



Background Information Document (BID)

ENVIRONMENTAL IMPACT ASSESSMENT (EIA) STUDY AND ENVIRONMENTAL MANAGEMENT PLANS FOR GOBOBOSEB SMALL-SCALE MINING HOTSPOT IN ERONGO REGION

PURPOSE OF BID

- Provide a brief background about the study
- Explain what the EIA process entails & the possible environmental impacts; and
- Invite Interested and Affected Parties (I&APs) for comments and inputs

1. INTRODUCTION AND BACKGROUND

1.1 Introduction

Mr. Joseph Kondja Amushila, here to refer as, an Individual Consultant (IC), has been appointed by the United Nations Development Programme (UNDP) to conduct a collective Environmental Scoping study and develop an Environmental Management Plan (EMP) for Goboboseb Small-Scale Mining (SSM) hotspot in Erongo Region.

The Goboboseb mining hotspot consists of mining claims which are owned and operated by different individuals and/or as groups. Mining activities mainly include artisanal and semi-mechanized methods which are used in extracting a wide range of gemstones. Although mining activities have been taking place for many years at these areas, there has not been any Environmental Impact Assessment study done. Thus, ECCs for SSM have in the past been issued upon completion of Environmental questionnaire and signing a pro-forma Environmental Contract. In terms of the Environment Management Act (Act No 7 of 2007), all mining and quarrying activities cannot be undertaken without an Environmental Clearance Certificate, hence this study.

1.2 Purpose of the EIA

To facilitate the development of EMPs, and subsequent issuance of ECCs by the Environmental Commissioner, MME is assisting Small-Scale Miners in the two mining hotspots to comply with the statutory requirements.

The purpose of the EIA study is as follow.

- i. Identify, investigate, and evaluate all potential impacts of the mining activities on the physical environment, social, cultural, and economic environment.
- ii. Review relevant and applicable legislations
- iii. Consult relevant stakeholders and potential Interested and Affected Parties (IAPs)
- iv. Prepare Environmental Scoping reports
- v. Compile Environmental Management Plans for each mining site
- vi. Submit the Environmental Scoping Reports and Environmental Management Plans (EMPs) to MEFT in a prescribed manner as per EMA Regulations of 2012.

1.3 Terms of References (ToR)

The ToR provided by the client are inferred to the requirements of the Environmental Management Act (Act No. 07 of 2007) and its Regulations of February 2012.

The consultant is required to conduct a collective Environmental Scoping study, compile Environmental Management Plans for the two small-scale mining hotspots as mentioned above and submit to MEFT for approval.

2. DESCRIPTION OF THE SMALL-SCALE MINING ACTIVITIES

The Goboboseb mining hotspot encompasses several mining claims, owned and operated by different individuals and/ or groups, from which a range of semi-precious stones such as *tourmaline*, *smoky quartz*, *beryl*, *amethyst*, *prehnite*, *rock crystals* and *Schorl* are extracted. Mining methods used in extraction of these gemstones varies from Artisanal to semi-mechanized.

a). Artisanal – Operations ranges from open pit to underground small-scale mining. This method mostly involves manual digging and excavation of the overburden and/or drilling on the granite rock with an identified crystalized miarolitic or vein. The depth of excavation depends on the quality and quantity of crystals after which the pit/vein can be abandoned for a more promising site.



Figure 1 Small scale mining activities

Equipment used in Artisanal methods includes.

Equipment	Uses
Pick mattock and Shovel	excavation
Jackhammer	rock breaking
Driller	drill holes/rock breaking
Generator	power
Chisel, Hammer	extraction
Small air compressor	Ventilation

b). **Semi-mechanized** – This method includes using excavator, bulldozers, and loaders to remove overburden and rock hammer to break rock bodies. Some small-scale miners also use Air Compressor for rock breaking. While some SSM own semi-mechanized equipment most of them relies on middlemen.



Figure 2; Semi-mechanized mining operations

Equipment	Uses
Hydro Compressor	Rock breaking
Excavator, TLB	Excavation
Spade, Chisel, Hammer	Extraction

Economic gains from small-scale mining activities is not guaranteed as weeks and months can pass by without extracting valuable gemstones. However, the two hotspots occasionally do produces high concentrations of exceptionally good quality crystals in “pockets”. The most sought after gemstones are aquamarine crystals. Grading is also done manually based on the attractiveness of the gemstones. High quality crystals are sold to established buyers in nearby towns i.e. Uis, Karibib, Swakopmund while lower value gemstones i.e. black tourmaline are sold locally to collectors and tourists

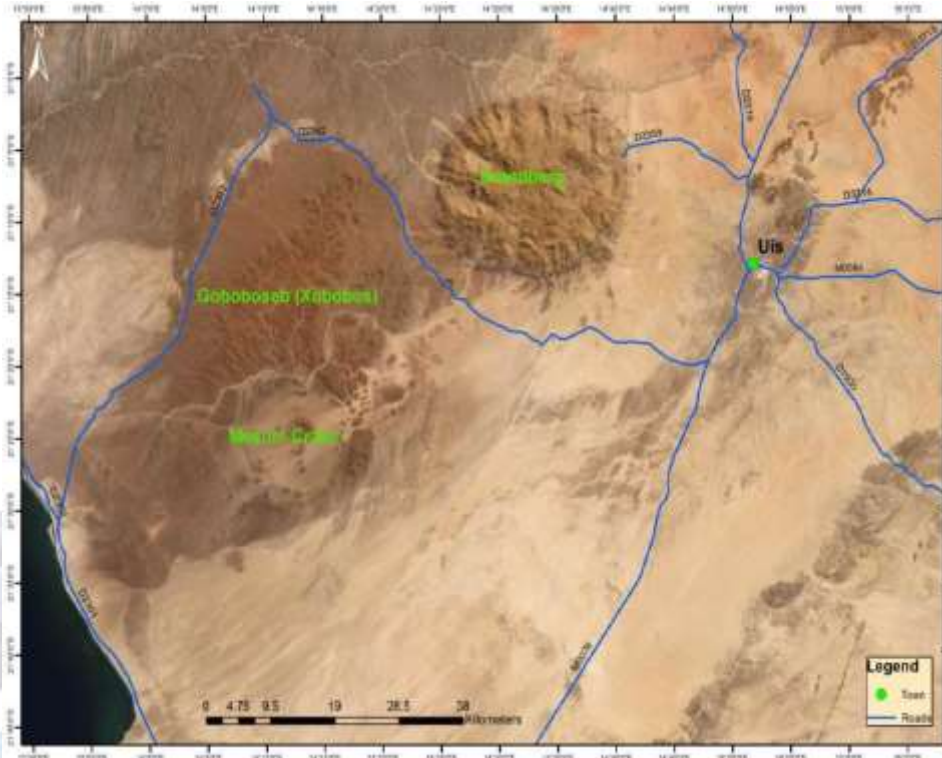


3. DESCRIPTION OF THE AFFECTED ENVIRONMENT (STUDY AREA)

3.1 Goboboseb mining hotspot

a). Locality

Goboboseb is located approximately 80 km west of Uis, west of the D2342 road from Uis to Brandberg mine on co-ordinates -21°15'00"S and 14°10'30"E.



b). Land tenure and surrounding land uses

The Xobobos hotspot area is a communal land under the Daure Dama Traditional Authority. Politically, the area falls under the Dâures Constituency of the Erongo Region. The area also forms part of the Tsiseb Conservancy. The mining hotspot is located few kilometers west of the Brandberg Massif which attracts tourists in the area.

c). Socio-economic environment

This hotspot has approximately 80 small scale miners who exploit gemstones such as amethyst and rock crystal. This operation mainly focuses on geodes which are sold to local dealers and foreign collectors.

Most of the miners reside at the mining area in tents and houses made of corrugated iron sheets. The area is slowly turning into a village and currently a home to about 80 Scale-Scale Miners, of which majority are men. Most of the miners are residents of Uis and surrounding villages while few of them originates from other parts of the country and occasionally travels back especially during the festive season.

Water and other amenities are sourced from Uis (60 km) and water is stored in tanks (about 25,000liters). Previously these miners use to collect water for everyday usage from a borehole west of Brandberg, however water from this source is not the best for drinking.



d). Biophysical environment

The Xoboxobos hotspot area is made up of the prominent geological formation of the Etendeka lavas of which the Brandberg Mountains is the major feature. The mineralization of the mining area is made up mainly of *mica schist, minor quartzite, graphic schist, marble, mudstone, sandstone, siltstone, shale, and limestone.*



The main habitats directly affected by the small-scale mining activities are *gravel plains, and rocky ridges.* Other habitats in the area such as incised valleys, caves and inselberg may also be indirectly affected.

The local flora consists of a variety of species most of which are endemic to the area. Typical of the area is *Welwitschia mirabilis, Zygophyllum cylindrifolium Schinz, Stipagrostis damarensis, Danthoniopsis ramosa, Acacia montis-ustii* etc.

The local fauna include mainly the desert adapted animals which includes large wildlife such as *mountain zebra, African Wild Cat, Cheetah* as well as *invertebrates, mammals, reptiles, and birds.* Due to its desert environment and its proximity to the Brandberg Mountain as well as the coastal line, the area can be considered a pristine environment with high to very high vulnerability.

4. ASSESSMENT PROCESS

4.1 Baseline study

The EIA study started with the collection of baseline information both about the proposed development and the affected area. Baseline information will be used as a basis for the assessment of potential impacts.

This BID is prepared to provide background information of the project to relevant IAPs and stakeholders in order to solicit

4.2 Public Consultation

Consultations form an integral part of the EIA process; hence, relevant stakeholders are identified and invited to submit comments for consideration in the study.

The consultation process will enable an integrated and transparent approach which will result in a sustainable development that is environmentally friendly, economic viable and socially acceptable. The consultant will consult relevant stakeholders and Interested and Affected Parties (IAPs).

✓ List of identified stakeholders

Tubussis	Xoboxobos
Erongo Regional Council	
#Gangu Conservancy	Tsiseb Conservancy
Karibib Constituency	Uis Settlement
Daures Constituency	
!Oe-#Gan Traditional Authority	Daure Dama Traditional Authority
MEFT, MME, MAWLR	
National Heritage Council (NHC)	
Small Scale Miners Association	
Erongo Mountains Sanctuary, Omandumba Farm	Elephant Rock Lodge

Above are the identified stakeholders that will be issued with this BID and will be invited to provide inputs for consideration in the Scoping report.

✓ Potential Interested and Affected Parties.

Potential Interested and Affected parties (I&AP) were notified through newspaper advertisement and public Notices that were placed at different public venues. The newspaper advertisement appeared twice in two separate newspapers (The Namibia and New Era newspapers) for two consecutive weeks. In addition, invitations to the public meetings were done through the local Traditional Authorities.

The public meeting took place as follows

Venue: Community Hall, Uis

Date: 30 September 2020

Time: 14:30

Small Scale Miners at both hotspots were directly interviewed during the site visit and their inputs were considered for incorporation in the Scoping report.

4.3 Scoping

The scoping study will provide detailed information about the Small-Scale Mining activities and description of the receiving environment.

4.4 Assessment of potential impacts

Assessment of potential impacts of SSM activities on the socio-economic and biophysical environment will be conducted using different matrices. Impacts will be rated in terms of significance based on the nature, probability, intensity and extent.

4.5 Scoping Report and EMP

Draft Scoping Report and Draft EMPs will be circulated to all stakeholders and registered IAPs for comments before submitting to MEFT.

5. PRE-IDENTIFIED ISSUES

Below is a list of issues of concerns that were identified during the site visits and consultations with Small-Scale Miners. These issues will be investigated in detail during the Scoping phase.

5.1 Socio-economic issues

Aspect	Description of impacts	Nature of Impact
Marketing	There is lack of market information to enable SSM to sell their products at right price	Negative Establish formal market for gemstones and Provide available market information
Mining Claim Registration process	Due to lack of awareness or due to the cumbersome registration process, some SSM were unable to claim the mining spots they have been operating for many years and as result lost their places to Claim Owners. This has resulted in conflicts among SSM as well as between SSM and Claim owners. Some miners also feel that their digging/mining spots are too small to register a Mining Claim	Negative
Land use	Some Claim owners register and peg claims without consultation with the local Traditional Authority or Conservancy. This could result in land use conflicts	Negative <i>According to the Mineral Prospecting Act, any person who wants to carryout prospecting or mining operations on Communal land should notify the TA and Board prior to making any application of the intended activities.</i>
Support	Most of the SSM are in need of	Neutral (The more advance the mining operation, the more aggressive its impacts to the environment. However, Advanced methods are more safer for SSM)
Livelihood	SSM activities serves as livelihood support for many people	Positive
Economic contribution	SSM can be an important contributor to the GDP	Positive -Formalization and Protection of the SSM industry -Encourage value addition and reduce export of un-polished products.
Gender issue	Since the gemstone traders are often women, the gender ratio for this industry has been somehow improved.	Positive

5.2 Biophysical issues

Aspect	Description of impacts	Nature of Impact and possible measure/s
Surface disturbance	Vegetation loses from excavation and trenching process	Negative Rehabilitation of mining areas should be concurrent with the mining activities. (SSM excavate and use excavation sites continuously).
Waste Management	Windblown litter can be observed at SSM camps and surroundings There are no proper ablution facilities mining areas	Negative (Some SSM do their best to collect and safely dispose waste generated)
Public safety	Un-rehabilitated trenches and pits pose serious threats to wildlife and domestic animals.	Negative Encourage rehabilitation, Mining tailing should be discarded in an orderly and controlled manner
Nuisance	Generation of nuisance from noise and dust associated with mining activities	Negative
Landscape	Mining trenches and pits decrease the aesthetic view and attractiveness of the landscapes	Negative Encourage rehabilitation, Mining tailing should be discarded in a orderly and controlled manner
Grazing	Mining activities in the area of Tumib affects an area suitable for grazing	Negative (Pegging of future claims should be done in consultation with Traditional Authorities and Conservancy. Areas with high abundance of grazing should be avoid.
Groundwater abstraction	The abstraction of groundwater resources, especially in the area of Tubussis is uncontrolled and could results to unsustainable utilization of this resources.	Negative Drilling of boreholes should be approved by MAWLR and utilization of groundwater for commercial purpose must be approve by MAWLR.

How to be involved?

- Registering your inputs (comments or questions) to the project with the EAP
- Attending the scheduled Public Meeting
- Receive the BID, completing and submitting the registration form (here attached)
- Deadline for all comments and registration is on the **14 October 2020**

RESPONSE SECTION: INTERESTED AND AFFECTED PARTIES

1. PERSONAL DETAILS

Name	
Organization	
Physical Address;	
Cellphone	
Telephone	
Fax	
Email:	

2. Comments:

3. Questions:

KINDLY PROVIDE YOUR INPUTS AND COMMENTS TO info@greengain.com.na or greengaincc@yahoo.com on or before 27 September 2019: Enquiries: Mr. Joseph Kondja Amushila at Cell: 0811422927 or jkondja@gmail.com

Appendix A: Land tenure:

