

**ENVIRONMENTAL SCREENING**  
**KOUCHANGUINE-MOURA CAMP**  
**FARCHANA SUB-OFFICE**

## **1. INTRODUCTION**

### **1.1. Context background**

The context of this environmental screening is specific to the situation of the response to the new emergency resulting from the influx of an estimated 30,000 Sudanese Refugees in the East. This was as a result of an incident that occurred in El Geneina on 29<sup>th</sup> December 2019 between two conflicting communities gave rise to deadly attacks and the eventual displacement of people both within Sudan and into neighbouring Chad.

The screening is for the newly opened settlement of Kouchanguine-Moura located in the Ouddai Province (Adre, Mourra, Farchana and Amleyouna). The settlement is located 48km east of Abeche and approximately 500m west of the Ouaddi Moura (Main seasonal river). The absorption capacity of the site is 23,000 people in an area of 3.26 km<sup>2</sup>. The population of the settlement is at 5,447 individuals as of 28<sup>th</sup> March 2020 with continuing relocation from the border areas.

This NEAT assessment was carried out as a rapid environmental screening due to the constraints caused by the COVID-19 emergency which limits travel and hence the possibility to immediately carry out an Environmental Impact Assessment which was requested by the local government environmental officials. The mitigation tips provided will give the much needed guidance and support the operation to make environmentally informed decisions in implementation of emergency response activities. However it should be noted that this does not replace the EIA.

### **1.2. What is NEAT+**

The Nexus Environmental Assessment Tool (NEAT+) is a simple and pragmatic project level environmental assessment tool that assesses a snapshot of the current sensitivity of the local environment, highlighting any underlying vulnerabilities. The tool then overlays humanitarian activity-specific information to identify potential exacerbating risks posed by a project. The tool is intended to enhance project quality and improve the accountability of humanitarian programming. Data is collected in Kobo Toolbox.

## **2. ENVIRONMENTAL SCREENING – RESULTS AND ANALYSIS**

### **2.1. Analysis of the Environmental Sensitivity of the area**

This section, which shows results from the assessment done through the environmental sensitivity module of the NEAT+, identifies potential environmental concerns of the project area, i.e. Kouchanguine-Moura, through a snapshot of the current state. It does not assess environmental changes associated with the crisis.

The following table highlights what have been identified as major environmental concerns together with subsequent potential mitigation measures.

#### **a. Issues of High Concern**

Potential issues	Mitigation tips
There is a high concentration and/or number of people. The potential environmental impact is greater.	<ul style="list-style-type: none"> <li>- As soon as practical, establish resource user groups to promote sustainable and fair use of available natural resources</li> <li>- Plan for community green space such as tree covered areas or gardens that provide shade and a sense of community</li> <li>- Plan for sustainable use of resources before setting up any temporary settlement, especially regarding shelter construction materials, water management and waste disposal</li> <li>- Plan for introduction and dissemination of fuel-efficient stoves</li> <li>- Explore alternative settlement and/or consider relocation of part of the camp occupants to another location</li> </ul>
Rates of deforestation may exceed regeneration capabilities. Deforestation may be a risk	<ul style="list-style-type: none"> <li>- Identify key drivers of deforestation and plan to transition away from reliance on local timber as a construction material and/or on fuelwood for cooking energy</li> <li>- Introduce alternative to timber/wood with economic incentives</li> <li>- Conduct biomass assessment</li> <li>- Establish community-based forest management practices</li> <li>- Establish/promote ecological restoration programs (such as through the promotion of livelihood activities involving nursery/replantation activities)</li> </ul>
The community may have low self-sufficiency. There may be a greater demand (and impact) on the local environment	<ul style="list-style-type: none"> <li>- Assess local population dependency on natural resources in a detailed project assessment or as part of a natural resource assessment leading to a natural resource management plan</li> <li>- Consult and work with local community</li> <li>- Complete livelihoods assessment</li> <li>- Set up sustainable livelihood projects and facilitate livelihood diversification</li> </ul>
The community may not be socially cohesive. This can prevent collective action and lead to social conflict	<ul style="list-style-type: none"> <li>- Create mixed community level structures that are involved in decision making</li> <li>- Promote “integrated” livelihood activities (PoCs + Host communities) to encourage social cohesion</li> <li>- Discuss issues of concern with community leaders</li> <li>- Set up social projects and consider involving host communities as volunteers</li> </ul>
The displaced population may have a poor understanding of local ecosystems. This makes it difficult to manage the environment effectively	<ul style="list-style-type: none"> <li>- Consult host/local community representatives in assessment, including questions on natural resources</li> <li>- Involve local community representatives in the design and management of training/educational awareness activities</li> <li>- Conduct community environmental action planning (<a href="https://data2.unhcr.org/en/documents/download/64633">https://data2.unhcr.org/en/documents/download/64633</a>)</li> </ul>
The community may be close to a protected/conservation area. There may be legal/social implications	<ul style="list-style-type: none"> <li>- Engage the local authorities and ministry of environment on legal implications of proximity to protected areas</li> </ul>

	<ul style="list-style-type: none"> <li>- Work with local authorities to mitigate damage to protected sites, for example from extraction of natural resources such as timber</li> <li>- Consult local environmental NGOs</li> <li>- Develop eco-guard units in charge of protection of conservation areas</li> </ul>
The environment has a low regenerative capacity. The effects of land and soil degradation are more significant	<ul style="list-style-type: none"> <li>- Proactively minimize ground cover loss</li> <li>- Establish vegetation land cover</li> <li>- Establish erosion control mechanisms</li> <li>- If erosion/soil loss is already evident, seek expert assistance to develop a regeneration plan</li> <li>- Conduct an agricultural productivity assessment</li> <li>- Support and provide training on sustainable farming and/or climate smart/resilient agricultural practices</li> </ul>
Indoor air pollution, caused by poor ventilation and cooking/heating, may be an issue	<ul style="list-style-type: none"> <li>- Conduct a fuel/stove assessment</li> <li>- Promote the use of improved cookstoves</li> <li>- Improve ventilation of shelters (e.g. windows on opposite sides to allow air circulation)</li> <li>- Promote outdoor cooking</li> </ul>
The water resources may have a low regenerative capacity. Water scarcity may be an issue	<ul style="list-style-type: none"> <li>- Maximize water use efficiency (e.g. self-closing water-points, high levels of pipe maintenance)</li> <li>- Establish grey water capture and enhance infiltration</li> <li>- Establish rainwater harvesting</li> <li>- Provide training/technological solutions for efficient water improvement, especially in crop cultivation/ and livestock keeping</li> <li>- Map use and protection measures of water resources from a watershed perspective</li> <li>- Establish community-based water management project</li> <li>- Identify ways to support regeneration of water resources</li> <li>- Consult with WASH experts</li> </ul>
There is low capacity to manage wastewater. Environmental sanitation and disease transmission may be an issue	<ul style="list-style-type: none"> <li>- Ensure waterpoints have infiltration built in</li> <li>- Introduce greywater capture</li> <li>- Promote ground cover vegetation to enhance infiltration and reduce surface runoff</li> <li>- Develop sensitization messages on links between environmental sanitation and disease transmission, and undertake sensitization sessions with the community</li> <li>- In consultation with experts, identify improvements to waste management (e.g. suitable technology for treating and managing wastewater, etc.)</li> </ul>
This area may be at risk of flooding	<ul style="list-style-type: none"> <li>- Consult national/local hazard maps (if available)</li> <li>- Set up natural filtration systems</li> <li>- Establish a simple early warning mechanism</li> <li>- Improve the infiltration capacity of the soil with vegetation coverage</li> <li>- Analyse the environmental status of wetlands and consider watershed management (e.g. restoration, reforestation, etc.)</li> </ul>

Natural resource availability/accessibility may be affected by changing climatic conditions.	<ul style="list-style-type: none"> <li>-Identify key limited resources</li> <li>-Set up a natural resource and management plan/strategy or governance framework</li> <li>-Consult local environmental organisations on existing natural resources management usage/ stressors /impacts and changes over time due to climatic conditions.</li> <li>-Set up natural resource management committees (host and refugees)</li> <li>-Consult with an expert to develop a sustainable use strategy and plan, working with communities and local partners</li> </ul>
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While results from the screening tool have identified the below issues as of lesser concerns, they should nevertheless be taken into consideration when a comprehensive environmental impact assessment is conducted. Those issues should also be brought to the attention of the camp and local authorities to ensure that they are properly addressed in the management of the camp/hosting area.

#### **b. Issues of Medium Concern**

- There may be a weakened or poor governance system. There may be low capacity for environmental management
- The environment has fragile ecosystems. Loss of biodiversity may be an issue
- The environment has high biodiversity value. Vulnerable and/or rare flora and fauna may be at risk
- The community may have a high dependency on the natural environment. This can threaten livelihoods and social cohesion
- The water sources may be vulnerable to contamination. Water quality may be an issue
- There is low capacity to manage sewerage and faecal sludge. Environmental sanitation may be an issue

#### **c. Issues of Lower Concern**

- There is low capacity to manage solid waste. Environmental sanitation and disease transmission may be an issue
- Disaster waste may be an issue. Disaster waste can pose public health risks and impede relief or recovery activities
- This area may be at risk of soil erosion from wind
- This area may be at risk of soil erosion from water
- The area may have heightened exposure to climate-related risks and extreme weather events
- Natural resources may be scarce and in high demand. This can lead to social conflict
- There may be high and/or unsustainable rates of extraction of resources from the local environment

### **2.2. Analysis of potential impacts of WASH and Shelter activities**

This assesses potential environmental impacts associated with the proposed shelter and WASH activities to be developed in the camp. The tool has assessed the potential environmental impacts of the planned activities, overlaying those impacts are against the above identified environmental

sensitivity results to evaluate residual risk. Results and analysis of both shelter and WASH projects potential impacts are included as annexes to this report.

### **3. CONCLUSION**

The Nexus Environmental Assessment Tool (NEAT+) does not replace the necessity of having in-field environmental assessment/study with required level of expertise. Nevertheless, the above analysis could assist the operation to take minimum required environmentally informed decisions in the development of the camp, especially in the current context of lack of environmental expertise in the field. In order to avoid adverse (sometimes irreversible) environmental impacts and given the identified fragility of the area to climate change and human encroachment, it is therefore recommended to take into consideration the above-mentioned mitigation measures, which need to be contextualized, in the camp development and management. Moreover, it would be advisable to establish, if and when possible, an EMP (Environment Management Plan) for the major camp development projects (Water supply, latrines construction, etc.).