

Strengthening Environmental Screening Capacity of Humanitarian Organizations

# Environmental Screening Report

## NEAT +

Nexus Environmental  
Assessment Tool

### ROHINGYA REFUGEE CAMP

#### Cox's Bazar, Bangladesh



05-09 February 2023

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## INTRODUCTION

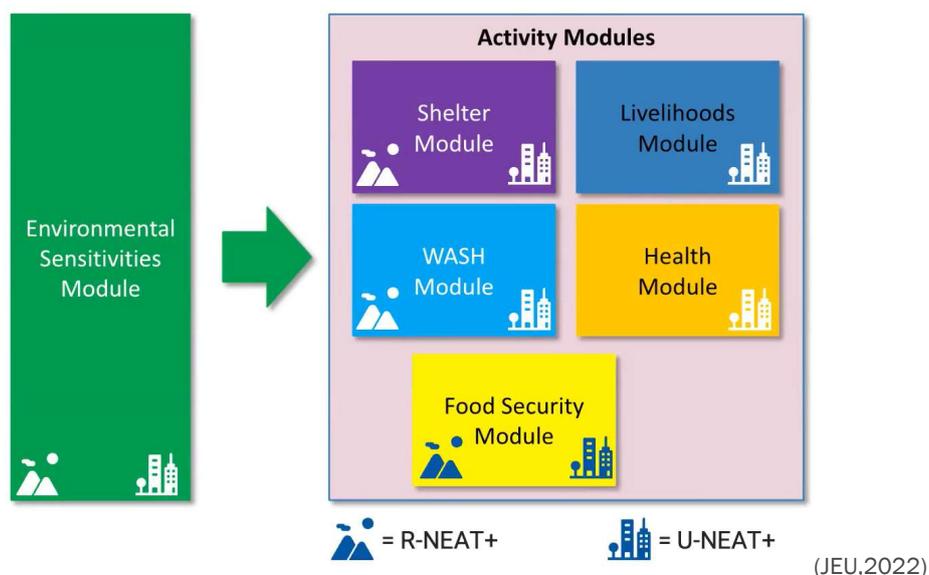
Humanitarian projects, although addressing protection needs and aiming for durable solutions for the crisis and conflict-affected communities, can result in adverse environmental impacts. These environmental impacts must be identified and addressed in the earliest stages of humanitarian response to help protect the environment and communities from any project-associated potential adverse impacts. There is a growing recognition of environmental risks; however, a systematic mainstreaming of environmental risk into project planning, designs and implementations is yet to be strengthened. Mainstreaming environmental considerations into projects begins with an environmental screening exercise. It evaluates projects' interventions against the sensitivities of the receiving environment to determine positive and negative environmental impacts. Environmental screening can be done using various tools depending on the project's nature, scale, location, and organizations' implementation capacity. It is usually a mandatory requirement by local environmental authorities and donors for certain categories of projects, but it can also be an internal organizational compliance requirement.

This environmental screening report covers Shelter & Settlement and WASH projects implemented by the Norwegian Refugee Council in the Rohingya refugee camps in Cox's Bazar, Bangladesh. The report is part of the **Error! Reference source not found.**ECHO-funded project on "Strengthening the capacity of humanitarian actors to do environmental screenings".

### NEAT+

The NEAT+ is an open-source, rapid and easy-to-use environmental screening tool<sup>1</sup> mainly designed for humanitarian contexts. A consortium of humanitarian organizations developed and officially launched this tool in 2019. The tool assesses vulnerabilities and impacts of humanitarian response activities and generates summary reports providing a snapshot of baseline environmental conditions, potential environmental impacts, mitigation measures, and development opportunities. There are currently two versions of the NEAT+, the Microsoft Excel-based Rural version and a web-based Urban version. The figure below shows that the NEAT+ consists of an Environment Sensitivity module and subsequent Activity modules that cover core humanitarian activities: Shelter and Settlement, WASH, Food Security, Livelihood, and Health.

Figure: Technical Structure of the NEAT+



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<sup>1</sup> <https://resources.eccentre.org/resources/neat/> or <https://neatplus.org/>

## CONTEXT

The violence and insecurity in the Rakhine State of Myanmar has driven many Rohingya people to neighbouring Bangladesh. There are close to one million Rohingya refugees settled across the border in Cox's Bazar, Bangladesh. The speed and scale of the influx to Cox's Bazar district has resulted in a critical humanitarian emergency, where over 1.3 million people need support, including 907,766 refugees and 450,000 adjacent host communities (UNHRC). The Rohingya refugees are settled in temporary shelters under difficult conditions in the subdistricts Ukhia and Teknaf of the Cox's Bazar, bordering Myanmar on the east, and the Bay of Bengal on the south and west (shown in the figure).

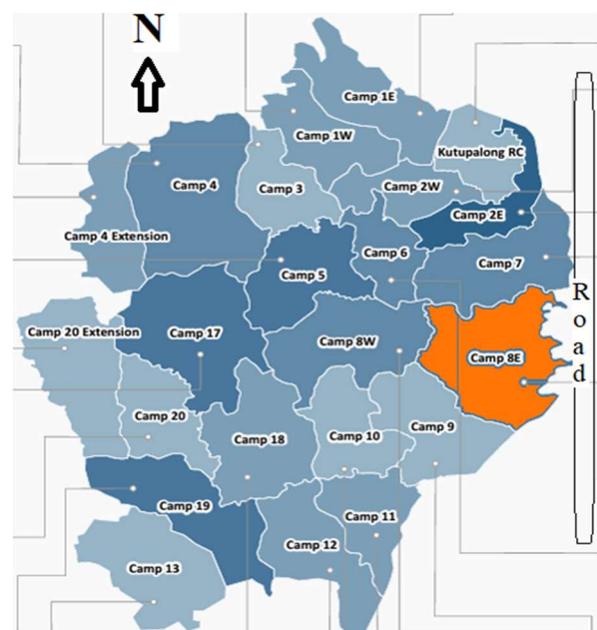
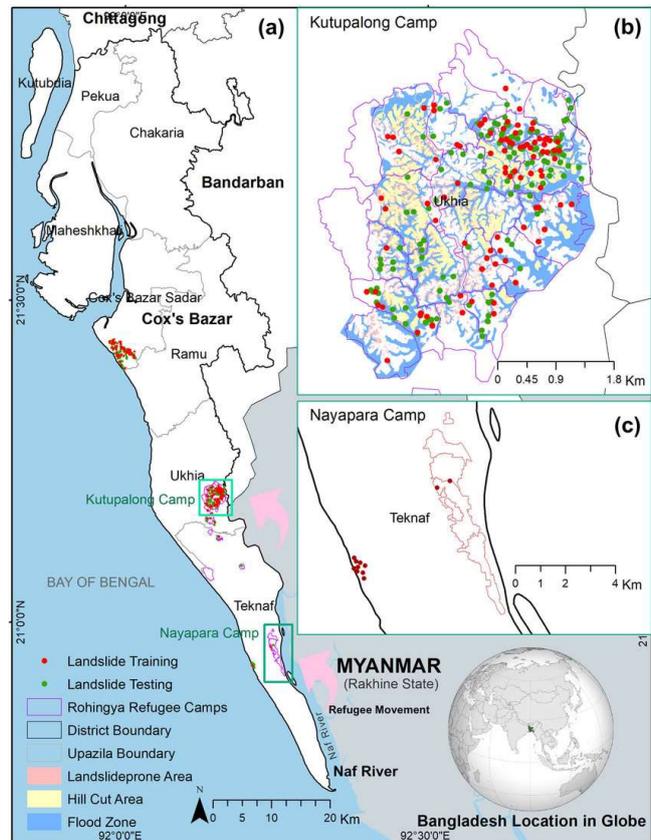
Basic services are under severe strain due to the high concentration of people in the area. Water and sanitation facilities are limited or of poor quality, and extremely high population density raises the risks of outbreaks of diseases. Groundwater from tube wells is the source of potable water for most households, yet this water often has elevated arsenic and salinity levels. The quality of drinking water in the refugee camps is a concern with traces of biological contamination. There are insufficient and disproportionate numbers of latrines and bathing facilities, and overall, these facilities lack basic protection measures, including gender segregation, given that 53% of the population are women and girls.

The temperature in Cox's Bazar ranges from 40 °C in the summer to around 18 °C in the winter. Land use is predominantly built-up areas, agriculture, aquaculture and salt farming, shrimp hatcheries, and natural and planted forest.

The Rohingya Refugee Repatriation Commissioner (RRRC), under the Ministry of Disaster Management and Relief of Bangladesh, oversees the Rohingya influx. The Rohingya refugees are officially prohibited from leaving the camps, restricting their freedom of movement from the camp in search of income-generating opportunities. Refugees depend highly on humanitarian relief, often insufficient to meet their basic needs. Some refugees make small earnings through labour work at discounted daily rates, and some (often women and children) generate income by collecting fuelwood in the forests and selling it at local markets; this often leads to tension with host communities.

## PROJECT BACKGROUND:

The Norwegian Refugee Council is in the early phase of the project 'Provision of life-saving assistance and protection to IDPs, Rohingya refugees and vulnerable host communities in Bangladesh'. The project covers Rohingya refugees and host communities in the Ukhia and Teknaf sub-district of Cox's Bazar district in Bangladesh. Given the temporary nature of shelter material approved by the Government, coupled with extreme weather conditions in Bangladesh,



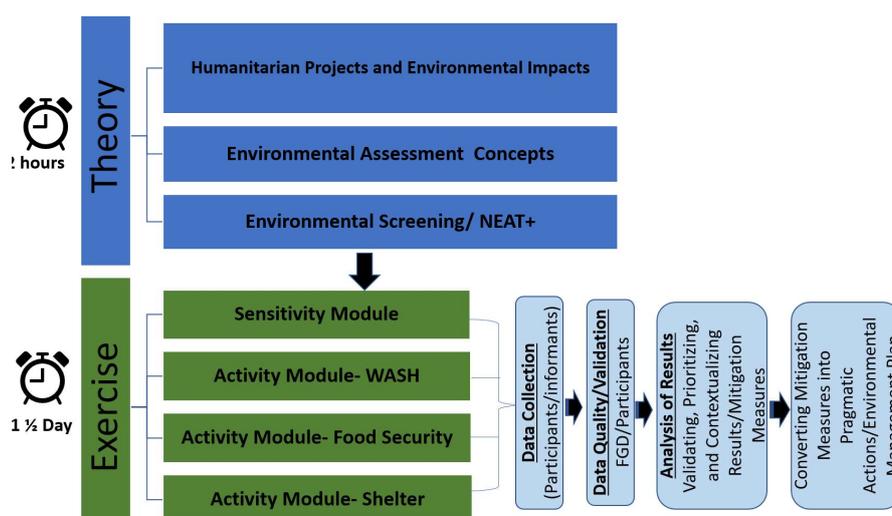
refugee shelters require maintenance throughout the year.

The project will target households to maintain their shelters with bamboo, tarpaulin, rope, and wires. To reinforce the shelters, households will be provided materials and technical support, including Shelter NFIs/TDKs, steel footings and treated bamboo, in preparation for cyclone and monsoon season. NRC's Shelter programs are operational in camps 8-East, 8-West, and Camp 25. WASH programs are operational in Ukhiya; specifically, Palongkhali, Holdiapalong. In 2022 NRC started WASH activities in Camp 7 which includes inclusive rehabilitation and construction of safe water points such as new construction, rehabilitation, repair, and maintenance of safe water points/source/catchment. The WASH component of the project also includes the inclusive rehabilitation and construction of latrines, bathing cubicles, solid waste, and faecal sludge management facilities. This covers new construction, rehabilitation, repair, and maintenance of sanitation facilities such as latrines, bathing areas, solid waste management points, etc., distribution of hygiene kits, hygiene promotion, and awareness programs.

## METHODOLOGY

This NEAT+-based environmental screening is part of the capacity-building training held from 06-09 February 2023, for humanitarian organizations operating in Cox's Bazar, Bangladesh. As shown in the figure below, a dual-purpose approach is used where participants are exposed to the concepts, regulatory framework, and methods of conducting an environmental screening for humanitarian projects. This is followed by a NEAT+-based screening for a project led by the participants covering the sensitivity module and Shelter, WASH, and Livelihood modules. Considering the context of Cox's Bazar, the rural version of NEAT+ is applied. The questionnaires were completed in a group exercise using information from the NRC's planned/implemented Shelter & Settlement and WASH projects in the Rohingya Refugee Camps of Cox's Bazar. The tool-generated results are analysed using criteria to contextualize and prioritize impacts and mitigation measures. The main criteria for prioritization included the impact's likelihood to occur, the nature of impacts, frequency, magnitude, and importance to the crises-affected population. The mitigation measures against each impact are contextualized through group discussion and using the criteria such as financial viability, technical feasibility, social acceptance of the mitigation measures, within the organizational capacity and scope of the project, and alignment with the national/organizational/donors' policies. A field visit to the project site in Refugees Camp 07 was conducted, including a transect walk and interviews with community representatives were undertaken to better understand the local situation and communities' challenges and priorities. Subsequently, the prioritized impacts and mitigation measures are compiled in this report.

Figure1: Overview of the Approach Employed



Each Activity module of NEAT+ has several sub-activity modules, which are selected as per the scope of the projects. Some sub-activity modules that were not relevant are excluded from this analysis, although they were completed as part of the group exercise with the aim to expose participants to all the sub-modules within the NEAT+.

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## ANALYSIS OF THE RESULT SUMMARY

### SENSITIVITY ANALYSIS

The Environmental Sensitivity summary helps understand the environmental baseline of the project location. It informs the project team about site-specific potential environmental risks and vulnerabilities resulting from the interactions between communities and their natural system, and about the carrying capacity of the natural systems against the proposed project activities.

The sensitivity analysis report below provides an overview of the baseline environmental conditions of the refugees' settlements in the Cox's Bazar area and categorizes site-specific environmental issues into Low, Medium, and High concerns. These issues are structured around five broad categories, namely i) Affected communities, ii) Impacts on biodiversity, iii) Pressure on natural resources, iv) Pollution and environmental degradation, and v) Environmental hazard.

The main environmental issues highlighted in the sensitivity report are.

- A high concentration of people in the Rohingya refugee camps puts pressure on natural resources, such as water resources, forests, etc. Competition for natural resources such as fuelwood, shelter materials, fresh water and wildlife may be a concern. The environmental impacts of any development intervention are likely to be substantial.
- Rohingya camps are situated near the protected areas of Teknaf Wildlife Sanctuary (TWS), the proposed Inani National Park and the *Himchari* National Park. This may have a significant impact on flora and fauna species and habitats. The area has already suffered degradation as forest land is converted to establish housing, schools, water supply and sanitation facilities, and any new expansion of the camps will likely result in significant environmental impacts. The TWS is Bangladesh's most important forest ecosystem and hosts over one hundred Asian elephants. In many places, the elephant corridors have been blocked by host communities and infrastructure and by the shelters for refugees. The wildlife may be under threat.
- Wood, charcoal, and Compressed Natural Gas (CNG) are the main sources of household energy used in the refugees' shelters, leading to deforestation that may exceed the rate of regeneration capabilities. There may be a lack of incentive to practice sustainable behaviour, leading to unsustainable use of natural resources. Deforestation and overall resource scarcity may exacerbate protection and fire hazard concerns.
- The issue of soil erosions is more significant in Cox's Bazar. Soil texture, steep slopes, vegetation clearance, and extreme weather conditions contribute to soil erosion.
- Cox's Bazar is vulnerable to water scarcity due to climatic conditions and over-extraction of the groundwater than its regenerative capacity.
- The water sources may be vulnerable to contamination, and the distance between water sources and sewage facilities is not adequately maintained, leading to leakages contaminating water sources. water quality may be an issue.
- There is a low capacity to manage surface water drainage/wastewater. Environmental sanitation and disease transmission may be an issue.
- The area has a heightened exposure to climate-related impacts and extreme weather events. It is highly susceptible to tropical cyclones and tidal surges. Cyclone storms develop in the Bay, generally from April to May and October to November, occasionally causing landslides and severely damaging human settlements and vegetation. The area is also prone to frequent and severe tropical cyclones, erratic rainfall; higher river flows; riverbank and coastal erosion; increased sedimentation; and sea level rises.

## SHELTER- Potential Environmental Impacts and Mitigation Measures

The Shelter summary report outlines environmental risks associated with the planned project activities and combines them with the sensitivities of the project location. Based on its significance, environmental risks are categorized as low, medium, and high. The potential environmental risks are prioritised by the training participants and communities that were consulted during the site visit. These potential environmental risks include climate-related hazards, deforestation and loss of biodiversity, erosion and land degradation, low capacity to manage solid waste, and air pollution.

- **Climate-related hazards**, such as cyclones, flash floods, and storms, have been identified as a concern associated with shelter & settlement activities in Cox's Bazar. Past trends include frequent landslides, earthquakes, flash floods and tidal surges. Although the Rohingya camps' main area is outside the flood zone, the camps are vulnerable to extreme weather events such as cyclones, strong winds and precipitation. The steep slopes may become unstable in the monsoon seasons and cause landslides damaging shelter, properties, livestock, and people's lives. In general, neither the structures in the Rohingya camps nor those in the makeshift settlements can withstand cyclones or floods; nearly 70% of shelters in settlements were damaged by Cyclone Mora in May 2017. Land use changes and overpopulating land with shelters reduces the ability of the ground to absorb rain and flood waters. Additionally, using flammable (easy-to-catch fire) materials in shelter construction and indoor kitchens can lead to fire hazards exacerbated by strong winds.
- **Deforestation and Biodiversity** have been identified as potential issues. The Rohingya refugees depend highly on humanitarian relief assistance, often insufficient to meet their needs. Alternatively, they are exploring opportunities to generate additional income from collecting and selling fuelwood from the forest, causing forest degradation and habitat destruction. There are also encroachments into the forest area from additional shelters and expansion of agricultural land. Around 1,500 ha of forest land has been encroached on for Rohingya makeshift settlements. Deforestation directly impacts the mammal wildlife relying on forests as a habitat, e.g., the Asian elephant's habitat and corridors have become fragmented due to refugees' settlement inside the forest. The elephant's movement has increased the risk of incidents and wildlife hunting. There are reported incidents of deer hunting for meat, and some refugees have been killed by wild elephants.
- **Erosion and land degradation** have been identified as potential issues in Cox's Bazar. Loose soil texture is highly susceptible to being blown away in the monsoon rains or in stormy winds taking away the top layer of the fertile soil. Vegetation cutting on the hill edges loosens the soil and can result in soil erosion, landslides, sedimentation, and siltation. The eroded soil will also cause stream congestion, which might hinder stream flow, resulting in habitat loss, water pollution and water scarcity further downstream. Erosion and land degradation directly impact all shelter and livelihood activities.
- **Solid waste management** has been identified as a potential issue of high concern in Cox's Bazar. During the consultation with communities, it was revealed that there are no adequate waste dump sites or even if it exists, people are not disposing of their household waste at a designated site, and waste often ends up in front of houses or even burned in the open air. There is no or limited adequate public service or infrastructure to manage construction or household waste. Shelter project activities may also contribute to increased waste generation, with adverse health and environmental consequences. Unmanaged waste can also lead to water stagnation, increasing the risk of vector transmission.
- **Air pollution** has been identified as an issue of concern, primarily due to indoor cooking and inadequate ventilation system. Indoor air pollution in the camps from cooking is a serious concern with severe impacts, especially for women and children. In Cox's Bazar, most cooking is carried out inside the poorly ventilated shelters. The firewood, used as fuel, produces large quantities of smoke that stays in the air long after extinguishing the fire. Burning firewood releases particulate matter such as CO, CO<sub>2</sub>, and sulphur Oxides, which are extremely dangerous. Some families even use burning plastic as cooking fuel, which is very harmful with direct health consequences.

The table below lists contextualized mitigation measures against the selected<sup>2</sup> potential impact extracted from the tool-generated Shelter result summary.

Potential Project Impacts	Mitigation Measures
Climate Hazards	<ul style="list-style-type: none"> <li>▪ Consult local hazard maps while selecting sites for shelters, this will help inform the shelter team about local climatic hazards to be considered</li> <li>▪ Establish simple early warning mechanisms that are accessible to the community (could be alert system through local radio or phone messaging etc)</li> <li>▪ Consider Multi-hazard resistant shelter and infrastructure, and include Multi-Purpose Cyclone Shelters, if resources permit.</li> <li>▪ Use participatory mapping and depict the main risks and causes of flood risks</li> <li>▪ Clear drainage canals and improve the infiltration capacity of the ground with vegetation coverage</li> <li>▪ Implement flood-resistant shelters in compliance with appropriate shelter codes and regularly upgrade shelters and infrastructure where needed</li> <li>▪ Minimize using highly flammable materials in the shelter construction and ensure that fire hazards are adequately considered in the shelter design.</li> <li>▪ Consider gender-specific adaptation strategies, as climate change impacts are disproportionate among gender</li> <li>▪ Support capacity-building &amp; awareness programs on climate adaptation &amp; hazards</li> </ul>
Deforestation & Biodiversity	<ul style="list-style-type: none"> <li>▪ Educate communities on sustainable consumption of wood and charcoal for the household energy use</li> <li>▪ Consider providing fuel-efficient stoves as part of the Non-Food-Items support</li> <li>▪ Use various construction materials and reduce the use of wood and bamboo in the shelter construction, where alternatives are available.</li> <li>▪ Consider generating alternative livelihood sources for people who make their income from selling wood and charcoals</li> <li>▪ Support fuel wood substitution such as solar cookers or Liquefied Petroleum Gas</li> <li>▪ Plant native tree species and discourage introducing any invasive species</li> <li>▪ Incorporate green areas in your planning. Green spaces also improve inhabitant satisfaction and can provide a natural cooling effect</li> </ul>
Erosion & Land Degradation	<ul style="list-style-type: none"> <li>▪ Stabilise the slopes and terrains of the hills before the onset of the monsoon rains</li> <li>▪ Refill the excavated land (if any) used for erecting shelters within four days to avoid hosting vectors</li> <li>▪ Limit vegetation clearance to the project site only and take action to stabilize steep slopes</li> <li>▪ Plant indigenous (light but deep roots) trees as a revegetation measure</li> <li>▪ Avoid excavating in areas near the surface or shallow sub-surface water flows</li> <li>▪ If possible, promote agro-forestry practices through other projects</li> </ul>
Solid Waste Management	<ul style="list-style-type: none"> <li>▪ Separate organic and inorganic waste and designate separate waste dump sites at an appropriate distance</li> <li>▪ Ensure storing chemical waste in approved containers to avoid any spills or leakages</li> <li>▪ Minimize the amount of packaging, substitute for paper or cardboard (biodegradable), and promote the principle of reducing, recycling, and reusing.</li> <li>▪ Select items strategically and consider each household's specific needs, which can reduce resource consumption and waste generation.</li> <li>▪ Consider multifunctional items and post-crisis use of the items.</li> <li>▪ Support waste livelihoods projects, if possible, and promote best practices</li> <li>▪ Arrange waste collection and awareness campaigns, and educate the community on potential health risks</li> </ul>
Air Pollution	<ul style="list-style-type: none"> <li>▪ Consider adequate ventilation system in the shelter design (separate kitchen)</li> <li>▪ Plan construction activities that minimize dust exposure to nearby sensitive receptors, and use water spray to minimize dust</li> <li>▪ Vehicles used for the transportation of the construction materials should be well-maintained and should respect the speed limit</li> <li>▪ Provide clean energy cooking materials such as clean energy cooking stoves, Liquefied petroleum gas etc.), and discourage indoor cooking in closed kitchens</li> <li>▪ Discourage open-air burning of waste</li> </ul>

<sup>2</sup> Please refer to Methodology section for more information on criteria used for selection for impacts and mitigation measures

## WASH- Potential Environmental Impacts and Mitigation Measures

The WASH summary informs the project team about the potential environmental risks that must be considered during project planning, design, implementation, and operation stages. WASH project site-specific environmental risks include water scarcity, contamination of water sources, climate-related hazard such as cyclones, soil erosion and flash flood, and low capacity to manage solid waste and wastewaters.

- **Water scarcity** due to low regenerative capacity of the natural system and over-extraction of water to meet the growing needs of refugees and host communities has been identified as a high-risk issue in the refugee camps of Cox's Bazar. The influx of refugees in large numbers has resulted in excessive water withdrawal exceeding what the natural system can supply. This has lowered the water table and dried up some of the wells. Water is extracted from shallow and deep wells with limited or no prior hydrogeological studies to assess the capacity of the aquifers, which exerts pressure on groundwater resources. Large scale, around 1,600ha of vegetation land in the watershed area has been cleared to build refugee shelters. The built-up area affects the water retaining and absorption capacity of rainwater, resulting in low recharge of groundwater aquifers. Refugees and host communities' demand for scarce water resources may result in tension, particularly in the winters when *Reju*, *Inani*, *Mankhali*, *Rajachora*, and *Mathabanga* canals are dry, and when local communities extract groundwater for their crops and horticulture.
- **Water sources are vulnerable to contamination** from poor drainage systems, and lack of proper sanitation infrastructure has been identified as a high-risk issue. Many latrines in the refugee camps of Cox's Bazar are without proper soak pits installed along the contour lines of the hills near the shelters and water points. Loose soil allows the movement of contamination, such as human waste, into water bodies. Leakage, seepage, and overflow from these facilities may contaminate surface water bodies and groundwater. Some previous studies have identified that water in refugee camps is heavily polluted with pathogens, arsenic, and iron. Water from these contaminated sources may be used for drinking, cleaning, or bathing. Children and older people are particularly affected by contaminated water due to weaker immune systems. Another source of water contamination may be Borak bamboo's chemical treatment facilities and saltwater intrusion from coastal aquifers.
- The project site has an enhanced exposure to **climate-related risks** such as **soil erosion, cyclone, and flash flooding**. This is primarily due to the soil's porous texture, strong storms, and flash floods. Soil erosion has a direct impact on soil fertility and people's livelihood. WASH facilities are directly affected by such climatic risks.
- **Solid waste management** has been identified as an issue of concern in the refugee camps of Cox's Bazar. There is low capacity, supporting infrastructure and awareness to manage solid waste and fecal sludge. Environmental sanitation and disease transmission may be an issue. The distribution of WASH kits may lead to waste generation without a proper solid waste management strategy.
- **Wastewater management** has been identified as a medium-risk issue. There is a lack of drainage infrastructure and low capacity to manage wastewater and fecal sludge. Wastewater ponds can turn into mosquitoes' breeding grounds, has an odour, and carry contaminants that harm human health. Contaminated water can also drain into streams and other surface water used for washing, cleaning, and bathing, increasing the risk of further contamination, particularly among women, children, and aged people with weaker immune systems. Environmental sanitation and waterborne diseases are already reported as severe issues in the refugee camps of Cox's Bazar.

The table below lists contextualized mitigation measures against the most relevant anticipated impact extracted from the tool-generated WASH result summary.

Potential Project Impacts	Mitigation Measures
Water Scarcity	<ul style="list-style-type: none"> <li>▪ Conduct hydrogeological surveys and water balance assessments for bore well projects and avoid over-extraction from confined aquifers.</li> <li>▪ Ensure that water abstraction does not exceed its replenishment capacity</li> <li>▪ Reduce water losses/leakages (e.g., self-closing water points, regular pipe maintenance etc.)</li> <li>▪ Consider water supply and shower designs that collect water from showers and basins and repurpose this for toilets or small-scale agricultural activities.</li> <li>▪ Installing low-flow showerheads or using bucket systems can minimize the amount of water consumption</li> <li>▪ Establish a rainwater harvesting system and promote kitchen gardening</li> <li>▪ Consider water ponds for groundwater recharge but ensure it does not turn into a host of vector diseases.</li> <li>▪ Build capacity for water conservation practices</li> <li>▪ Consider community green spaces to promote cohesion among the community and avoid potential conflicts over scarce resources</li> </ul>
Water Contamination	<ul style="list-style-type: none"> <li>▪ Safeguard (fencing) drinking water sources against contamination</li> <li>▪ Properly store oil and chemicals and prevent any leakages into soil or water</li> <li>▪ Machinery and chemical storage should be monitored for any leakages. Safely dispose of oil residuals, including waste oil, lubricants, and used filters.</li> <li>▪ Identify improvements to sanitation infrastructure (e.g. improve latrine design)</li> <li>▪ Conduct sensitization campaigns on good sanitation practices and links to health</li> <li>▪ Maintain distance (minimum 15-20 meters) and keep the water source at a higher elevation from the contamination source</li> <li>▪ Ensure reduced stagnation of water through proper drainage systems</li> <li>▪ Protect water sources and monitor water quality regularly, including tests for microbial, pathogenic, arsenic, fluoride, and iron content.</li> </ul>
Loss of Vegetation	<ul style="list-style-type: none"> <li>▪ Limit vegetation clearance to the project site only</li> <li>▪ Plant indigenous trees as a revegetation measure</li> <li>▪ Encourage wastewater reuse in watering vegetable gardens, trees, etc</li> <li>▪ If possible, promote agro-forestry practices through other projects</li> </ul>
Solid Waste Management	<ul style="list-style-type: none"> <li>▪ Separate organic and inorganic waste and designate a waste dump site at an appropriate distance from shelters.</li> <li>▪ Minimize the amount of packaging, substitute for paper or cardboard (biodegradable), and promote the principle of reducing, recycling, and reusing in all operations.</li> <li>▪ Consider setting up waste livelihoods projects</li> <li>▪ Promote waste management in communities via Reduce, Re-use and Recycle</li> <li>▪ Explore the potential of biogas production from fecal sludge</li> <li>▪ Create awareness and build the capacity of the community to dispose of waste at designated sites.</li> </ul>
Wastewater management	<ul style="list-style-type: none"> <li>▪ Promote the use of wastewater for kitchen gardening</li> <li>▪ Consider a proper drainage system, and consider odour control mechanisms</li> <li>▪ Improve sanitation infrastructure</li> <li>▪ Consider necessary arrangements for the safe disposal of fecal sludge and its reuse as manure or biogas.</li> <li>▪ Protect water sources from pollution, particularly human and animal excreta</li> <li>▪ Support community awareness programs</li> </ul>
Deforestation	<ul style="list-style-type: none"> <li>▪ Consider providing the community with treated water so they do not have to boil it with fuelwood.</li> <li>▪ Plan indigenous trees and discourage any invasive species of trees</li> <li>▪ Promote alternative clean sources of energy for household use</li> <li>▪ Promote tree plantation next to the water points</li> </ul>

## RECOMMENDATIONS AND NEXT STEPS

Some key learning from the environmental screening exercise and recommendations are listed below.

- This environmental screening report provides a baseline for organizations operating in the Rohingya Refugee Camps of Cox's Bazar in Bangladesh. It assesses the baseline environmental conditions and lists the potential environmental impacts of Shelter & Settlement, and WASH projects implemented by NRC in the Rohingya refugee camps of Cox's Bazar. The report also provides contextualized mitigation measures to address environmental risks and serves as a base for future environmental screenings in the area.
- Main environmental risks in the Refugee Camps of Cox's Bazar worth consideration in the WASH and Shelter & Settlement projects are climate-related risks, erosion and land degradation, water scarcity, loss of biodiversity due to deforestation, fire hazards, and low capacity to manage solid and wastewater.
- The exercise should be followed by a detailed Environmental Management Plan, where the mitigation measures are translated into project activities with clear implementation responsibilities. Developing an environmental management plan should be a collaborative effort and must have adequate monitoring mechanisms for compliance. Contractual terms can be used to enforce contractors' and subcontractors' compliance.
- Environmental assessment tools, including NEAT+, are more effective when applied during the project planning phase, where there is more room for any potential adjustments in the project design or implementation strategy; however, they can also be used for ongoing projects to avoid and mitigate adverse environmental impacts through corrective actions.
- NEAT+ is a participatory tool, and it's more effective when input data and results are discussed among the project team and with wider stakeholders. The environmental data collection and the discussion process are as important as the outcome of the environmental screening process. This helps in the collective understanding of project-related environmental impacts, helps create awareness, and contributes to learning on environmental issues.
- The quality of environmental screening outputs depends on the reliability of the input data and analysis of the result summary. Minimizing data biases and giving considerable time to explore various data sources to validate and triangulate data is important. Merely relying on assumptions and completing the questionnaire without conducting field visits and consultation with important stakeholders should be discouraged. NEAT+ is a flexible tool, and changes in the questionnaire can be made even at a later stage when more reliable information is available.
- Focus group discussion and community engagement are essential aspects of an environmental screening process, it helps in utilizing traditional knowledge of the local communities and understanding the community's challenges and priorities. It also gives them a sense of inclusion in the process and informs them about their responsibility in addressing environmental impacts.
- NEAT+ generates a list project associated impacts and mitigation measures, however, it is important to analyse and contextualize these impacts and mitigation measures. It is also important to look beyond the tool-generated result summary and consider other important impacts and mitigation measures associated with the project activities. This might require some input from environmental experts and other stakeholders. As such, NEAT+ should not be viewed as an absolute but as a guidance tool.
- It is important to consider mitigation measures within the project's duration and scope. Mitigation measures will not always mean 'doing new/additional things'; Often, it will be 'doing things differently' in a more environment-friendly manner and may not necessarily imply any additional cost. Options need to be explored if some mitigation measures could be done through other projects within the organization or in collaboration with other partner organizations operating in Rohingya Refugee camps.
- Environmental screening may not be seen as a one-off or stand-alone exercise. Humanitarian organizations must systematically mainstream environmental screening as an embedded process within the program cycle or, where possible, integrate environmental screening into existing project procedures and practices, such as Situational Analysis or Rapid Assessments.

## REFERENCE MATERIALS

- Access to NEAT+ Microsoft Excel used in this environmental screening (files provided with the folder)
- Ahmed, 2020 Application of geospatial technologies in developing a dynamic landslide early warning system in a humanitarian context: the Rohingya refugee crisis in Cox's Bazar, Bangladesh
- ECHO Environmental Guidance: [https://civil-protection-humanitarian-aid.ec.europa.eu/what/humanitarian-aid/climate-change-and-environment\\_en](https://civil-protection-humanitarian-aid.ec.europa.eu/what/humanitarian-aid/climate-change-and-environment_en).
- Environment and Humanitarian Action (EHA) Connect, a comprehensive online repository of tools and guidance spanning the humanitarian-environment nexus: <https://ehaconnect.org>.
- Environmental Emergency Centre - library of resources and tools for environmental emergency prevention, preparedness, and response Resources: <https://resources.eecentre.org/>.
- The International Federation of Red Cross and Red Crescent Societies (IFRC)- Green Response: Environmental Quick Guide (2022): <https://www.ifrc.org/document/green-response-environmental-quick-guide>.
- Nexus Environmental Assessment Tool: <https://neatplus.org/>.

## ANNEXES

### ANNEX 1: LIST OF PARTICIPANTS

ORGANIZATION	CONTACT DETAILS	ORGANIZATION	CONTACT DETAILS
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	<a href="mailto:shahin.coast@gmail.com">shahin.coast@gmail.com</a>	United Purpose	<a href="mailto:zahangir.alam@united-purpose.org">zahangir.alam@united-purpose.org</a>
Save the Children	<a href="mailto:nauman.haque@savethechildren.org">nauman.haque@savethechildren.org</a>	Save the Children	<a href="mailto:tasnim.tushin@savethechildren.org">tasnim.tushin@savethechildren.org</a>
Christian Aid	<a href="mailto:dnayan@christian-aid.org">dnayan@christian-aid.org</a>		<a href="mailto:mofizur.rk@gmail.com">mofizur.rk@gmail.com</a>
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