

Strengthening Environmental Screening Capacity of Humanitarian Organizations

Environmental Screening Report

NEAT +

Nexus Environmental
Assessment Tool

Sunamgonj, Sylhet

Bangladesh



12-13 February 2023

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INTRODUCTION

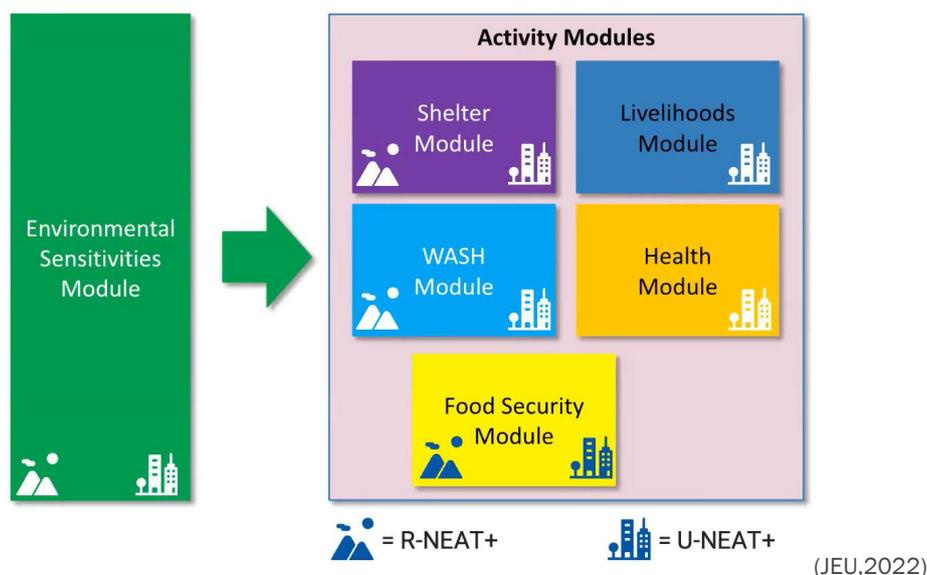
Humanitarian projects, although addressing protection needs and aiming for durable solutions for the crisis and conflict-affected communities, can result in adverse environmental impacts. These environmental impacts must be identified and addressed in the earliest stages of the humanitarian response 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 organization's 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 WASH and Food Security projects implemented in the Sunamgonj district of Sylhet division in north-eastern 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 tool¹ 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+



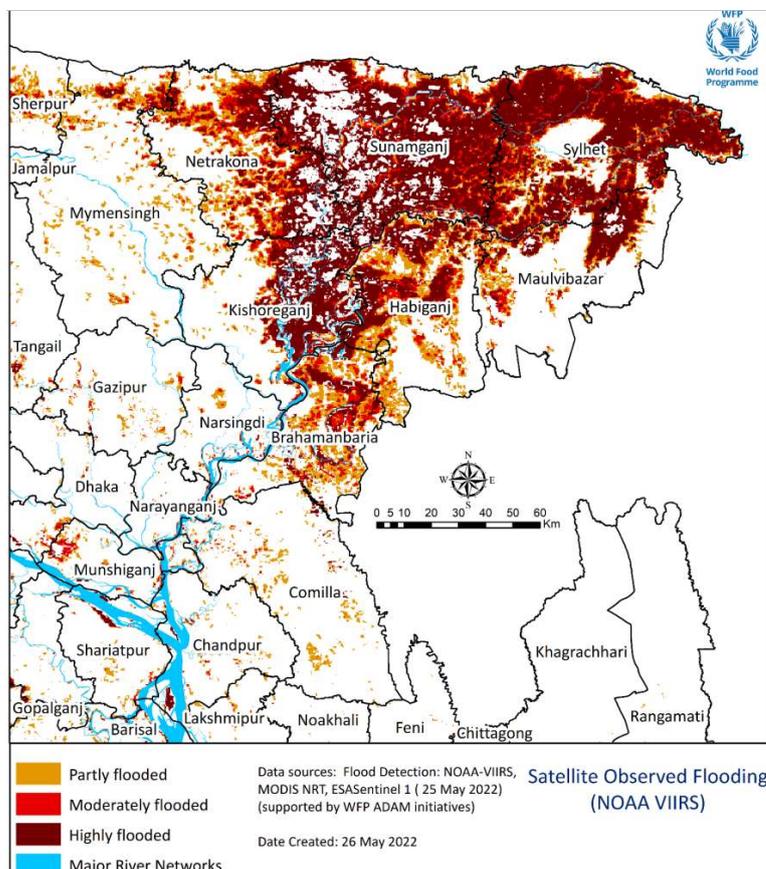
¹ <https://resources.eecentre.org/resources/neat/> or <https://neatplus.org/>

CONTEXT

Bangladesh is at the forefront of the climate change disasters; it is one of the seventh most affected country facing extreme weather events particularly cyclone and floodings. Considering the severity of the climatic events, around 23 million people in Bangladesh will likely displaced by 2050 due to climate change (The World Bank).

In 2022, the north-easter region of Bangladesh, bordering Meghalaya State of India, was hit by one of the worst flooding in country's history, affecting around 4 million people in Sunamgonj, Sylhet, Moulavibazar, Habiganj and Kishoreganj. As shown in the map, the monsoon rain and flash floods swept away homes, livestock, and inundated farmlands, particularly in Sunamgonj and Sylhet, forcing families to seek shelter on higher ground and temporary flood shelters.

The North-eastern part of Bangladesh is the relatively coldest region, with an average high temperature of only 25°C. June and July are often heavy rainy seasons, however, changes are noticed in recent years due to climate change. hilly and predominantly fertile land. The hilly terrain is known for tea cultivation, while the lower lands are known for the unique Haors wetlands. In dry seasons, it is used for cropping, and during the monsoon period, fishing remains the only viable livelihood option. The Haor floodplain region produces approximately 20% of the country's staple food, i.e., rice. People's dependency on natural resources is high, and are mostly involved in agricultural farming, fishing, and small-scale livestock, and commercial activities.



PROJECT BACKGROUND

NRC in partnership with a local organization, Efforts for Rural Advancement (ERA) has launched a humanitarian assistance project for flood-affected communities in the Sunamgonj district of Sylhet, Bangladesh. The project received funding from the Swedish International Development Cooperation Agency (SIDA) and the Norwegian Ministry of Foreign Affairs (NMFA) and aims to deliver humanitarian assistance to flood-stricken people with basic shelter, WASH, and food security needs.

The WASH activities include supporting the new construction of households' latrines with flood-resilient features and rehabilitating damaged WASH facilities in schools. It also includes installing community water points, tube wells, water networks through mini piped water supply systems, and awareness initiatives on hygiene practices among affected communities. Shelter activities of the project aim to increase connectivity and access to safe and dignified housing, which will also serve as emergency shelters during floods. The project activities include Cash for Work to develop community infrastructures such as roads, pathways, institutions etc., providing safe and dignified shelter construction support within targeted flood-prone communities, support mobility to safe shelters with their belongings, and providing life-saving boats to scale up community preparedness/readiness to mitigate the further impacts of flood destruction. The Food Security-related activities aim to address the flood-affected communities' economic insecurities through short-term Cash-for-Work employment opportunities, direct food assistance, and providing agricultural inputs such as seeds, training, and tools to support women for homestead gardening.

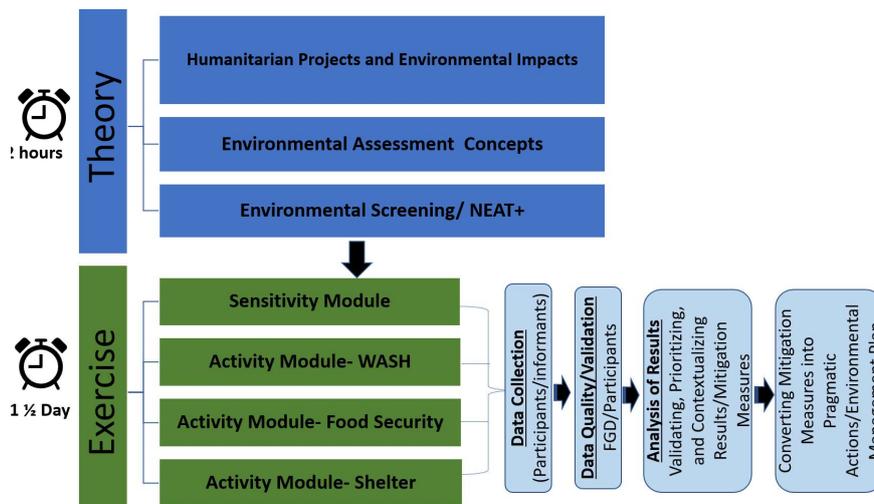
METHODOLOGY

This NEAT+ based environmental screening is part of the two-day capacity-building training held in Sylhet from 12-13 February 2023, for humanitarian organizations operating in north-eastern part of Bangladesh, particularly in Sylhet and Sunamgonj districts. As shown in the figure below, a dual-purpose approach is used where participants are exposed to the topic-related 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 Food Security modules. Considering the context of Sunamgonj, the rural version of NEAT+ is applied. The questionnaires were completed in a group exercise using information from the NRC's implemented Shelter & Settlement, WASH and Food Security projects in the Sunamgonj district of Sylhet division.

The tool-generated results are analysed using objective 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.

The field visit, an essential part of the environmental screening, could not be arranged due to the distance from the training venue to the project location. The experience and knowledge of the participants who are familiar with the local conditions and have active projects there are used for data verification and prioritization of impacts and mitigation measures compiled in this report.

Figure1: Overview of the Approach Employed



Each Activity module of NEAT+ has several sub-activity modules, that are selected according to the project's scope. Some activity & sub-activity modules that were beyond the scope of selected project are not part of this analysis, although they were completed as part of the group exercise to expose participants to all the sub-modules within the NEAT+.

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 Sunamgonj IDP area, and categorizes site-specific environmental risks 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.

- Sunamgonj and Sylhet areas has a heightened exposure to climate-related hazards. The area is highly susceptible to climate change induced erosion, cyclones, floodings, sliding, and salinity in river flows. Monsoon rains in the area are becoming more erratic, and communities have noticed changes in the rainfall pattern. In the recent past (2022), Sunamgonj has experienced devastating floods that have caused damage to public infrastructure, people's properties, and agricultural lands and deaths of people and their livestock.
- Biodiversity may be fragile in the area. Sunamgonj district has a high ecological significance, it hosts several ecologically important wetlands, which include Sangair, Joalbhangra, Kalnar, Khai, Dekar, Nandair, Naluar, Chaptir, Kalikota, Bharmohona, Halir, Pagnar Angurali, Karchar, Sonir, Matian, Gurmer, Kanamaiya, Pashua and Rui haors. The wetland ecosystems are a major source of livelihood for local communities and habitats of many species, including various migratory birds.
- Land degradation and soil erosion are issues of concern in Sunamgonj, particularly due to hilly topography, loose soil texture, and flash rain and flooding. Slope stability is a major issue in the area, and the risk of mud and land slights is high.
- Water sources may not be well protected and vulnerable to contamination. Flooding has damaged most of the sanitation infrastructure, leading to contamination of water bodies, especially potable water, and can lead to outbreaks of waterborne diseases. The porous nature of soil may also allow water sources to contaminate if the distance between water sources and sanitation facilities is not maintained and if the elevation of the water source is not above the contaminant source. Water quality may be an issue in the area.
- Besides the municipal grid, wood and charcoal are the main sources of household energy and heating. Wood and bamboo are also used extensively in construction, leading to deforestation as it exceeds the regeneration rate. There may be a lack of incentive to practice sustainable behaviour, leading to unsustainable use of natural resources. Deforestation and resource scarcity may exacerbate protection and biodiversity concerns, threatening social cohesion.
- Scarcity of fresh water is becoming an issue in the area, particularly for flood-affected communities. Most water sources are contaminated and damaged due to heavy flooding, while there is high demand for water and growing competition between various water users (households, agriculture, industries etc.), while the natural system has a relatively low regenerative capacity to meet all demands. Water trucking and shallow groundwater are primarily used for drinking and other household use, this often does not meet the drinking water quality standard and may pose health risks.
- The drainage system for rainwater and sewerage is inadequate and poorly maintained. During the monsoon rainy season, the drainage system is either blocked or damaged, and water remains in the areas blocking access and turns into ponds for mosquito breeding. Environmental sanitation and disease transmission may be an issue.
- Solid waste management may be an issue of concern in Sunamganj, this is due to the overall low capacity to manage solid waste. There is a lack of proper waste disposal dump sites, and organic and inorganic waste is often not segregated. This can have detrimental health consequences for the community and livestock.

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 training participants familiar with the project location and local conditions have prioritised the potential environmental risks. These potential environmental risks include

climate-related hazards, erosion and slope stability, deforestation and biodiversity loss, and limited capacity for solid waste management.

- **Climate-related hazards**, particularly flash floods during the monsoon rainy season, changing rainfall patterns, water logging, and landslides, have been identified as issues in Sunamgonj. Floodings are more frequent during the rainy season due to poor drainage systems and adequate infrastructure on the river systems. Changing rainfall intensity and unpredictability in the rainfall have affected the livelihood sources of the community, including rainfed farming, fishing, and livestock grazing land. Shelter siting, design, and materials choices may not withstand the climate shocks, leaving affected communities even at a greater risk of floods and landslides.
- **Slope Stability and Erosion** have been identified as potential issues due to the hilly landscape, loose soil texture and poor land management practices in Sunamgonj. Vegetation cutting over steep slopes loosens the soil, resulting in soil erosion, 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. Removal of natural land cover, excavation, extraction of construction materials and other construction-related activities can result in sheet and gully erosion, where the top layer of the fertile soil is eroded. This affects the soil water and nutrient-holding capacity of crop soils and favourable soil structure for root development.
- **Loss of Biodiversity and Deforestation** has been identified as potential issue due to the fragile ecosystem and high demand for construction wood, expansion in agricultural land, and fuel wood. Sunamganj hosts Ramsar-recognized wetland conservation sites, including Tanguar Haor and the Sundarbans. These wetlands offer important ecosystem services such as fertile soil, fishing and habitat for various flora and fauna. Extensive agricultural activities and shelter construction within the floodplain may increase the risk of biodiversity loss and deforestation.
- **Solid waste management** has been identified as a potential issue of concern in Shantiganj and Jagannathpur subdistricts of Sunamgonj district. There is not adequate public service and adequate infrastructure to manage solid waste. The segregation of organic and inorganic waste is rare, and there are limited designated solid waste dump sites. Solid waste may also be generated from shelter activities during and post-construction, such as packaging and distributing non-food items. Unmanaged waste may lead to water contamination, water stagnation, odour, and can have detrimental health and environmental impacts, and may increase the risk of vector transmission.

The table below lists contextualized mitigation measures against the selected² potential impact extracted from the tool-generated Shelter result summary.

Potential Project Impacts	Mitigation Measures
Climate Hazards	<ul style="list-style-type: none"> ▪ Consult local hazard maps while selecting sites for shelters. Implement multi-hazard resistant shelter and infrastructure ▪ Use community-based Disaster Risk Reduction methods to identify needs and priorities ▪ Establish community-centred early warning mechanisms and make it accessible to the community (could be an alert system through local radio or phone messaging etc.) ▪ Use participatory mapping and depict the main risks and causes of flood risks ▪ Clear drainage canals and improve the infiltration capacity of the ground with vegetation coverage ▪ Implement flood-resistant shelters in compliance with appropriate shelter codes and regularly upgrade shelters and infrastructure where needed ▪ Use lightweight shelter materials to improve heat dissipation, insulate roofs to minimize heating from solar radiation. Roofing should include adequate drainage, and the structure and fixings should be robust enough to withstand heavy rainfall. ▪ Support capacity-building & awareness programs on climate adaptation & hazards ▪ Consider gender-specific adaptation and resilience strategies, as climate change impacts are disproportionate among gender

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

Slope Stability/Landslides and Erosion	<ul style="list-style-type: none"> ▪ Stabilise and minimize slope grades, follow land contours in route planning, and choose an appropriate site for the shelter construction ▪ Refill the excavated land (if any) used for making shelters bricks or foundations within four days to avoid hosting vectors ▪ Follow land contours in route planning, minimizing slope grades ▪ Limit vegetation clearance only to the project site only and take action to stabilize steep slopes ▪ Plant indigenous (lightweight and deep roots) trees as a revegetation measure ▪ Avoid excavating in areas near the surface or shallow sub-surface water flows ▪ If possible, promote agro-forestry practices through other projects
Deforestation & Biodiversity	<ul style="list-style-type: none"> ▪ Consider appropriate distance (10 km, where possible) from naturally protected areas and wetlands/floodplains ▪ Consider providing fuel-efficient stoves as part of the Non-Food-Items support ▪ Support fuel wood substitution such as solar cookers or Liquefied Petroleum Gas ▪ Incorporate green areas in your planning. Green spaces also improve inhabitant satisfaction and can provide a natural cooling effect ▪ Plant native tree species and discourage introducing any invasive species ▪ Educate communities on sustainable consumption of wood and charcoal for the household energy use ▪ Use various construction materials and reduce the use of wood in the shelter construction, where alternatives are available. ▪ Consider generating alternative livelihood sources for people who make their income from selling wood and charcoals
Solid Waste Management	<ul style="list-style-type: none"> ▪ Separate organic and inorganic waste and designate separate waste dump sites at an appropriate distance ▪ Minimize the amount of packaging, substitute for paper or cardboard (biodegradable), and promote the principle of reducing, recycling, and reusing. ▪ Select items strategically and consider each household's specific needs, which can reduce resource consumption and waste generation. ▪ Consider multifunctional items and post-crisis use of the items. ▪ Consider materials and construction methods that allow for easy dismantling, transport, and reuse to avoid wasted materials. Transitional shelters are a high likelihood of mobility of the affected population. ▪ Support waste livelihoods projects, if possible, and promote best practices ▪ Arrange waste collection and awareness campaigns and educate the community on potential health risks.

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 climate-related hazards such as flooding, high-intensity rainfall, surface and groundwater aquifers contamination, and low capacity to manage solid waste and wastewater/drainage.

- Sunamgonj is highly vulnerable to **climate-related risks**, particularly flash floods, high-intensity monsoon rains and landslides due to steep slopes and loose soil texture. These climate disasters pose a high risk to WASH infrastructure. Flooding and landslides may damage WASH infrastructure and will not be accessible during flooding or wet season. This may increase the practice of open defecation and the use of surface water for drinking, which is likely contaminated and may pose a great risk of disease outbreak.
- There is a risk of **contamination of the water sources** in the Shantiganj and Jagannathpur sub-districts of Sunamganj. This is primarily due to poor drainage facilities for stormwater runoff, lack of flood-resilient sanitation infrastructure, and low capacity for waste management. Around 80% of the water tube wells were submerged and contaminated during 2022's flooding. Leakage, seepage, and overflow from the sanitation facilities contaminate surface water bodies and groundwater aquifers when the soil is porous and less cohesive. Surface water is commonly used for bathing, cleaning, and drinking in many parts of Sunamgonj, which is likely contaminated by livestock movement and pathogens from contact with the damaged drainage systems. Poor drainage can lead to water accumulation, causing erosion and sedimentation and impeding access. Stagnant water from rain and poor drainage can also turn into mosquito breeding sites with an increased risk of waterborne diseases such as cholera or malaria, particularly among children and older people with weaker immune systems.

- **Solid waste management** has been identified as an issue of concern in both sub-districts (Shantiganj and Jagannathpur) of Sunamgonj. There is overall low capacity, inadequate supporting infrastructure, and lack of awareness to manage solid waste and fecal sludge. There are no or limited designated waste dump sites at an appropriate distance from the shelters, Waste is often disposed at an informal communal dump site near the shelters. Packaging and other sanitary waste, including dignity kits, may be disposed of inappropriately. Environmental sanitation and disease transmission may be an issue.
- **Wastewater management** has been identified as an issue of concern in Sunamgonj. There is a lack of drainage infrastructure and low capacity to manage drainage wastewater and protect water sources. Wastewater ponds can turn into mosquitoes' breeding grounds, often has an odour, and carry contaminants that harm human and livestock health. Contaminated water can also drain into streams and other surface water used for washing, cleaning, and bathing, which raises health concerns. Environmental sanitation and waterborne diseases may be an issue in the area.

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
Climate-related risks	<ul style="list-style-type: none"> ▪ Consult national/local hazard maps before site selection for the WASH infrastructure ▪ Choose sites for WASH infrastructure with minimum exposure to floods, erosion, and landslide hazards. ▪ Explore locally available early warning mechanisms and make them accessible to the community. ▪ Conduct participatory mapping by depicting the main risks and root causes of flood risks, and communicate the findings with the community ▪ Support cleaning of drainage canals and create awareness on promoting vegetation coverage to increase the infiltration capacity of the ground
Water Contamination	<ul style="list-style-type: none"> ▪ Safeguard (fencing) drinking water sources against contamination, particularly from animals and open defecation ▪ Properly store oil and chemicals and prevent any leakages into soil or water ▪ Machinery and chemical/chlorine storage should be monitored for any leakages. Safely dispose of oil residuals, including waste oil, lubricants, and used filters ▪ Identify improvements to sanitation infrastructure (e.g., improve latrine design) ▪ Conduct sensitization campaigns on good sanitation practices and links to health ▪ Maintain distance (minimum 15-20 meters) and keep the water source at a higher elevation from the contamination source ▪ Ensure reduced stagnation of water through proper drainage systems ▪ Protect water sources and monitor/test water quality to ensure potable quality, including tests for microbial, pathogenic, arsenic, fluoride, and iron content
Solid Waste Management	<ul style="list-style-type: none"> ▪ Separate organic and inorganic waste and designate a waste dump site/collection point at an appropriate distance from shelters. ▪ Minimize the amount of packaging, substitute for paper or cardboard (biodegradable), and promote the principle of reducing, recycling, and reusing in all operations ▪ Promoting organic waste composting, which recovers valuable nutrients, improves soil fertility, and decreases raw waste. ▪ Consider setting up waste livelihoods projects ▪ Promote waste management in communities via Reduce, Re-use and Recycle ▪ Explore the potential of biogas production from fecal sludge ▪ Create awareness and build the capacity of the community to dispose of waste at designated sites
Wastewater management	<ul style="list-style-type: none"> ▪ Promote the use of wastewater for kitchen gardening ▪ Consider a proper drainage system, and consider odour control mechanisms ▪ Improve sanitation infrastructure ▪ Consider necessary arrangements for the safe disposal of fecal sludge and its reuse as manure or biogas ▪ Support community awareness programs ▪ Protect water sources from pollution, particularly human and animal excreta

LIVELIHOOD- Potential Environmental Impacts and Mitigation Measures

Environment and food security are interdependent; when land is degraded or prone to natural hazards, productivity decreases, directly impacting communities' food security, livelihood, and well-being. Interventions that focus on short-term benefits and neglect consideration of the environment can jeopardize long-term food security and livelihood opportunities. Therefore, a healthy and productive ecosystem is a prerequisite for those reliant on the environment for their livelihoods. The Sphere Standards (2018) also state that environmentally sensitive options within the livelihood interventions be chosen whenever possible.

This section summarises the environmental vulnerabilities, key impacts and mitigation measures associated with the NRC's food security project in Shantiganj and Jagannathpur subdistricts of Sunamgonj. The prioritized potential environmental impacts of the food security project are listed below.

- **Climate-related hazards**, such as flash flooding, erratic and unpredictability of rainfall, water logging, and landslides, are issues of concern in Sunamgonj. Communities are involved in large-scale paddy rice cultivation in the floodplains and fishing from the lakes, which are highly vulnerable to climate-related hazards. Flash floods and water logging pose a risk towards large-scale land degradation, and agricultural productivity in Sunamgonj. This is primarily due to the unavailability of climate-resilient infrastructure, upstream activities, inadequate drainage, and agriculture practices (monoculture).
- **Chemical fertilizers and pesticides** are commonly used for agriculture in Sunamgonj, an issue of environmental concern leading to land and soil degradation. This often leads to land degradation and contamination of surface and groundwater resources. Most chemical pesticides are toxic to human health and the environment, particularly when usage is poorly managed. Continued poor pesticide practices increased pest resistance, necessitating even higher dosages. Pesticides also destroy other flora and fauna, damaging ecosystems and decreasing biodiversity.
- **Inadequate drainage system and land degradation** has been identified as an issue associated with agricultural practices. Land and soil can be degraded with unsustainable agriculture practices such as monoculture, tillage etc. Sunamgonj and Sylhet areas are considered the food basket of Bangladesh, with large-scale paddy rice production- the staple food in the country. A proper drainage system is crucial for agricultural productivity and environmental risks. The drainage infrastructure is limited in Sunamgonj and is not designed to avoid salt accumulation (salinity) and waterlogging, which is a challenge for farmers. There is also a risk of eutrophication (lacking oxygen), a condition caused by runoff from fertilized agriculture, which can permanently damage water bodies and agricultural land.
- **Deforestation** has been identified as an issue of concern due to fuelwood use and expansion of agricultural land. Forests play an important role in flood retention, slope stabilization and sediment control and provide important ecosystem services, including habitat for critical flora and fauna.

Potential Project Impacts	Mitigation Measures
Climate-related Hazard	<ul style="list-style-type: none"> ▪ Use localized and easy-to-use early warning systems (radio/SMS alerts) ▪ Support climate-smart and conservation agriculture: low till, diverse rotations, cover/tree/shrub crops more resilient to drought ▪ Support climate-resilient irrigation and drainage infrastructure ▪ Support capacity-building and awareness programs on climate adaptation and resilience in the context of agriculture
Use of Chemical Fertilizers	<ul style="list-style-type: none"> ▪ Assess traditional knowledge and promote good agricultural practices ▪ Promote Integrated Pest Management practices, and discourage the use of chemical fertilizers ▪ Consider providing organic fertilizers and generating awareness of their benefits ▪ Monitor water quality and disseminate information to all stakeholders.
Land and Soil Degradation	<ul style="list-style-type: none"> ▪ Promote polyculture and rotational crop cultivation ▪ Intercrop with legumes or other nitrogen-fixing species ▪ Promote low-tillage farming and discourage inappropriate farm machinery ▪ Keep the drainage canal regularly clear from accumulating silt ▪ Take appropriate localized measures to minimize waterlogging and salinization ▪ Support agriculture extension services, and local farmer learning centres,
Deforestation	<ul style="list-style-type: none"> ▪ Discourage the expansion of agricultural land at the cost of deforestation ▪ Support native tree plantation and other agro-forestry measures when possible ▪ Provide appropriate pots and other cooking utensils that are suitable and help improve the efficiency of the cooking process ▪ Support community awareness programs

RECOMMENDATIONS AND NEXT STEPS

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

- This NEAT⁺-generated environmental screening presents a systematic and objective assessment of the potential impacts of the NRC's WASH and Shelter & Settlement and Food Security projects in Shantiganj and Jagannathpur subdistricts of Sunamgonj in Bangladesh. It identifies and assesses project-associated risks and proposes contextualized mitigation measures for addressing negative impacts and enhancing positive effects. The report serves as a base for future environmental assessments in the area.
- Main environmental risks in the Sunamgonj project sites that need to be considered before project implementation are climate-related hazards, particularly flooding, erosion and landslides, contamination of surface and groundwater aquifers, water logging, loss of biodiversity due to proximity to critical natural conservation areas, and limited capacity to manage solid and wastewater.
- The exercise should be followed by an Environmental Management Plan, where the mitigation measures are converted into project activities with clear implementation responsibilities. An environmental management plan should be a collaborative effort and must be monitored by the implementing agency for compliance, where contractual terms can be used to enforce contractor and subcontractor compliance. For self-reconstruction, adequate monitoring mechanisms should be in place.
- 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' but often, it would be doing things differently in a more environment-friendly manner and may not necessarily imply any additional cost. Options need to be explored if mitigation measures could be implemented through other projects within the organization or in collaboration with partner organizations operating in the Sunamganj.
- 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)
- ECHO Environmental Guidance: 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/>.
- Post Disaster Need Assessment Study Key <https://reliefweb.int/report/bangladesh/key-immediate-needs-and-preliminary-impact-assessment-north-eastern-flash-flood-may-2022-bangladesh>
- 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>

ANNEX: LIST OF PARTICIPANTS

ORGANIZATION	CONTACT DETAILS	ORGANIZATION	CONTACT DETAILS
IDEA	idea.sylhet@yahoo.com	NRC	mahedi.mahedi@nrc.no
CARITAS	dencil_podueng@caritasbd.org		dcil2140@gmail.com
CNRS	tasnimamukit@cnrs.org.bd	UTTARAN	nstriazulraaz@gmail.com
ERA	md.kamrujjaman111@gmail.com		na_eco@yahoo.com
ERA	ashiqurrahman.ashiq11@gmail.com	IDEA	jubayerahmed@gmail.com
CARITAS	arook_toppo.rro@caritasbd.org	NRC	tauhid.rahman@nrc.no
CNRS	tasnimamukit@cnrs.org.bd		