

Energy & Environment  
Technical Working Group

## Environmental activities overview

- 700 MT of firewood equivalent to 4 football fields are collected every day
- Estimated complete loss of forest by end of 2019
- 86% of drinking water wells contaminated with ecoli from unmanaged fecal matter
- Irrigation wells no longer able due to watershed destruction and diminished water table
- Agricultural land near camps suffering from siltation and contamination from fecal matter
- Mass cooking fires and garbage burning lead to daily spikes in air pollution
- Area of 1,500 ha of wildlife habitat removed
- Loss of critical habitat for elephants and other species
- Depleted marine resources due to overfishing and destructive practices.

**Crisis Context:** Since the massive influx of refugees in August 2017, the population in Cox's Bazar has more than doubled exposing both refugees and communities to severe challenges in terms of food and nutrition security and livelihoods. This important humanitarian crisis is becoming a rapidly deteriorating environmental crisis with landslides and flash floods threatening the lives of thousands while stoking conflict between host communities and Rohingya refugees. The crisis is also contributing to depletion of already scarce water resources.



**Impact on Populations:** More than two thousand hectares of forest and crop land have been depleted to establish the camps and every day more than 4 football fields of forest disappear due to firewood collection (700 tons per day).

The Energy and Environment Technical Working Group (EETWG) focuses mainly on the environmental disaster caused by the massive firewood collection. The EETWG encourages and supports all initiatives and innovative solutions contributing to environmental restoration and the improvement of living conditions for host communities and refugees.

The environmental crisis requires immediate actions to avoid the complete loss of the natural resource base and the foundation for local livelihoods. The rapid and extensive deforestation has led to destruction of key watersheds causing mass erosion, landslides, flash floods and a dramatic reduction in the recharge of ground water reserves.

### Ongoing Activities of the Humanitarian Response

#### ***Provision of alternative cooking technology:***

Providing the population with alternative clean cooking fuel and eliminating the competition for firewood is the preliminary condition before starting environment restoration activities. Reports and studies show that introducing LPG is a way to quickly and significantly curb the deforestation. A coalition of organizations has started distributions of LPG cook sets and cylinders with a plan to cover more than 100,000 households from the refugee and host community population within the next 12 months. The project is part of the RRRC Clean Energy Program which also entails the expansion of other cooking fuel alternatives including improved cookstoves, biomass briquettes and biogas.

#### ***Longer-Term Environmental Planning***

The environmental restoration activities will be developed and managed under the supervision of the Government. This long-term rehabilitation strategy for restoring the degraded lands will further include watershed management, water resource mapping and efficient/clean energy use planning for both agriculture and home consumption. This work will be led by the local government with the support of partner agencies and will be informed by several recently conducted environmental impact assessments.

### ***Establishment of nurseries***



Specific tree and grass nurseries will be established for increasing the supply chain of planting materials for soil stabilization and reforestation activities. As reforestation activities must follow a specific planting calendar to succeed, seedlings must be ready at the right time. Several nurseries have already been established to ensure availability of strong seedlings for the upcoming planting season and for the subsequent years' reforestation plans. Nurseries could generate an important source of revenue for the host communities in the short term by providing seedlings for reforestation projects but also in the long term by introducing high-value trees like fruit

trees.

### ***Soil stabilization and reforestation***

The area is undergoing heavy loss of topsoil and an increased risk of flash flooding due to denuded slopes and hillsides. Urgent DRR works focused on water runoff control can reduce the risks exposure for refugee and host communities. Initial grass and tree plantation for land stabilization and reforestation will also be undertaken during the coming monsoon season and contribute to landslide mitigation and will be scheduled for every subsequent planting season under the leadership and planning of the Forestry Department. Additional activities to address land degradation will be scheduled throughout the year including,

### ***Wildlife habitat restoration***

The establishment of the camps and the deforestation of the surrounded areas have heavily disturbed the local biodiversity and particularly the population of wild Asian elephants. In collaboration with the IUCN, work has begun on specific activities to identify and mark migration corridors, restore the habitat and raise elephant interaction awareness and safety. Further planning will be required to ensure the local environment remains viable for eco-tourism.

### ***Planned Activities***

#### ***Sustainable fishing and promotion off-season livelihoods alternatives***

The influx of refugees has dramatically increased the pressure on the marine resources of the district. An explosion of fishing vessels, many using harmful technology, has disrupted the reproductive cycle of key species and impacted fish stocks. The situation requires raising awareness in fishing communities on legal standards and regulations for fishing (seasonal bans and appropriate gear) as well as providing alternative income generating opportunities to diversify income.

#### ***Promotion of green technologies in activity design and implementation:***

Significant and innovative approaches can also reduce the environmental impact of humanitarian operations, for example by reducing energy consumption, using LPG for vehicles, limiting packaging, procuring locally and actively conserving natural resources.

#### ***The Community awareness raising and capacity development of local institutions***

Restoring the environmental balance cannot be done overnight. Activities started under the Joint Response Plan must be sustained and nurtured. This involves developing the capacity of institutions and supporting them to provide outreach services and enforce environmental regulations. Government partners and the international community must consider building the longer-term foundations of environmental management while responding to urgent needs.