RED-DUNE CONSULTING CC

APP: 240912004684

Environmental Scoping Study For the Proposed Drilling Of Boreholes for Water Supply at Sachona, Ngara and Namushasha Villages in Mashi Conservancy, Zambezi Region

MASHI CONSERVANCY

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TABLE OF CONTENTS

List of Figures

List of Tables

ACCRONYMS

CBNRM	Community Based Natural Resource Management
CCFN	Community Conservation Fund of Namibia
CEO	Chief Executive Officer
DEA	Department of Environmental Affairs
DWA	Department of Water Affairs
EA	Environmental Assessment
EAP	Environmental Assessment Practitioner
EC	Environmental Commissioner
ECC	Environmental Clearance Certificate
ECO	Environmental Compliance Officer
EIA	Environmental Impact Assessment
EMA	Environmental Management Act (No. 7 of 2007)
EMP	Environmental Management Plan
ESI	Environmental Social Indicators
ESMF	Environmental and Social Management Framework
FDM	Frequency Domain Electromagnetic
FPIC	Free Prior Informed Consent
GPS	Global Positioning System
GRM	Grievance Redress Mechanisms
HWC	Human Wildlife Conflict
HWC and WC	Human Wildlife Conflict - Wildlife Crime
I&APs	Interested and Affected Parties
ILO	International Labour Organization
IRDNC	Integrated Rural Development and Nature Conservation
ISO	International Standard Organisation
IWRM	Integrated Water Resource Management
KFW	German Development Bank
L	Litre
m^3	Cubic

MAWLR	Ministry of Agriculture Water and Land Reform
MEFT	Ministry of Environment Forestry and Tourism
MM	Millimetres
Mm^3	Million Cubic
NACSO	Namibian Association of CBNRM Support Organizations
^{o}rc	Degree Celsius
OMDEL	Omaruru Delta
PPE	Personal Protective Equipment
PPP	Public Participation Process
R	Reversible
RD	Red-Dune Consulting CC
SEMP	Social Environmental Management Plan
SM	Site Manager

EXECUTIVE SUMMARY

The concept of wildlife management at community levels through establishment of conservancies has seen remarkable population increase in wildlife. However, this increased wildlife population resulted into their expanded foraging ranges into communal and freehold farming areas resulting in an increased frequency and severity of Human Wildlife Conflict (HWC). The conflicts include damage to crops, gardens and infrastructure (water points, fences, kraals, boreholes, etc.), loss of life or injuries to people and livestock mortalities. Climate change is also known to contribute to the shift of wildlife population to areas that were previously not heavily affected by drought, which further exacerbate HWC in communities.

Mashi Conservancy lies on Bwabwata National Part (BNP) in the west, Mudumu National Park in the South, Kwando River in south east, Mayuni and Sobbe conservancy in the north and west respectively. The National Parks are home to a diverse range of wildlife species while the Kwando River support crocodile population. The interaction of wildlife herbivores and feline predators as well as crocodiles with human often result into incidents of human-wildlife conflict which mainly involve destruction of crops and loss of livestock.

The HWC hotspots in the Conservancy are areas of Sachona, Ngara, Namushasha, Lubuta, Ngonga, Namushasha, and Lizauli. Sachona, Ngara, Namushasha and Lubuta, inland from the Kwando River are mostly affected by lion and elephants, while areas in the river proximity are mostly affected by crocodile, hippos, leopard and buffalo. Destruction of crops are the most recorded incidents caused elephants and hippos, while crocodile, lion and leopards are the major cause of livestock losses. Injuries and fatal incidents to human has been report.

Between 2020-2022, the conservancy experienced 336 cases of HWC valued at N$ 925,766.01. Majority of the cases were damage to crops at 71 percent, mainly caused by elephants. Livestock losses are mainly caused by crocodiles, lions, hyena and leopards.

In December 2022, Mashi Conservancy applied for a Grant from the Community Conservation Fund of Namibia (CCFN) to be supported with drilling water point, a measure that is aimed to

mitigate Human Wildlife Conflict (HWC). CCFN, through the project *"Poverty Oriented Support to Community Conservation in Namibia"* is now supporting Mashi Conservancy with a solar powered boreholes at Sachona, Ngara and Namushasha Villages. The borehole will serve as a water supply infrastructure to enable safe access to water points for human and livestock. This intervention is in line with the project's objective of "providing targeted conservancies with the means to address the HWC challenges they face in line with the National Policies of Namibia".

Section 27 of the Environmental Management Act, Act No 7 of 2007 has listed the "*Abstraction of groundwater at a volume exceeding the threshold authorised in terms of a law relating to water resources"* as an activity that may not be undertaken without issuance of an Environmental Clearance Certificate. To fulfil this statutory requirements, Red-Dune Consulting CC (RDC) was appointed to develop the requisite Environmental Management Plan (EMP) for the project.

The project's magnitude is small and its potential negative impacts are negligible to; the Kwando river flow, aquatic bio-diversity, bio-physical environment on land and, it has positive impact on socio-economic in addressing *the human-wildlife conflict* and poverty eradication by supporting livestock of the community and potential gardens.

1 INTRODUCTION AND BACKGROUND

1.1 Poverty Oriented Support to Community Conservation in Namibia

The Community Conservation Fund of Namibia (CCFN) is a non-profit Association incorporated under Section 21 of Namibia's Companies Act of 2004. Using a foundation model, the CCFN is mandated to raise funds and manage various financial mechanisms such as endowments, sinking or revolving funds, to ensure the long-term sustainability of Community-Based National Resource Management (CBNRM) activities that are carried out by communal conservancies and other entities with a similar legal mandate.

Box 1. A Conservancy is...

- a legally registered area with clearly defined borders and a constituted management body run by the community for the development of residents and the sustainable use of wildlife and tourism.
- managed by a group elected to serve the interests of all its members.
- a place where residents can add income from wildlife and tourism to traditional farming activities.
- a place where wildlife populations increase as they are managed for productive gain.
- a place where the value of the natural resources increases, enhancing the value of the land.
- a forum through which services and developments can be channelled and integrated.
- zoned for multiple uses to minimize conflict and maximize the interests of all stakeholders.

With financial support from the German Government through the KfW Development Bank, CCFN is implementing a project, "Poverty Oriented Support to Community Conservation in Namibia". The project's main objective is to contribute to biodiversity conservation and rural development through the establishment of sustainable Human-Wildlife-Conflict (HWC) management systems in Namibia's communal conservancies.

The project is (i) working together with CBNRM partners to develop and institutionalize long-term mechanisms and structures that make management of HWC part of the sustainability strategy of CBNRM (ii) providing targeted conservancies with the means to address the HWC challenges they face in line with the National Policies of Namibia.

1.2 Community Based Natural Resource Management

Before Namibia gained its independence in 1990, residents in the communal areas had few rights to use wildlife. Predators and foraging wild animals were regarded as threats due to their destruction of crop fields, human attacks, killing of livestock as well as damaging of infrastructures, especially water infrastructure. In turn, community retaliate by killing wild animals, which gave birth to a concept commonly known as Human Wildlife Conflict and Wildlife Crime (HWC-WC).

After independence, and in line with Article 95l[1] of the Namibian Constitution, Namibia has adopted policies, legal instruments, and strategies for addressing HWC-WC. One such strategies is enabling communities and private businesses to benefit from wildlife-based tourism and sustainable natural resource management commonly known as Community-Based Natural Resource Management (CBNRM) which is guided by the National Policy on Community Based Natural Resource Management.

The CBNRM concept is based on the understanding that if natural resources have sufficient value to rural communities, and allow for rights to use, benefit and manage, then appropriate incentives for people to use natural resources in a sustainable way will be created through the establishment of a Conservancy. The CBNRM programme links conservation to poverty eradication through developing the conservation, hunting and tourism industries which in turn contribute to the Gross Domestic Product, employment creation and the improvement of the well-being and social upliftment of rural communities.

1.3 Challenges faced by Conservancies

The CBNRM concept yielded remarkable recovery and increase of wildlife populations, including key predator species and internationally threatened or endangered species such as elephant and

[1] The State to actively promote and maintain the welfare of the people by adopting policies aimed at the maintenance of ecosystems, essential ecological processes and biological diversity of Namibia and utilization of living natural resources on a sustainable basis for the benefit of all Namibians, both present and future."

black rhinoceros[2]. However, this increased wildlife population resulted into their expanded foraging ranges into communal and freehold farming areas resulting in an increased frequency and severity of Human Wildlife Conflict (HWC) especially involving elephants, feline predators, crocodiles and hippopotamus[3][4].

The conflicts include damage to crops, gardens and infrastructure (water points, fences, kraals, boreholes, etc.), loss of life or injuries to people and livestock mortalities. Climate change is also known to contribute to the shift of wildlife population to areas that were previously not heavily affected by drought, which further exacerbate HWC & WC.

Wildlife trafficking became a million-dollar criminal enterprise that has expanded to more than just a conservation concern. The increasing involvement of organized crime in poaching and wildlife trafficking threatens peace, strengthens illicit trade routes, and destabilizes economies and communities that depend on wildlife for their livelihoods.

Namibia is not spared from Wildlife Crime[5] (WC). Although the country has made remarkable effort in preventing WC, the country is still facing this challenge and requires significant financial resources to address the challenge. Statistics indicates that 27 elephant and 61 rhino were poached in 2018 while in 2019, 39 live and 65 dead pangolin were seized in 2019. Furthermore, conservancy residents experiencing HWC sometimes engage in retaliatory killing to remove problem animals[6]. Other WC reported includes poaching wildlife such as Gemsbok, Springbok, Kudu, Giraffe etc., to sell meat and for own consumption.

[2] Republic of Namibia: Revised National Policy on Human Wildlife Conflict Management 2018-2027
[3] Brian T. B. J and Jonathan I. Barnes 2006., Human Wildlife Conflict Study Namibian Case Study
[4] Ailla-Tessa Nangula Iiyambula 2021., Identifying the Spatio-Temporal Distribution and Drivers Of Human-Carnivore Conflict In Epupa And Okanguati Conservancies, Kunene Region Namibia
[55] Republic of Namibia: Revised National Strategy on Wildlife Protection and Law Enforcement 2021 - 2025
[6] Project Document: Integrated approach to proactive management of human-wildlife conflict and wildlife crime in hotspot landscapes in Namibia

2 MASHI CONSERVANCY

Mashi Conservancy was registered in March 2003. It covers an area of 297 km^2 and has a population of 5000 people. It is home to the Mafwe, Hambukushu and Khwe San community.

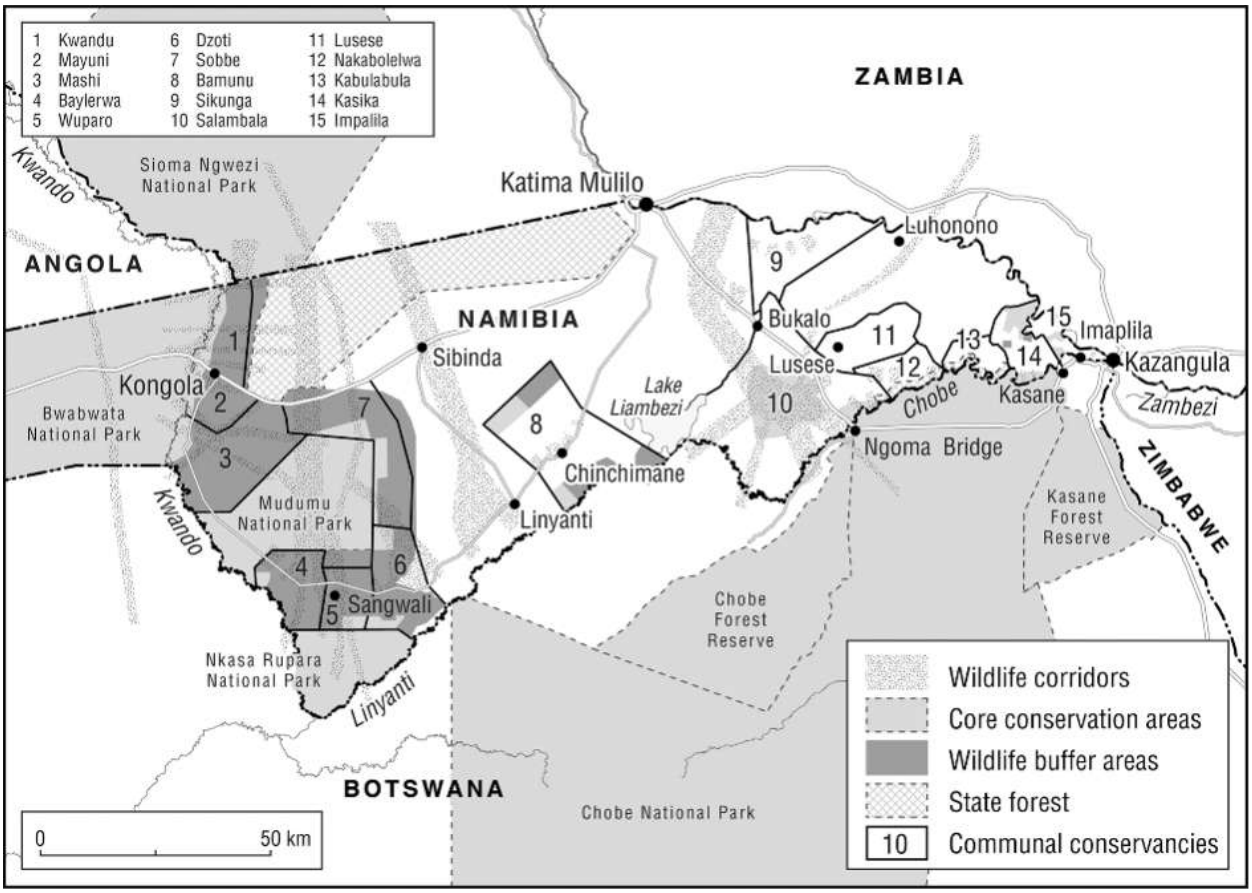

Figure 1. Map of Mashi Conservancy (#3) (*Source: NACSO, 2022*)

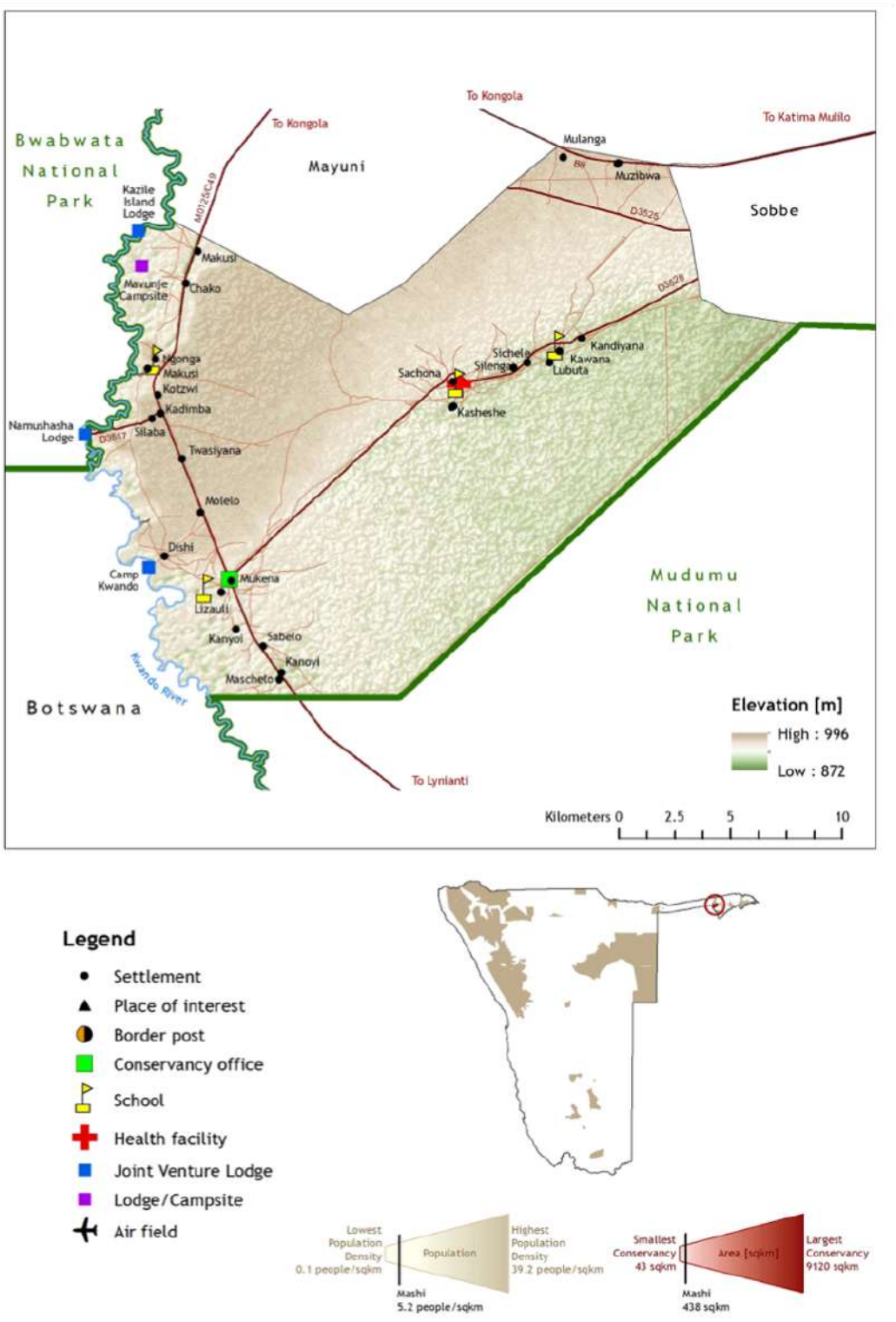

Figure 2: Locality map of Mashi Conservancy and borehole site

2.1 Areas most affected by HWC

The HWC hotspots in the Conservancy are areas of Sachina, Ngara and Namushasha, Lubuta, Ngonga, and Lizauli. Sachona, Ngara, Namushasha, and Lubuta inland from the Kwando River are mostly affected by lion and elephants, while areas in the river proximity are mostly affected by crocodile, hippos, leopard and buffalo. Destruction of crops are the most recorded incidents caused elephants and hippos, while crocodile, lion and leopards are the major cause of livestock losses. Injuries and fatal incidents to human has been report.

2.2 Challenges experience by the conservancy / communities in the area

2.2.1 Human Wildlife Conflict (HWC)

The Mashi Conservancy is home to a diverse range of wildlife species and their interaction with human often result into incidents of human-wildlife conflict. Nestled between the Bwabwata Nation Park and Mudumu National Park, the communities often suffer losses from wildlife. The attacks are primarily from species such as elephants, hippos, crocodiles, lions, leopards hyenas, and wild dogs. The biggest losses are crop damages mainly by elephants.

The Conservancy has raised the challenge of HWC to CCFN and through a grant proposal requested assistance to develop / establish safer water access point to mitigate HWC.

2.3 Support from Community Conservation Fund of Namibia (CCFN)

With financial support from the German Government through the KfW Development Bank, CCFN is implementing a project, *"Poverty Oriented Support to Community Conservation in Namibia"*. The project's main objective is to contribute to biodiversity conservation and rural development through the establishment of sustainable Human-Wildlife-Conflict (HWC) management systems in Namibia's communal conservancies.

In line with the project objectives, CCFN is supporting members Mashi Conservancy to drill solar powered boreholes at Sachona, Ngara and Namushasha village to ensure safe drinking water points for animal. The project is (i) working together with CBNRM partners[7] to develop and institutionalize long-term mechanisms and structures that make management of HWC part of the sustainability strategy of CBNRM (ii) providing targeted conservancies with the means to address the HWC challenges they face in line with the National Policies of Namibia, which is of particular relevance to this proposed intervention.

3 STATUTORY REQUIREMENTS

The protection of the environment is enshrined under Article 95l of the Namibia Constitution. The Environmental Management Act (Act No 7 of 2007) (EMA) and its Environmental Impact Assessment Regulation 2012, has listed Water Resource Developments activities not to be undertaken without an Environmental Clearance Certificate (ECC) as follows;

a) 8.1 The abstraction of ground or surface water for industrial or commercial purposes
b) 8.2 The abstraction of groundwater at a volume exceeding the threshold authorised in terms of a law relating to water resources.

To fulfil the above statutory requirements, Red-Dune Consulting CC (RDC) was appointed to Develop an Environmental Scoping Report and accompanying Environmental Management Plan (EMP) that would guide drilling and operation of the proposed borehole at Sachona, Ngara and Namushasha village in Mashi Conservancy.

In addition to EMA, there are other statutory requirements that would need to be fulfilled. The Ministry of Agriculture, Water and Land Reform as the custodian of the Water Resources Management Act, No.11 of 2013 instructs that a permit must be obtained prior to any borehole drilling activities can be undertaken.

[7] IRDNC

4 TERMS OF REFERENCE

The scope to develop this Scoping Report and EMP is guided by the Terms of References as provided in the EIA Regulation 2012, Section 9 (a-b) but, not limited to the following;

- Provide a comprehensive description of the proposed project;
- Identify relevant legislation and guidelines for the project;
- Identify potential environmental (physical, biological and social) conditions of the
- project location and conduct risk assessment;
- Inform Interested and Affected Parties (I&APs) and relevant authorities about the
- proposed project to enable their participation and contribution;
- Develop an Environmental Management (EMP) that would be a legal guideline for the environmental protection by the project.

5 THE PROPONENT

Mashi Conservancy is the proponent for this application with financial support from CCFN.

6 UNDERGROUND WATER IN ZAMBEZI

The aquifers in the Zambezi are known to have a thickness of up to 125m, formed by coarse grained, semi-consolidated to consolidated sandstone with underlying layer of basal / brackish to saline water See Figure 5)..

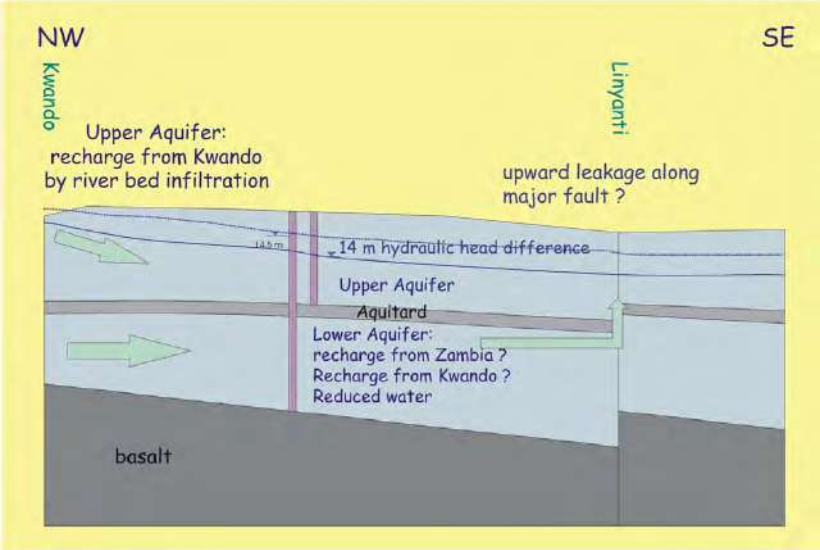

Figure 3. Schematic Concept showing the Structure of the Aquifer System in the Eastern Caprivi (Groundwater Investigations in the Eastern Caprivi Region, Main Hydrogeological Report pp46)

6.1 Project Alternatives

The EMA requires impact assessment to explore various project alternatives which aims to ensure that a chosen project component does not have significant impact to the environment. Project alternatives ranges from not implementing the project (no go alternative), when the environmental impacts are severe, or there is high degree of uncertainty. Other alternative considers the project site, technology, and equipment to be used. The description of alternatives is given in table 1 below.

Table 1. Project Alternatives

Project Alternative	Description	Advantages	Disadvantages	Alternative adoption
No project	Do not implement the project	None	The HWC will not mitigate	No
Implement the project	Implement the project	Reduce HWC Improved water supply	None	Yes
Diesel Powered Water Pump	Use of diesel-powered water pump	Cost effective and quick to implement	Difficult to upkeep with fuel supply Diesel is very costly, and communities always don't have the means to buy diesel.	No
Solar Powered Water Pump	Use of solar powered water pump	Environmentally friendly. Does not require fuel to operate	The borehole operation could be impacted during cloud cover	Yes

7 DESCRIPTION OF THE RECEIVING ENVIRONMENT

7.1 Populational demography

The 2023 population census indicated that Zambezi region has total population of 142 373 people. The human population in Mashi Conservancy is estimated to be 1085 inhabitants. Overall, 61% of the region population makes up the labour force whereby 62% and 32% of the labour force is employed and unemployed respectively. The region has 8 electoral constituencies as presented in Table 2 below. Mashi Conservancy falls within Kongola and Linyanti Constituencies.

Table 2. Population distribution in constituencies of Zambezi Region (Census 2023)

Zambezi	**142 373**
Judea Lyaboloma	8 738
Kabbe North	12 253
Kabbe South	11 345
Katima Mulilo Rural	24 016
Katima Mulilo Urban	46 401
Kongola	12 069
Linyanti	10 425
Sibbinda	17 126

The average household size in the Zambezi Region was 4.4 people/household in 2015[8], with a relatively young population of approximately 39% of the total population to be less than 15 years old. Officially, employment rate for Zambezi Region is 62%[8] , which is closely like the national average of 63.1%. Most of the employable adults are engaged in the category of agriculture, forestry, and fishing as the main sources of household income. Tourism and wildlife management are an important growing component of the economy, providing jobs through accommodation establishments and conservation work.

[8] Namibia Statistics Agency.2015. Namibia Household Income and Expenditure Survey Report

7.2 Socio-economic profile

The livelihood activities of most residents of the area are based on livestock herding and crop cultivation, as well as the use of natural vegetation for food, fuel and building material. This is supplemented by income from employment and trade as well as social grant.

The CBNRM through Conservancies and Community Forests has significantly diversified livelihood options for people living in Mudumu North Complex. The largest portion of conservancy income is obtained from trophy hunting. Occasional sales of live game, which is captured and translocated to other areas to boost game numbers provide further income.

7.3 Regional Geology and Topography

According to Mendelsohn *et al 2022*, Zambezi region, is formed up of the Kalahari Basin. The Kalahari Basin was formed from the split between Namibia and South America to form a broad coastal plain which is now the Namib Desert. The Kalahari Basin gradually filled up with sand and water borne deposit. These deposits of sands, clay and calcrete formed the Kalahari Group.

The soils are fluvisols that are derived from river deposits, and these loamy soils vary locally in the proportions of clay (distributed in the areas which experience frequent flooding) and sand (found mainly in the non-flood prone areas). While soils are naturally fertile and suitable to a range of crops, the sandy parts have poor soils with rather low nutrient levels, similar to other soils in the Kalahari Sandveld[9].

Generally, the Zambezi region is flat and sloping toward the eastern direction. This is because, the geology of the area was formed from the filling up of the coastal plain with Namib sand and water borne deposits. Low-lying areas are inundated to varying extents, depending on the level of water in the Zambezi River which is usually high around January to March. Flooding is therefore

[9] Mendelsohn, J., Jarvis, A., Roberts, C., Robertson, T. (2002). Atlas of Namibia. A Portrait of the Land and its People. Cape Town (David Philip Publishers; New Africa Books (PTY) Ltd)

frequent in the region because of direct rainfall and rise in the Zambezi River from Angolan inflows.

The lithology of the aquifer in surrounding areas is not well known. The geohydrology indicates that the aquifers are found in Kalahari Deposits where soils are clayey loam with low infiltration potentials and faced with evaporation rates higher than rainfall which consequently causes low *potential* of ground water recharge.

7.4 Climate

Generally, Namibia is an arid country, with a large part of country having a climatic condition characterized by high temperatures and, periodic low rainfall and scarcity of water. High solar radiation, low humidity and high temperatures lead to very high evaporation rates, which vary between 3800 mm per annum in the south to 2600 mm per annum in the north. In many areas, potential evaporation is about five times greater than the average rainfall. Surface water sources such as dams are subject to high evaporation rates.

Rainfall decreases from east to west, with Zambezi Region receiving the highest rainfall of 600ml/year to less than 25 mm in the Southwest and West of the country. Similar to that of the Zambezi region, Mashi conservancy rainfall patterns are shown in (**see Figure 4**).

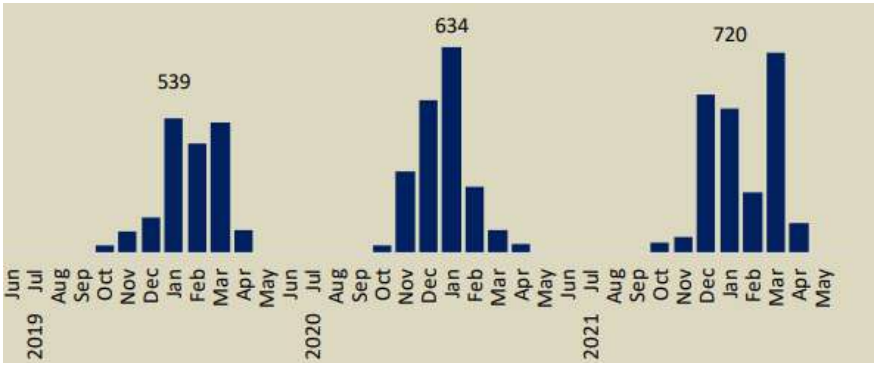

Figure 4: Rainfall trends in Mashi Conservancy (Source: NACSO,2022)

The regions' climatic condition is influenced by the Zambezi River, that of tropical nature with warm to hot temperatures. The warmest temperatures are from September to March, and the coldest between May to August. The dry season fall between April and October while the wet season is falls between November and March.

According to Mendelsohn et al 2022, the average summer temperature is 20ºC while during winter the average temperature is 5 ºC and the average maximum and minimum annual temperature is 35 ºC and 19 ºC respectively.

7.5 Biodiversity

7.5.1 Flora

Zambezi region is the most densely vegetated region in Namibia. Due to its tropical nature, the areas has a tropical forest covered by thick bush, shrubs mature trees which are predominantly Rose Wood and various species of Acacia trees and tall glass in the floodplain while non-flooded areas have trees of mopane *(Colophospermum mopane), Burkea Africana*, *Terminalia sericea* Grewia Cross berry, Camelthorn and Dichrostachys Cinerea trees.

7.5.2 Fauna

The conservancy, situated in the largest conservation area in the world, the Kavango Zambezi Transfrontier Conservation Area (KAZA – TFCA), nestled between Mudumu and Bwabwata National Park, is home to a diversity of keystone wildlife species. It is home to elephant, lion, leopard, cheetah, hyena, wild-dog, jackals, roan, sitatunga, tsessebe, duiker, kudu, bushbuck, steenbok, lechwe, high diversity bird species, crocodile, hippo and various fish species in the Kwando River. Elephant, crocodile, hippo, lion, leopard, hyenas are main problem causing animal in the conservancy. Herbivores destroy crops while feline predators attack livestock and seldomly human as well.

7.6 Surface Water

The primary surface water in Namibia is found in dams in Ephemeral Rivers and Perennial Rivers which have a potential of 200 Mm^3 and 1,105Mm^3 per annum respectively. The Ephemeral Rivers in the interior flow during the raining season, where western flowing rivers drains into the Atlantic Ocean, Fish River drains into Orange River, Cuvelai system, which is not a defined River system but rather Iishanas or flood plain drains into Etosha Pan and partially contribute to Kavango, Kwando and Zambezi River.

Perennial River, which has permanent flow are all found on the border of the country. Zambezi in the northeast has a mean annual flow of 40,000 Mm^3, its flow per second, 180Mm^3, is about twice the overall Dams capacity in Namibia at 100Mm^3. The Kwando / Linyati / Chobe has an annual flow of 10,000Mm^3, Kunene 5,500Mm^3 and Orange River with 11,000Mm^3 flow. The Kwando river is main source of surface water in the conservancy and this is animal are attacked by crocodiles, *"human-crocodile conflict"*.

7.7 Ground Water

Namibia highly relies on ground water. About 50-60% water is ground water which has a potential yield of 360Mm^3. Geologically, the main aquifers are the Karst, Otjwarongo, Omaruru Delta (OMDEL), Lower Kuiseb, Windhoek, Stampriet, Koichab and Ohangwena II.

Groundwater quality in much of the Zambezi Region is generally good, especially within 5-20 km from the rivers, which recharge the aquifers[9]. Boreholes provide water for people and livestock, and most boreholes are located along the main access roads, while piped water is delivered to communal water points.

7.8 Land Use

The conservancy is zone into various uses which includes **(Figure 5);**

1) Settlement & Cropping Area

2a) Multiple Use: Livestock Priority

2b) Multiple Use: Hunting Priority

2c) Multiple Use: Tourism Priority

3c) Exclusive Wildlife: Tourism

3d) Exclusive Wildlife: No Disturbance

Figure 5. Conservancy Zones (Source: NACSO, 2022)

8 THE NEED AND DESIRABILITY OF THE PROJECT

The project is in line with the CBNRM programme toward reducing HWC-WC and contributing to conservation incentives and poverty reduction. In addition, the project contributes to the aim and objective of the Integrated Water Resource Management (IWRM) for Namibia which aims to achieve a sustainable water resources management regime, contributing to social equity, economic efficiency, and environmental sustainability.

9 POLICY AND LEGAL FRAMEWORK

Namibia has devised relevant policies, regulatory frameworks and institutions to ensure the conservation, sustainable use, access and benefit sharing of natural resources, biodiversity and ecosystems in line with international conventions and national legislation. The country is also party to several international treaties, conventions and multilateral agreements, and takes part in various international standards such as UNDP's SES, reviews and processes that are relevant to sustainable management of resources; access to basic rights including a clean environment.

Table 3. Policy and Legal Framework

Legislation	Relevant authority	Applicability
The Namibia Constitution	**Government Republic of Namibia**	The Namibian constitution is the supreme law of the country and makes provision for environmental protection and sustainable development.
Environmental Management Act No. 7 of 2007	**Ministry of Environment, Forestry and Tourism**	To fulfil Article 95 of the Constitution, the Namibian Government enacted the environmental management act No.7 of 2007 that aims to promote the sustainable use of natural resources and provides the framework for the environmental and social impact assessment. The act further demands precaution and mitigation of activities that may have negative impacts on the environment and provision for incidental matters. Furthermore, the act provides a list of activities that may not be undertaken without an environmental clearance certificate.

Legislation	Relevant authority	Applicability
Environmental Assessment Policy (1995)	**Ministry of Environment, Forestry and Tourism**	The Environmental Assessment Policy for Sustainable development and Environmental Conservation emphasize the importance of environmental assessments as a key tool towards implementing integrated environmental management. Sets an obligation to Namibians to prioritize the protection of ecosystems and related ecological processes. The policy subjects all developments to environmental assessment and provides guideline for the Environmental Assessment. The policy advocates that Environmental Assessment take due consideration of all potential impacts and mitigations measures should be incorporated in the project design and planning stages (as early as possible).
Pollution Control and Waste Management Bill (in preparation)	**MEFT, MHSS and others**	The Pollution Control and Waste Management Bill, intents to regulate and prevent the discharge of pollutants into the air and water as well as providing for general waste management.
Public Health Act (Act No. 36 of 1919)	**Ministry of Health and Social Services**	The Public Health Act aims to protect the public from nuisance and states that no person shall cause a nuisance or shall suffer to exist on any land or premises owned or occupied by him or of which he is in charge any nuisance or other condition liable to be injurious or dangerous to health.
Water Resources Management Act (Act No. 11 of 2013)	**Ministry of Agriculture, Water and Land Reform**	This Act provides a framework for managing water resources based on the principles of integrated water resources management. It provides for the management, development, protection, conservation, and use of water resources.

Legislation	Relevant authority	Applicability
		Therefore, water abstraction should satisfy the provisions of the water act (water abstraction / borehole permit should be applied from the respective ministry).
Water Act No, 54 of 1956	**Ministry of Agriculture, Water and Land Reform**	This act states that, all water resources belong to the State. It prevents pollution and promotes the sustainable utilization of the resource. To protect these resources, this act requires that permits are obtained when activities involve the following: (a) Discharge of contaminated into water sources such as pipe, sewer, canal, sea outfall and (b) Disposal of water in a manner that may cause detrimental impact on the water resources
Soil Conservation Act No. 76 of 1969	**Ministry of Agriculture, Water and Land Reform**	This act promotes the conservation of soil, prevention of soil erosion. Prevent soil salinification.
National Heritage Act No. 27 of 2004	**Ministry of Urban and Rural Development**	The Act makes provision for the protection and conservation of places and objects of heritage significance and the registration of such places and objects. Part V Section 46 of the Act prohibits removal, damage, alteration or excavation of heritage sites or remains, while Section 48 sets out the procedure for application and granting of permits.
Regional Councils Act, 1992 (Act No. 22 of 1992)	**Ministry of Urban and Rural Development**	The Regional Councils Act legislates the establishment of Regional Councils that are responsible for the planning and coordination of regional policies and

Legislation	Relevant authority	Applicability
		development. The main objective of this Act is to initiate, supervise, manage and evaluate regional development.

10 PUBLIC CONSULTATION

Section 21 of the EIA Regulation requires the undertaking of an Environmental Impact Assessment (EIA) to follows a robust and comprehensive public consultation. This is an important process, because it gives members of the public, especially the Interested and Affected Parties to comment or raise concerns that may affect their socio-economic or general environment because of the project. Further, it solicits crucial local knowledge that the Environmental Assessment Practitioner may not have.

The Public Participation Process (PPP) was primarily focused on members of the conservancy. However, competent and or regulatory authorities such as Ministry of Environment Forestry and Tourism (MEFT), Ministry of Agriculture Water and Land Reform (MAWLR), where also consulted during the project development phase for application for the ECC.

10.1 Sachona Village Consultation

A community meeting for Sachona Village was held on 18 February 2024 at Sachona Sub-Khuta (**See Figure 6 below***)*.

Figure 6. Community Meeting at Sachona Village, on 18 February 2024 (Source: Red-Dune Consulting, 2024).

- The meeting was attended by 56 people, 36 women including Red Dune Consulting team and a facilitator from Integrated Rural Development and Nature Conservation (IRDNC) (**See Appendix A).**
- Mr. Robin Lyonga, the Vice-chairperson of the conservancy presented the background of the project and the meeting objectives. He informed the meeting that the proposed development of water points is a result of the conservancy request to be assisted in dealing with the challenge of HWC. He assured the meeting that, the proposed water development is a community project and no land will be required to be allocated to an individual or an institution.
- Red-Dune presented the meeting objectives, particularly the requirement of the Environmental Social Safeguards (ESS) as outlined in the project's Environmental Social Management Plan (ESMP).
- The meeting was informed that, the proposed water point will be developed with funding from Community Conservancy Fund of Namibia (CCFN) which received funding from the KfW development bank to support communal conservancies to mitigate issues of Human Wild Conflict (HWC).
- KfW require that the money is spent wisely and accounted for to the benefit of the communities and ensure that project implementing agencies observe the highest standard of Environmental and Social Safeguard (ESS) which aims to ensure that the project is environmental and social sustainability.
- The meeting was informed that, the ESS requirement does not be support projects if amongst many red-flags, if it involves:
    - Displacement of people
    - Destroying heritage sites
    - Damaging critical biodiversity habitat
    - Causing conflict in the community
- Furthermore, the meeting was informed that, the proposed site must not be on an occupied land.
- The meeting was further informed that the protection of the environment is provided for under the Environmental Management Act (Act No. 7 of 2007) (EMA) and its Environmental Impact Assessment Regulation 2012 where EMA has listed Water Resource Developments activities,

such as drilling of boreholes not to be undertaken without an Environmental Clearance Certificate (ECC).

- To obtain an ECC, a Social and Environmental Impact Assessment has to be undertaken, which is one of the core components of the consultation.
- Lastly the meeting was informed that, a consent letter is one of the requisites for the project to be implemented. This consent letter, called 'Free Prior Informed Consent' (FPIC) represent the community in understanding and agreeing to the proposed water development project. The FPIC was explained to the project as follows;
    - **FREE** refers to a consent given voluntarily and absent of coercion, intimidation or manipulation.
    - **PRIOR** means consent is sought sufficiently in advance of any authorization or commencement of activities
    - **INFORMED** means that community was well informed about the project and they know all information about the project.
    - **CONSENT** refers to the collective decision made by the rights-holders and reached through the customary decision-making processes of the affected peoples or communities.
- Free Prior Informed Consent was verbally obtained from the meeting by show of hands and a FPIC letter was drafted in the presence of the community, read and signed by the Induna (village headman) (**See Appendix B).**
- The community enquired the following;
    - How many boreholes will be drilled and will it only be drilling or will some boreholes be rehabilitated?
        - Red-Dune informed the meeting that only one borehole will be drilled, however, they may approach the conservancy on the matter of rehabilitation and this can be tabled at the Annual General Meeting.
    - Recommended the boreholes to be near household to ensure security of associated infrastructure especially solar panels.
        - This is not necessary as the borehole will be equipped with a fence to prevent theft and destruction by elephants

- The Induna thanked the project team and stated that they welcome the project with open arms, expressing deep appreciation for it.The meeting adjourned with a prayer, and a site assessment with the community was undertaken.

10.1.1 Site Assessment

- A site location for the drilling of the borehole was selected during the community engagement.
- **Location:** The site where the borehole will be drilled is an open space with no human settlements or crop fields on it. The GPS Coordinates 17,970555556 S, 23,45166667 E.
- **Surrounding Land Use**: There are homesteads situated approximately 300 m from the site and a crop field situated approximately 500 m (***See Figure 7***)

Figure 7: Selected Borehole Drilling Site, Sachona Village on 18 February 2024 *(Source: Red-Dune Consulting, 2024).*

Vegetation: There are no native or indigenous plants on both sites; however, the area is surrounded by Grewia Cross berry, Camelthorn and Dichrostachys Cinerea trees *(***See Figure 8***)*

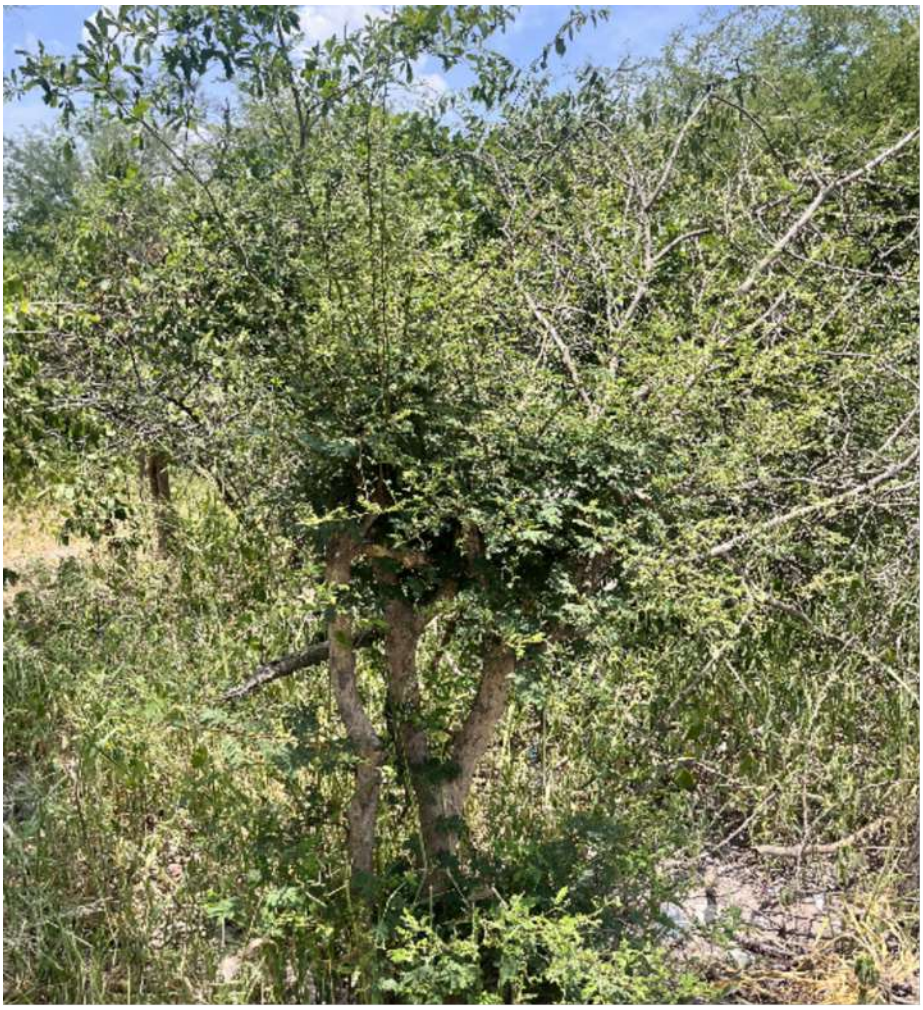

Figure 8: Dichrostachys Cinerea tree at Sachona Village on 18 February 2024 *(Source: Red-Dune Consulting, 2024).*

10.2 Ngara Village Consultation

A community meeting for Ngara Village was held on 21 May 2024 at Ngara Village (**See Figure 9 below***).*

Figure 9: Community Meeting at Ngara Village *(Source: Red-Dune Consulting, 2024).*

- The meeting was attended by 14 people, 8 man and 6 women and a facilitator from Integrated Rural Development and Nature Conservation (IRDNC) ***(See Appendix C).***
- The IRDNC facilitator, Mr. Obicious presented the background of the project and the meeting objectives. He informed the meeting that the proposed development of water points is a result of the conservancy request to be assisted in dealing with the challenge of HWC. He assured the meeting that, the proposed water development is a community project and no land will be required to be allocated to an individual or an institution.
- Red-Dune presented the meeting objectives, particularly the requirement of the Environmental Social Safeguards (ESS) as outlined in the project's Environmental Social Management Plan (ESMP).
- The meeting was informed that, the proposed water point will be developed with funding from Community Conservancy Fund of Namibia (CCFN) which received funding from the KfW development bank to support communal conservancies to mitigate issues of Human Wild Conflict (HWC).
- KfW require that the money is spent wisely and accounted for to the benefit of the communities and ensure that project implementing agencies observe the highest standard of Environmental and Social Safeguard (ESS) which aims to ensure that the project is environmental and social sustainability.

- The meeting was informed that, the ESS requirement does not be support projects if amongst many red-flags, if it involves:
    - Displacement of people
    - Destroying heritage sites
    - Damaging critical biodiversity habitat
- Furthermore, the meeting was informed that, the proposed site must not be on an occupied land.
- The meeting was further informed that the protection of the environment is provided for under the Environmental Management Act (Act No. 7 of 2007) (EMA) and its Environmental Impact Assessment Regulation 2012 where EMA has listed Water Resource Developments activities, such as drilling of boreholes not to be undertaken without an Environmental Clearance Certificate (ECC).
- To obtain an ECC, a Social and Environmental Impact Assessment has to be undertaken, which is one of the core components of the consultation.
- Lastly the meeting was informed that, a consent letter is one of the requisites for the project to be implemented. This consent letter, called 'Free Prior Informed Consent' (FPIC) represent the community in understanding and agreeing to the proposed water development project. The FPIC was explained to the project as follows;
    - **FREE** refers to a consent given voluntarily and absent of coercion, intimidation or manipulation.
    - **PRIOR** means consent is sought sufficiently in advance of any authorization or commencement of activities
    - **INFORMED** means that community was well informed about the project and they know all information about the project.
    - **CONSENT** refers to the collective decision made by the rights-holders and reached through the customary decision-making processes of the affected peoples or communities.
- Free Prior Informed Consent was verbally obtained from the meeting by show of hands and a FPIC letter was drafted in the presence of the community, read and signed by the are community leader (**See Appendix D and Figure 10).**

Figure 10. FPIC for Ngara Village

- The community enquired the following;
    - When will drilling start ?
        - Red-Dune informed the meeting that drilling will only start after the project is issued with an Environmental Clearance Certificate.
    - The community leader indicated that, they are happy for the meeting, he thanked the project team and stated that they welcome the project with open arms, expressing deep appreciation for it. The meeting adjourned with a prayer.

10.3 Site Assessment

- A site location the borehole was cleared of shrub and bushes. There is also an existing access road **(see Figure 11)**.
- **Location:** The site where the borehole will be drilled does not impact on human settlements or crop fields. The GPS Coordinates 17, 98500000 S, 23,37777778 E.

Figure 11: Selected Borehole Drilling Site, Ngara Village *(Source: Red-Dune Consulting, 2024).*

Vegetation: There are no native or indigenous plants on both sites; however, the area is surrounded by Grewia Cross berry, Camelthorn and Dichrostachys Cinerea trees

10.4 Meeting at Namushasha

The meeting at Namushasha was held on 22 may 2024, and Namushasha Village (**see figure 12)**.

Figure 12. Community Meeting at Namushasha Village (Source: Red-Dune Consulting, 2024).

- The meeting was attended by 22 people, 13 man and 9 women a facilitator from Integrated Rural Development and Nature Conservation (IRDNC). Two staff member from CCFN also attended the meeting (**See Appendix E**).
- Mr. Kadimba Shine, the Chairperson of the conservancy presented the background of the project and the meeting objectives. He informed the meeting that the proposed development of water points is a result of the conservancy request to be assisted in dealing with the challenge of HWC. He assured the meeting that, the proposed water development is a community project and no land will be required to be allocated to an individual or an institution.
- Red-Dune presented the meeting objectives, particularly the requirement of the Environmental Social Safeguards (ESS) as outlined in the project's Environmental Social Management Plan (ESMP).
- The meeting was informed that, the proposed water point will be developed with funding from Community Conservancy Fund of Namibia (CCFN) which received funding from the KfW development bank to support communal conservancies to mitigate issues of Human Wild Conflict (HWC).

- KfW require that the money is spent wisely and accounted for to the benefit of the communities and ensure that project implementing agencies observe the highest standard of Environmental and Social Safeguard (ESS) which aims to ensure that the project is environmental and social sustainability.
- The meeting was informed that, the ESS requirement does not be support projects if amongst many red-flags, if it involves:
    - Displacement of people
    - Destroying heritage sites
    - Damaging critical biodiversity habitat
- Furthermore, the meeting was informed that, the proposed site must not be on an occupied land.
- The meeting was further informed that the protection of the environment is provided for under the Environmental Management Act (Act No. 7 of 2007) (EMA) and its Environmental Impact Assessment Regulation 2012 where EMA has listed Water Resource Developments activities, such as drilling of boreholes not to be undertaken without an Environmental Clearance Certificate (ECC).
- To obtain an ECC, a Social and Environmental Impact Assessment has to be undertaken, which is one of the core components of the consultation.
- Lastly the meeting was informed that, a consent letter is one of the requisites for the project to be implemented. This consent letter, called 'Free Prior Informed Consent' (FPIC) represent the community in understanding and agreeing to the proposed water development project. The FPIC was explained to the project as follows;
    - **FREE** refers to a consent given voluntarily and absent of coercion, intimidation or manipulation.
    - **PRIOR** means consent is sought sufficiently in advance of any authorization or commencement of activities
    - **INFORMED** means that community was well informed about the project and they know all information about the project.
    - **CONSENT** refers to the collective decision made by the rights-holders and reached through the customary decision-making processes of the affected peoples or communities.

- Free Prior Informed Consent was verbally obtained from the meeting by show of hands and a FPIC letter was drafted in the presence of the community, read and signed by the Induna (village headman) (**See Appendix F and Figure 13).**

Figure 13. FPIC at Namushasha village *(Source: Red-Dune 2024)*

- The Chairperson thanked the project team and stated that they welcome the project with open arms, expressing deep appreciation for it.The meeting adjourned with a prayer, and a site assessment with the community was undertaken.

Site Assessment

- A site location for the borehole had an old borehole which has not been functioning for a long time **(see Figure 14)**

Figure 14. Platform of the old borehole *(Source Red-Dune 2024).*

- **Location:** The site where the borehole will be drilled is an open space and does not interfere with human settlements or crop fields on it. The GPS Coordinates (-17,97777778 S, 23,32694444 E)
- **Surrounding Land Use**: There are homesteads ins the surrounding, but that they will not be impacted 300 m by the borehole operation.

11 IMPACT ASSESSMENT

11.1 Impact Identification

Potential impacts were identified in accordance to the key Environmental Social Indicators (ESI)[10] and using literature review, site assessment and public participation process and experience for Red-Dune Consulting.

11.1.1 Air Environment

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.

11.1.2 Noise Environment

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.

11.1.3 Water Environment

Drilling of boreholes has the potential of polluting underground water resources through oil spills. Additionally, poor underground water management could lead to over-abstraction what may deteriorate ground water.

[10] Guidance Note UNDP Social and Environmental Standards Social and Environmental Assessment and Management July 2022

11.1.4 Biodiversity Environment

On the project risk is that poorly-informed or executed project activities could damage critical habitats and change landscape suitability for threatened species. This could be as a result of clearing of area to make provision for project activities which may lead to destruction fauna habitats.

11.1.5 Land Environment

Land degradation could happen if the movement of heavy vehicle in an area is not coordinated. Furthermore, project activities could produce pollution such as household and industrial, both solid and liquid which could pollute the land environment.

11.1.6 Employees And Community Health and Safety Environment

Occupational health and safety at workplace is a critical component to promote the welfare of the employees and public. The employment opportunities will create new social relationship which has the potential spreading diseases such as HIV-AIDS and workers as susceptible to vector diseases such as malaria. The bush working environment makes workers to be prone to venomous insect and snake bites which may lead to fatalities. Other health risk include workers exposure to excessive noise and dust and injuries.

11.1.7 Heritage and Archaeology Resources

Although this is part of the social environmental, due to its uniqueness and importance, a chance find will be developed. This impacts links to the project risk of activities to potentially damage critical habitats.

11.1.8 Dangerous good

Handling of fuel and lubricants at project sites could casus oil spill and pollute the environment.

11.2 Impact Assessment

11.2.1 Criterial for impact assessment

The criteria used to assess the impacts and the method of determining their significance is outlined below. This process conforms with international best practices and the Environmental Impact Assessment Regulations of Environmental Management Act, 2007 (Government Gazette No. 4878) EIA regulations.

11.2.1.1 Impact Type

Following the impact determination, the impacts are classified into two categories; positive and negative impacts.

Table 4. Impact Type

Impact type	**0**	No Impact
	+VE	Positive
	-VE	Negative

11.2.1.2 Probability of occurrence

All potential impacts are analysed to determine their likelihood of occurrences after proposed mitigation measures / residual effect after applying the developed mitigation measures.

Table 5. Likelihood occurrence

Likelihood occurrence	1	Improbable (Low likelihood)
	2	Low probability
	3	Probable (Likely to occur)
	4	Highly Probable (Most likely)

	5	Definite (Impact will occur irrespective of the applied mitigation measure)

11.2.1.3 Confidence level

The level of confidence residual effect[11] predictions which depends on the degree of uncertainty associated with the basis of understanding project interaction with the environment, available data/information, and the effectiveness of proposed mitigation. The confidence is determined under three levels Low, Medium and High (**Table 6**). When the uncertainty associated with the residual effect prediction increases, the level of confidence in the prediction becomes lower.

For example, the confidence level of uncertainty residual effect of noise, dust, vegetation disturbances and land degradation impacts by construction activities is high. However, the confidence level of uncertainty residual effect of drilling activities on the impact to heritage / archaeological resources is lower (thus a chance find is often developed as a precaution to mitigate the impact).

Table 6. Confidence level

Confidence level	L	1	Low	The uncertainty residual effect maybe well understood, but the impact severity is not known. Precautional approach mitigation measures based on literatures / world best practises are developed to reduce the impact significance to low levels.
	M	2	Medium	The uncertainty residual effect is partially understood with available information and practical mitigation measures with monitoring program to reduce the impact significance to low levels.

[11] Residual impacts refer to those environmental effects predicted to remain after the application of mitigation outlined

	H	3	High	The uncertainty residual effect is well understood and practical mitigation measures are developed to mitigate the impact significance to low levels.

11.2.1.4 Impact Significance

The residual effect prediction of the impact were rated under 5 categories; negligible=1, Low=2, Medium=3, High=4 and Severe=5.

Table 7. Risk Rating

1	**Negligible** (Based on the available information, the potential impact is found to not have a significant impact)	N
2	**Low** (The presence of the impact's magnitude is expected to be temporal or localized, that may not require alteration to the operation of the project	L
3	**Medium** (This impact is probable, limited in scale, expected to be of short term / temporary, can be avoided, managed and or mitigated with simple mitigation measures.	M
4	**High** (The impact is definite, mostly predictable, temporal, can be local, regional or national and in long term and reversible. These are impacts that may affect human rights, lands, natural resources, traditional livelihood, critical ecosystem services. The severity of these impact are more limited than sever impacts.	H
5	**Severe** (The impact is definite, it has significant adverse impacts on human population and or / the environment which are of large-scale magnitude and or spatial extend such as large geographic area, large number of people or transboundary nature. The impact duration is long term, permanent and often irreversible. Impacts include displacement of human, destruction of critical ecological systems and or cultural and heritage sites etc. The impact could have a no-go implication unless the project is re-designed or proper mitigation can practically be applied.	S

11.2.1.5 Duration of Impacts

Under this criteria, the impact is analysed based on the time at which the impact will last. During construction, most of the impact are immediate and short term.

Table 8. Impact duration

Duration	1	Immediate
	2	Short-term (0-5 years)
	3	Medium-term (5-15 years)
	4	Long-term (more than 15 years)
	5	Permanent

11.2.1.6 Geographical Scale

The impact is further analysed based on its geographical scale or spatial extend. For example, noise pollution from drilling activities will be site specific. Positive impacts such as potential government revenue through taxes and levies will be national, and employment will mainly be regional.

Table 9. Geographical extend of impact

Scale	1	Site specific
	2	Local
	3	Regional
	4	National
	5	International

11.2.1.7 Risk Assessment

The impact significance was determined using a risk matrix **(Table 10 below).** A five-by-five matrix was used where the impact severity was categorised and assigned scores from 1 to 5 as follows: Improbable=1, Low=2, Medium=3, High=4 and Severe=5. Similarly, the likelihood was

assigned scores as follows; improbable=1, Low Likely=2, Probable=3, High Probability=4, Definite=5. The impact rating was determined by multiplying the impact severity and likelihood.

Table 10. Risk assessment matrix[12]

LIKELIHOOD						
	5 Definite	5 Low	10 Medium	15 High	20 Severe	25 Severe
	4 High Probability	4 Low	8 Medium	12 High	16 High	20 Severe
	3 Probable	3 Low	6 Medium	9 Medium	12 High	15 High
	2 Low	2 Low	4 Low	6 Medium	8 Medium	10 Medium
	1 Improbable	1 Negligible	2 Low	3 Low	4 Low	5 Low
		1 Negligible	**2 Minor**	**3 Medium**	**4 High**	**5 Severe**
		IMPACT SEVERITY / CONSEQUENCE				
		Negligible	Low	Medium	High	Severe

11.3 Mitigation Hierarchy

Best practises call for mitigation measures to follow a mitigation hierarchy that favours (i) avoidance of potential adverse impacts, and where avoidance is not possible, then (ii) minimization and reduction; where adverse residual impacts remain, then (iii) mitigation measures need to be applied, and, as a last resort, (iv) measures to offset impacts that cannot be appropriately mitigated. According to EIS regulations, the objectives mitigations are to;

- Find environmental ways of doing thing
- Promote environmental benefits of the project
- Avoid, Minimise or remedy negative impacts and
- Ensure that residual negative impacts are within acceptable levels,

[12] Risk Management Guideline for the BC Public Sector (Province of British Columbia Risk Management Branch and Government Security Office 2012)

Further, during consideration of the mitigation measure, the following mitigation hierarchy was followed;

- Avoid the negative impact through preventative means,
- Minimise the negative impacts to acceptable low levels and,
- If the above two are not possible, remedy or compensate the impact.

11.4 Potential Negative Impacts of the Project

- Noise pollution from heavy machinery and drilling
- Soil disturbance / land degradation
- Loss of habitat and biodiversity from site preparations and occupation
- Air pollution from vehicle emission and dust emission from drilling activities
- Health and Safety risk
- Risk of pollution from generated domestic solid wastes
- Risk of contamination of ground water from oil, grease and lubricants from heavy vehicles, and drilling activities.
- Poaching

11.5 Potential Positive Impact of the project

- Reduced HWC
- Direct and indirect creation of employment opportunities
- Knowledge and technology transfer.

11.6 Planning Phase: Impact Assessment

To ensure that the project is accepted by the public and avoid possible conflicts, the Zambezi regional council, traditional authorities and affected communities were consulted.

11.7 Siting Phase: Impact Assessment

Typically, before drilling of a borehole, a site assessment undertaken to determine the optimum location for drilling a process called siting of a borehole. This process involve analysis of geohydrology property of the area using two main conventional methods; (i) electrical resistivity and (ii) ground conductivity. These method use Frequency Domain Electromagnetic operated by a highly trained geohydrologist.

During this phase, there will be no evasive activities that could cause harm to the physical environment. To ensure social cohesion with the siting team, it will be required for the locals, particularly the traditional authorities to be informed about the presence of the siting team in the area. This activities is usually undertaken by two people, who will carry hand held FDM. The sited location will be pinned for marking purposes.

11.8 Drilling Phase

Drilling is the major evasive and core environmental threat. This phase involves mobilization and moving of drilling equipment to the drilling site, construction of boreholes protective fence and solar panel platforms. Where necessary, setting up campsite at the drill site with supporting infrastructures such as ablution facilities, household solid waste and other solid waste. During this phase, occupation health and safety risk such as injuries emanating from operating equipment, insect (Mosquito) and snake bites as well as potential oil pollution. **Table 11** below outline all potential impacts during drilling phase.

Table 11. Social Environment: Impact Assessment

Project-Environment Interaction	Description	Mitigation Measures	Impact type	Likelihood occurrence	Severity	Impact Rating	Geographical Extend	Duration	Reversibility (R)	Significance	Confidence Level
Employment / Socio-Economic advancement of local	Possible exclusion of locals community from job opportunities. Unfair compensation of workers. It is not anticipated that a significant number of employment will be created during drilling	1. Ensure that all general work is reserved for local people unless in circumstances where specialized skills are required. 2. Fair compensation and labour practice as per Namibian Labour Laws must be followed	+ve	2	2	4	Regional	Life of project	n/a	Low	High

Project-Environment Interaction	Description	Mitigation Measures	Impact type	Likelihood occurrence	Severity	Impact Rating	Geographical Extend	Duration	Reversibility (R)	Significance	Confidence Level
		3. Ensure skill transfer to the locals 4. Use local supplier for good and service where possible									
Health and Safety for employees and general public	Job opportunities leads to new social relationship which often spread disease, particularly pandemic such as HIV and AIDS and substance abuse. Hiring off unlicenced employees to operate vehicles and special machinery pose safety risk to themselves, co-workers and public. Additionally, employees are subject to dust and	1. Provide awareness to the employees on dangers of HIV/AIDS, alcohol and drug abuse 2. Provide condoms on site 3. Develop a safety plan 4. Ensure that every employee goes through an induction course about safety to train employees on health and safety. 5. All drivers must be in possession of appropriate driver's licenses	-ve	2	2	4	Site Specific and Local	Project Duration	n/a	Low	High

Project-Environment Interaction	Description	Mitigation Measures	Impact type	Likelihood occurrence	Severity	Impact Rating	Geographical Extend	Duration	Reversibility (R)	Significance	Confidence Level
	noise pollution as well as other occupational health and safety issues	6. Adequate safety signs must be put at designated places. 7. Provide safe wears such as, overalls, safety boots, safety eyeglasses, Hand gloves and hard hat etc to employees 8. Adhere to the Labour act, non-toxic human dust exposure levels may not exceed 5mg/m3 for respiratory dust and 15mg/m3 for total dust. 9. Employees must NOT be exposed to noise levels above the required -85dB (A) limit over a period of 8 hours. 10. Abide by the Occupational Health and Safety and Labour Act of Namibia and other statutory requirement such as									

Project-Environment Interaction	Description	Mitigation Measures	Impact type	Likelihood occurrence	Severity	Impact Rating	Geographical Extend	Duration	Reversibility (R)	Significance	Confidence Level
		International Labour Practise (ILO) 11. Ensure adequate first aid kit on site taking into consideration, insect and snake bites 12. Supervisors must undergo an occupational health and first aid course, 13. Supply clean drinking water to the site, such as portable water tank; 14. Used gendered mobile toilets 15. Provide insect repellent, mosquito nets and if necessary immunization to prevent deadly diseases such as malaria.									

Project-Environment Interaction	Description	Mitigation Measures	Impact type	Likelihood occurrence	Severity	Impact Rating	Geographical Extend	Duration	Reversibility (R)	Significance	Confidence Level
Heritage and Archaeology	Potential unearthing of archaeological material or damaging heritage resources	1. Employee must be trained on the possible find of heritage and archaeological material in the area; 2. Implement a chance find and steps to be taken for heritage and archaeological material finding (Heritage (rock painting and drawings), human remains or artefacts) are unearthed 3. Stopping the activity immediately i. Informing the operational manager or supervisor ii. Cordoned of the area with a danger tape and manager to take appropriated pictures.	-ve	2	2	4	Site Specific	Construction / Drilling	R	Low	High

Project-Environment Interaction	Description	Mitigation Measures	Impact type	Likelihood occurrence	Severity	Impact Rating	Geographical Extend	Duration	Reversibility (R)	Significance	Confidence Level
		iii. Manager/supervisor must report the finding to the following competent authorities, National Heritage Council of Namibia (061 244 375) National Museum (+264 61 276800) or the National Forensic Laboratory (+264 61 240461).									

Table 12. Bio-Physical Environment: Impacts Assessment

Project-Environment Interaction	Description	Mitigation Measures	Impact type	Likelihood occurrence	Severity	Impact Rating	Geographical Extend	Duration	Reversibility (R)	Significance	Confidence Level
Biodiversity: Flora	Destruction of trees	1. Avoid cutting down mature and protected plant species. 2. Ensure that access roads are rehabilitated after use to enhance revegetation	-ve	2	2	4	Site Specific	Construction / Drilling	R	Low	High
Biodiversity: Fauna	Destruction of animal habitats such as bird nests, poaching, stealing of livestock	1. Do not kill animal, unless such animals pose eminent danger to humans 2. There must be ZERO tolerance to poaching to ensure this, no weapon and traps are allowed on site;	-ve	2	2	4	Regional	Construction / Drilling	R	Low	High
Surface and Ground Water Pollution	Heavy vehicle and machinery may pollute water sources from leakages of oils, hydraulic	1. Fuelling of heavy vehicle on site must be well coordinated at designated places, 2. Stationary vehicles must be provided with drip tray to capture oil, lubricants and hydraulic fluids leakages	-ve	2	2	4	Site Specific	Construction / Drilling	R	Low	High

Project-Environment Interaction	Description	Mitigation Measures	Impact type	Likelihood occurrence	Severity	Impact Rating	Geographical Extend	Duration	Reversibility (R)	Significance	Confidence Level
	fluids, lubricants and greases. These pollutants may reach underground water through seepage. Further surface water may be polluted from surface run off soils that is polluted.	3. All vehicle and machinery must be well service to avoid leakages 4. Provide and train on oil spill emergency response 5. Servicing of vehicles and machinery must take place at designate places									
Waste Generation	General household pollution and littering such as used oil cans	1. Provide skip bins to collect waste and be disposed of at an approved disposal site 2. Provide labelled household waste drums for household solid waste.	-ve	2	2	4	Site Specific	Life of project	R	Low	High

Project-Environment Interaction	Description	Mitigation Measures	Impact type	Likelihood occurrence	Severity	Impact Rating	Geographical Extend	Duration	Reversibility (R)	Significance	Confidence Level
	drums, metals, and household solid and liquid waste	3. Do not burry waste on site 4. Excavate a small biodegradable waste site that would be dump filled at the end of the project, alternatively, provide mobile toilets that will be disposed at an approved site and ensure separate ablution facilities for men and women. 5. Used oil, grease and lubricants cans must be collected in appropriate drums and disposed of at an approved site 6. Maintain good housekeeping on site. 7. Do not burry waste on site									
Dust Pollution	Land clearing, digging, excavation of trenches, drilling,	1. Movement of heavy vehicles must strictly be restricted on site. 2. Adhere to the minimum speed limit of 30 or 40km/hour when on farm roads.	-ve	2	2	4	Local and Site Specific	Immediate	R	Low	High

Project-Environment Interaction	Description	Mitigation Measures	Impact type	Likelihood occurrence	Severity	Impact Rating	Geographical Extend	Duration	Reversibility (R)	Significance	Confidence Level
	movement of vehicles and heavy machinery in site, transportation of material to site, will create fugitive dust which could be a nuisance to the surrounding.	3. On site where soil is loosened by vehicle movement, apply dust a suppression method such as water spraying. 4. During drilling, use water to suppress the dust									
Land degradation and pollution	Uncoordinated movement of heavy vehicles and uncoordinated land clearing	1. Movement of heavy vehicles must be coordinated and restricted to be on access roads 2. Normally, public gravel roads are meant for light vehicles drilling vehicles have the potential to	-ve	2	2	4	Site Specific	Life of project	R	Low	High

Project-Environment Interaction	Description	Mitigation Measures	Impact type	Likelihood occurrence	Severity	Impact Rating	Geographical Extend	Duration	Reversibility (R)	Significance	Confidence Level
	could lead to soil erosion. Possible spill and leakages of fuel and lubricants from vehicle and machinery could pollute the soil and eventually the ground water resource.	damage the access roads. Hence proper road maintenance must be implemented to ensure that the roads are left on good state 3. Fuelling of heavy vehicles on site must be well coordinated at designated places 4. Servicing of vehicles and machinery must take place at designated sites 5. Stationary vehicles must be provided with drip tray to capture oil, lubricants and hydraulic fluid leakages 6. All vehicles and machinery must be well serviced to avoid leakages 7. Provide and train on oil spill emergency response.									

11.9 Operational Phase:

The main activities during the operational phase of the borehole is water abstraction which, if not well monitored could lead to over abstraction and consequently to deteriorating of water quality and potential impacts on vegetation from deepening of water table. The borehole could also cause social conflict whereby community in the surrounding area could claim ownership of the borehole and may prevent other communities from using the borehole. **Table 13 below** outlines the potential impacts during the operational phase and proposed mitigation measures.

Table 13. Operational Phase Impact Assessment

Project-Environment Interaction	Description	Mitigation Measures	Impact type	Likelihood occurrence	Severity	Impact Rating	Geographical Extend	Duration	Reversibility (R)	Significance	Confidence Level
Reduced Human Wild-Life Conflict	The borehole operation will ensure domestic animals do not drink directly from the river.	1. Animal owners / herders should ensure that animals are made to drink from water points to prevent crocodile attack.	+ve	2	2	4	Site Specific	Life of project	R	Low	High
Increase in community water supply	Besides reducing HWC, the borehole will also make water	1. Aid in increasing water point in the village 2. Reduced distance travel by people to water points	+ve	2	2	4	Site Specific	Life of project	R	Low	High

Project-Environment Interaction	Description	Mitigation Measures	Impact type	Likelihood occurrence	Severity	Impact Rating	Geographical Extend	Duration	Reversibility (R)	Significance	Confidence Level
	readily available for household use by the community	3. Sustainable supply of water during drought									
Over abstraction of underground water	High and unsustainable water abstraction which could affect ground water quality	1. Do not abstract more than what is recommended by the permit 2. Where possible, install automatic measuring gauge to monitor abstraction 3. Monitor water level periodically 3. Carry out periodic pumping yield to assess aquifer sustainability 4. Undertake systematic water quality assessment	-ve	2	2	4	Local	Life of project	R	Low	High
Risk of water infrastructure destruction buy elephants	Elephant are notorious known for damaging water points in search for drinking water	1. Construct an elephant proof fence around the borehole and its supporting infrastructures 2. Build high and thick enough walls that will prevent elephants access to the water tank and	-ve	2	2	4	Local	Life of project	R	Low	High

Project-Environment Interaction	Description	Mitigation Measures	Impact type	Likelihood occurrence	Severity	Impact Rating	Geographical Extend	Duration	Reversibility (R)	Significance	Confidence Level
		solar infrastructures.									
Conflict of water use buy villagers	Claim of ownership of water point / borehole by some community members	1. Raise awareness of the indented purpose of the borehole 2. Ensure no one is made to be entitled to owning or have controlling power on who should use the borehole	-ve	2	2	4	Local	Life of project	R	Low	High
Theft of borehole infrastructures	There are reported cases where boreholes infrastructure such as solar panel are stolen	1. Construct theft proof fence to protect solar panels	-ve	2	2	4	Local	Life of project	R	Low	High

12 GRIEVANCE PROCEDURE

The Grievance Procedures will be a process to facilitate for an easy and smooth process in which stakeholders are able to submit their complaints about the project activities or its consequences i) free of charge ii) without fear of retribution iii) anonymously and iv) user friendly channels.

It is important to emphasise that the Grievance Procedure will not address HWC incidents per se, because those are not caused by the Project. Grievances that are eligible are, for instance, cases where a party is disadvantaged as a result of a Project activity, or as a result of negligence on the part of the Project to follow its procedures thoroughly or fairly. Complainants may be by actual or potential beneficiaries of the Project, or any members of the public.

In generally, the grievances process will follow six (6) Grievance Redress Mechanism (GRM) value chain, namely; i) Receive and log grievance, ii) Acknowledge grievance, iii) Assess and Investigate iv) Grievance Resolution, iiv) Sign-off on grievance and iiiv) Monitor and continuously evaluate the effectiveness of the GRM.

Grievances will be addressed through the channels in the institutional structure presented below, in an efficient, effective and consistent manner (**see Figure 12**).

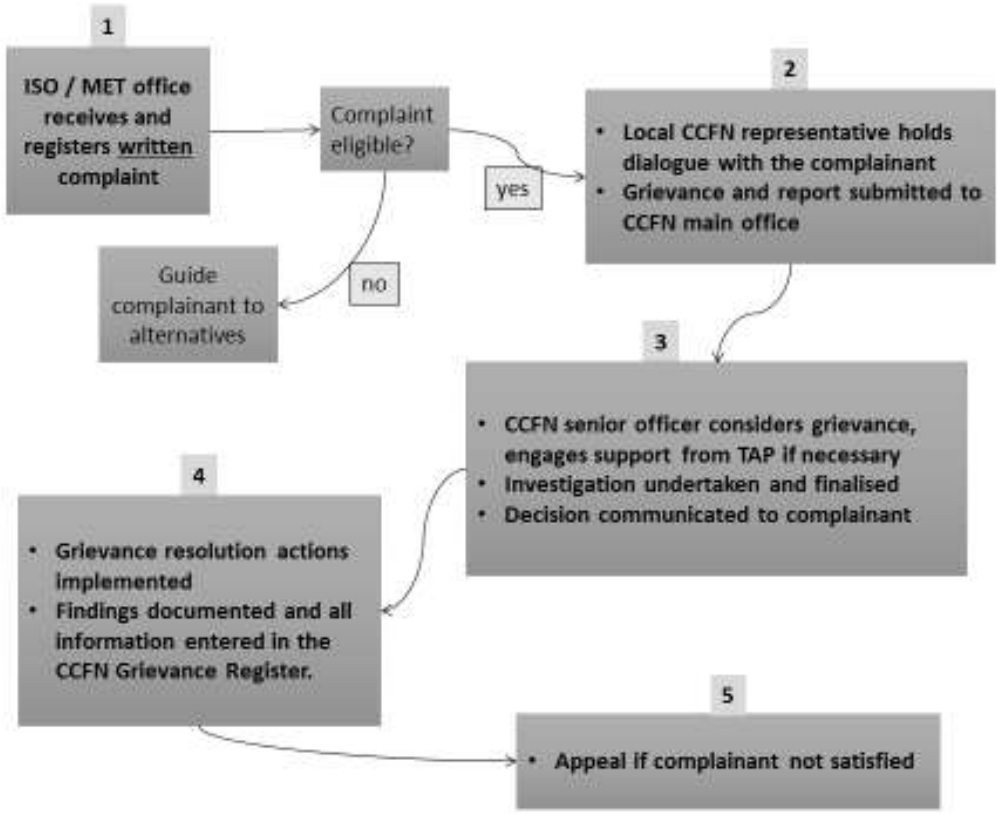

Figure 15. GRM flow chart (Source: ESMF_ Poverty Oriented Support to Community Conservation in Namibia)

The eligibility of the grievance will be assessed at the level where it is first received, at a local MEFT / ISO office (Step 1) and the following actions / steps will be undertaken. The grievance will be discussed with the complainant, with the objective of understanding the problem and giving the complainant a fair hearing (Step 2). The local CCFN representative will submit the grievance, and any notes of their own, to the CCFN head office for higher-level input to the issue (Step 2). The CCFN senior officer will investigate the substance of the grievance (Step 3). If necessary, assistance may be sought from the TAP. Further dialogue with the complainant and others affected by the grievance might also be necessary. The CCFN senior officer will compile a written report on the grievance and communicate the outcome to the complainant.

Any actions necessary to resolve the grievance will be implemented by the relevant parties, under the direction of the CCFN (Step 4). Resolution of the grievance will be documented and entered into the Grievance Register. Under normal conditions, a grievance will be resolved, and redress actions commenced within 30 days of receiving a complaint. A complainant is permitted to appeal against the decision by the CCFN, to the CCFN CEO (Step 5). In such a

case the CEO must present the grievance and the CCFN decision to the Board, for reconsideration.

13 DECOMMISSIONING AND REHABILITATION PLAN

Decommissioning is normally the reverse of construction where all installed equipment / structure must be removed. Supply of water to the community is aimed to be a life-long intervention unless of a pressing issue that would necessitate decommissioning. Aging equipment that requires replacement should be done by qualified Namibians to ensure smooth operation and constant water supply.

14 CONCLUSION AND RECOMMENDATIONS

14.1 Conclusion

With the available information, the following conclusions were made:

1. The area is known to have high yield aquifer.
2. Over-abstraction of water has not been reported in the area.
3. The area receives the highest rainfall in the country which increases potential of recharge.
4. HWC is critical in the area, and water is the main contributing factor.

14.2 Recommendations

- It is recommended to the approving authority for the issuance of the ECC.
- CCFN support the Conservancy to ensure intermittent testing of water quality and obtain necessary fitness approval.

15 ANNEX 1. GROUNDWATER MONITORING PLAN

The purpose of the groundwater monitoring plan is to make sure that suitable procedures are in place to monitor and evaluate the response of the aquifer and the surrounding environment to the abstraction process. Furthermore, the plan is aimed to control the impacts of groundwater abstraction and contaminant loads, and monitoring aquifer response and quality. The proposed procedures shall also serve as an early warning system for over-abstraction.

15.1 Groundwater Quality

It is essential that the quality of groundwater abstracted is monitored on a realistically regular basis, to serve as an early warning of quality changes that may occur due to the abstraction; natural causes; or pollution. Undertake intermittent water quality testing.

15.2 Groundwater Level Measurements

The level of groundwater in the aquifer will serve to inform the water quantity vs the rate of abstraction. This will be critical given low to no recharge due to lower rainfall in the area. This provision is provided for in the monitoring sheet for water meter readings provided by the MAWLR to the borehole operator. It is therefore important that hydrological baseline information of water level is recorded to ensure time-variant collection of data. This type of monitoring becomes effective proof of errors when MAWLR also carries out periodic inspections.

16 REFERENCES

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17 APPENDICES

17.1 Appendix A. Sachona Village Attendance Register

MEFT

STAKEHOLDER CONSULTATION FOR ENVIRONMENTAL SCOPING STUDY AND DEVELOPMENT OF ENVIRONMENTAL MANAGEMENT PLAN(s) FOR THE DRILLING OF WATER POINT IN COMMUNAL CONSERVANCIES OF ZAMBEZI AND KAVANGO WEST REGION."

Place: Sachona Sub-Khuta (Mashi Conservancy)

Date: 18 February 2024

Time: 11h00

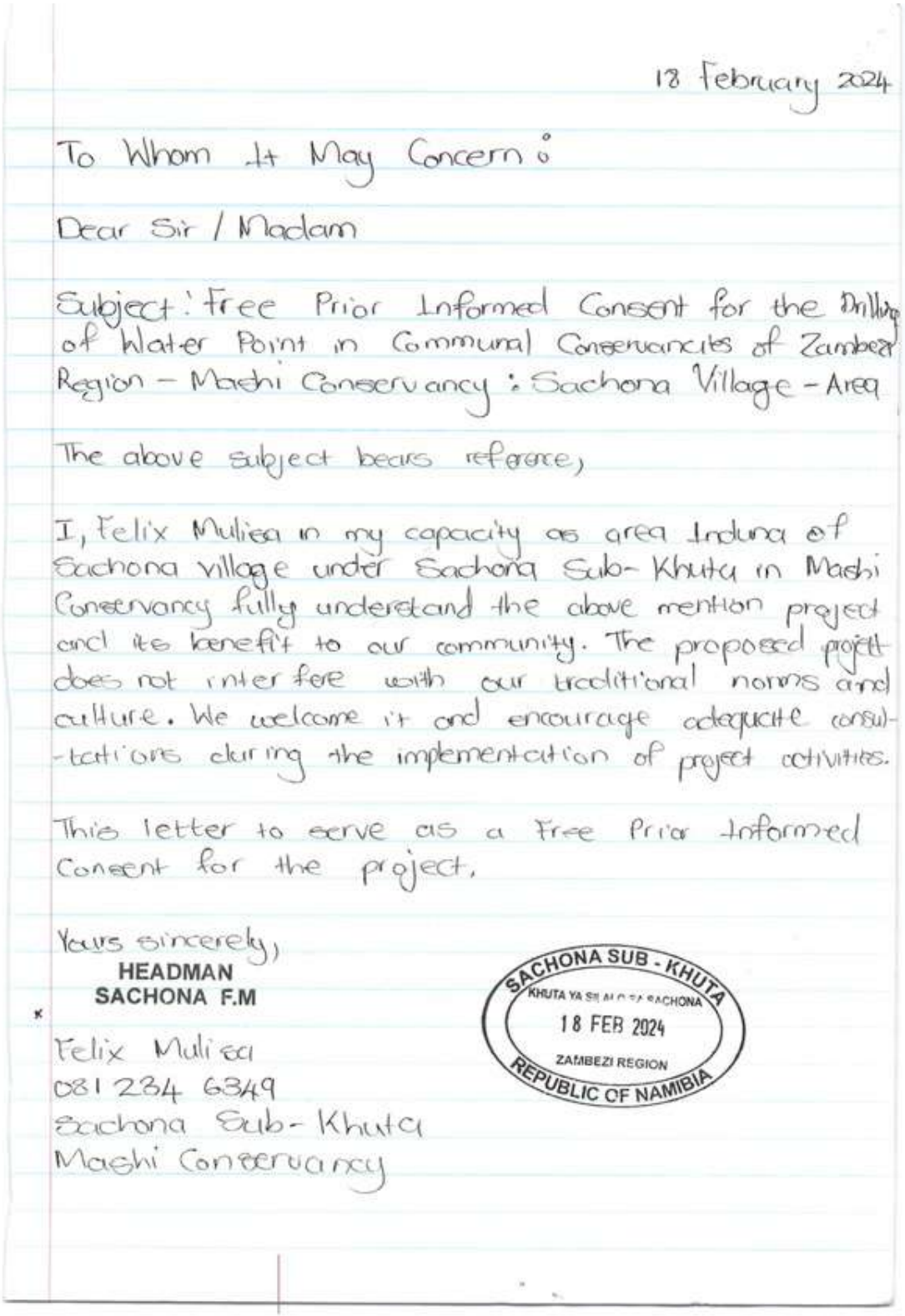
No	Name	Gender	Organization	Position	Cell:	Email	Signature
1	Sigrid Nyambe	F	Red dunes	Consultant	0816588629	sigridnyambe@gmail.com	[signature]
2	Obiriaus Siyanga	M	IRDNC	Facilitator	0813383351		[signature]
3	Mukule Richard	M.	Mashi Cons	Manager	0817377271	richgangmukule85@gm	[signature]
4	Kamei Daglas	M	TA	T.A.	–		K.D.
5	Siyama Elizabeth	F	TA	T.A	–		[signature]
6	Sitina Beauty	F	TA	Ngambela	0816681385		B. Sitina
7	Boma Willisen	F	mashi Conse	member	–		m.m
8	shamaoma marine	F	mashi Conse	member	–		S.m
9	Mutanincwa Mafentcho	F	mashi Conse	member	–		m.m
10	Siambiso Doreen	F	mashi	member	0814061946		[signature]
11	Divai Edgar	m	mashi	member	0816839067	N/A	[signature]
12	Muyahiso Ronnety	F	mashi	member	0814215984		[signature]

13	Madyaoo Tronellia	F	mashi Conse	member	0813187852		
14	Kandunda maria	F	mashi Conse	member	--		K. M
15	Tubafwile Vistrongh	F	mashi Conse	member	0814451097		T.V.K
16	Sivula Singai	F	mashi Conse	member	0814199[illegible]		
17	Mikatazo Rosety	F	mashi Conse	member	0816980873		
18	Sanyuka Gradys	F	mashi Conse	member			S. S
19	Muzimisa Judith	F	mashi Conse	member			M. J
20	Kalundu Lunza	F	mashi Conse	member	0887445992		
21	Ndala Fenter	m	mashi Con	member	—		N.F
22	Shamalopa Nangela	F	mashi Conse	member	0813138917		S.N.
23	Samuhepwe Visco	m	mashi Conse	member			
24	Ngoshi Muyenga	m	mashi Conse	member			
25	Sanyuka Elvin	m	mashi Conse	F.O. ~~member~~	0818451883		
26	Tulunzi Victor	m	mashi Conse	Drive	0816234345		
27	Kyka Thimango	m	mashi Conse	member	0817733507		Tkimango
28	Ifumbela Namasiku	F	mashi Conse	member	0818033483		

	Baamalopa Sydney	m	mashi Conse	member	—		SSB
30	majumo Gloria	F	mashi Conse	member	0814780357		m.G
31	Murundu mabanje	F	mashi Conse	member	—		m.m
32	mabote fesca	F	mashi Conse	member	—		M.K.P
33	mabote makena	F	mashi Conse	member	—		m.m
34	Pisaso mayemi	F	mashi Conse	member	—		P. m
35	pisaso Mayenga	F	mashi Conse	member	—		P. m
36	Kanguwere Muyenga	m	mashi Conse	member	—		Kanguweru
37	Diya Emelda	F	mashi Conse	member	—		D.E
38	Kabalelwa lisa	F	mashi Conse	member	0813647260		KB
39	mubumbulwa Aggies	F	mashi Cons	member	0818751601		Agnes
40	MuyendekwaSiongi	F	mashi Cons	member	—		m.S
41	Lishoni Ericah	F	mashi Conse	Area rep	0814881280		E. Lishoni
42	Mulisa Maria	F	mash Cons	Area rep	0818149163		mulisa m
43	Mubonda Lector	M	Mashi Cons	Area rep	0812193129		Mbuida
44	Ndola Charles	M	Mashi Cons	T.A	-		Ndola c
45	Tubanyanyame.M	F	Mashi Cons	Area rep	0813858506		T.M

46	Lunyandile Berinah	F	Mashi conse area rep	area rep	081 2320838		
47	Musho Kimwe	M	Mashi conservan	Area rep	0818038680		MK
48	Joani Andreas	M	Mashi Conse	Area rep	—		
49	Victor Muinelo	M	MASHI	T.A	081286582 5		
50	Kasimba Esther	F	Mashi	T. A	0817894304		
51	Weni Benitha	F	mashi	T. A	—		Weni. B.
52	Bobin Lyonga	M	Mashi	Vicechair	0817515824		
53	Felix Mulisa	M	Area Eachong Indo Khutei	Area Indure	081284 6369		F. M
54	Pilgelo Mulisa	F	Sachona		0812346389		P Mulisa
55	Margaret Nzundamo	F	Sachona		0813330772		M. N. Nzundamo
56	Mundjuh Donge	M	RDC	Rep-Dune	0811497887		
57							
58							
59							
60							

17.2 Appendix B. Sachona Village Consent



18 February 2024

To Whom It May Concern:

Dear Sir / Madam

Subject: Free Prior Informed Consent for the Drilling of Water Point in Communal Conservancies of Zambezi Region – Mashi Conservancy: Sachona Village – Area

The above subject bears reference,

I, Felix Muliea in my capacity as area Induna of Sachona village under Sachona Sub-Khuta in Mashi Conservancy fully understand the above mention project and its benefit to our community. The proposed project does not interfere with our traditional norms and culture. We welcome it and encourage adequate consultations during the implementation of project activities.

This letter to serve as a Free Prior Informed Consent for the project.

Yours sincerely,

HEADMAN
SACHONA F.M

SACHONA SUB - KHUTA
KHUTA YA SACHONA
18 FEB 2024
ZAMBEZI REGION
REPUBLIC OF NAMIBIA

Felix Muliea
081 234 6349
Sachona Sub-Khuta
Mashi Conservancy

17.3 Appendix C. Ngara Village Attendance Register

MEFT

STAKEHOLDER CONSULTATION FOR ENVIRONMENTAL SCOPING STUDY AND DEVELOPMENT OF ENVIRONMENTAL MANAGEMENT PLAN(s) FOR THE DRILLING OF WATER POINT IN COMMUNAL CONSERVANCIES OF ZAMBEZI."

Place: NGARA VILLAGE
Date: 21 MAY 2024
Time: 14:00 – 17:00

No	Name	Gender	Organization	Position	Cell:	Email	Signature
1	SAYUKA . E.	M	NGARA	F. O.	0818450898		[illegible]
2	SINOMBO . A.	M	NGARA		0812220527		[illegible]
3	NGOSHI . R	M	NGARA		0817941408		[illegible]
4	SINOMBO . B	M	NGARA				[illegible]
5	KAWANA . C	M	NGARA				[illegible]
6	KAPIMBA . M	F	NGARA				K-M
7	DIYAI . S	F	NGARA				D.S
8	MBANGO . A	F	NGARA				M.A.
9	KAPELWA . I	F	NGARA				K.I.
10	SIYONGISO I	M	NGARA				S.I
11	KAYIRA C	M	NGARA				K.C.
12	KATEMBA . M	F	NGARA				

17.4 Appendix D. Consent Letter for Ngara Village

21 May 2024

To Whom It May Concern:

Dear Sir / Madam

SUBJECT: FREE PRIOR INFORMED CONSENT FOR THE DRILLING OF WATER POINT IN COMMUNAL CONSERVANCIES OF ZAMBEZI REGION, MASHI CONSERVANCY NGARA VILLAGE

The above subject bears reference,

I, Alex Kapitao Siñombo as the area ~~Headman~~ Leader of Ngara Village under the Mafwe Traditional Authority in Mashi Conservancy fully understand the above-mentioned project and its benefit to our community. The proposed project does not interfere with our traditional norms and culture. We welcome it and encourage adequate consultation during the implementation of project activities.

This letter to serve as a Free Prior Informed Consent for the project.

Yours Sincerely

Alex Kapitao Siñombo
~~Name of Headman~~
Name of community leader
Traditional Authority
Mashi Conservancy

Signature

081 222 0527
Cellphone Number

Stamp

17.5 Appendix E. Namushasha Village Attendance Register

MEFT

STAKEHOLDER CONSULTATION FOR ENVIRONMENTAL SCOPING STUDY AND DEVELOPMENT OF ENVIRONMENTAL MANAGEMENT PLAN(s) FOR THE DRILLING OF WATER POINT IN COMMUNAL CONSERVANCIES OF ZAMBEZI."

Place: NAMUSHASHA VILLAGE
Date: 22 MAY 2024
Time: 09:00 – 13:00

No	Name	Gender	Organization	Position	Cell:	Email	Signature
1	Kadumbo Shine	M	Namushasha	chairperson	0812216778	shinemokasha@gmail.com	[illegible]
2	Kadimba Linus	M	Namushasha	Health Assistant	0813015644		[illegible]
3	Mulahda Jonas	M	Namushasha		–		Mulanda
4	Sehani Neviter	F	Namushasha		0814287731		N Sehani
5	Chapu Memory	F	Namushasha		0812481117		[illegible]
6	Manyuka Wambi	F	Namushasha	member	0816665691		M.W
7	Sakumeneka W	F	Namushasha	member	–		S.W
8	Sehani Ellena	F	Namushasha		0814875539		E Sehani
9	Martha Amukoa	F	Namushasha	member	0814478267		[illegible]
10	Lubilo Edina	F	Namushasha	member	–		[illegible]
11	Sakumeneka	F	Namushasha	member	–		S B
12	Kumana M	M	Namushasha	member	–		[illegible]

17.6 Appendix F. Consent Letter for Namushasha Village

22 May 2024

To Whom It May Concern:

Dear Sir / Madam

SUBJECT: FREE PRIOR INFORMED CONSENT FOR THE DRILLING OF WATER POINT IN COMMUNAL CONSERVANCIES OF ZAMBEZI REGION, Mashi ~~KWANDO~~ CONSERVANCY NAMUSHASHA VILLAGE

The above subject bears reference,

I, Coster Shamaoma Munuma as the area Headman of Namushasha Village under the Mafwe Traditional Authority in Mashi ~~Kwando~~ Conservancy fully understand the above-mentioned project and its benefit to our community. The proposed project does not interfere with our traditional norms and culture. We welcome it and encourage adequate consultation during the implementation of project activities.

This letter to serve as a Free Prior Informed Consent for the project.

Yours Sincerely

C.S Munuma
Name of Headman

PP [illegible]
Signature

Mafwe
Mashi
Traditional Authority
~~**Kwando**~~ **Conservancy**

081 3317622
Cellphone Number

Stamp

MAFWE TRIBAL KHUTA
KADIMBA SUB-KHUTA
NAMUSHASHA AREA
2 2 MAY 2024
KATIMA MULILO
REPUBLIC OF NAMIBIA