



The arrival of refugees to Cox's Bazar from Myanmar put a large strain on the local environment. During the initial phase of the emergency, hundreds of thousands of refugees struggled to build emergency shelters with the materials they could find, and used firewood from forest areas for cooking. This led to forest areas being cleared and trees cut extensively. UNHCR has been working with the authorities and other humanitarian agencies in Cox's Bazar on sustainable and safe solutions for refugees helping to mitigate the impact on the environment and protect and restore it with the help of refugees.

ENERGY & ENVIRONMENT OBJECTIVES

100,423 households were reached with Liquefied Petroleum Gas (LPG) and cooking kits provide cheaper, safer, and a more efficient and cleaner source of energy

UNHCR is working to create a better environment by:

- 1 **Reducing the environmental impact** of hosting refugees through environmental protection efforts, restoration & awareness among refugees
- 2 **Increasing the use of safe and alternative energy sources** in both refugee and host communities
- 3 **Improving protection and wellbeing** in refugee settlements through solar street lights installations and other environment-friendly energy initiatives

PROGRESS

The LPG programme of UNHCR is on-going and proving to be key for the protection of refugees. 99% of the refugees have been cooking with LPG since April 2019. The on-going monitoring and evaluation has allowed to better tailor the distribution as per refugee's needs, and to make sure that refugees are using LPG cookstove in a same manner. A biomass survey is being realized together with the International Union for the Conservation of Nature (IUCN) and it will allow to quantify the positive impact of the LPG programme in terms of deforestation and preservation of ecosystem services. The distributions of host community families have been initiated after a vulnerability survey on 23000 host community families was performed. This on-going distribution will contribute to strengthen the resilience of the inhabitants of the Cox's Bazar peninsula with regards to cooking energy. A pilot project on pressure cooker is being rolled out and expected to generate a 30% fuel efficiency to its users. A scale-up is planned upon the results of the pilot project.

As per the High Commissioner's initiative, the Solar+ programme has started and consist of the implementation of minigrids in the refugee camps. The construction of a minigrid that will power, amongst others, the clinic and market stalls is about to start.

Planting using a composition (27 species) of tree saplings, grass, legumes and shrubs have been completed in 62 ha of degraded land within the 16 camps. Planting programme of UNHCR and partners aim at controlling soil erosion, riparian protection, improving soil health and promotion of shade and nutrition. Refugees are engaged to protect the saplings following an agro-forestry model. 160 refugee households have been engaged and supported with inputs and relevant training on environment friendly agricultural techniques that ensures minimum disturbance to soil, less water use by the crops and bio- pesticide control mechanisms.

Watershed management options, enhancing reservoir capacity, bank protection with plant, biological waste water treatment is being piloted in one important stretch of Madurchhara watershed aiming to be replicated and scaled in whole basin. Better watershed management will ensure livelihoods security of host communities living in the downstream and improve habitat condition for the refugees as well as contribute to improve habitat for the biodiversity that were affected.

596 Elephnat response Team volunteers from host and refugee communities are engaged, who has been monitoring the elephant movement around the camp from 96 watch towers and managing the contact by engaging with community. Aiming sustainability and improving the capacity of the environment programme, 176,111 individuals have been provided with environmental education.

A comprehensive assessment to measure the effectiveness of LPG programme in controlling deforestation is ongoing.

CHALLENGE

- Maintenance of solar street lights, including recycling of e-waste. As some type of batteries, such as lithium ion cannot be recycled in Bangladesh;
- Lack of space in the camps. Numerous projects are hampered due to not being able to find space (for saplings, for control rooms, etc.);
- Further conservation measures needed to address the situation of wild Asian elephants as the refugee settlements are on a vital migration corridor they once used.

WAY FORWARD

UNHCR is looking at ways to make the LPG programme more sustainable. The pressure cooker may be a solution and a detailed monitoring and evaluation will allow to validate this hypothesis. Solar street lights are expensive and not durable; UNHCR is aiming at gradually phasing in minigrids and phasing out solar street lights. Refugees are engaged for the basic maintenance and a scheme of "Energy Ambassador" shall be created.

A comprehensive environment restoration plan requires understanding and knowledge of the basin characteristics, degradation level and causes. Stream restoration plan for two other major stream networks will be implemented soon. Development of an environment sensitive camp management protocol is in progress aiming to mainstream environment in all sectors and consider impact on environment in all aspects of activities in compliance with Bangladesh's environmental laws and regulations.

KEY FIGURES

100,423
Households received LPG

24,561
Host community households surveyed for LPG distribution

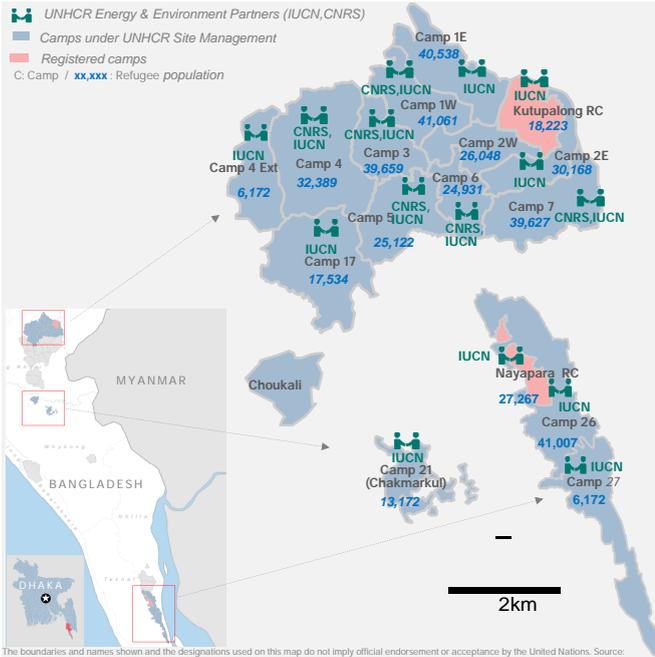
69,503
Households received LPG refill (September)

22,754
Refugees receiving environmental education

2,500
Street lighting maintained by UNHCR

869
Households received compressed rice husk (CRH)

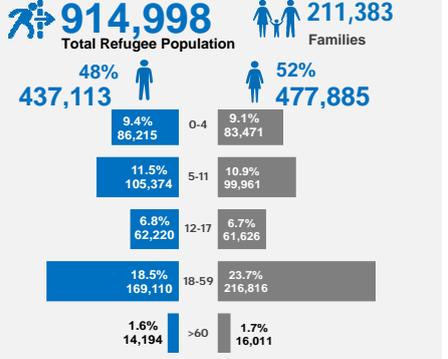
GEOGRAPHIC SITUATION & PARTNER



UNHCR FUNDING STATUS



POPULATION BREAKDOWN



ACTIVITY STATUS

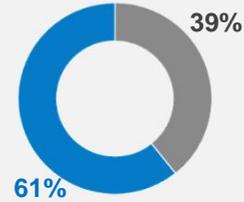
147,669 Tree sapling planted (Target: 142,500)



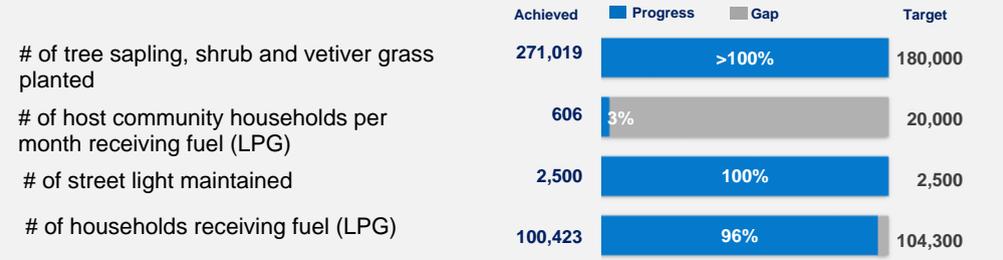
59 Hectare area covered by sapling, shrub & vetiver grass plantation (Target: 57 hectare)



15,185 Refugees received environmental education (Target: 25,000)



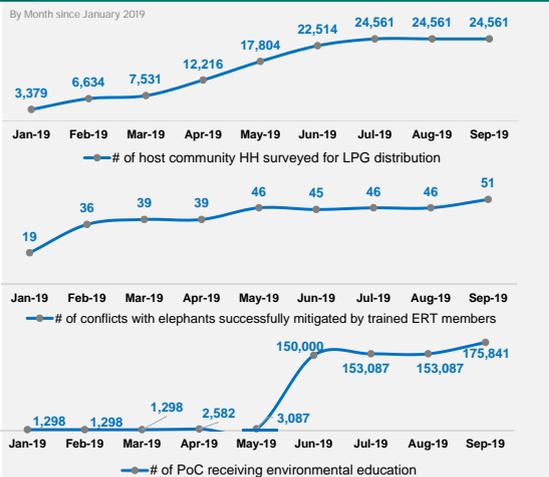
PROGRESS AGAINST 2019 TARGETS



ACHIEVEMENTS OF THE MONTH

- 4,637 new households have received LPG cylinder while 69,503 households received refills others families in this reporting month.
- 22,754 refugees participated in environmental education opportunities in September

ACHIEVEMENT TRENDS



TREND ANALYSIS

