinery will be employed for the construction and operation of the campsite and putting up associated infrastructure. Absence of clear safety guidelines may lead to accidents affecting worker's safety and productivity; however, this will not be the case during the construction of this development and clear safety guidelines will be available and all workers will be briefed and trained accordingly.
Increased Traffic	Increased traffic flow in and out of the area is expected during construction and operations. During operations, this will be reduced by the introduction of buses and guided tours. A slightly increase in local traffic can be expected during construction, however, this will be for a limited period of time and the impact is expected to be low.

Noise form Machinery and vibrations	During the construction and operational phases, noise and vibrations from the vehicles and machineries will result into noise and vibration. This impact will be insignificant. The construction workers are the most vulnerable and therefore they should wear protective gear.
Air pollution	The major source of the impact will be dust from vehicles ferrying materials. Due to distance from local communities, this impact is insignificant. Care should be taken not to expose workers to excessive dust and exhaust fumes.
Waste Generated	No waste is allowed to be stored or disposed in the National Park. All waste must be properly contained and disposed at designated area.
Solid degradation	No impact
Siltation and sedimentation	No impact
Loss of Habitat	The project site will not interfere directly with any existing wildlife reserves or protected areas.
Displacement of people	No Impact

13. Description of the existing environment

13.1 Physical Environment

Kwando/Linyanti Rivers' narrow, permanently filled channels support a rich array of flora and fauna, similar to those found in the Okavango. The periodically flooded channels and extensive seasonally inundated grasslands create diverse habitats that are crucial for many species, particularly during the wet season.

The presence of wooded islands with economically rare tree species adds unique ecological and conservation value, highlighting the area's importance for biodiversity and potential sustainable resource management. Additionally, the small catchment area in Angola indicates the 23 interconnectedness of ecosystems across borders, emphasizing the need for cooperative

conservation efforts to protect these vital habitats.

Overall, this ecosystem is a critical area for wildlife, including migratory birds and large

herbivores, and it plays a significant role in local and regional hydrology and climate regulation.

13.1 Climate

Malengalenga, Namibia, generally experiences a hot and dry climate, typical of Namibia as a

whole, with high potential for evaporation and low humidity. The area is characterized by sparse

and erratic rainfall, and substantial fluctuations in temperature, both seasonally and within the

same day. The weather forecast for Malengalenga on March 7, 2025, indicated clear periods with

minimal precipitation and no risk of rain, with daytime temperatures in the low 30s Celsius and

nighttime temperatures in the low 20s, according to Weather Crave.

13.2 Rainfall and Vegetation 2023/2024 season

Figure 5: Rainfall and Vegetation 2023,2024

The Linyanti River region in Namibia is characterised by its diverse geographical features,

including expansive floodplain areas and rich vegetation, such as broad-leaved trees and shrubby

savannahs that extend away from the river. This area receives an average annual rainfall of 550-

600 mm, making it one of the wetter regions in Namibia.

The Dzoti Conservancy, situated in this region, boasts extensive woodlands, permanent rivers,

and associated floodplains and swamps, which contribute to its ecological diversity. These

features create a unique habitat that supports a variety of wildlife and plant species, making it

an important area for conservation and biodiversity.

13.3 Geology & Soil

The study area is characterized by Fluvisol soil type. Fluvisols are young soils developed in aquatic sediments such as those in riverbeds, river valleys, alluvial fans, deltas, tidal marshes and recent marine deposits. They form with distinct bands varying in texture, colour, and organic content and coarse fragments periodically flood deposits layers of sediments. Gravelly or sandy material is deposited by fast-flowing water, while fine, silty sediments are deposited by standing or slowmoving water. Gleysols in Namibia are confined to waterlogged places in rivers, and lakes and rapid drainage means that Leptosols have a low potential for crop production. Regosols are young, almost undeveloped soils with no diagnostic horizons and little evidence of soil-forming processes. They are found where soil formation has been inhibited by arid conditions or interrupted by erosion or recent deposition of sediments. They are normally medium to finely textured unconsolidated materials common in young sediments. Regosols on slopes are easily eroded due to their unconsolidated structure and are prone to desiccation, which limits their potential for cultivating rainfed crops. dams, at the coast and in the Liambezi- Chobe area. They are characterized by greyish, bluish and greenish colours deeper inside the soil mass, with yellowish, reddish or brownish flecks in the upper layers and on the surfaces of aggregates.

13.4 Fauna and Flora

The Dzoti Conservancy boasts a diverse array of wildlife, including iconic species such as elephants, lions, and leopards, alongside numerous antelope and bird species. This rich biodiversity makes it a prime location for eco-tourism and trophy hunting, which serves as the conservancy's primary economic activity. Trophy hunting can provide significant revenue, supporting conservation efforts and local communities. However, it also raises important discussions about wildlife management, sustainability, and the ethical implications of hunting practices. Balancing economic benefits with conservation goals is crucial for the long-term health of the conservancy's ecosystem.

The Dzoti conservancy is rich in wildlife resources such as Elephant, buffalo, lion, wild dog, spotted hyaena, black-backed jackal, hippo, crocodile, lechwe, situtunga, bushbuck, reedbuck,

kudu, common impala, roan, plains zebra, duiker, steenbok, warthog, bush pig, baboon, and a variety of bird life. Trophy hunting is the major business enterprise of the conservancy.

13.6 Land Tenure

In Namibia, communal land tenure is the dominant system in rural areas, where land is collectively held by a community, not individuals. This system, which evolved from customary practices, is governed by traditional authorities (Mayeyi Traditional Authority) and Land Boards, who administer land allocation for various purposes. Importantly, communal land cannot be sold; use rights are managed through traditional authorities and the Land Board.

14. Considerations and alternatives

To ensure the successful operational management of this proposed project, a structured assessment is essential. By carefully considering the potential and exploring sustainable alternatives, the project can align with conservation goals while providing an enriching experience for visitors. Engaging stakeholders throughout the process has further enhanced the project's success and sustainability.

15. Planning project scheduling

If the financial, technical, and environmental/social feasibility of the project is established, the proposed key dates for the project will be as follows:

Table 5: Project Scheduling

Date	Milestone
January 2025	Initiate the EIA study (Environmental Screening Study)
February 2025	Environmental Scoping and Assessment (Specialist Studies if required)

February/ March 2025	Submit EIA Scoping & EMP, Application for ECC to DEA for approval
April/ June 2025	Record decision
August/ September 2025	Construction
January 2026	Recruitment & Training of staff member
February/ March 2026	Opening of Adventure Camp & Lodge for business

16. EIA evaluation method

The concept behind the introduction of Environmental Assessment is to ensure tourism operators adopt a consistent approach to conducting environmental risk assessments, particularly those for lodge development, as well as to assess the environmental impacts and mitigation options for long-standing unregulated game drives. Such sites are generally operated illegally and do not follow any legal requirements. This section assesses the impacts and risks associated with the proposed development that likely pose a threat to the surrounding environment and local public health. A tabulated evaluation of potential impacts identified is presented in the evaluation tables below, which indicates that the impacts associated with the project vary from low to medium with mitigation.

It is possible to mitigate the potential negative impacts by committing to apply the related mitigation actions as outlined in the attached EMP. The main environmental concerns identified are dust, noise, soil, and water contamination. These impacts were evaluated using the scoring criteria outlined in Table 6 below.

Table 6: Impact Rating Criteria

Significance Rating	

	LIST OF CRITERIA USED IN ASSIGNING A SPECIFIC RATING						
	INTENSITY	EXTENT	DURATION				
	High	Regional	Medium Term				
High	High	National	Short Term				
Significance	High	Local	Long Term				
	Medium	National	Medium Term				
	Medium	Regional	Long Term				
	High	Local	Medium Term				
	High	Regional	Short Term				
Medium Significance	Medium	National	Short Term				
	Medium	Regional	Medium Term				
	Medium	Local	Long Term				
	Low	National	Medium Term				
	Low	Regional	Long Term				
	Medium	Local	Medium Term				
Laur	Medium – High	Local	Short Term				
Low Significance	Medium	Regional	Short Term				
	Low	National	Short Term				
	Low	Regional	Medium Term				

	Low	Local	Long Term			
Very low	Low	Local Medium				
Significance	Low	Regional	Short Term			
	Very low	Local	Short Term			
Neutral/No impact	Zero intensity with any combination of extent and duration					

17. Potential impact identified

This section describes how impact rating criteria were used to assess, evaluate impact, and develop alternatives by predicting and identifying the likely environmental impacts of the proposed campsite development including the detailed elaboration of alternatives as highlighted in the table above. The advantage of using these criteria is that they can act as inputs to, or double checks of, the risk appetite and risk-tolerance statement. Another advantage is that as the impact criteria become refined over time, distinguishing the types of risk that would result in immediate direct costs vs. future loss of revenue or liabilities to the organization may also be useful.

The following impacts were identified and assessed as follows:

Rehabilitation

Human activities have led to the degradation of areas in and around National Park. The activities include clearing land for the construction of road borrow pits, hunting camps and ad hoc infrastructure. MEFT camps have also been relocated, leaving behind areas that require rehabilitation.

29 Evaluation of impact:

Aspect	Type of Impact	Scale	Duration	Magnitude	Probability	Significance	
	·					Unmitigated	Mitigated
Noise	-	2	2	4	2	MS	LS

Human safety

Wildlife and wildfire pose threats to tourists and staff safety within National Parks. Park management must monitor those instances and areas where this is likely to happen. Proactive action can often prevent or minimize these problems and therefore strategies and activities for human safety need to be set up and implemented.

Evaluation of impact:

Aspect	Type of Impact	Scale	Duration	Magnitude	Probability	Significance	
						Unmitigated	Mitigated
Dust	-	2	2	4	2	М	L

Waste generation

The disposal of waste is often problematic in remote areas, and the volume of waste will grow as the use of the parks increases. Solid waste should not be disposed of in a park, and it should be transported to a managed waste management site on the periphery or nearby town. Strategies must therefore be specified for waste management, sewerage and toxic waste in a park. The proper treatment and discharge of wastewater are especially critical where developments are close to wetlands, mulapos and boreholes.

Evaluation of impact:

Aspect	Type of	Scale	Duration	Magnitude	Probability	Significance	
	Impact					Unmitigated	Mitigated
Waste	-	2	2	4	2	М	L

Soil and Water

The soil and water of the proposed campsite are not to be affected given that there are no significant excavations or construction activities to be generated by the development of the new landfill facility. Additionally, the soil and geology of the new campsite will not be affected given that no groundwater disturbance or contamination is anticipated during the construction works.

Water for domestic consumption will need to be provided by digging a borehole by means of a solar driven pump. The water might be of poor quality and should be purified. However, control measures will be implemented in this EMP.

Evaluation of impact:

Aspect	Type of Impact	Scale	Duration	Magnitude	Probability	Significance	
						Unmitigated	Mitigated
Soil & Water	-	1	1	2	1	L	L

Buildings

No new Park entrance will be established. The access will be via the Baobab entrance to the Nkasa Rupara. This infrastructure should serve its current purpose for the duration of this management plan and long beyond that, but to do so, it must be adequately maintained.

31 **Evaluation of impact:**

Aspect	Type of Impact	Scale	Duration	Magnitude	Probability	Significance	
						Unmitigated	Mitigated
Groundwater	-	2	2	4	2	M	L

Cumulative Impacts

Cumulative impacts result when the effects of an action are added to or interact with other effects in a particular place and within a particular time. It is a combination of effects resulting from environmental degradation.

Possible cumulative impacts associated with this proposed project include increased movement of vehicles and ecological disturbance. If not well managed and controlled, these impacts are likely to become significant. They can occur at both stages (constructional and operational) of the project development.

Evaluation of impact:

Aspect	Type of Impact	Scale	Duration	Magnitude	Probability	Significance	
						Unmitigated	Mitigated
Cumulative Impacts	-	2	3	4	2	L	L

In summary, all impacts assessed are expected to be low to medium and mostly short-term and only applicable to the targeted study area and not affecting the surroundings. However, mitigation measures outlining options on how to reduce or lessen these potential impacts will be discussed in the Environmental Management Plan (EMP) attached.

18. Public participation

32

The principle of the Environmental Management Act of 2007, along with the EIA Regulations of 6 February 2012, is to provide for a sufficient and transparent process to share information regarding a proposed project and to allow the Interested and Affected Parties to comment and ensure that all concerns are identified and included throughout the decision-making process.

Notices appeared in the Business Express Newspaper and the New Era Newspaper. See attached appendices of newspaper notices to this scoping report. Other notices were displayed on-site and on the Notice Board (Sangwari Police Station, Clinic, Constituency office, Dzoti Conservancy office). No objectives or comments on the proposed activity were observed or received.

Figure 6: Public Meeting in Malengalenga (Dzoti Conservancy office)

1.1. Objectives of the Public Participation Process

The public participation process is designed to offer enough, accessible, and fair platforms to share or to include the affected and interested parties in information about the project. The process must allow those issues of concern to benefit both parties and be addressed relatively throughout the process. It also should verify that these issues have been captured. The technical investigations should verify all issues. Comments and issues raised must be included in the EIA report.

Announcing the Opportunity to Participate 1.2.

The opportunity for stakeholders to participate in the EIA was announced as follows:

- A3 posters were placed on noticeboards at the following places: On the Proposed Site, Sangwari Police Station, Clinic, Constituency office, Dzoti Conservancy office.
- Background information document (BID) was distributed to stakeholders.

• Newspaper advertisements were placed in the following newspaper (see annexure attached).

New Era Newspaper

- 1. 20 February 2025
- 2. 24 February 2025

Business Express Newspaper

- 1. 24 February to 02 March 2025
- 2. 03 March to 09 March 2025

Figure 7: Public Notice at Dzoti Conservancy Office

Announcement for report availability

The availability of the draft report was announced by way of:

- All initial contact and public consultative meetings with stakeholders.
- All initial calls for registration as Interested and affected parties in newspaper advertisements.

Distribution of draft report

The report was distributed for comment as follows:

- A copy was issued to the Dzoti Conservancy Office, Ministry of MEFT Katima Mulilo, and Mayeyi Traditional Authority.
- Posted on <u>www.smdynamic.org</u> website.
- MEFT ECC application portal

1.3. Stakeholder Briefing and Community Consultation

The meeting held on March 3, 2025, saw impressive attendance, with participants expressing strong support for the development. Attendees shared positive feedback and constructive comments, highlighting the project's potential benefits and enthusiasm for its future. Overall, the atmosphere was one of collaboration and optimism, paving the way for successful progress ahead.

1.4. Raised Issues for Investigation by EIA Specialists

Stakeholders had ample opportunity to voice their concerns during the meeting on 31 March 2025, but no issues have been raised so far via any of the provided channels. This could indicate that there are no current concerns or that the Stakeholders feel satisfied with the current situation. If further engagement is needed, consider following up with them to ensure their voices are heard.

1.5. Final Scoping Report and Issues and Responses

The final Scoping Report was prepared and distributed for comments to all stakeholders. Still, no issues were raised via any of the provided channels. This once again could indicate that the stakeholders are satisfied with the EIA process and ready to proceed with the proposed project.

1.6. Ongoing Progress Report

As the process progressed, all stakeholders who attended the meeting were added to the distribution list and received personalized letters. These were updated progress reports achieved appreciation was given to those who attended the public consultation meeting and outlined the next step in the process.

34

The Malengalenga community faces several socio-economic challenges, including:

- 1. High Poverty Rates: Many families struggle to meet basic needs, leading to a cycle of poverty that limits opportunities for growth and development.
- Reliance on Subsistence Agriculture: The community primarily depends on agriculture for sustenance, which can be unpredictable due to climate variability and limited access to markets.
- 3. Limited Access to Resources: There is a scarcity of educational, financial, and health resources, hindering the community's ability to improve their quality of life.

Proposed Activity Benefits

The proposed initiative aims to leverage local wildlife and resources to foster both wildlife conservation and community development. Key benefits include:

- 1. **Wildlife Conservation**: By promoting sustainable practices, the initiative can help protect local wildlife, ensuring biodiversity and ecosystem health.
- 2. Economic Opportunities:
- Consumptive Use: Controlled hunting and harvesting can provide income and food sources.
- Non-consumptive Use: Eco-tourism and conservation-related activities can attract visitors, create jobs and stimulate the local economy.
- 3. **Youth Engagement:** The high attendance of youth at public meetings indicates a strong interest among the younger population. Engaging them in these initiatives can:

- Provide training and employment opportunities.
- Foster leadership skills and community involvement.
- 4. **Community Development**: Increased economic activity can lead to better infrastructure, education, and health services, improving overall community well-being.

The proposed activity presents a significant opportunity for the Malengalenga community to address socio-economic challenges while promoting wildlife conservation. By focusing on inclusive strategies that engage the youth and benefit the entire community, the initiative can create a sustainable path toward improved livelihoods and environmental stewardship.

20. Recommendation

This section outlines essential considerations for the proposed development, ensuring a balanced approach to sustainability and community engagement.

I. Environmental Protection

- Implement measures to minimize water usage and waste production.
- Promote responsible sourcing of materials to reduce environmental impact.

II. Protect Natural Resources

- Conserve vital natural resources, including water and wildlife habitats.
- Develop sustainable tourism practices that minimize environmental disturbance.

III. Promote Eco-Tourism

• Encourage activities that foster a connection with nature, such as guided wildlife viewing and educational tours, ensuring they are conducted responsibly.

IV. Community Involvement

 Ensure that tourism initiatives benefit local communities by creating job opportunities and supporting local businesses.

Promote local products and services to enhance community integration.

V. Monitoring and Evaluation

 Establish mechanisms to track environmental impacts and assess social and economic outcomes of the development.

Implementation of an Environmental Management Plan (EMP)

To ensure a consistent and accurate presentation of information, it is recommended that a standard Environmental Management Plan (EMP) be adopted. This will facilitate simplified interpretation and implementation of sustainable practices throughout the development process.

21. Conclusion

In conclusion, SM Dynamic recommends that the proposed development operate in conjunction with the outlined management plan, fostering a sustainable and community-focused tourism model. This approach will not only protect the environment but also enhance the socio-economic well-being of local communities.

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