

E&E TWG Flood Response (A Conversation Starter)



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UNHCR
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Problem and Root Causes

- Heavy monsoon rains have caused severe damage and casualties in Cox's Bazar District, which is affecting both, refugees and host communities
- A very important reason for the increased run-off of water in the camp areas and adjacent host communities is the reduced water retention capacity of the soils in the catchment areas of the rivers and streams due to the forest degradation
- Although the forests are recovering from the overexploitation in the past, they are still far from their original water retention capacity
- Increased sealing of the soils by concrete structures and the construction of buildings (shelters and communal infrastructure) in the watershed areas (significantly reducing the open space for the infiltration of the rainwater; increasing the run-off speed of the surface water (damages upstream and inundations down-stream))
- Blockage of drains and channels due to solid waste
- Backwater in coastal rivers due to a combination of high tide and intense rainfall

Short-Term Response

- Increasing the monitoring capacity in selected watershed areas, e.g. by installation of measuring stakes
- Existing flood and landslide hazard maps should be shared with implementing partners to increase their planning and implementation capacity/quality
- Using drone and satellite images (if available) to illustrate the problem and compare it with previous disaster events
- To analyze and share all available information (e.g. maps, monsoon rainfall data) to develop benchmarks for particular areas to understand the severity of the current situation (5-years, 10-years or even 100 years event) and to determine future long-term actions
- Mapping of flooded shelters and communal infrastructures which could guide future planning exercises (and relocations)
- Assessment of the existing early warning system for heavy rains and flooding

Long-Term Response

- More plantations in the upstream-catchment areas and in the camp area to increase the water retention capacity of the soils
- Planting of soil cover plants (e.g. grasses, bamboo, trees and shrubs) on slope areas and river banks for soil stabilization reasons to reduce soil erosion (and thus blocking of streams) and land-slides
- Construction of more water reservoirs which could serve as consecutive flood-control retention basins in the upstream catchment area (water-regulatory structures)
- Construction of more silt-traps in the upstream catchment area of the rivers to reduce silting and thus the risk of inundations due to blocking of streams
- Removal of the existing concrete river bank structures and renaturation of the streams by using nature based solutions (study on the impact of concreting of streams on the recession speed of the flood water)
- As a standard procedure for all new construction activities, environment experts should be consulted to provide their technical expertise (if necessary, a more detailed environmental assessment should be carried out)



Thank you.