Environmental Scoping Study: For the Proposed Drilling of Boreholes for Water Supply at Liambezi, Kandiana, and Kopano Projects, as well as Irrigation at Makalelelo Project in Salambala Conservancy, Zambezi Region.

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List of Acronyms

- **CBNRM** – Community-Based Natural Resource Management
- **CLD-HWCM** – Community Livelihood Development and Human-Wildlife Conflict Mitigation
- **ECC** – Environmental Clearance Certificate
- **EIA** – Environmental Impact Assessment
- **EMA** – Environmental Management Act
- **EMP** – Environmental Management Plan
- **FMD** – Foot-and-Mouth Disease
- **HWC** – Human-Wildlife Conflict
- **KR-ZCFP WDAs** – Kwando River and Zambezi-Chobe Floodplains Wildlife Dispersal Areas
- **KAZA-TFCA** – Kavango-Zambezi Transfrontier Conservation Area
- **MEFT** – Ministry of Environment, Forestry, and Tourism
- **NSA** – Namibia Statistics Agency
- **PPE** – Personal Protective Equipment
- **ZCRWDA** – Zambezi-Chobe River Wildlife Dispersal Area

Executive Summary

The Environmental Scoping Study assesses the proposed borehole drilling at Liambezi, Kandiana, Makalelo and Kopano projects within the Salambala Conservancy, Zambezi Region. The project, supported by the Community Livelihood Development and Human-Wildlife Conflict Mitigation (CLD-HWCM) Project, aims to enhance water security for domestic use, agriculture, and livestock while mitigating human-wildlife conflict (HWC).

The study highlights the significance of the Kwando River and Zambezi-Chobe Floodplains Wildlife Dispersal Areas (KR-ZCFP WDAs) as critical corridors supporting biodiversity and sustainable livelihoods. However, increasing human settlement and agricultural activities have led to habitat fragmentation and escalated conflicts between humans and wildlife.

Key challenges identified include:

- Groundwater depletion and aquifer contamination if drilling is not properly managed.
- Conflicts over water usage between local communities, farmers, and conservation initiatives.
- Infrastructure damage by elephants and risks of theft/vandalism.
- Health risks due to potential water contamination and increased social interactions.

The report outlines mitigation strategies, including:

- Sustainable water abstraction limits and regular monitoring.
- Use of solar-powered irrigation and wildlife-friendly water points.
- Implementation of grievance mechanisms and community participation in decision-making.

With proper environmental management, the borehole project is expected to enhance agricultural productivity, reduce HWC, and improve local livelihoods while ensuring sustainable conservation practices.

1. Introduction

1.1 Wildlife Corridors and Human-Wildlife Conflict (HWC) in KR-ZCFP WDAs

The Kwando River and Zambezi-Chobe Floodplains Wildlife Dispersal Areas (KR-ZCFP WDAs) serve as crucial transboundary corridors connecting Botswana's southern wildlife regions to Zambia and Angola's northern habitats. These corridors support wildlife migration, promote human-wildlife coexistence, enhance genetic diversity, and improve community livelihoods. Key corridors include the Kwando River Wildlife Corridor and the Chobe-Zambezi Corridor, spanning floodplains from Chinchimane to Impalila and the Zambezi River to Katima Mulilo and beyond.

1.2 Human-Wildlife Conflict (HWC) and Mitigation Strategies

Population growth in the Zambezi Region has led to habitat loss and shrinking wildlife corridors, increasing conflicts with species such as elephants, buffalo, lions, and wild dogs due to crop destruction, livestock predation, and human attacks. Effective HWC mitigation relies on community participation, sustainable livelihoods, and conservation-friendly land-use practices. Integrating agropastoral activities with wildlife conservation, providing financial support, and promoting wildlife-friendly entrepreneurship are key strategies.

1.3 Project Implementation and Priority Areas

Due to limited funding, the project prioritizes HWC hotspot areas with the highest recorded incidents (101–270 cases from 2010–2015). The targeted locations include Namushasha, Kamenga, Mashi, Mayuni, Sobbe, Balyerwa, Sangwali, Wuparo, Dzoti, Chinchimane, Bamunu, Kasheshe, Gunkwe, Masokotwane, Muyako, Namalubi, Lisikili, Sikunga, Salambala, Lusese, Ngoma, Nakabolelwa, Kabulabula, and Kasika.

1.4 Collaboration and Future Prospects

The project takes an anthrotherological (One Health) approach, integrating conservation, law enforcement, research, and community engagement. Led by MEFT's Project Coordinator, it involves partnerships with NGOs, universities, CBOs, law enforcement, forestry, agriculture, and transboundary resource management forums. The CLD-HWCM project focuses on community development, inland fisheries, livestock and rangeland management, conservation agriculture, wildlife-friendly products, forestry, and tourism. Future expansion will depend on funding and stakeholder engagement.

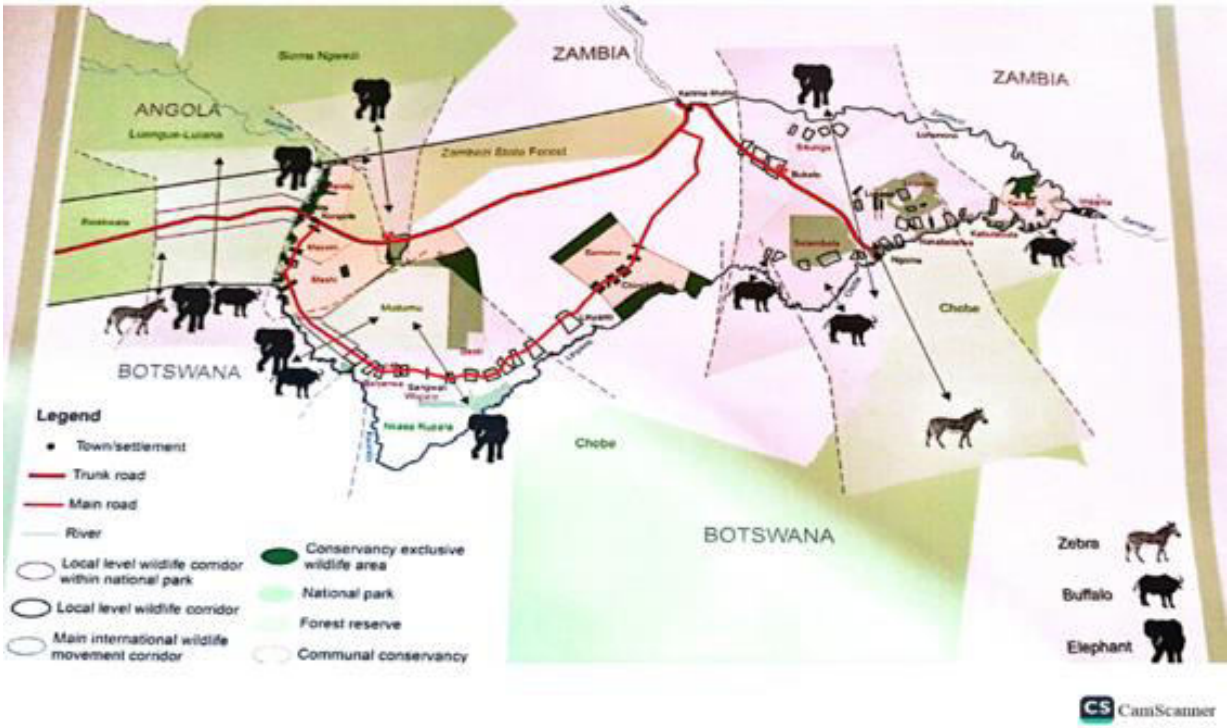

Figure 1.. Schematic drawing showing the four transboundary corridors identified in Namibia within the Kwando WDA: Source MEFT -Namibia

1.5 Community-Based Natural Resource Management

Namibia has been a leader in implementing Community-Based Natural Resource Management (CBNRM) since the 1990s, empowering rural communities to manage and benefit from wildlife. The communal conservancy program promotes sustainable use of natural resources through activities like photographic tourism, hunting, and harvesting forest products.

Conservancies generate income and provide direct benefits such as meat distribution, water supply, electricity, schools, and healthcare facilities, supporting local livelihoods and conservation. Sustainable wildlife use is governed by the Nature Conservation Ordinance 4 of 1975 and the Nature Conservation Amendment Act 5 of 1996, granting communities rights over wildlife management.

Self-governed and democratically managed, conservancies must maintain sustainable wildlife populations. Over the past 20 years, consistent wildlife monitoring has led to population recoveries in some areas, reinforcing the success of Namibia's CBNRM model.

1.5.1 overview of the challenges.

Common Challenges Faced by Communities in the KR-ZCF WDAs

The communities residing in the Kwando River–Zambezi-Chobe Floodplains Wildlife Dispersal Areas (KR-ZCF WDAs) face several socio-economic and environmental challenges that threaten their livelihoods. These challenges include:

- Limited Access to Wildlife Benefits and Eco-Tourism Opportunities – Communities struggle to engage in eco-preneurship activities such as tour guiding, lodge development, aquaculture, and professional hunting due to restricted access to collateral, capital, and wildlife benefits.
- Human-Wildlife Conflict – Issues such as deforestation, encroachment on wildlife habitats, and limited appreciation of wildlife corridors contribute to increased crop depredation and livestock predation by wild animals.
- High Human-Wildlife Contact and Retaliatory Killings – Frequent interactions with wildlife lead to retaliatory killings, further straining conservation efforts.
- Outbreaks of Zoonotic Diseases – Diseases such as Anthrax in hippopotamuses pose risks to both human and animal health.
- Livestock Diseases and Market Challenges – The region faces persistent outbreaks of Foot-and-Mouth Disease (FMD), often linked to buffalo populations, restricting livestock movement and trade.
- Stringent FMD Control Measures – Strict disease control regulations, even during localized outbreaks, make livestock marketing difficult and disrupt economic activities.
- Escalating Poaching – Both subsistence and commercial poaching threaten wildlife populations and conservation efforts.
- Overfishing and Illegal Fishing – The depletion of fish stocks in the Zambezi, Chobe, and Linyanti rivers, as well as Lake Lyambezi, has affected food security and local livelihoods.

- Other Socio-Economic and Environmental Challenges:
    - High poverty rates, youth unemployment, and a high prevalence of HIV/AIDS.
    - Crop destruction by locusts and fall armyworms, reducing food production.
    - Lack of formal livestock marketing and value addition for venison and beef.
    - Overstocking and overgrazing due to poor livestock marketing systems.
    - Poor crop yields caused by erratic rainfall and climate change.

- Annual fire outbreaks, with limited capacity to manage or prevent them.

2. Improved Conservation Agriculture

Communal farmers in the KR-ZCFP WDAs of the Zambezi Region have the potential to enhance crop production, but material and knowledge gaps hinder their productivity. The COVID-19 pandemic has further exacerbated health and socioeconomic challenges, emphasizing the need for local food production to reduce dependency on imports from South Africa and Zambia. Sustainable agroecological initiatives can strengthen food sovereignty while addressing climate change and human-wildlife conflict (HWC).

The CLD-HWCM project aims to integrate Zimbabwe's Pfumvudza farming techniques with Namibia's Conservation Agriculture practices to boost production. The goal is to achieve 10 tons of maize per hectare per season, translating to 30 tons per year across three production cycles. A family of six requires only one ton annually, which can be grown on a small 16x39m plot. Excess crop residues will serve as livestock feed, reducing pressure on grazing land.

Currently, maize yields in the Zambezi Region stand at a low 200kg/ha, significantly below potential. With an average farm size of 1.8ha, food scarcity could lead to increased deforestation through shifting agriculture, threatening biodiversity and accelerating climate change. The CLD-HWCM project seeks to empower women with conservation agriculture methods, providing boreholes, solar-powered irrigation systems, drip irrigation pipes, and filtration equipment. These water systems will also benefit livestock and wildlife, promoting sustainable farming and environmental conservation.

3. Support from Community Livelihood Development and Human-Wildlife Conflict Mitigation (CLD-HWCM)

With financial support from the German Government through the KfW Development Bank, and through the KAZA-TFCA the MEFT is implementing a project, "CLD-HWCM". The project's main objective is to contribute to biodiversity conservation and rural development by improving the community's livelihoods and establishing sustainable Human-Wildlife-Conflict (HWC) management systems in Zambezi region conservancies. In line with the project objectives, the CLD-HWCM is supporting Salambala Conservancy to drill three boreholes for community water consumption and farming areas for the community and mitigation of HWC. This intervention speaks to the project's objective of biodiversity conservation, sustainable

coexistence of humans, domesticated animals, and wildlife in KR-ZCF WDAs, and the sustainable development of meaningful agro-wildlife entrepreneurial activities at the household and individual level with deliberate elevated inclusion of women.

4. Legal Requirements

The Namibian Constitution (Article 95l) upholds environmental protection, a principle further reinforced by the Environmental Management Act (EMA) No. 7 of 2007 and its Environmental Impact Assessment Regulations (2012). These regulations stipulate that specific water resource development activities require an Environmental Clearance Certificate (ECC), including:

- Extraction of surface or groundwater for industrial or commercial use.
- Groundwater abstraction exceeding the legally authorized limits.

To meet these legal obligations, the CLD-HWCM project, in partnership with beneficiary conservancies, will develop an Environmental Management Plan (EMP) to regulate borehole drilling and operation.

5. The Proponent

Salambala Conservancy is the proponent of this application with financial support from the CLD-HWCM project.

6. Project Description

6.1 Borehole Drilling Project Description

The borehole drilling project aims to improve water accessibility for local communities by tapping into underground water sources in the Zambezi Region. The project is designed to support sustainable water supply for domestic use, agriculture, and livestock, reducing dependence on surface water sources that are vulnerable to seasonal fluctuations and climate change.

6.2 Project Phases

1. **Site Selection and Survey**
    - Hydrogeological assessments are conducted to identify suitable drilling locations.

- Geological and geophysical surveys help determine groundwater availability and quality.

2. **Drilling and Casing**
   - Boreholes are drilled to varying depths, depending on aquifer location.
   - High-quality casing materials are used to prevent contamination and structural collapse.
3. **Water Quality Testing**
   - Samples are analysed for salinity, pollutants, and mineral content to ensure safe consumption and irrigation suitability.
4. **Pump Installation and Infrastructure Development**
   - Boreholes are fitted with either hand pumps or solar-powered pumps, depending on community needs.
   - Storage tanks and distribution points may be established for efficient water supply.
5. **Monitoring and Maintenance**
   - Regular inspections and maintenance ensure long-term functionality.
   - Community members are trained on sustainable water use and borehole upkeep.

6.3 Project Impact

- Improved Water Security: Provides a reliable water source, reducing reliance on seasonal rivers and rainfall.
- Enhanced Agricultural Productivity: Supports irrigation for crops, improving food security and economic stability.
- Livestock Sustainability: Ensures water availability for cattle farming, a key livelihood in the region.
- Health Benefits: Reduces waterborne diseases by providing cleaner, safer drinking water.

7. Description of the Receiving Environment

7.1 Zambezi Region

The study sites will be the 15 gazetted communal conservancies located in the Zambezi Region (Figure 1). These are namely, Impalila, Kasika, Kabulabula, Nakabolelwa, Lusese, Salambala, Sikunga, Bamunu, Dzoti, Wuparo, Balyerwa, Mashi, Mayuni, Kwandu and Sobbe

conservancies. The study sites are covered by woodlands, scattered with rivers, swamps and mashes with soils characterized by sandy-loam with some pockets of gravel hills (Kamwi et al., 2018).

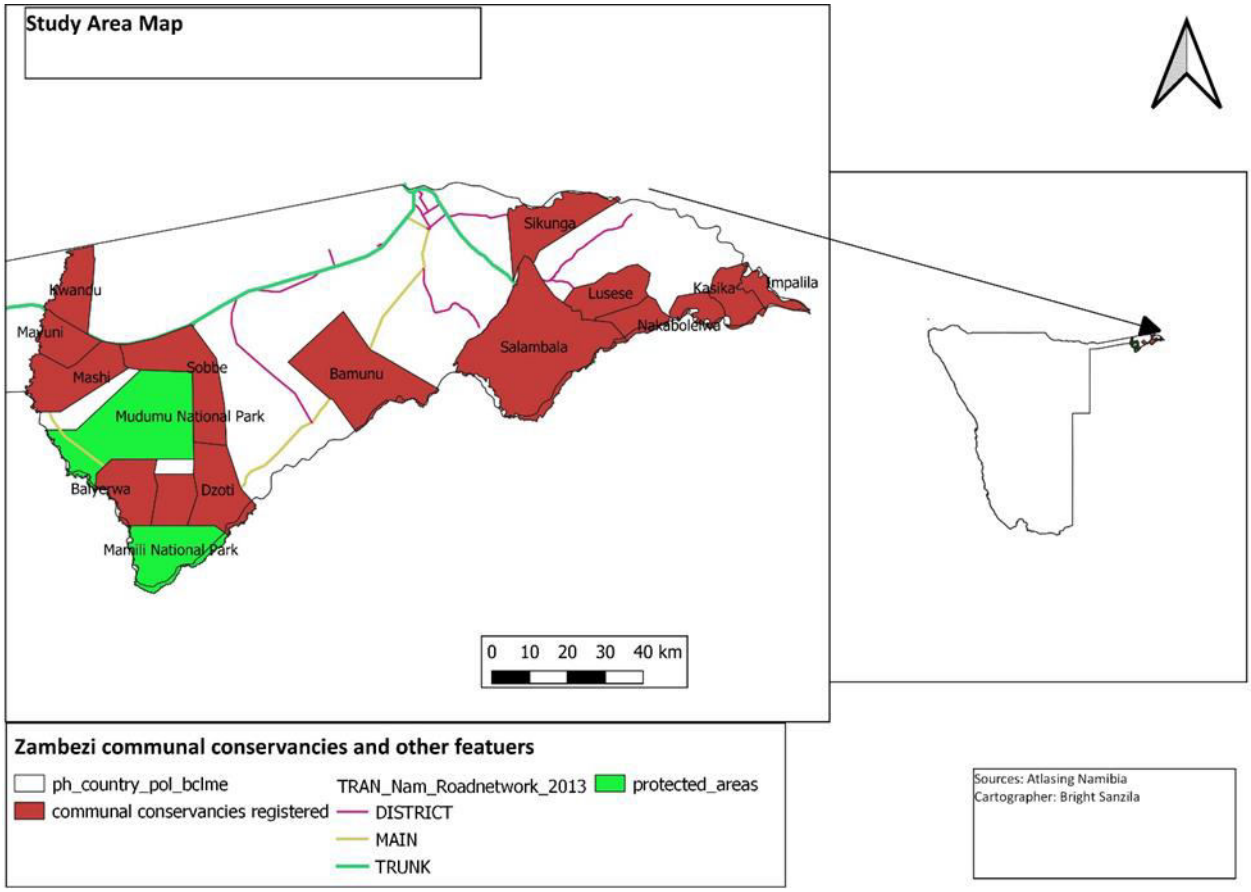

Figure 2. Map of Zambezi Region Conservancies

The annual mean rainfall ranges from 650 mm in the western parts of the Zambezi Region to 1000 mm in the east, falling between October and March, giving the region a high potential in agriculture and forestry.

7.1.1 Population dynamics

The 2023 Population and Housing Census (PHC) report by the Namibian Statistics Agency (NSA) highlights key demographic trends. Namibia's total population has grown to 3,022,401, with 48.8% males and 51.2% females, marking an increase of 909,324 people over the last decade.

In the Zambezi Region, the population stands at 142,373, with females (50.8%) outnumbering males (49.2%). The region has a population density of 9.7 people per square kilometer, and the average household size is 3.7 individuals. The dominant employment sectors include

agriculture, forestry, and fishing, while wildlife-based activities play a significant role in the local economy.

The Zambezi Region consists of 8 constituencies, with Salambala Conservancy located in Kabbe South Constituency. A detailed breakdown of constituency population figures is provided in Table 1.

Table 1. Zambezi Region constituencies

Constituency	Population	Area in km2	Person/ km2
Judea Lyaboloma	8738	1723.04	5.1
Kabbe North	12253	1182.62	10.4
Kabbe South	11345	1257.6	9.0
Katima Mulilo Rural	24016	1620.03	14.8
Katima Mulilo Urban	46401	44.94	1032.6
Kongola	12069	5173.82	2.3
Linyanti	10425	1804.35	5.8
Sibbinda	17126	1857.03	9.2

7.1.2 Climate

Namibia is predominantly an arid country, with much of its landscape experiencing high temperatures and sporadic, low rainfall. Rainfall patterns vary across the country, generally decreasing from east to west. The Zambezi Region receives the highest annual rainfall, averaging approximately 600mm per year.

The region's climate is highly variable and increasingly affected by climate change, posing challenges to water availability, agriculture, and hydropower production. To ensure sustainable development, effective water resource management and adaptive strategies are crucial in mitigating these impacts on livelihoods and economic activities.

7.1.3 Biodiversity

The Vegetation for this region is known as a woodland savanna with some common trees such as African teak (*Baikiaea plurijuga),* African rosewood *(Guibourtia coleosperma),* Wild teak

(Pterocarpus angolensis), Wild syringa *(Burkea africana) and* Kalahari podberry *(Dialium engleranum)*.

Animals such as Buffalo (Syncerus caffer), Elephant (*Loxodonta africana*), Hippo (*Hippopotamus amphibious*) and Crocodiles (*Crocodylus niloticus*) are common in this area.

7.1.4 Hydrology

The study area is situated in the extreme north-eastern corner of Namibia, within the Zambezi Region. It is bordered by four perennial rivers, comprising the Zambezi, Kwando, Linyanti, and Chobe Rivers, which form the borders with Zambia, Angola, Botswana, and Zimbabwe, respectively. The region receives the highest observed mean annual rainfall rates in the country between 500 to 700mm.

7.1.5 Geology

The Regional geology of the study area comprises of the aeolian sands and fluviatile-lacustrine deposits of Kalahari Super group that cover the entire Zambezi region. The Sedimentary rock unit of the Kalahari sequence consists of the unconsolidated to semi-consolidated conglomerates, gravel, sand and clay. Hidden under the unconsolidated sediments, is the host graben system. The Zambezi region forms fart of the Okavango Rift Zone. The Kalahari supergroup sediments were underlain by the volcanic rock, whose outcrops can be seen along the Zambezi River.

7.2 Project Site

7.2.1 Salambala Conservancy

The Salambala Conservancy was registered in 1998 (one of the first Conservancies to be registered in Namibia). The conservancy's name derives from the lovers Sala and Bala, whose forbidden relationship led to them being sent away to the forest. The majority ethnic group is the Masubia, who are under the leadership of the Masubia traditional authority. Hunting income is the most significant contributor to the Salambala Conservancy. Like in other hunting

conservancies, game meat is vital in emphasising the importance of wildlife management in rural areas as an essential in-kind benefit.

7.2.2 Population dynamics

The Salambala measures 930 square kilometers with a population of 8,923 people living in 1,597 households.

7.2.3 Biodiversity and Geographical Features

The Salambala Conservancy features a diverse landscape with Mopane woodlands dominating the northern areas and floodplain grasslands covering the southern sections. The conservancy receives an average annual rainfall of 600 mm, supporting its rich biodiversity.

Salambala is home to keystone wildlife species, including large mammals such as elephants, buffalos, lions, and leopards. The Chobe River provides habitat for aquatic species like crocodiles and hippopotamuses, as well as a variety of fish species. Additionally, the conservancy supports a diverse range of antelope species, including blue wildebeest, kudu, zebras, lechwe, impala, reedbuck, and waterbuck, all contributing to the region's ecological balance and overall biodiversity.

7.2.4 Socio-Economic Profile

The Salambala Conservancy community primarily relies on agriculture for their livelihoods, with cattle farming playing a significant role despite marketing challenges posed by the veterinary cordon fence. Crop farming, photographic tourism, and trophy hunting are key contributors to the local economy. Additionally**,** meat distribution from trophy hunting serves as an essential source of protein for community members, supporting both nutrition and food security within the conservancy.

7.2.5 Hydrology and Hydrogeology

See sitting water reports and sitting maps attached in annexures 2 and 3.

7.2.6 Land use

From the total 930 square kilometers, 140 square kilometers is zoned as a core wildlife area with exclusive rights to wildlife and tourism. The remaining 790 square kilometers are zoned as a multiple-use area for wildlife management, human habitation, and local.

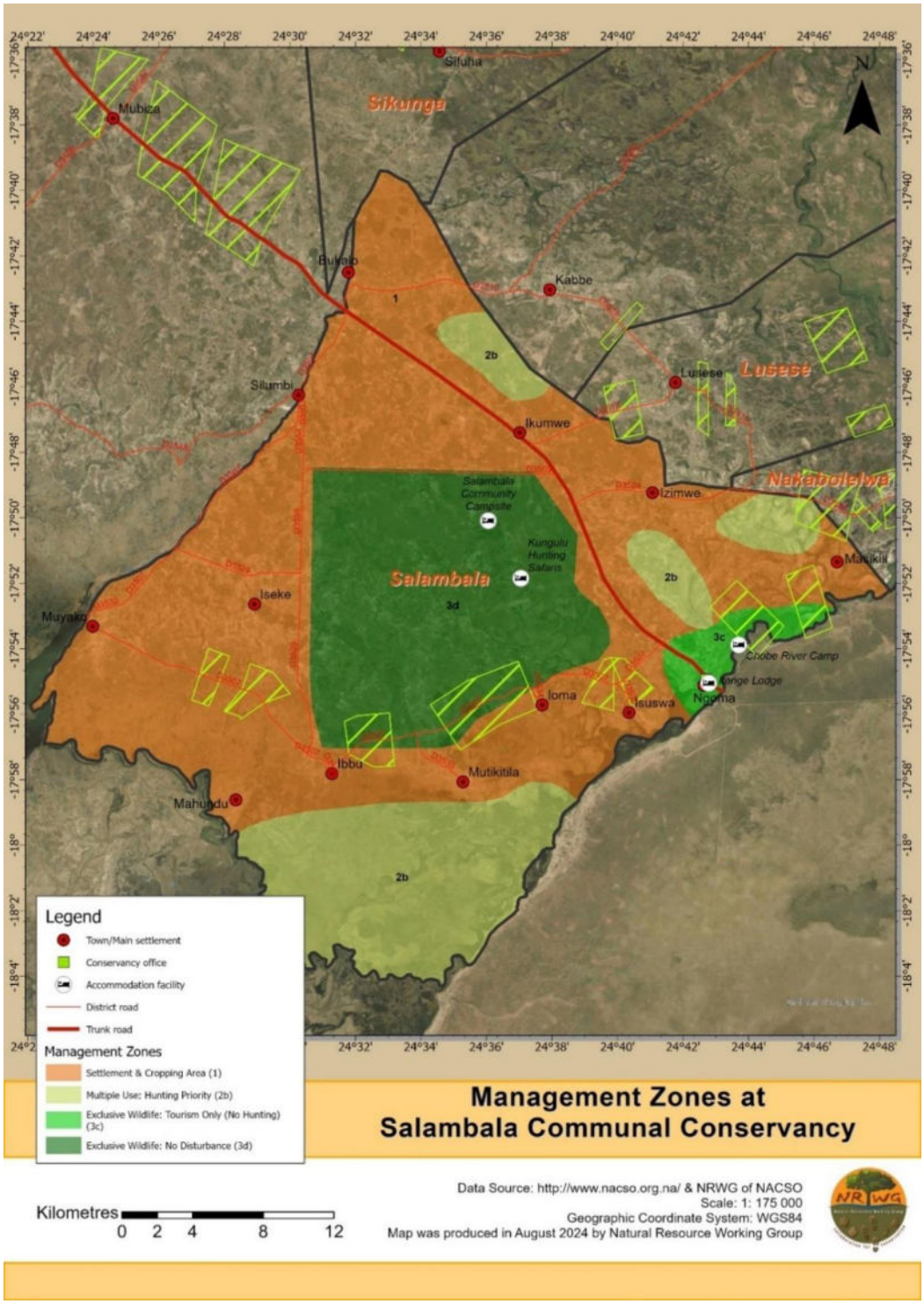

Figure 3. Conservancy Zones (Source: NACSO, 2022)

8. Public Consultation

8.1 Community Consultation

The community consultation was restricted to the benefiting community due to the limited project implementation timeframe (see attached request for exemption for carrying out a full-scale environmental scoping).

8.1.1 Kandiana (Come together project) Site in Salambala Conservancy

Kandiana project is located within the Salambala Conservancy in the area of Ngoma (Figure 4). The area for the borehole installation is already cleared for settlement and no further vegetation clearing will take place.

Figure 4. Kandiana Site Assessment

8.1.2 Kopano Site in Salambala Conservancy

Kopana project is located within the Salambala Conservancy in the area of Ngoma (Figure 5). The area for the borehole installation is already cleared for settlement and no further vegetation clearing will take place.

Figure 5. Kopano Site Assessment

8.1.3 Makelelo Site in Salambala Conservancy

The Makelelo project is located within the Salambala Conservancy in the area of Ngoma. The area already has an existing borehole and a crop field already cleared for gardening, meaning no drilling and further vegetation clearing will take place. Therefore, environmental clearance is only required for the irrigation of the 1-hectare plot.

8.1.4 Liambezi Site in Salambala conservancy

The Liambezi project is located within the Salambala Conservancy in the area of Muyako (Figure 6). The area for the borehole installation is already cleared for settlement and no further vegetation clearing will take place.

Figure 6. Liambezi Site Assessment

9. Impact Assessment

9.1 Impact Identification

Potential impacts were identified in accordance to the key Environmental Social Indicators (ESI)10 and using literature review, site assessment and MEFT staff experience.

Borehole drilling in the Zambezi Region can have various environmental, social, and economic impacts. While it provides crucial water supply for human consumption, livestock, and irrigation, it may also pose certain challenges. Below are some possible impacts:

A. Environmental Impacts

- Groundwater Depletion: Over-extraction of water may lower the water table, affecting nearby wells and water-dependent ecosystems.
- Aquifer Contamination: Poorly managed boreholes can lead to contamination from agricultural runoff, animal waste, and chemicals.
- Disruption of Wetlands and River Systems: The Zambezi Region has ecologically sensitive areas, and excessive borehole drilling can reduce water flow to wetlands, affecting biodiversity.
- Soil Erosion and Land Degradation: Improper borehole placement and usage may lead to localized erosion and land degradation.
- Air pollution: Project activities that have potential of creating dust emission such as uncoordinated driving and drilling could deteriorate surrounding air quality from fugitive dust. Excess dust during work could be a health hazard to workers and the surrounding communities.
- Noise pollution: The movement of heavy trucks and drill rigs, and drilling activities could produce excessive noise which could be noise nuisance to communities and hearing hazards to workers. Additionally, noise maybe generated from playing loud music or unnecessary hooting and revving of vehicles.
- Dangerous goods: Handling of fuel and lubricants at project sites could casus oil spill and pollute the environment.

B. Social Impacts

- Increased Water Access and Livelihood Support: Boreholes improve water availability for communities, reducing reliance on surface water sources that may be seasonal or contaminated.
- Conflicts Over Water Use: Competing water demands among communities, livestock owners, and conservation efforts may arise.
- Health Risks: If borehole water is not properly tested and treated, it could expose communities to harmful contaminants like fluoride, nitrates, or bacteria. Prolonged exposure to excessive noise, dust, and harsh weather conditions may lead to respiratory issues, hearing damage, and other occupational health concerns. Increased social interactions due to employment opportunities may lead to the spread of communicable diseases such as HIV/AIDS and other infections.

C. Economic Impacts

- Agricultural Productivity and Food Security: Reliable water supply supports small-scale irrigation, enhancing food production and income for rural farmers.
- Cost of Borehole Drilling and Maintenance: Borehole installation and maintenance can be expensive, requiring long-term financial planning.
- Potential for Tourism and Conservation Impacts: If groundwater abstraction reduces surface water availability in protected areas, it could affect tourism and wildlife conservation efforts.

D. Heritage and Archaeology

Potential unearthing of archaeological material or damaging heritage resources

9.2 Impact Assessment

The approach for evaluating impacts and determining their significance is detailed below. This assessment follows globally recognized best practices and aligns with the Environmental Impact Assessment (EIA) Regulations outlined in the Environmental Management Act of 2007 (Government Gazette No. 4878).

Table 2. Impact Assessment Rating

Rating		**Definition of Rating**
Status of the Impact – in terms of meeting the objective of maintaining a healthy environment.		
Positive	0	The impact benefits the environment
Negative	P	The impact results in a cost to the environment
Neutral	N	The impact has no effect
Probability – the likelihood of the impact occurring		
Negligible	1	Possibility negligible
Improbable	2	Possibility very low
Probable	3	Distinct possibility
Highly Probable	4	Most likely
Definite	5	Impact will occur regardless of preventive measures
Degree of confidence in predictions – in terms of basing the assessment on available information		
Low	1	Assessment based on extrapolated data
Medium	2	Information base available but lacking
High	3	Information base comparatively reliable
Extent – the area over which the impact will be experienced		
Site specific	1	Confined to within < 1 km of the project
Local	2	Confined to the study area or within 5 km of the project
Regional	3	Confined to the region, i.e. > 5 km but < National
National	4	Nationally

International	5	Beyond the borders of Namibia
Duration – the time frame for which the impact will be experienced		
Very short	1	Less than 2 years
Short-term	2	2 to 5 years
Medium-term	3	6 to 15 years
Long-term	4	More than 15 years
Permanent	5	Generations
Intensity – the magnitude of the impact in relation to the sensitivity of the receiving environment		
Negligible	1	Natural functions and processes are negligibly altered due to adaptation by the receptor(s) to high natural environmental variability
Mild	2	Natural functions and processes continue albeit in a modified way that does not appear to have a significant disruptive effect (i.e. changes are temporary)
Moderate	3	Natural functions and processes continue albeit in a modified way that does appear to have a noticeable disruptive effect (i.e. changes are permanent)
Severe	4	Natural functions or processes are altered to the extent that they temporarily cease resulting in severe deterioration of the impacted environment
Very Severe	5	Natural functions or processes permanently cease or are completely disrupted

9.3 Risk Assessment

The impact significance was determined using a risk matrix. A 5 by 5 matrix was used where the impact severity was categorised and assigned scores from 1 to 5 as follows: Negligible=1, Mild=2, Moderate=3, Severe=4 and Very Severe=5. Similarly, the likelihood was assigned scores as follows; Negligible =1, improbable=2, Probable=3, Highly Probability=4, Definite=5. The impact score was determined by multiplying the impact severity and likelihood.

Table 3. The criteria used to determine the significance rating of the impact(s).

Probability – the likelihood of the impact occurring	Negligible 1	5	4	3	2	1
	Improbable 2	10	8	6	4	2
	Probable 3	15	12	9	6	3
	Highly Probable 4	20	16	12	8	4
	Definite 5	25	20	15	10	5
		5 Very Severe	4 Severe	3 Moderate	2 Mild	1 Negligible
		Intensity – the magnitude of the impact in relation to the sensitivity of the receiving environment				

Very Severe	Severe	Moderate	Mild	Negligible

9.4 Mitigation Hierarchy

Best practices emphasize that mitigation measures should adhere to a structured mitigation hierarchy, prioritizing the following steps:

1. Avoidance: Prevent potential adverse impacts whenever feasible.
2. Minimization and Reduction: Where avoidance is not possible, take measures to reduce the severity and extent of impacts.
3. Mitigation: Implement corrective measures to address any remaining adverse effects.

4. Offsetting: As a last resort, compensate for impacts that cannot be fully mitigated.

In line with Environmental Impact Assessment (EIA) regulations, the primary objectives of mitigation include:

- Identifying environmentally responsible approaches to project implementation.
- Enhancing the environmental benefits of the project.
- Preventing, reducing, or addressing negative impacts.
- Ensuring that any residual negative impacts remain within acceptable thresholds.

Additionally, when determining appropriate mitigation measures, the following hierarchy was applied:

- Prevention: Eliminating negative impacts through proactive strategies.
- Minimization: Reducing negative impacts to acceptable levels.
- Remediation or Compensation: If prevention and minimization are not feasible, implementing corrective actions or compensation measures to address the impact.

9.5 Positive Impacts

1. Increased Water Access and Livelihood Support: Enhances water availability for communities, reducing dependency on seasonal or contaminated surface water sources.
2. Agricultural Productivity and Food Security: Reliable water supply supports small-scale irrigation, improving food production and rural incomes.
3. Economic Growth: Improved water access can boost local businesses, livestock farming, and other income-generating activities.
4. Potential for Tourism and Conservation Benefits: If managed properly, borehole water can sustain ecosystems that attract wildlife and tourists.
5. Reduced Time and Effort for Water Collection: Women and children spend less time fetching water, allowing for better engagement in education and other productive activities.
6. Health Benefits: Access to clean water reduces the risk of waterborne diseases and improves overall community health.
7. Reduced Livestock Attacks by Predators: Boreholes provide water sources closer to settlements, reducing the need for livestock to wander into predator-prone areas.

9.6 Negative Impacts

1. Groundwater Depletion: Over-extraction may lower the water table, affecting nearby wells and ecosystems.
2. Aquifer Contamination: Poorly managed boreholes risk contamination from agricultural runoff, animal waste, and chemicals.
3. Disruption of Wetlands and River Systems: Excessive borehole drilling can reduce water flow to sensitive ecosystems, affecting biodiversity.
4. Soil Erosion and Land Degradation: Improper borehole placement may lead to localized erosion and land degradation.
5. Air Pollution: Dust emissions from drilling and vehicle movement can deteriorate air quality and pose health hazards.
6. Noise Pollution: Heavy machinery, drilling activities, and unregulated noise from workers may disturb nearby communities.
7. Conflicts Over Water Use: Competing demands among communities, farmers, and conservationists may lead to disputes.
8. Health Risks: Poor water quality, dust, and excessive noise can lead to respiratory issues, hearing damage, and other occupational health concerns.
9. Spread of Communicable Diseases: Increased social interactions from employment opportunities may contribute to the spread of diseases such as HIV/AIDS.
10. Cost of Borehole Drilling and Maintenance: High installation and maintenance costs may be a financial burden for communities.
11. Heritage and Archaeology Risks: Borehole drilling may unintentionally unearth or damage archaeological and heritage resources.
12. Destruction of Trees: Borehole drilling may lead to clearing of tress to make way for vehicles and the actual work site
13. Infrastructure Damage by Elephants: Elephants seeking water may damage borehole equipment, pipelines, and storage tanks.
14. Theft of Borehole Infrastructure: Vandalism and theft of pumps, pipes, and solar panels can disrupt water supply and increase maintenance costs.

9.7 Impact Assessment: Sitting Phase

A. Geophysical Survey Methodology

This study utilises the magnetotelluric geophysical method for groundwater exploration. Two groundwater detection devices, the PQWT-TC300 and PQWT-GT300A, will be employed for

site selection. This geophysical technique operates based on the principle of natural electric field frequency selection (PQWT, 2024). Additionally, the groundwater detectors measure the electric potential difference (V) in millivolts (mV) within subsurface materials.

The magnetotelluric method is chosen due to its efficiency, deeper penetration capability, and high accuracy, which collectively enhance success rates in groundwater detection. This technique has demonstrated its effectiveness in identifying geological contact zones and delineating aquifer depths prior to drilling.

B. Survey Approach

The geophysical survey will follow the following steps:

- Desk Study: A review of geological and hydrogeological data to inform site selection.
- Survey Design & Data Collection: Laying out survey lines and recording field data, which was then downloaded onto a field computer for qualitative interpretation.
- Site Selection & Pegging: Identifying optimal drilling locations based on the geophysical survey results.

During this phase, no intrusive activities will take place that could negatively impact the physical environment. To promote social cohesion with the siting team, it is essential to inform local communities, about their presence in the area. This process is typically carried out by a two-person team equipped with handheld FDM devices. The selected site will then be marked and pinned for reference.

9.8 Drilling Phase

The borehole drilling phase involves site preparation, including surveying, marking, and clearing the designated area. Drilling operations follow, where equipment is set up, and the borehole is drilled to the target depth with casing installation. Borehole development ensures structural integrity through cleaning and test pumping, followed by water quality testing to analyse potential contaminants. The tables below highlight the potential impacts during this phase and the recommended mitigation measures.

Table 4. Social Environment: Driling phase Impact Assessment

Project Environmental Impact	**Description**	**Mitigation Measures**	Impact type	Likelihood occurrence	Severity	Impact Intensity Rating	Geographical Extend	Duration	Significance	Confidence Level
Health Risks (Negative Impact)	Dust, noise, and poor water quality may cause respiratory illnesses, hearing damage, HIV and AIDS and waterborne diseases.	Enforce workplace safety regulations, provide PPE for workers, and conduct water treatment.	N	2	2	4	Site specific	Meduim-Term	Low	High

Spread of Communicable Diseases (Negative Impact)	Increased social interactions due to employment opportunities may spread diseases like HIV/AIDS.	1. Implement health awareness campaigns and provide health screenings. 2. Provide awareness to the employees on dangers of HIV/AIDS, alcohol and drug abuse	N	2	2	4	Site specific	Short-term	Low	High
Cost of Borehole Drilling & Maintenance (Negative Impact)	High installation and maintenance costs may be a financial burden.	Establish community contribution plans and explore subsidies for borehole maintenance.	N	3	2	6	Site specific	Long-term	Medium	High

Heritage & Archaeology Risks (Negative Impact)	Potential damage to archaeological or heritage resources during drilling.	1. Conduct heritage assessments before drilling and implement protective measures. 2. Stop drilling 3. Notifying the Operational Manager or Supervisor i. The operational manager or supervisor must be informed immediately. ii. Secure the area using danger tape, and the manager should document the findings with appropriate	N	2	2	4	Site specific	Short-term	Low	High

		photographs. iii. The manager or supervisor must report the discovery to the relevant authorities, including: - National Heritage Council of Namibia (+264 61 244 375) - National Museum of Namibia (+264 61 276 800) - National Forensic Laboratory (+264 61 240 461).								

Table 5. Bio-Physical Environment: Impacts Assessment

Project Environmental Impact	Description	Mitigation Measures	Impact type	Likelihood occurrence	Severity	Impact Intensity Rating	Geographical Extend	Duration	Significance	Confidence Level
Disruption of Wetlands & River Systems	Excessive drilling may reduce water flow to ecologically sensitive areas.	Conduct hydrological assessments before drilling and regulate borehole density.	N	2	2	4	Site specific		Low	High
Soil Erosion & Land Degradation	Poor borehole placement may cause localized erosion and degradation.	Implement soil conservation techniques and stabilize drilling sites.	N	2	2	4	Site specific	Long-term	Low	High
Air Pollution	Dust emissions from drilling and vehicle movement may affect air quality.	Use dust suppression techniques such as water spraying.	N	2	2	4	Site specific	Short-term	Low	High

Project Environmental Impact	Description	Mitigation Measures	Impact type	Likelihood occurrence	Severity	Impact Intensity Rating	Geographical Extend	Duration	Significance	Confidence Level
Noise Pollution	Machinery, drilling, and worker activities may disturb communities and wildlife.	Limit drilling to daytime hours and provide workers with ear protection.	N	2	2	4	Site specific	Short-term	Low	High
Dangerous Goods	Handling of fuel and lubricants may cause spills, polluting soil and water.	Implement proper fuel storage and spill management protocols	N	3	2	6	Site specific	Long-term	Medium	High
Destruction of Trees	Cutting down tree on drilling sites	1. Avoid cutting down mature and protected plant species. 2. Ensure that access roads are rehabilitated after use to enhance	N	2	2	4	Site specific	Long-term	Low	High

Project Environmental Impact	Description	Mitigation Measures	Impact type	Likelihood occurrence	Severity	Impact Intensity Rating	Geographical Extend	Duration	Significance	Confidence Level
		revegetation								

9.9 Operational Phase:

During the operational phase, the primary activity involves water extraction. If not effectively managed, excessive abstraction could lead to a decline in the water table, negatively impacting water quality and surrounding vegetation. The tables below highlight the potential impacts during this phase and the recommended mitigation measures.

Table 6. Social Environment: Operational Phase Impact Assessment

Project Environmental Impact	**Description**	**Mitigation Measures**	**Impact type**	**Likelihood occurrence**	**Severity**	**Impact Intensity Rating**	**Geographical Extend**	**Duration**	**Significance**	**Confidence Level**
Increased Water Access & Livelihood Support	Enhances access to clean water, benefiting communities and reducing reliance on contaminated sources.	Ensure equitable water distribution and sustainable management plans.	P	2	2	4	Site specific	Long-term	Low	High
Conflicts Over Water Use	Competing demands among communities, farmers, and conservationists may arise.	Implement community-based water management strategies to prevent disputes.	N	3	2	6	Site specific	Long-term	Medium	High

Project Environmental Impact	Description	Mitigation Measures	Impact type	Likelihood occurrence	Severity	Impact Intensity Rating	Geographical Extend	Duration	Significance	Confidence Level
Agricultural Productivity & Food Security	Supports small-scale irrigation, improving crop yields and rural incomes.	Promote water-efficient irrigation methods and train farmers on sustainable practices.	P	2	2	4	Site specific	Long-term	Low	High
Economic Growth	Improved water availability supports local businesses and livestock farming.	Encourage investment in water-based economic activities.	P	1	2	2	Site specific	Long-term	Low	High
Reduced Time for Water Collection	Women and children spend less time fetching water, allowing for education and other activities.	Establish community water management committees to maintain access.	P	1	1	1	Site specific	Long-term	Low	High
Health Benefits	Access to clean water reduces waterborne diseases and	Conduct regular water quality testing and community	P	2	2	4	Site specific	Long-term	Low	High

Project Environmental Impact	Description	Mitigation Measures	Impact type	Likelihood occurrence	Severity	Impact Intensity Rating	Geographical Extend	Duration	Significance	Confidence Level
	improves sanitation.	health awareness programs.								
Potential for Tourism & Conservation Benefits	If managed sustainably, boreholes can support ecosystems that attract wildlife and tourists.	Ensure water abstraction does not negatively impact nearby ecosystems.	P	2	2	4	Site specific	Long-term	Low	High
Reduced Livestock Attacks by Predators	Boreholes provide water sources closer to settlements, reducing the need for livestock to wander into predator-prone areas.	1. Install predator-proof kraals near water points. 2. Implement community-based predator monitoring and deterrent programs.	P	2	2	4	Site specific	Long-term	Low	High

Project Environmental Impact	Description	Mitigation Measures	Impact type	Likelihood occurrence	Severity	Impact Intensity Rating	Geographical Extend	Duration	Significance	Confidence Level
Theft of Borehole Infrastructure	Vandalism and theft of pumps, pipes, and solar panels can disrupt water supply and increase maintenance costs.	1. Use tamper-proof locks and security fencing. 2. Engage community watch groups to protect infrastructure. 3. Register borehole equipment for easy tracking and recovery.	N	3	2	6	Site specific	Long-term	Medium	High
Infrastructure Damage by Elephants	Elephants seeking water may damage borehole equipment, pipelines, and storage tanks.	1. Construct elephant-proof barriers around boreholes. 2. - Install alternative water sources for	N	3	2	6	Site specific	Long-term	Medium	High

Project Environmental Impact	Description	Mitigation Measures	Impact type	Likelihood occurrence	Severity	Impact Intensity Rating	Geographical Extend	Duration	Significance	Confidence Level
		wildlife at a safe distance. 3. - Use reinforced materials resistant to elephant damage.								

Table 7. Bio-Physical Environment: Operational Phase Impacts Assessment

Project Environmental Impact	Description	Mitigation Measures	Impact type	Likelihood occurrence	Severity	Impact Intensity Rating	Geographical Extend	Duration	Significance	Confidence Level
Aquifer Contamination	Poor borehole management may lead to contamination from chemicals and animal waste.	1. Properly seal boreholes 2. use protective casings, and conduct regular water testing. 3.Ensure boreholes are properly sealed and cased to prevent surface pollutants from entering the groundwater. 4. Wastewater Management – Implement safe disposal methods for sewage,	N	2	2	4	Site-specific	Long-term	Low	High

Project Environmental Impact	Description	Mitigation Measures	Impact type	Likelihood occurrence	Severity	Impact Intensity Rating	Geographical Extend	Duration	Significance	Confidence Level
		agricultural runoff, and industrial waste to avoid contamination. 5. Regular Water Quality Testing – Conduct periodic water testing to detect and address any contamination early. 6. Buffer Zones Around Boreholes – Maintain a safe distance between boreholes and potential pollution								

Project Environmental Impact	Description	Mitigation Measures	Impact type	Likelihood occurrence	Severity	Impact Intensity Rating	Geographical Extend	Duration	Significance	Confidence Level
		sources such as latrines, septic tanks, and agricultural fields. 7. Public Awareness & Training – Educate communities on safe water practices and pollution prevention measures. 8. Use of Eco-Friendly Agricultural Practices – Minimize the use of chemical fertilizers and pesticides to reduce leaching into								

Project Environmental Impact	Description	Mitigation Measures	Impact type	Likelihood occurrence	Severity	Impact Intensity Rating	Geographical Extend	Duration	Significance	Confidence Level
		groundwater.								

Project Environmental Impact	Description	Mitigation Measures	Impact type	Likelihood occurrence	Severity	Impact Intensity Rating	Geographical Extend	Duration	Significance	Confidence Level
Groundwater Depletion	Over-extraction may lower the water table, affecting other wells and ecosystems	1. Sustainable Water Abstraction Limits – Regulate water extraction based on aquifer recharge rates to prevent overuse. 2. Water Conservation Techniques – Promote efficient irrigation techniques such as drip irrigation to reduce wastage. 3. Rainwater Harvesting – Encourage rainwater harvesting	N	3	2	6	Site specific	Long-term	Medium	High

Project Environmental Impact	Description	Mitigation Measures	Impact type	Likelihood occurrence	Severity	Impact Intensity Rating	Geographical Extend	Duration	Significance	Confidence Level
		to reduce dependence on groundwater. 4. Recharge Wells & Managed Aquifer Recharge – Implement artificial recharge techniques to replenish depleted aquifers. 5. Monitor & Regulate Borehole Drilling – Enforce policies on borehole drilling to avoid excessive groundwater extraction. 6. Alternative								

Project Environmental Impact	Description	Mitigation Measures	Impact type	Likelihood occurrence	Severity	Impact Intensity Rating	Geographical Extend	Duration	Significance	Confidence Level
		Water Sources – Develop alternative water sources such as surface water reservoirs to reduce pressure on groundwater								

10 Grievance Procedure

Grievance Mechanism

The CLD-HWCM project in Namibia aims to ensure that grievances raised are resolved fairly, without prejudice and following a specified mechanism. The procedures outline the processes that should be followed when a grievance arises, to ensure they are resolved as quickly as possible. Any beneficiary of programme activities has a right to bring a complaint or grievance for investigation.

1. Definition of grievances covered

The Grievance Mechanism applies to the activities undertaken by Ministry of Environment, Forestry and Tourism (MEFT) and other service providers in the implementation of the mitigation and livelihood enhancement measures contained in the CLD-HWCM Project document.

The Grievance Mechanism is to be used when other methods of trying to resolve a concern or complaint have been exhausted and no satisfactory outcome has been achieved.

Community members may raise a concern or make a complaint if they:

a. Believe that a particular mitigation- and livelihood enhancement measure is being implemented without sufficient prior agreement and participation of the beneficiaries in the design of the specific support activities for that measure.
b. Believe that MEFT or another service provider is deviating from the agreed activities, methods, and scheduling for a particular mitigation- and livelihood enhancement measure (e.g. horticulture and garden development).
c. Mal administration within the project

2. Administration of the Mechanism

Responsibility for administering the Grievance Mechanism lies with the MEFT Control Warden for the Wildlife Services in Zambezi Region. The Control Warden will ensure that information about the Grievance Mechanism is widely distributed and available in the community. This will include a visit to each settlement in the ZCRWDA and KRWDA including the Bwabwata National Park, Kwando Core area to introduce and discuss the mechanism with residents and making written copies of the mechanism available in English and the Silozi and Khwe language.

3. Procedure for Addressing Grievances

A grievance may be delivered in the following ways:

- Verbally at community meetings held by the CBNRM Warden, Park Warden or Control Warden;
- Soft written format by mobile 'phone text message or via e-mail to the Control Warden.
- Hard written format delivered by hand to the Control Warden, or left for collection at the following collection points: MEFT reception at Susuwe station, MEFT reception at the Katima Mulilo office or Kyaramcan Asssociation office. A collection box will be available at each of these collection points.

Receipt of the Grievance

The Control Warden will keep an electronic log of each complaint or concern raised. The log will contain the following details:

- When, where, how the complaint was made.
- Who made the complaint.
- The details of the complaint.
- Date, and time complaint was recorded.
- Any evidence, supporting documents or statements.

Screening of the Grievance

The Control Warden will screen each grievance received to see whether it fits the criteria for acceptance set out above.

If the grievance does not meet the criteria, the Control Warden must ensure the complainant receives written communication to this effect, and a copy of this communication must be added to the log for the complaint.

If the grievance does meet the criteria, the Control Warden must acknowledge receipt of the grievance and indicate in writing to the complainant that an investigation into the complaint has been launched. A copy of this communication must be added to the log for the complaint.

Timeline for investigations

An investigation into a complaint may not take more than two weeks to complete unless there are specific circumstances that prevent the investigation from being concluded within this time.

If the investigation takes more than two weeks to conclude, the Control Warden must inform the complainant that the investigation is continuing and explain the reasons for this. A copy of this communication must be included in the log for that complaint.

Recording of and communication regarding progress

All communications, meetings, discussions etc. related to the investigation must be recorded in the log for the complaint.

Resolution of Grievances

If the Control Warden determines that the grievance is valid and in need of resolution he/she will take the necessary steps to discuss the issue with the organization or personnel concerned and recommend a way forward to address the specific issues raised in the complaint. The actions taken to address the grievance must be recorded in the log.

The findings and results from the investigation must be recorded in the log for the complaint and communicated to the complainant in writing. The date and time of any response from the complainant must be recorded in the log and a copy added if the response was in writing.

Closure

A response from the complainant indicating satisfaction with the results of the investigation and the actions taken to resolve the grievance indicates closure of that complaint. The closure date must be recorded in the log.

If the complainant is not satisfied with the result of the investigation, the Control Warden must assess whether it is possible for further action to be taken. If he/she believes there is scope for further action the complaint must be submitted to the Director: Wildlife and National Parks for adjudication, whose decision will be final.

11. Decommissioning and Rehabilitation Plan

The decommissioning phase aims to minimize environmental risks when a borehole is no longer in use. Key steps include:

- **Sealing:** Boreholes should be properly sealed with cement or bentonite to prevent groundwater contamination.

- **Infrastructure Removal:** All pipes, pumps, and solar panels must be dismantled and removed.
- **Land Restoration:** The site should be levelled, vegetation replanted, and natural drainage restored.

Responsibilities

- The proponent (Salambala Conservancy) oversees and funds decommissioning.
- The Environmental Compliance Officer ensures adherence to regulations.

Monitoring and Evaluation

- Regular assessments should confirm site safety and environmental stability.
- Groundwater quality testing ensures no contamination of the aquifer.

12. Conclusion and Recommendations

12.1 Conclusion

The borehole scoping report evaluates the environmental, social, and economic impacts of borehole drilling and water abstraction in the Zambezi Region. While boreholes provide essential water access, potential risks such as groundwater depletion, aquifer contamination, and social conflicts must be managed. However, the risk of groundwater depletion in this region is relatively low due to sufficient rainfall that supports regular aquifer recharge. Proper site selection, sustainable water extraction, and adherence to environmental regulations are essential for minimizing any negative impacts. The study confirms that, with appropriate mitigation measures, borehole development can significantly enhance community livelihoods, boost agricultural productivity, and improve water security in the region.

12.2 Recommendations

1. Sustainable Water Management: Implement regular monitoring of water levels and control abstraction rates to prevent over: extraction and maintain groundwater sustainability.
2. Water Quality Protection: Ensure boreholes are properly sealed and maintained to prevent contamination, and conduct periodic water quality testing to safeguard public health.

3. Community Engagement: Establish clear guidelines on borehole ownership and usage to prevent conflicts and promote equitable water access for all stakeholders.
4. Environmental Safeguards: Apply best practices in drilling to minimize soil erosion, land degradation, and impacts on surrounding ecosystems.
5. Infrastructure Security: Implement measures such as fencing and community-led security initiatives to protect borehole infrastructure from vandalism, theft, and wildlife damage.
6. Government and Stakeholder Collaboration: Maintain active coordination with relevant authorities, including the Ministry of Environment, Forestry, and Tourism (MEFT) and local conservancies, to ensure compliance with environmental regulations and best practices.

13. Reference

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14. Annex 1: Support letters from the Traditional authorities

MASUBIA TRADITIONAL AUTHORITY

BUKALO ROYAL HEADQUARTERS
TEL/FAX NO: (+264)66254715
P.O.BOX 6017
BUKALO
REPUBLIC OF NAMIBIA

13/05/2024

The Officer In-charge
Ministry of Agriculture, Water and Land Reform
Katima Mulilo

Dear Sir/Madam

Re: Confirmation of Land - Ms Simwanza Nalukui Saberia

This Traditional Authority hereby certify that Ms Simwanza Nalukui Saberia holder of Identity card no. 690608 0028 1 is a resident of Muyako area under this Traditional Authority.

The applicant intends to lease out one hector piece of land to Lyambezi project for vegetable garden. This project consists of 6 (Six) members to own the piece of land.

This Traditional Authority has no objection with the applicant's application hence recommend her to your office for further assistance.

Your cooperation will be appreciated

Yours faithfully

A.M.Mwala
Senior Induna

MASUBIA TRADITIONAL AUTHORITY
13 MAY
ZAMBEZI REGION

G.M.Liswaniso
Senior Induna

MASUBIA TRADITIONAL AUTHORITY
BUKALO ROYAL HEADQUARTERS
TEL/FAX NO: (+264)66254715
P.O.BOX 6017
BUKALO
REPUBLIC OF NAMIBIA

16/05/2024

The Officer In-charge
Ministry of Agriculture, Water and Land Reform
Katima Mulilo

Dear Sir/Madam

Re: Confirmation of Land - Sezuni Mary Chuma

This Traditional Authority hereby certify that Sezuni Bernard Mwilima holder of Identity card no. 671206 0031 7 is a resident of Ngoma area under this Traditional Authority.

The applicant intends to lease out one hector piece of land to **KOPANO** project for vegetable garden. This project consists of 6 (Six) members to own the piece of land.

This Traditional Authority has no objection with the applicant's application hence recommend her to your office for further assistance.

Your cooperation will be appreciated

Yours faithfully

A.M.Mwala
Senior Induna

MASUBIA TRADITIONAL AUTHORITY
ZAMBEZI REGION

B.K.Sinvula
Senior Induna

MASUBIA TRADITIONAL AUTHORITY
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P.O.BOX 6017
BUKALO
REPUBLIC OF NAMIBIA

16/05/2024

The Officer In-charge
Ministry of Agriculture, Water and Land Reform
Katima Mulilo

Dear Sir/Madam

Re: Confirmation of Land - Sezuni Bornface Simasiku

This Traditional Authority hereby certify that Sezuni Bornface Simasiku holder of Identity card no. 690205 0023 6 is a resident of Ngoma area under this Traditional Authority.

The applicant intends to lease out one hector piece of land to **MAKALELO** project for vegetable garden. This project consists of 6 (Six) members to own the piece of land.

This Traditional Authority has no objection with the applicant's application hence recommend her to your office for further assistance.

Your cooperation will be appreciated

Yours faithfully

MASUBIA TRADITIONAL AUTHORITY
Munitenge Royal Establishment 1652
Bukalo Headquarters
16 MAY 2024
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16/05/2024

The Officer In-charge
Ministry of Agriculture, Water and Land Reform
Katima Mulilo

Dear Sir/Madam

Re: Confirmation of Land - Sezuni Bernard Mwilima

This Traditional Authority hereby certify that Sezuni Bernard Mwilima holder of Identity card no. 620901 1002 3 is a resident of Ngoma area under this Traditional Authority.

The applicant intends to lease out one hector piece of land to Come together project for vegetable garden. This project consists of 6 (Six) members to own the piece of land.

This Traditional Authority has no objection with the applicant's application hence recommend her to your office for further assistance.

Your cooperation will be appreciated

Yours faithfully

A.M.Mwala
Senior Induna

MASUBIA TRADITIONAL AUTHORITY
16 MAY 2024
ZAMBEZI REGION

B.K.Sinvula
Senior Induna

15. Annex 2: Borehole water sitting report

Attached Separately

16. Annex 3: Borehole sitting Maps

Attached Separately