BANGLADESH - Rohingya Refugee Crisis - Cox's Bazar District

Fire Hazard Incident in Camp 11

For Humanitarian Purposes Only
Production date: 09.03.2023

Description :
Map (a) shows the fire hazard susceptibility in Camp-11 made by REACH in 2021 based on the assumption that the higher the density of structures, the greater the fire hazard. A critical distance of 2 metres (buffer: 1m on each side of a structure) between the structures is used to calculate the fire hazard. In Bangladesh, the BNBC (Bangladesh National Building Code) recommends a distance of 1.25m between buildings that are up to 15m tall. So it was logical to use 2m critical distance. If the total area of the fire spread is between 0 and 500 sq.m, it is considered a low fire hazard, medium if it is 500 to 90,000 sq.m, and high if it is more than 90,000 sq.m.
The map aims to support sectors to identify priority areas for interventions at the camp level. All fire susceptibility estimates carry uncertainty and the presence or absence of susceptibility does not guarantee the presence or absence of fire. It is not designed as a stand-alone tool for detailed site planning decisions.

Map (b) shows the affected shelters due to the fire incident which took place in Camp-11 on 5th March 2023. A large portion of shelters in the northeast part were severely affected by this fire incident. The output was derived from satellite imagery through Burned Area Index (BAI).

Data Sources:
Camp Boundary: *ISCG, 2022*
Fire Suspectibility: *Derived from the Structure Footprint (UNOSAT-REACH, April 2021)*
Image Source : PlanetScope, 5th March 2023 and 7th March 2023
Coordinate System : *WGS 1984 UTM Zone 46N*

Disclaimer :
Data, designations, and boundaries contained on this map are not warranted to be error-free and do not imply acceptance by REACH.

The results are not ground-proofed and inherently limited by the quality of Data. Other factors, such as fire load, topography, wind direction, land cover, etc. are not taken into account.

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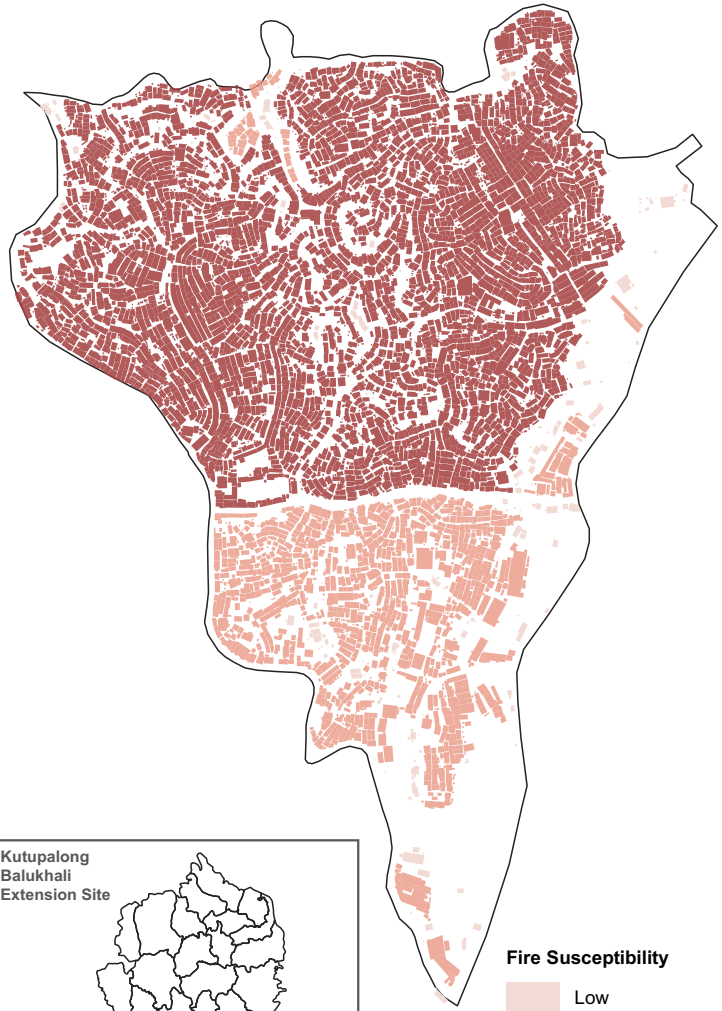
0 100 200 300 m

ACTED

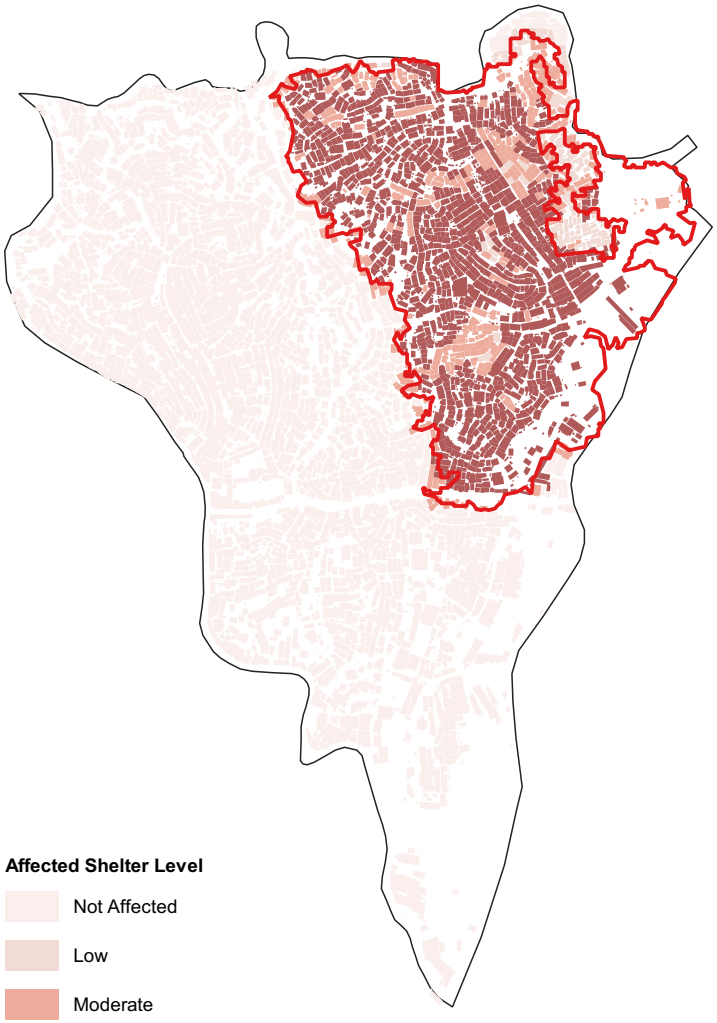
(a) Fire Susceptibility Map



Fire Susceptibility
- Low
- Moderate
- High

Boundary
- Camp Boundary

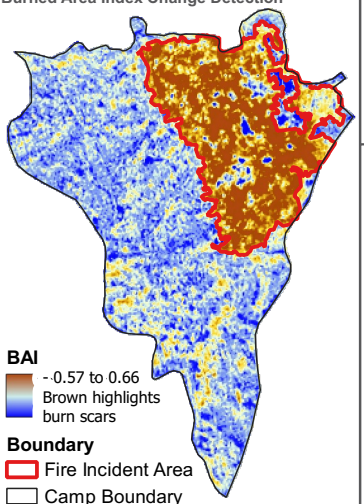
(b) Fire Incident Map



Affected Shelter Level
- Not Affected
- Low
- Moderate
- High

Boundary
- Fire Incident Area
- Camp Boundary

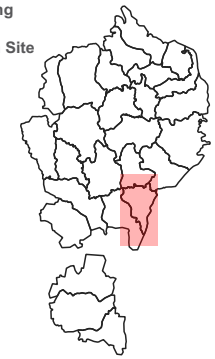
Burned Area Index Change Detection



BAI
- -0.57 to 0.66
- Brown highlights burn scars

Boundary
- Fire Incident Area
- Camp Boundary

Kutupalong Balukhali Extension Site



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