Multi-Hazard Response Plan for Rohingya Refugees in Cox's Bazar District 2022

Anticipatory Action & Response

Photo Credit: BDRCS, IFRC/American RC and CPP

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LIST OF ACRONYMS

AA	Anticipatory Action
AGDD	Age, Gender, Disability and Diversity
AOR	Area of Responsibility
APBn	Armed Police Battalion
BDRCS	Bangladesh Red Crescent Society
BMD	Bangladesh Meteorological Department
BSFP	Blanket Supplementary Feeding Programme
CDMC	Camp Disaster Management Committee
CiC	Camp in Charge
CNV	Community Nutrition Volunteer
CPP	Cyclone Preparedness Programme
DMC	Disaster Management Committee
DMU	Disaster Management Unit
DRR	Disaster Risk Reduction
EOC	Emergency Operation Center
EPR	Emergency Preparedness and Response
EPRWG	Emergency Preparedness and Response Working Group
ERT	Emergency Response Team
EWARS	Early Warning and Alert Response System
FAO	Food and Agriculture Organization
FSCD	Fire Service and Civil Defense
GoB	Government of Bangladesh
GSB	Geological Survey of Bangladesh
HCTT	Humanitarian Coordination Task Team
HEB	High-Energy Biscuits
HEOC	Health Emergency Operations Center
HOSOG	Heads of Sub-Offices Group
IEC	Information, Education, and Communication
IFRC	International Federation of Red Cross and Red Crescent Societies
INGO	International Non-Governmental Organization
INSTANT	Integrated Forecast Dissemination Portal
IOM	International Organization for Migration
IPC	Infection Prevention and Control
ISCG	Inter Sector Coordination Group
IYCF	Infant and Young Children Feeding
J-MSNA	Joint Multi-Sector Needs Assessment
LEWS	Landslide Early Warning System
LSM	Land Susceptibility Mapping
MAM	Moderate Acute Malnutrition
MHPSS	Mental Health and Psychosocial Support
MHRP	Multi-Hazard Response Plan
MLM	Mother Led Mid Upper Arm Circumference
MMT	Mobile Medical Team
MoDMR	Ministry of Disaster Management and Relief
MRF	Material Recovery Facility
MUAC	Mid Upper Arm Circumference
NFI	Non-Food Items
NGI	Norwegian Geotechnical Institute
NGO	Non-Governmental Organization
NPM	Needs Population and Mapping
PERU	Protection Emergency Response Unit
PLW	Pregnant & Lactating Women
PSEA	Protection from Sexual Exploitation and Abuse
RAB	Rapid Action Battalion
RRRC	Refugee Relief and Repatriation Commissioner
SAM	Severe Acute Malnutrition
SAR	Search and Rescue
SEG	Strategic Executive Group
SMS	Site Management Support
SMSD	Site Management and Site Development
SMEP	Site Management Engineering Project
SOPs	Standard Operating Procedures
SRH	Sexual and Reproductive Health
SUV	Safety Unit Volunteer
UN	United Nations
UNDSS	United Nations Department for Safety and Security
UNHCR	United Nations High Commissioner for Refugees
UNICEF	United Nations Children's Fund
WASH	Water, Sanitation and Hygiene
WFP	World Food Programme

1. CONTEXT

In August 2021, the Humanitarian Coordination Task Team (HCTT) issued the Nexus Strategy (2021-2025) on Humanitarian-Development Collaboration for Climate-Related Disasters developed in coordination with the Ministry of Disaster Management and Relief (MoDMR). This Multi-Hazard Response Plan (MHRP) is closely aligned to this HCTT strategy and the overall MoDMR National Plan for Disaster Management (2021-2025). It also draws upon district-level preparedness and response plans, including the Cox's Bazar Cyclone Preparedness Plan, 2021 and wide-ranging contributions from humanitarian stakeholders working in the camps. The plan specifically focuses on humanitarian operations targeting the Rohingya refugees and surrounding host communities in Cox's Bazar District, in the sub-Districts of Ukhiya and Teknaf.

The MHRP summarizes the immediate humanitarian response strategy to severe seasonal hazards during the monsoon season, as well as sudden-onset risks such as large-scale fires and tropical cyclones/storms that could have devastating impacts on the refugee camps and host communities. While earthquakes are highlighted as a major concern in Bangladesh, Cox's Bazar is identified as a moderate-risk (Zone III) seismic zone.[1] With several earthquakes of low to medium magnitude occurring in the past year, there is the risk of a potentially disastrous earthquake, as these low/medium events are unlikely to have released accumulated stress within fault lines. Severe infrastructural damage and casualties, would however, most likely be highly concentrated in the host communities and urban centres, compared to the camps, where lightweight temporary construction materials (bamboo and tarpaulin) are predominantly used.

Drought is another prevalent risk in the Teknaf sub-District, due to the lack of a fresh-water aquifer and/or ground-water reserves. The area is therefore fully reliant on rainwater that is inadequate to meet increased water demands in recent years. Due to the localized nature of this hazard, this risk will be addressed through a Sector-specific action plan to be developed by relevant water, sanitation, and hygiene (WASH) and Site Management Site Development (SMSD) partners.

This MHRP does not explicitly cover health-related hazards and cross-border risks that could trigger new refugee outflows.[2] Preparedness and response strategies to communicable diseases and epidemic prone diseases including COVID-19, are already extensively covered within various existing health plans, developed under the guidance of the World Health Organization (WHO) and relevant Government stakeholders. These include the COVID-19 Strategic Preparedness and Response Plan, WHO International Health Regulations, and the National Preparedness and Response Plan for COVID-19, Bangladesh.[3]

The EPR measures recommended by the MHRP, would however continue to be implemented in accordance with stipulated protocols that include Infection Prevention and Control (IPC) protocols and health regulations. Risk monitoring and contingency planning for cross-border risks that could trigger potential new influxes of refugees are also addressed within the UNHCR Contingency Plan.

[1] Contingency Plan for Earthquake Response in Major Urban Centers, 2019

[2] Additionally, lightning risks (categorized as a moderate risk in Cox's Bazar) would not trigger the MHRP.

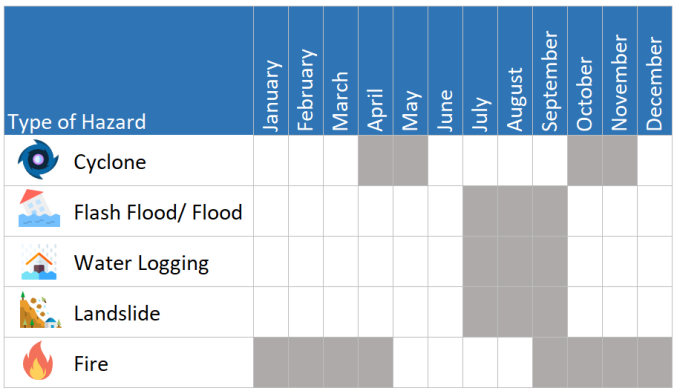
[3] Acute Watery Diarrheal Disease Preparedness and Response Plan, 2019

The objectives of the MHRP include:

- Coordinating effective, timely, age and gender responsive emergency preparedness and response (EPR) measures to the major natural and man-made hazards affecting the camps and host communities (living within and adjacent to camp boundaries).
- Streamlining emergency preparedness and response coordination, information sharing and decision-making processes and mechanisms while also strengthening humanitarian-disaster risk reduction (DRR) linkages.
- Enhancing integration between agency and Sector-specific EPR responses and mainstreaming of cross-cutting themes such as gender and persons living with disabilities to improve the cohesion and complementarity of programme outcomes.

1.1 Hazard Analysis

Figure 1: Annual Hazard Calendar (Cox's Bazar)



Source: https://instant.rimes.int/calendar

Risk Profile for Cox's Bazar District

An analysis of the Site Management and Site Development (SMSD) Sector's incident reporting within the camps from 2018 to 2021 indicated that the key risks likely to impact the camps are: wind/rain storms, floods (flash-flooding and water-logging), slope failure/landslides and fires. In addition, there is a periodic risk of cyclones during the two cyclone seasons from April-May and October–November. According to the Bangladesh Meteorological Department (BMD), between 1960 to 2017, seven Severe Cyclonic Storms (max wind speed of 220 km/hr) and two Cyclonic Storms (max wind speed of 115 km/hr) directly hit Cox's Bazar.[4]

The hazards impacting the camps during the period of 2017-2021 have been ranked in order of likelihood and level of impact (total number of people impacted and number of shelters/facilities damaged) in the risk matrix below. For scenarios that appear in the matrix in red, advanced preparedness actions need to be implemented to mitigate the impact of anticipated response scenarios[5]. As women, children, the elderly, and people with disabilities are often the most vulnerable in times of disasters, cross-cutting strategies addressing the specific needs of these groups must also be prioritized.

[4] Statistical Yearbook of Bangladesh, 2020, 40th Edition

[5] Preparedness Package for Refugee Emergencies -2020

1.2 Risk Prioritization Matrix

LIKELIHOOD						
	VERY LIKELY (5)			**Wind/Storms, Floods (flash floods, waterlogging), Landslides**	**Fires**	
	LIKELY (4)				**Cyclones**	
	MODERATELY LIKELY (3)			**Earthquake**[6]		
	UNLIKELY (2)					
	VERY UNLIKELY (1)					
LIKELIHOOD		**VERY LOW (MINIMAL) (1)**	**LOW (MINOR) (2)**	**MODERATE (MEDIUM) (3)**	**HIGH (SEVERE) (4)**	**CRITICAL (EXTREME) (5)**
		IMPACT				

LIKELIHOOD
1 = Very Unlikely (very low/remote chance, 0-5% likelihood in next 12 months)
2 = Unlikely (low chance (5-15%) of occurring in next 12 months)
3 = Moderate likely (viable chance 15-30% in next 12 months
4 = Likely (significant chance 30-50% in next 12 months)
5 = Very likely (high likelihood >50% in next 12 months)

IMPACT
1 = Very low (minimal/negligible impact on overall population: 0-10%). *Emergency response capacities are high to deal with predicted scenario*.
2 = Low (minor impact on overall population: 10-20%). *Emergency response capacities are relatively high to deal with predicted scenario*
3 = Moderate (medium impact on overall population: 20-50%), *Emergency response capacities are partially sufficient to deal with predicted scenario*
4 = High (major/severe impact on overall population: (50-70%) *Emergency response capacities are insufficient to deal with predicted scenario)*
5 = Critical (extreme impact on overall population: above 70%). *Emergency response capacities are highly insufficient to deal with the predicted scenario.*

1.3 Early Warning Systems in Place

- **Flood Forecasting & Alert System:** The Rohingya camps are mainly vulnerable to flash flooding and waterlogging due to heavy rainfall during the monsoon season. The Integrated Forecast Dissemination Portal (INSTANT) triggers localized alerts on accumulated rainfall in Cox's Bazar. The United Nations Development Programme (UNDP), in partnership with United Nations High Commissioner for Refugees (UNHCR), the Geological Survey of Bangladesh (GSB) and the Norwegian Geotechnical Institute (NGI), also installed three automated rain gauges within the camps in 2018[7]. This rain gauge alert system sends alerts to 20 designated government and UN agencies located in Cox's Bazar and Dhaka[8]. INSTANT can issue five (5) day forecasts with alerts issued at 72-hour, 48-hour and 24-hour intervals, which analyzed against historical SMSD incident data, can help partners anticipate, prepare, and respond to imminent flooding risks. These preliminary flood impact projections would be provided by ISCG in coordination with SMSD and the Natural Hazards Working Group (NatHaz WG).

- **Landslide Monitoring & Alert System**: In July 2021, the Food and Agriculture Organization (FAO) released the Landslide Early Warning System (LEWS) for Cox's Bazar District that provides alerts with 5 days lead time. The warning system uses forecasted rainfall estimated to trigger email alerts to registered users. While still at a pilot phase, and focused on host communities in Cox's Bazar, FAO plans to further expand and

[6] Cox's Bazar risk impact mapping ranked as moderate based on existing infrastructure and proximity to fault lines.

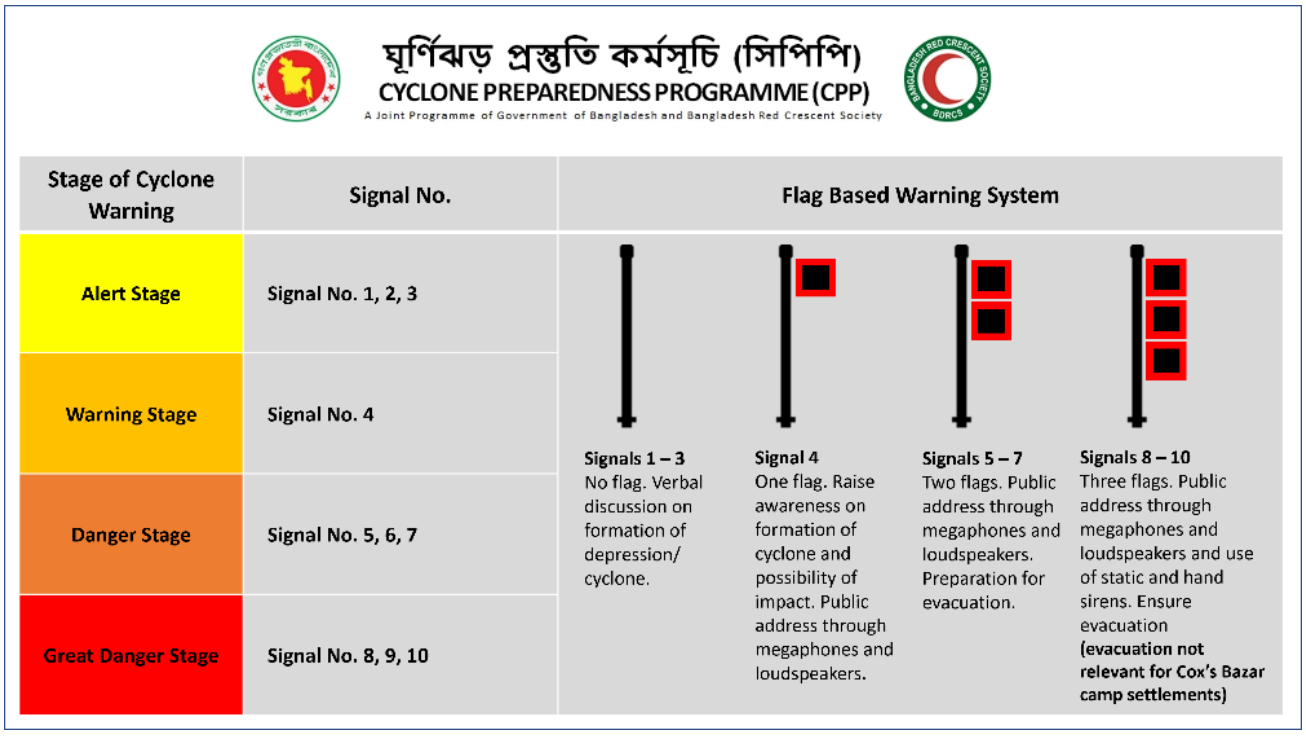
[7] Technical issues with non-functional rain-gauges still need to be resolved. UNDP also supports with collection of rainfall data from BMD and weather gauges available in camps and together with REACH maintains a hydro meteorological database which integrates weather data and SMSD incident data for better analysis.

[8] Natural Hazards Summary Report – October 2020

contextualize this system to camp conditions to provide early warning alerts (5-day forecast lead times), that can trigger anticipatory and early response actions to landslides in the most risk-prone areas within the camps. Preliminary impact projections would be developed by ISCG in coordination with FAO and the NatHaz WG, once the LEWS system is functional within the camps.

- **Cyclone Early Warning System**: The Bangladesh Meteorological Department (BMD) regularly monitors weather systems within the country, and when a low-pressure depression is observed at the Bay of Bengal (BoB), special weather bulletins are issued indicating the storm category, its current location, forecast track and cyclone signals for seaports and associated coastal areas. An Anticipatory Action (AA) Working Group is also activated during the two cyclone seasons, to monitor cyclonic activity in the BoB, triangulate data from other global and regional forecasting sources[9] and share a situational analysis with the Emergency Preparedness and Response Working Group (EPRWG). Based on cyclone early warning alerts issued by BMD, the Cyclone Preparedness Programme (CPP), a joint initiative of Government of Bangladesh (GoB) and the Bangladesh Red Crescent Society (BDRCS), is activated and through its volunteers, are mobilized to hoist cyclone warning flags with corresponding early warning-early action messages, as seen below.

Figure 2: Cyclone Warning Stages, Signals and Flags



- **Early Warning and Alert Response System (EWARS).** Recognizing the increased risk of infectious disease transmission and other health-related emergencies, the Health Sector relies on data obtained through the EWARS. This is a disease surveillance system that improves the timely detection of disease outbreaks and informs preparedness and response priorities following a disaster event. WHO, and the Ministry of Health and Family Welfare provide technical oversight and support for Sector-wide implementation of the EWARS.

[9] Other validated regional sources include the Indian Meteorological Department's (IMD) Regional Specialized Meteorological Center (RSMC) which monitors and issues advisories for all depressions and cyclones in the Bay of Bengal regardless of location.

- **Integration of Cross-Cutting Themes in EWS:** It is estimated that 12% of the population in the camps and around 10% in the host communities, are persons living with a disability and the prevalence increases among older persons.[10] Disability inclusion and the application of accessibility standards and universal design to early warning systems would increase the capability to effectively warn people with and without disabilities.

2. EMERGENCY CLASSIFICATION & PLANNING SCENARIOS

Emergency response in Cox's Bazar is classified into three categories.

Category	
Moderate (Category 1)	
Major (Category 2)	
Extreme (Category 3)	

1. **Moderate Emergency (Category 1):** categorized as minor incidents/events where the response can be managed in a timely and effective manner by existing partners within the camp under the leadership of the Site Management Support (SMS) Area of Responsibility (AOR) agency. A Category 1 Emergency would not require significant additional resources from other Sector partners and would utilize the existing response and coordination mechanisms used for regular camp operations.[11]
2. **Major Emergency (Category 2):** categorized as major incidents/events where camp and/or host-level response capacities have been exhausted and there is a serious disruption to normal operations. This could impact a single camp or multiple camps; additional resources and partners may be called upon by some Sectors to augment existing capacities.[12]
3. **Extreme emergency (Category 3):** categorized as severe incidents/damages to multiple camps and surrounding host communities where existing capacities are completely overwhelmed and require significant augmentation and external surge capacities.[13]

Humanitarian Operational and Coordination Leadership Functions during Emergencies[14]

- Within the humanitarian community, the operational leadership for all categories of emergencies would remain with the SMS AOR agency.
- Emergency mechanisms for the Camp Disaster Management Committees (CDMCs) would also be triggered through the activation of camp-specific response plans.
    - For Category 1 emergencies, the operational and coordination functions would remain the same as in non-emergency situations (i.e., under the SMS AOR agencies). ISCG and Sectors would provide support on information management and issuing of regular emergency updates to ensure transparency of information.
    - For Category 2 and 3 emergencies, ISCG and the respective Sectors would take the lead on the coordination of the response, while operational leadership would remain under the SMS AOR agencies. ISCG would provide overall coordination support to humanitarian partners and

[10] REACH Age and Disability Needs Assessment, Rohingya Refugee Response 2019.

[11] Examples of Category 1 emergencies include annual monsoon responses (for below average/average rainfall thresholds); the Camp 5 fire incident on 18 January 2022 that affected 138 people across 2 camp blocks, damaging 27 shelters and 1 facility.

[12] Examples of Category 2 emergencies include the 22 March 2021 fire incident that affected over 48,000 people across 3 camps, damaging 10,100 shelters and 327 facilities; the July/August 2021 monsoon floods that affected over 80,000 refugees including 8 fatalities and damaged over 8,500 shelters with major damages also reported in host communities.

[13] Any emergency event that significantly overwhelmed response capacities at Cox's Bazar level, requiring additional national and international level support would be considered a Category 3 emergency.

[14] Refer to Section 3.1 for further details.

Government counterparts, working closely with the respective Sectors and the Humanitarian Coordination Cells (that comprise SMS AORs among other key stakeholders) to facilitate multi-sectoral joint need assessments, information management, cross-sectoral coordination, regular reporting, donor advocacy for flash appeals[15] among other responsibilities.

- To facilitate improved Sector-level coordination for Category 2 and 3 responses, the SMS AOR agency would also designate a dedicated emergency focal point to liaise directly with Sectors on sectoral gaps and needs. This would help to better streamline early response efforts, minimize duplication of activities while safeguarding cross-cutting themes, including women and children, elderly people and persons living with disabilities.

The following rationalization principles would also be applicable across all emergency responses to ensure greater coherence with the Government and better continuity of services to affected refugees.[16]

- Implementing partners[17] already working in the affected camp(s) would be prioritized to provide services to refugees.
- Implementing partners from outside the affected camps may be called in to assist for a short period, when the response is too large for the existing partner(s) capacities within the affected camp, to handle the emergency. Additional implementing partners requested to temporarily augment existing capacities would be required to demobilize and hand over activities to the responsible partner in the camp, once the emergency response is over.
- This determination would be made by the relevant Sectors and technical working groups in consultation with the SMS AOR lead agencies that would be responsible for determining the emergency needs and gaps as well as identifying clear-cut opportunities and entry points for mainstreaming cross-cutting issues from the onset of the response.

The MHRP would only be activated for Category 2 and 3 emergencies once pre-determined pre-impact weather thresholds and triggers for activation are reached. A Humanitarian Coordination Cell (HCC) at Cox's Bazar level chaired by the Inter-Agency Principal Coordinator and other key operational lead agencies (including the SMS AOR agencies), would also be activated to provide key strategic and operational oversight for the response. HCC members would be senior operational staff /heads of operations authorized to make decisions on behalf of their respective agencies.

The HCC would keep the Heads of Sub-Offices Group (HOSOG) regularly appraised of evolving needs, priorities and challenges requiring high-level strategic attention. Where urgent Government approvals are required to expedite response actions, a special invite would be extended to the Refugee Relief and Repatriation Commissioner. The HCC mechanism would also be activated at Upazila level, to operationalize decisions made at Cox's Bazar level and facilitate coordination in catchment areas with Sectors, and with Government response mechanisms (Emergency Operation Centers [EOC]) if also activated. ISCG would also designate emergency focal points to participate in EOC sessions to ensure a two-way feedback loop between the HCC's and EOC's at district and Upazila levels.

Category 2 and 3 response levels would be reassessed every two weeks and deactivated or extended as deemed relevant. Individual Sector emergency response mechanisms would also be deactivated in a phased manner, as and when Sectoral gaps are ascertained to have been fully addressed.[18]

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[15] Please refer to section 3.7 of this document for additional information.

[16] Principles of Rationalization in the Rohingya Refugee Response in Bangladesh.

[17] Implementing partner refers to an NGO/UN agency implementing projects directly within the camps.

[18] For further details refer to Table 3.1 (Strategic, Operational and Coordination Leadership Functions).

2.1 General Planning Assumptions

- The Government of Bangladesh (GoB) maintains overall leadership for responding to emergencies in the Rohingya camps and surrounding host communities. The humanitarian community complements and supports these efforts, through this response plan among other relevant humanitarian response mechanisms.
- The refugees are the first responders for any emergency event within the camps, through an extensive network of disaster management units (DMUs), community leaders and well-organized and trained volunteer groups.
- The Camp Disaster Management Committees (CDMCs) will be the main coordination platform in camps for all types of emergencies, with membership comprising of the Camps-in-Charge (CiC), relevant Sector Focal Points, camp managers, the SMS agency, military, fire service, police, and community representatives.[19]
- All emergency preparedness measures will be in place in anticipation of identified risks and regularly monitored and tested through relevant EPR drills, simulations, and trainings to enhance operational readiness and response times.
- The COVID-19 pandemic will continue to be a major public-health concern in Bangladesh over the course of 2022. Humanitarian actors will need to remain highly agile and flexible, to adapt to evolving trends to minimize impacts to emergency response capabilities.
- Within the camps, communal facilities (mosques, learning centers, multi-purpose centers, reinforced warehouse structures and available semi-permanent/permanent structures) will be mapped, reviewed and pre-designated for use as temporary relocation centers (excluding critical facilities such as health facilities) during emergencies. Temporary relocation facilities should be accessible for people with disabilities, the elderly and other vulnerable groups who tend to be disproportionately affected compared to the general population. This will be coordinated by the CiCs in coordination with Bangladesh Army and SMS agencies.
- Humanitarian partners will ensure minimum protection standards are maintained including through collection of sex, age, and disability dis-aggregated data to inform response planning.[20] The Protection Sector will also continue to provide targeted support to all Sectors on protection mainstreaming[21] as a continuous exercise in the design, implementation, and evaluation of activities, incorporating the principles of Safety and Dignity, Do No Harm, Meaningful Access, and Accountability.
- Humanitarian staff and partners will strictly adhere to a zero-tolerance approach to sexual exploitation and abuse. The Prevention of Sexual Exploitation and Abuse (PSEA) Network and ISCG would continue building the capacities of all humanitarian actors to prevent, mitigate, and respond to risks and incidents of sexual exploitation and abuse; raising awareness on PSEA and ensuring that refugees understand how to respond to incidents; expanding reporting systems and community-based feedback mechanisms.
- In accordance with the Accountability to Affected Populations (AAP) Manifesto for the Rohingya refugee response, AAP will be ensured during emergencies. All actors involved will maintain two-way communication channels to exchange information on community awareness raising, sensitization and mobilization, to ensure

19 Draft Guidelines for Disaster Management Committees in Camp Settlements – pending RRRC approval.

[20] The ISCG and Protection Sector are working to streamline and aggregate existing data within various information management systems.

[21] The key Protection Principles are outlined in the 'Guidance Note on Protection Mainstreaming,' which was updated in November 2021 and shared with all Sectors and partners.

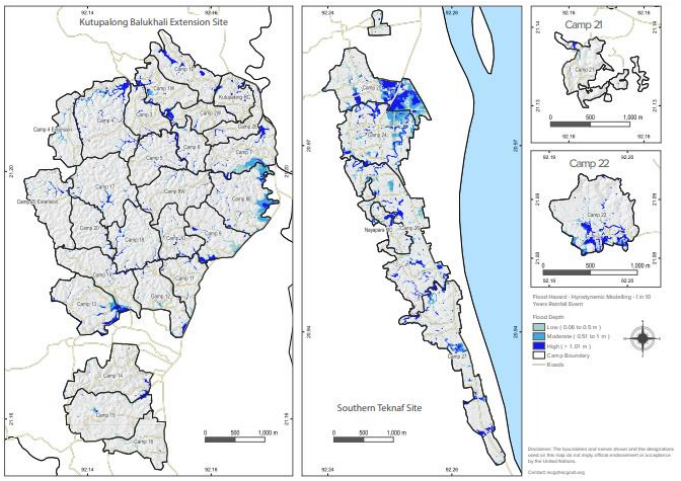
effective community engagement and participation and integrate community perceptions, feedback, and suggestions into the response. Standardized key messaging and Information, Education, and Communication (IEC) materials on different types of hazards have been developed and are publicly available through the Shongjog website. The Common Feedback Platform will be the main feedback mechanism to receive, respond/refer and resolve to close the feedback loop.[22]

- Critical emergency services including debris/road clearance, search, and rescue operations, dead body management, traffic and crowd control and mass temporary relocations will be handled by the Bangladesh Army, Armed Police Battalion (APBn), Fire Service and Civil Defense, BDRCS, CiCs, RRRC and SMS agencies in coordination with ISCG.
- Poor mobile telecommunication connectivity within the camps, that may exacerbate communication challenges between response teams, will be addressed by the Emergency Telecommunications Sector. This will be addressed through maintenance and expansion of the existing VHF radio communication and data connectivity network, regular equipment upgrades, expansion to additional connectivity sites in the camps, and related staff refresher trainings in coordination with relevant Government authorities.
- There may be a heightened risk and incidence of communicable diseases and waterborne diseases after disaster events. The EWARS will be the backbone for health surveillance and information for disease specific preparedness and response.
- Humanitarian partners will also maintain stand-by capacities to address any emergency needs arising from the host communities residing within the two Upazilas of Ukhiya and Teknaf.
- Recovery efforts will integrate cross-cutting themes including gender and disability inclusion to increase opportunities to 'build back better' both in terms of physical infrastructure but service provision and community support to strengthen disaster resilience as well as breaking down social barriers and inequalities.

[22] AAP Guidance and Community Engagement Guidance are under development.

2.2 Disaster Scenarios & Thresholds for Response Activation

Figure 3: Flood Hazard Susceptibility Map



Click for enlarged view

Scenario 1: Severe and recurrent monsoon flooding due to above normal rainfall. While monsoon flooding is an annual recurrent risk across the country, severe flooding occurs every 4-5 years in Bangladesh and covers 60% of the land mass.[23] Cox 's Bazar District and the Rohingya camps are particularly prone to flash-flooding and waterlogging.

Floods Impact Projections & Thresholds[24]

Anticipated rainfall impacts in the camps include impeded road access, shelter and facility losses/damages and increased challenges for refugees (especially persons living with disabilities, women, and girls) to access services and distribution points.

Below are pre-determined rainfall thresholds that would be used to anticipate flood risks and potential impacts and activate readiness triggers. The EPRWG, working under the guidance of ISCG, would be responsible for closely monitoring and tracking these thresholds with the support of relevant specialized partners.

Pre-flood Projections Threshold Matrix

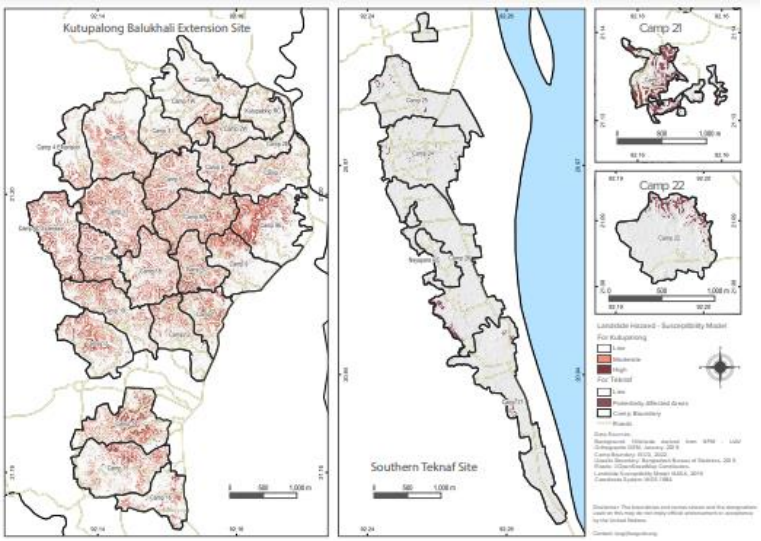
LIKELIHOOD	**HIGH**	Above all set 24h, 48h and 72 h. thresholds	**Readiness trigger**	**Action trigger**	**Action trigger**
	MODERATE	**24h:>152mm 48h:>210mm 72h:>268mm**	**Readiness trigger**	**Action trigger**	**Action trigger**
	LOW	**24h:<121mm-152mm 48h:<168mm-210mm 72h:211mm-268mm**	**No action**	**Readiness trigger**	**Action trigger**
Projected Risk Impacts & Readiness Actions • **0-0.5m flood depth:** The expected impacts on people and infrastructure are likely to be minor. • **>0.5-1m flood depth:** Site development activities would need to be combined with appropriate protection measures. • **>1m flood depth:** Higher numbers of people and infrastructure would be exposed. Pre-emptive temporary relocation may be required for highly flood-prone locations where flood impacts at sub-block level for flooded structures are projected to range between 140-500 structures.[25]			Flood depth **0-0.5m**	Flood depth **>0.5-1m**	**Flood depth >1m**
			LOW (MINOR)	**MODERATE (SEVERE)**	**HIGH (CRITICAL)**

[23] World Bank.

[24] Tropical Cyclone Disaster Impact Modelling-Impact Assessment for Chittagong and Cox's Bazar, 2020, p.46.

[25] REACH/UNOSTAT Maps 2021.

Figure 4: Landslide Susceptibility Map



Click for enlarged view

Scenario 2: Major landslides due to above normal rainfall.

Due to hill-cutting, constructions in hills and deforestation, there has been an increasing risk of landslides in Cox's Bazar, particularly within the camps due to the concentrated population density. Currently, landslide warnings can only be made a couple of hours before an event, allowing a very limited time to respond, but the new Landslide Early Warning system (LEWS) developed by FAO has the capability of issuing 5-day advance alerts. FAO plans to expand existing coverage within host communities into the camps and collaborate with BMD to embed LEWS into Government early warning systems.

Landslide Impact & Thresholds

The parameters used to calculate land susceptibility mapping (LSM) values[26] include rainfall levels, land cover, elevation levels, slope angle, soil type, soil texture, aspect, lithology, vegetation cover, stream, and road networks. The pre-determined rainfall thresholds in the matrix below, would be used to anticipate landslide risks and trigger relevant readiness and action triggers. The EPRWG, working under the guidance of ISCG, would be responsible for closely monitoring and tracking these thresholds with the support of FAO and other specialized partners.

Pre-landslide Projections Threshold Matrix

LIKELIHOOD	**HIGH**	**>345 mm rainfall in 5 consecutive days**	**Readiness trigger**	**Action trigger**	**Action trigger**
	MODERATE	**>220-345 mm rainfall in 5 consecutive days**	**Readiness trigger**	**Action trigger**	**Action trigger**
	LOW	**>95-220 mm rainfall in 5 consecutive days**	**No action**	**Readiness trigger**	**Action trigger**
RISK SERIOUSNESS			**LSM value 0.55-1**	**LSM value 0.40-1**	**LSM value 0-1**
			LOW (MINOR)	**MODERATE (SEVERE)**	**HIGH (CRITICAL)**

Scenario 3: Fire causing extensive damage to shelter and facilities in multiple camp blocks and/or camps

The risk of fire hazards in and around the camps is unpredictable and has potentially devastating consequences, due to the high population density, overly congested structures, and the heavy use of highly flammable

[26] LSMs are composite risk values that are calculated based on 10 data parameters ranging from 0 (low susceptibility) to 1 (high susceptibility). LSM values and thresholds for camps will be further refined based on ongoing data collection.

construction materials (bamboo and tarpaulin) within the camp settlements. Consequently, even the smallest fire outbreak can quickly grow within minutes in size and intensity, until it becomes a raging wildfire.

Although fires are a year-round threat, they are more likely to occur during the dry seasons (January to April and October to December) when humidity, temperature and wind speed conditions are most conducive. Unlike other climate-related hazards, such as cyclones and monsoon flooding, for which early warning systems exist, and preparedness measures can be put into place, fires are sudden-onset events, that are more difficult to accurately predict. Up-skilling existing first-responder fire response capabilities, to rapidly respond to fire within the camps at any time (day or night), is therefore essential. The capacities of humanitarian partners to also provide "wrap-around" emergency assistance services (once the fire is contained) and kick-start reconstruction efforts in a timely and effective manner, are also critical. The fire preparedness and response system for the Rohingya camps would consist of two distinct but inter-linked components:

1. **A specially trained and equipped rapid response firefighting capability.** Leveraging their existing role in supporting risk reduction efforts such as flood response and anti-drowning, this component will broaden and strengthen the capacities of the Disaster Management and Safety Unit Volunteers (DMU/SUV) already deployed in the camps, to mitigate the risk of fire and respond effectively when fire incidents occur. The long-term objective of this component includes the roll-out a combination of specialized trainings; a) fire risk reduction and safety, and b) operational use and maintenance of an assortment of custom built portable mobile firefighting equipment specifically designed for use within the unique terrain and infrastructure of the camps. The critical need for a dedicated firefighting water source would also be addressed through the installation of water tanks, in all camp blocks for exclusive use in firefighting. This combination of trainings and equipment would gradually establish an effective, 24/7 rapid response to fires, while also providing follow-on support to the Fire Safety and Civil Defense (FSCD) upon its arrival at the affected location(s). A detailed fire risk analysis to identify the structures/facilities that have the highest fire load,[27] and consequently, enhancing the potential severity of any fire incident if involved, is ongoing, and would support the mapping of the most risk-prone areas and inform planned fire prevention and mitigation measures.

   In the interim, until this specialized component is fully rolled out, stop-gap solutions based on the existing capacities on ground will continue to be utilized. The activities under this component would be implemented through the Site Maintenance Engineering Project (SMEP) and specialized fire safety partners, in close coordination with key humanitarian stakeholders including the Site Management and Site Development (SMSD) agencies, the WASH sector, the FSCD, RRRC and CiCs.

2. **A set of pre-planned humanitarian "wrap-around" services, scaled to the overall impact of any fire.** This second component focuses on the array of site management and humanitarian support services likely to be needed, and the level of fire impact likely to trigger their need. It recognizes that the determinant factor in the composition and scope of humanitarian activities (emergency shelter/NFIs, food, health, WASH, and protection assistance) and related debris management, site clearance, repairs, and reconstruction work, (coordinated by the SMSD Sector and SMEP), would be based on the scale of impact on affected households (including female headed households), damage to shelters/facilities and the extent of disruption caused to regular camp operations and access to lifesaving services. As an annex to this MHRP, age and gender responsive standard operating procedures (SOPs) and/or minimum implementation guidelines drawing on the lessons learnt and best practices from previous fire incidents, will also be developed by ISCG in collaboration with SMS AOR agencies and the Sectors to provide a streamlined response strategy for implementation of inter-sectoral activities in the immediate aftermath of a fire incident.

[27] Structures with highly combustible materials that are typically also of high socio-economic value to camp residents e.g., health facilities, LPG distribution sites, etc.

Scenario 4: Category 4 tropical cyclone[28] makes landfall in Cox's Bazar. Wind speeds of approximately 200km/h, heavy and prolonged torrential rains, and storm surges of up to 4m triggering severe floods and landslides that impact Cox's Bazar and adjacent districts.

Cyclone Impact & Thresholds[29]

Cyclones would likely cause the mobilization of loose materials and debris due to strong winds resulting to significant losses/damages to shelters, communal facilities, water and sanitation, health infrastructure and casualties from flying debris.

Most of the camps in Teknaf sub-District are approximately 1km from the Naf River and a breach or over-topping of river embankments during a cyclone would cause storm surges, flooding and/or landslides in the eastern Teknaf camps. The Ukhiya camps are at a higher elevation and less prone to storm surges, but communities living in low-lying areas would potentially be impacted.

Although pre-determined wind impact thresholds at national level indicate low to minimal damage for wind speeds ranging between 50-60km, it is likely existing camp shelters constructed with bamboo and tarpaulin (excluding transitional and mid-term shelters) would only withstand winds up to 40km/h. Wind speeds above 200km/h could create debris fly and therefore be extremely hazardous to human lives and assets. Any direct cyclone impacts on the camps, regardless of the level of intensity (Category 1 or 4) would likely result in significant damage (approx. 70%) to temporary shelters.

Below are national-level cyclone thresholds and impact projections that trigger the Cyclone Preparedness Programme (CPP) early warning alerts and community preparedness activities. These thresholds are likely to be more appropriate for non-temporary structures within camps and for host community impacts.

National Cyclone Threshold Matrix

LIKELIHOOD	**HIGH**	>89 km/h maximum sustain wind speed (Signal 8,9,10) >3 m surge height				
	MEDIUM	62-88 km/h maximum sustained wind speed (Signal 5,6,7) 2-3 m surge height				
	LOW	51-61 km/h maximum sustained wind speed (Signal 4) 1-2 m surge height				
	VERY LOW	50 km/h maximum sustained wind speed (Signal 1, 2, 3) up to 1 m surge height				
RISK SERIOUSNESS			<20,000 people	<50,000 people	<100,000 people	<200,000 people
			VERY LOW (MINIMAL)	**LOW (MINOR)**	**MEDIUM (MAJOR)**	**HIGH (SEVERE)**

[28] Based on Severe Tropical Cyclone (CAT 4) scenario in Teknaf in 1994. Cyclone Mora in 2017 which was a more moderate cyclone (CAT 1) also caused extensive 70% damages to shelters.

[29] Tropical Cyclone Disaster Impact Modelling-Impact Assessment for Chittagong and Cox's Bazar, 2020, p.56.

2.3 Scenario Planning Projections for 2022[30]

Hazard Scenarios	Projected Impacts (People)	Projected Impacts (Facilities/Shelters)
Scenario 1: Severe Monsoon Flooding	**Moderate Risk:** 41,500 **High/Extreme Risk:** 20,500 (Ukhiya estimates only, Teknaf estimates not available)	**Moderate Risk:** 8,500 **Extreme/High Risk:** 9,000 (Ukhiya estimates only, Teknaf estimates not available)
Scenario 2: Landslides	**Moderate Risk:** 50,000 people **High/Extreme Risk:** 15,500 (Ukhiya estimates only)	**Moderate Risk:** 10,000 shelters **High/Extreme Risks:** 3,000 shelters (Ukhiya estimates only)
Scenario 3: Fire[31]	**Moderate Risk:** 50,000 people **High/Extreme Risk: TBD**	**Moderate Risk:** 10,000 shelters **High/Extreme Risk: TBD**
Scenario 4: Cyclone (CAT 4)-related impacts (worst-case scenario)		
Coastal Inundation/Storm Surge	**High/Extreme Risk:** 12,500 people – Teknaf 2,000 people – Ukhiya	**High/Extreme Risk:** 2,700 camp shelters (Teknaf) 450 camp shelters (Ukhiya)
Wind Damage	**High/Extreme:** 184,000 people (Teknaf) 708,500 people (Ukhiya)	**High/Extreme Risk:** 150,000 shelters (Ukhiya) 40,000 shelters (Teknaf)
Flash-flooding *(conservative estimates)*	***Similar flooding estimates to Scenario 1***	***Similar flooding estimates to Scenario 1***

2.4 Response Activation

Following any emergency event, initial post-disaster rapid assessments would be conducted by first responders (volunteers and Sector focal points), present within camps and channeled through relevant camp-level reporting mechanisms. ISCG can also request the Needs Population and Mapping (NPM) Team to provide remote sensing imaging (using drones) and mapping support, in the immediate aftermath of an emergency event to further augment existing information sources. These initial post-disaster assessments would be used by the ISCG Principal Inter-Agency Coordinator to determine whether pre-determined thresholds have been reached, to trigger a Joint Multi-Sector Needs Assessment (J-MSNA) and convene an ad-hoc Humanitarian Coordination Cell (HCC) at Cox's Bazar level to activate a Category 2 or 3 emergency response. HCCs would also be activated at Upazila level, to coordinate mobilization of pre-positioned stocks, deployment of emergency response teams (ERT) in coordination with Sectors within the respective catchment areas and facilitate information flows to and from Cox's Bazar level.

Camp Disaster Management Committees (CDMCs) in affected camps would also convene on an ad-hoc basis, trigger camp-level response plans and coordinate the response between all relevant stakeholders at camp-level and ensure a streamlined two-way communication channel to and from the camps.

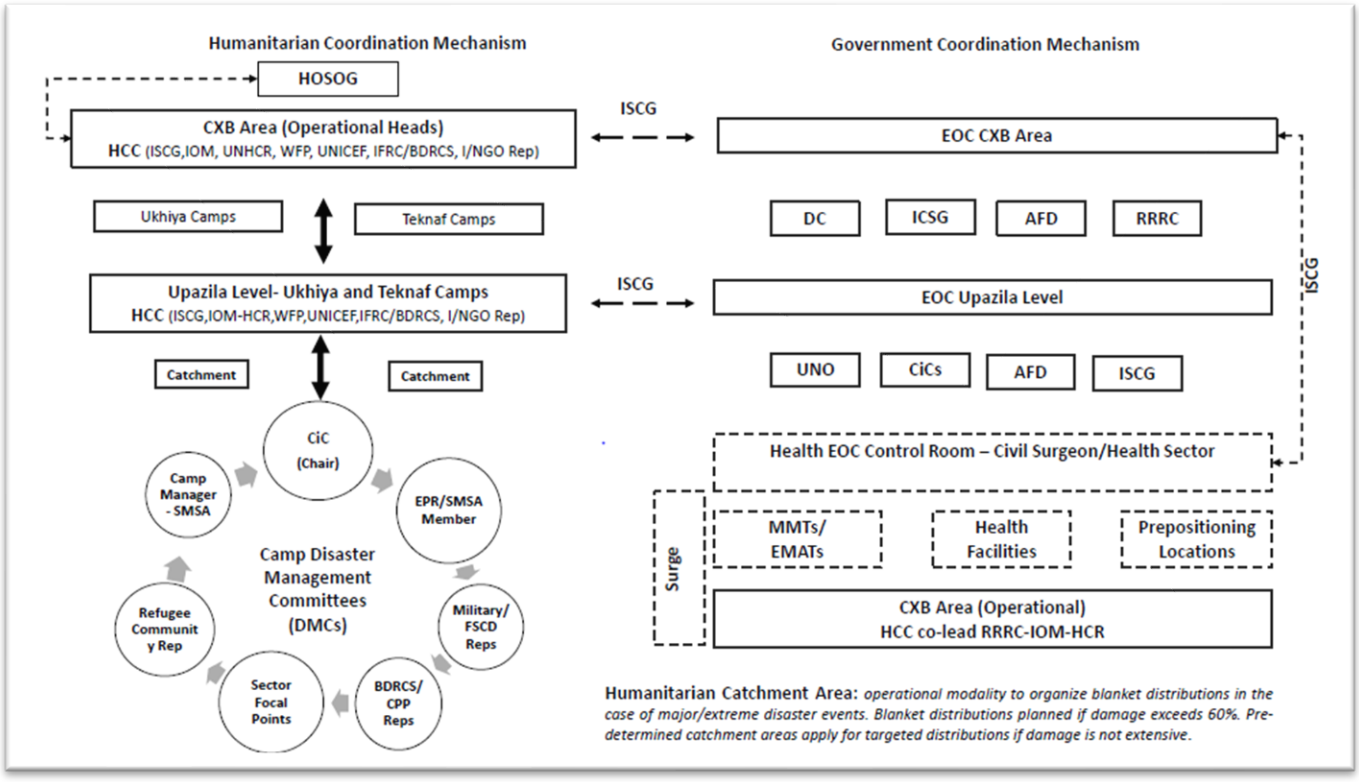
[30] Tropical Cyclone Disaster Impact Modelling-Impact Assessment for Chittagong and Cox's Bazar, 2020, Appendix I – conservative estimates due to changes in population demographics, camp infrastructure since 2020 and exclusion of Teknaf areas.
[31] Based on fire impact projections from the 22 March 2021 fire in Camps 8W, 8E, and 9.

3. COORDINATION MECHANISMS

The Humanitarian Coordination Task Team (HCTT) and the national cluster system were established in Bangladesh in 2012. The HCTT is co-chaired by the Secretary of MoDMR and the UN Resident Coordinator. The HCTT's mandate is to coordinate the international community's preparedness and response efforts to natural and man-made hazards in a way that complements Government of Bangladesh-led interventions. The HCTT's mandate does not include the Rohingya response.

In the event of any natural or man-made emergencies within the two sub-Districts of Ukhiya and Teknaf, the ISCG Principal Inter-Agency Coordinator would act as the district emergency focal point and would liaise with both the HOSOG and the Strategic Executive Group (SEG) at Cox's Bazar and Dhaka levels respectively. The SEG which is co-chaired by IOM, the UN Resident Coordinator and UNHCR is responsible for coordination of the Rohingya humanitarian response with the Government of Bangladesh at the national (Dhaka) level.

The flowchart below illustrates the coordination mechanisms at Cox's Bazar level both for the humanitarian community and corresponding Government mechanisms and relevant linkages are further outlined below.



3.1 Strategic, Operational and Coordination Functions during Category 2 and 3 Emergencies

Level	Roles & responsibilities	Decision-making	Information flow Strategic	Information flow Operational	Link with EOC /Govt Coord. Mechanism
Cox's Bazar Level Coordination					
ISCG	• Responsible for inter-sectoral response coordination, information management and Government advocacy for Category 2 and 3 emergencies • Provide direct oversight and support for Sector Coordinators	• Trigger Joint Needs Assessment • Activate Humanitarian Coordination Cells • Assess funding gaps and coordinate resource mobilization efforts (as needed)	• Consolidate information on needs (damages, casualties, response requirements) • Consolidate information on operational response/implementation modalities • Coordinate access & security concerns • Government communication/orders on military engagement/support in crisis • Report to Sectors on evolving needs and requirements	• Disseminate early warning alerts and weather bulletins with operational advisory guidance to partners • Consolidate and update operational information on existing capacities (stocks, response teams) vs projected needs • Issue regular emergency updates	Liaison with • Government (district-level) EOC (if activated)
CXB-Humanitarian Coordination Cell – Operational Leads (ISCG, UNHCR, IOM, WFP, UNICEF, IFRC/BDRCS, I/NGO Rep)	• Responsible for strategic and operational leadership for Category 2 and 3 emergencies in camps • Initiate host community response (as needed) • Update HOSOG on evolving needs, priorities and challenges requiring high-	• Confirm movement of pre-positioned stocks from warehouses to the camps. • Coordinate calling forward additional pipeline and surge capacity requirements • Determine resource reallocation & stock sharing criteria amongst agencies • Assess security exemptions, staff evacuation requirements, and provide overall guidance on major operational bottlenecks /challenges	• Report to HOSOG and SEG on evolving needs and requirements • Highlight the need for national/international resources to HOSOG (if necessary)	• Operational info from HCC to be channeled to operational partners through ISCG and respective members • Info flow is also channeled to Upazila HCC if activated	

	level strategic attention	• Advise on political coordination as appropriate (issues arising related to host community response) • Support external reporting requirements (communicate to ISCG)			
• Sector Level	• Facilitate rapid Joint Needs Assessments in coordination with ISCG • Provide sectoral coordination & Information management • Provide technical guidance on common standards and quality control • Provide support to ensure sectoral responses prioritize safeguarding for women and children, older people, and people with disabilities	• Coordinate preparedness and anticipatory actions of partners based on early warning alerts • Support J-MSNA • Facilitate deployment of emergency teams and stocks through partners	• Liaise closely with dedicated AOR emergency focal points to map sectoral gaps and needs, streamline sectoral response efforts and direct new partners towards unmet needs.	• Coordinate with camp Sector focal points and provide regular updates to ISCG and feedback info received on sectoral challenges and gaps	• Sectoral focal points to participate in Camp Disaster Management Committees (CDMCs) chaired by CiCs
Upazila Level Coordination					
Upazila HCC (*activate if multiple camps within an Upazila are affected.*	• Provide operational leadership at Upazila level and follow up on HCC decisions made at CXB level • Support coordination of host community	• Coordinate follow-up of CXB-HCC decisions at Upazila level • Coordinate emergency catchment areas for blanket/targeted distributions (as needed)	• Consolidate relevant information to inform strategic decision-making upwards to CXB-HCC	• Verify appropriate catchment areas for distributions depending on extent of damage • Feed relevant operational information to camp-level coordination structures	Liaison with • Government (Upazila-level) EOC (if activated)

	response at Upazila level (if needed) • Coordinate with Government EOC at Upazila level (if activated) • Reporting on pipeline status/updates				
Camp-Level					
Camp Disaster Management Committees [32]	• Facilitate coordination of humanitarian response at camp-level • Activate camp-level response plans as relevant. • Ensure safeguarding for women and children, people with disabilities and older persons	• Coordinate on dissemination of early warning messages and preparedness activities at camp level • Confirm/validate initial assessment data at camp-level • Confirm distribution methodologies (as per agreed SOPs) • Confirm stock management (if area needs additional stock from initial stock prepositioned) • Provide guidance on prioritization of SMEP/earthworks/access works in camps and army and police forces will work on access and traffic control outside of camps	• Camp-level data / results from needs / damage assessment • Camp-level access constraints • Camp-level ongoing response (distribution, mobile teams) • Daily reporting (frequency to be determined based on needs)		Liaison with • Ukhiya & Teknaf EOC • Camp/Union field teams • Union Disaster Management Committee (UDMC)

[32] CDMC membership includes *CiCs, SMS Camp Managers, Sector Focal Points, SMS EPR focal points, Military/FSCD Reps, BDRCS/CPP focal points, DMU Rep and Refugee Community Rep.* In the event of a host community response level, coordination would also be channeled through relevant local (District, Upazila and Union) coordination structures.

4. RESPONSE STRATEGY & CONCEPT OF OPERATIONS

4.1 Access & Security Management

Physical access control and security risk management is critical to ensuring that responders can safely reach and operate in the camp, search and rescue operations and ambulances can operate unimpeded, and that congestion on the limited narrow roads do not inhibit the activities of first responders and response teams. The responsibility for ensuring access falls primarily with the military and other relevant Government authorities, but the humanitarian community would complement these efforts by conducting:

a) Security Risk Assessments

For any major weather-related events (cyclones, wind/rainstorms, and floods), prior to the resumption of any humanitarian activity in the camps, the United Nations Department for Safety and Security (UNDSS) and relevant Security partners in coordination with the military, will undertake an immediate security risk to determine if main access routes to camps are blocked or considered hazardous to staff safety.

b) Logistics Assessments[33]

The Logistics Sector, in coordination with local authorities, would provide rolling updates and mapping support to partners on physical access constraints through the Log.IE App. Once the security risk assessment is completed, partners would be advised on possible movement options and limitations for moving through impacted areas.

Depending on the degree of disruption to roads and infrastructure, an access control system may be required. This would be based on the COVID-19 access system, with staff and organizations supporting the initial phase of the emergency response prioritized first, close coordination with the ambulance dispatch and emergency medical teams, and other partners. The access control protocols would be reviewed regularly to ensure equitable access based on evolving needs and gaps.

In the event of extensive damage, the Logistics Sector would also coordinate with the military and SMEP, to ensure the rapid restoration of physical access and address critical repairs to ensure safe access for first responders. Priority activities would include:

- Debris clearance
- Drainage repair/ clearance
- Road repair/ temporary road construction
- Bridges/ culvert repairing and temporary construction
- Slope stabilization

Critical facilities/services that would be prioritized to allow for immediate resumption of services would include:

- Health facilities – primary and secondary facilities. Where access is constrained, provide support to mobile medical teams (MMTs) to reach affected population locations
- Distribution points, and warehouses
- Triage/Medical Staging areas
- Safe and accessible facilities[34]

[33] For further Logistics Sector information, refer to the website.

[34] This would include any other critical community infrastructure that would need to be rapidly re-established to support the delivery of life-saving assistance including critical WASH infrastructure, temporary relocation centers, feeding centers etc. and ensuring they are accessible to all vulnerable groups including disabled persons and the elderly.

4.2 Joint Needs Assessments

In anticipation of physical access constraints that may result in some delays in humanitarian response teams accessing the camps, rapid assessments would be conducted in two phases:

a. **Preliminary Post-Disaster Impact Analysis:** this would be based on pre-existing secondary data already available at sub-block level for all the camps, prior to the disaster event. This data would be cross-referenced against initial post-disaster rapid assessment findings in affected areas, received from camp-level first responders. Relevant secondary data sets used in this analysis would include dis-aggregated sex, age and disability population data, service monitoring, facility mapping and 4W (who does what, where, when) datasets. The preliminary rapid analysis would be updated by ISCG in coordination with SMSD, in the immediate aftermath of any disaster event, to ensure data on initial damages and immediate needs is readily available to all partners. This preliminary analysis would continue to be updated on a rolling-basis during the response.
b. **Joint Multi Sector Needs Assessment (J-MSNA):** the findings from this preliminary analysis would be later validated and further refined through a Joint Needs Assessment conducted by SMS/Multi-Sector Field Teams of UN and (I)NGOs if initial rapid findings indicate the need for further in-depth assessments.

4.3 Information Management & Reporting

All humanitarian partners will be required to share information on their emergency activities on a regular basis[35] with the relevant Sectors and ISCG to ensure transparency of information and to facilitate coordination efforts. This information would be collected through a standardized emergency reporting template[36] circulated by the Sectors to all partners involved in the response. At a minimum, the information collated by Sectors would include overall situational highlights, initial assessment findings, physical and humanitarian access constraints, activity updates, achievements against targets,[37] operational gaps and challenges, cross-sectoral coordination arrangements, cross-cutting issues and areas of concern that require advocacy with Government partners or further engagement at a strategic level. ISCG would consolidate all the information received from Sectors and issue regular flash updates and updated emergency dashboards.

The ISCG and the Sectors/Working Groups will also develop an inter-sectoral database to map activities that are being undertaken in the camps at the block level on a quarterly basis. In the event of an emergency, this database would be updated more frequently by the Sectors with the support of all funding and implementing agencies to ensure that accurate and real-time information is available. This should be accessible to all relevant partners to help make funding decisions and provide the information necessary to rectify any gaps and overlaps. This information would also be made available to the Government.

4.4 Search and Rescue (SAR) and Emergency Medical Services

Depending on the extent of damage, search and rescue (SAR) and provision of life-saving emergency medical support would be critical activities in the initial phase of the response. This would primarily be implemented by existing volunteers, local emergency responders and the Army brigade assigned to the affected camp.

[35] Reporting frequency to be daily in the early phases of the response and shift to twice a week and/weekly as the response evolves and stabilizes.

[36] The standardized emergency reporting template is under development in coordination with the Sectors and will be available on the Humanitarian Response website once finalized.

[37] Sex, age, and disability disaggregated data provided for response activities.

Other SAR emergency responders would include the Bangladesh Red Crescent Society (BDRCS), Police, Fire Service and Civil Defense, Rapid Action Battalion (RAB). These teams have been trained to assist, stabilize and stretcher injured patients to medical facilities and ambulances. The Army has oriented approximately 4,700 community volunteers on information sharing, portering, and supporting the search and rescue efforts.

In the event of extensive damage and/or disrupted access to existing health facilities or major casualties in affected camps, the Health Sector would also coordinate with the Civil Surgeon's Office on the possible need to activate the Health Emergency Operations Center (HEOC) and response based on the Health Sector Cyclone and Monsoon Season Contingency Plan. This plan is adaptable to the other disaster scenarios outlined above, with corresponding response activation thresholds and response mechanisms such as the multi-disciplinary Mobile Medical Teams, kits, communication, and transportation arrangements in place.

4.5 Debris Management

Simultaneously to conducting search and rescue operations, a debris management contingency plan would also be activated, for disaster events resulting in extensive damage to shelters and camp infrastructure. Cyclones and major flood disaster scenarios, would be more likely to generate significant debris waste, compared to fire events. The key objectives in the initial phase of an emergency where debris management would be required include:

- Facilitating search and rescue operations where removing the debris and damaged buildings is required for access to the survivors.
- Removal of debris from key access routes (roads and pathways) for emergency vehicles such as ambulances, fire engines and the police.
- Removal of debris from critical and essential camp facilities including health facilities, distribution points, etc.
- Removal of unstable structures which are at risk of further collapse.
- General access for returning public and humanitarian assistance; and,
- Removal of debris to minimize public health risks from the piles of debris becoming magnets for general waste disposal which in turn creates health risks through vermin, disease, and odors.

To achieve the above objectives the following priority measures are currently being put in place, to facilitate effective debris management in the aftermath of a major disaster event:

1) Pre-designating temporary debris management sites that can be used to store and sort any debris generated by a disaster event. The temporary debris management would be required for the first 2-3 weeks of the response and would allow site improvement and reconstruction sites to commence in a timely manner. Approximately 70% of the debris (mainly bamboo and tarpaulin) would be channeled back into reconstruction efforts once sorted in the temporary sites.
2) Temporary burial sites would also be required for large-scale disasters resulting to a high number of casualties.
3) The Management of Dead Bodies during Disasters would be coordinated through the SMSD Sector supported by other Sectors (Protection, Health) and relevant Government authorities. Volunteers handling human remains would be provided with necessary precautions and safety measures.
4) Planning for augmented support from cash for work volunteers for cleaning and sorting debris and stand-by capacity of trucks, compactors, bulldozers for debris removal that requires heavy machinery.
5) Establishing proper communication channels for cleaning teams that would be used to support debris removal.

6) Developing guidance on sorting and processing debris including what can be re-used/recycled and environmentally friendly debris disposal practices. Food waste generated during the response would be channeled to existing Material Recovery Facilities (MRFs) that have composting facilities.
7) Continued coordination and pre-planning between key stakeholders (WASH, Food Security, Shelter/NFIs and SMSD) to minimize waste generation during the response and ensure robust emergency waste systems are in place.

4.6 Volunteer First Responders & Humanitarian Emergency Response Teams[38]

Volunteers are fully integrated into the overall emergency response structure in the camps and act as first responders for all emergencies. This is particularly critical in the context of the COVID-19 pandemic, where humanitarian partners are required to maintain a lighter footprint in the camps, to minimize transmission risks for the refugees. Below are some of the key volunteer networks (among many others) working in the camps that are often mobilized as first responders during emergencies:

- **Cyclone Preparedness Programme (CPP) volunteers:** there is an average of 3-4 volunteers per camp coordinated by the BDRCS who undertake cyclone-related early warning, preparedness, and response activities.
- **Safety Unit Volunteers /Site Management Volunteers (SUV/SMS):** there are roughly 100 SUVs per camp trained in multi-hazard preparedness (for fires, landslides, waterlogging, flashfloods, drowning). These volunteers are organized into Disaster Management units (DMUs) that act as the first line of defense in response during emergencies and have been trained in post-disaster damage assessments and supporting the delivery of emergency assistance.
- **Community Health Workers and Mental Health and Psychosocial Support (MHPSS) Volunteers:** there are over 1,400 CHWs trained in basic first aid and portering injured patients to health facilities and ambulances. This is important as the first line of care within the camps, while awaiting humanitarian emergency responders to arrive. They also constitute the core response pillar in COVID-19 awareness raising, contact tracing and vaccination campaigns.
- **Community Nutrition Volunteers (CNVs):** each camp has roughly 30 to 35 CNVs drawn from the refugee and host communities. In the event of any disaster event, they are actively engaged to support beneficiary tracking and follow up to moderately and severely acutely malnourished children and pregnant & lactating women (PLW) regularly monitoring their status, feeding practices and care. They also provide referral linkages to mobile nutrition teams and/or static centers and support nutrition education activities on infant and young children feeding (IYCF) practices to ensure exclusive breastfeeding and complementary feeding.
- **WASH Volunteers:** involved in hygiene promotion activities, infrastructural repairs, solid waste management among other activities.
- **Protection Volunteers:** community responders with more of a protection focus would also provide information sharing and counselling, psychological first aid, and support temporary relocations of vulnerable persons including children, women, persons with disabilities and the elderly. They can also support efforts to mainstream cross-cutting priorities, including disability inclusion with other volunteer teams.

In addition, several Sectors would also deploy emergency response teams (ERTs) for large emergency events including:

[38] TORs and SOPs of ERTS, including their composition, areas of coverage, pre-positioned supplies (to be updated).

- **Mobile Medical Teams (MMTs):** these are teams drawn from health Sector partners that have been trained to deliver immediate life-saving health services and facilitate emergency referrals in the event of an emergency, in which static facility services are disrupted or insufficient to meet the needs.
- **Mobile Nutrition Service Teams:** comprised of trained staff drawn from nutrition Sector partners that are deployed as mobile nutrition teams to provide emergency nutrition services in case beneficiaries are not able to access services from static facilities due to facility damages/ logistical access constraints.
    - **Mother Led Mid Upper Arm Circumference (MLM) Groups:** beneficiary-led approach where mothers are trained to screen for acute malnutrition in their children by measuring MUAC and testing for oedema and refer them for treatment where volunteers do not access them for regular screening.
- **Protection Emergency Response Units (PERUs):** these are deployed during emergencies to ensure identification and referrals to service providers of urgent protection cases, psychosocial support, rapid identification of unaccompanied and/or separated children or of persons looking for missing family members, sharing protection messaging and awareness-raising. In addition, PERUs would also ensure that protection mainstreaming and strengthening of community involvement in all Sectors is met, and the response on the ground is in line with protection principles and sensitive to Age, Gender, Disability and Diversity (AGDD) concerns.

4.7 Emergency Distributions

Catchment areas have been defined as an operational modality to organize blanket or targeted distributions in the case of major/extreme disaster events. The catchment areas define all the populations that would be served from a centralized emergency storage location (containers) and from any adjacent distribution points, which depending on the scale of the crisis may be combined or separated. Catchment areas have been defined using a comprehensive set of criteria, such as:

- existing accessible distribution points and container locations,
- vehicular access roads,
- partner coverage,
- walking distance to the centralized distribution point.

If the Humanitarian Coordination Cells (HCCs) are activated, the catchment area system would also be activated simultaneously. Each catchment area would be managed by a Catchment Area Manager[39] deployed via UNHCR, IOM, UNICEF, WFP, or any of their pre-identified implementing/cooperating partners. Based on the level of damage determined based on the initial assessments, there would be a decision for either **targeted distributions** if damage is contained, or **blanket** distributions if the damage exceeds 60%. This decision would be made by the HCCs at Ukhiya and Teknaf levels.

Within the camps, emergency items for the minimum assistance package and initial humanitarian response have been pre-positioned by key agencies (IOM, UNHCR, WFP, UNICEF, UNFPA and the respective Sectors) at pre-determined areas in and around the camps. Prepositioned stocks are intended to be used within the pre-identified catchment areas[40] to facilitate swift distribution to the affected refugees. Prepositioning and stock monitoring would be done by the responsible agencies. Particular attention should be made to ensure access for people with disabilities and older persons.

Two (2) different sets of catchment areas have been established to organize the distribution of minimum assistance packages for various Sectors. The table below summarizes the basic assistance package and minimum

[39] TOR of Catchment Managers and updated contact lists (to be updated).

[40] Mapping of all Catchment Areas and Distribution Points (to be updated).

contingency stocks (list not exhaustive and detailed kit components/by Sector would be annexed) that should be maintained across the relevant Sectors. If these prepositioned stocks are not utilized during emergencies, they can be used for regular operations on a rotational basis and replenished as needed.

Emergency response package[41] (kit components not exhaustive – detailed stock lists to be annexed to MHRP)		Minimum quantity of stocks prepositioned
Emergency Shelter/NFI Kits	• Tarpaulin • Rope • Floor mats • Assorted NFI items	• Ukhiya catchment area – covers 30% of catchment area population (IOM and UNHCR stocks) • Teknaf catchment area – covers 100% of catchment area population (UNHCR stocks) *(Inclusive of all Shelter/NFIs Sector stocks)* • *TBD (stock-taking ongoing)*
Emergency WASH Kit	• Jerry cans • Aqua tabs • Bathing soap	• ***TBD (stock-taking ongoing)***
Food	• High-Energy Biscuits (HEB) • Hot meals if cooking facilities are available	• Contingency stocks of HEB covering 200,000 people for one month • Cooked meal capacity for 26,000 meals a day during emergencies
Protection & GBV Kits	• Dignity Kits & Menstrual Health /Hygiene Kits (clothes, underwear, sandals,sanitary towels,soap, etc.)	• To be determined
Nutrition	• Nutrition supplies	• Supplies for all Moderate Acute Malnutrition (MAM), Severe Acute Malnutrition (SAM) and Blanket Supplementary Feeding Programme (BSFP) beneficiaries – 3 months in camps • 1 year of supplies at Cox's Bazar level
Health Kit	• Inter Agency Health Kit (IEHK) 2017	• The IEHK serves 10,000 people for three months
	• Cholera Kit 2020	• Prepositoned for a potential cholera outbreak for 100 cases
	• Trauma and Emergency Surgery Kit (TESK) 2019 (WHO)	• Provides materials and drugs to meet the needs of 50 patients, requiring surgical care in emergency situations, assuming an average of two operations per patient.
	• Inter Agency Reproductive Health Kits	• Assorted Sexual and Reproductive Health (SRH) Kits to ensure availability of Minimal Initial Service Package for SRH services in an emergency. Priority kits to be prepositioned include individual Clean Delivey Kits (Kit 2A) (in a population of 10,000 people, 100 deliveries in 3 months), Post-Rape

[41] Refer to the Minimum Emergency Response Package Guidelines for quantity specifications (to be updated).

		Treament Kit (Kit 3) (1 Kit for 50 women and 10 children).

Sector Coordinators would regularly receive updates from camp-based Sector Focal Points and would have a holistic overview of the rate of distribution and outstanding needs related to the emergency response. They would, therefore, be able to share response updates on any identified gaps in assistance with ISCG, for further escalation to the HCC and other relevant stakeholders. To further streamline Sector-level coordination, the SMS AOR agencies would designate dedicated emergency focal points (particularly in the early phase of the response) to support the respective Sectors with mapping sectoral gaps and needs and minimizing duplication of efforts by directing new partners towards unmet gaps, while ensuring equitable partner coverage across all affected areas. Sector Focal Points can also support these advocacy efforts at camp-level through their engagement in Camp Disaster Management Committees that would be chaired by Camp in Charges (CiCs).

4.8 Funding Requirements & Resource Mobilization

The initial phase of the response would rely on pre-positioned stocks located at strategic locations within the camps and other storage hubs in Ukhiya, Teknaf and Cox's Bazar. In the event of a large-scale disaster that requires a blanket distribution in the camps, accessible stocks would be rapidly depleted. Humanitarian partners may be able to repurpose existing resources, draw down on internal emergency pre-financing mechanisms or utilize ad-hoc donations directed towards the response.

If there are outstanding needs and gaps that exceed existing financial resources, ISCG in coordination with HCC members and Sector Coordinators would consolidate information on existing funding gaps by Sector for further advocacy with donors to address funding gaps. A Flash Appeal may be considered for large-scale responses to extreme events that completely overwhelm existing funding capacities for all partners.

ANNEX I TOOLS AND RESOURCES

- Multi-Hazard Sector Preparedness Tracker
- Multi-Hazard Sector Response Tracker
- Hazard Exposure Susceptibility Maps at Sub-Block Level
- Debris Management Contingency Plan – draft SOP under development
- List of SMEP Heavy Duty Equipment 2021
- Emergency Camp Profiles – to be updated
- Emergency Contingency Stocks and Maps – to be updated
- Mapping of Catchment Areas and Distribution Points – to be updated
- Sector Preparedness Checklists – to be updated
- Joint Needs Assessment Tools – to be updated
- Response Standard Operating Procedures, by hazard type and Sector – to be developed
- Camp-level Emergency Preparedness and Response Plans – to be updated
- Emergency Response Team SOPs (composition, coverage, activation triggers) – to be updated

ANNEX II GUIDANCE AND REFERENCE DOCUMENTS

- Accountability Manifesto & Common Feedback Platform (AAP and Community Engagement Guideline under development)
- UN Special Measures for Protection from Sexual Exploitation and Abuse-ST/SGB/2003/13
- Guidance Note on Protection Mainstreaming
- Guidance Note on Integrating Gender Equality Commitments in Emergency Preparedness and Response
- Core Commitments for Children in Humanitarian Action 2020
- CXB District Cyclone Preparedness and Response Plan 2020
- Humanitarian Coordination Cells (Terms of Reference and Updated Contact Lists) – to be updated
- 4Ws Coverage at Sub-block Level – to be updated
- Relocation of Refugees (Protection Sector Guidance) – to be updated
- Evacuation of Medical Patients (Health Sector) – to be updated
- Inter-Agency Business Continuity Plan – to be updated