

24 June 2022

PRELIMINARY SATELLITE- DERIVED FLOOD ASSESSMENT AS OF 18-21 JUNE 2022

Bangladesh



BANGLADESH

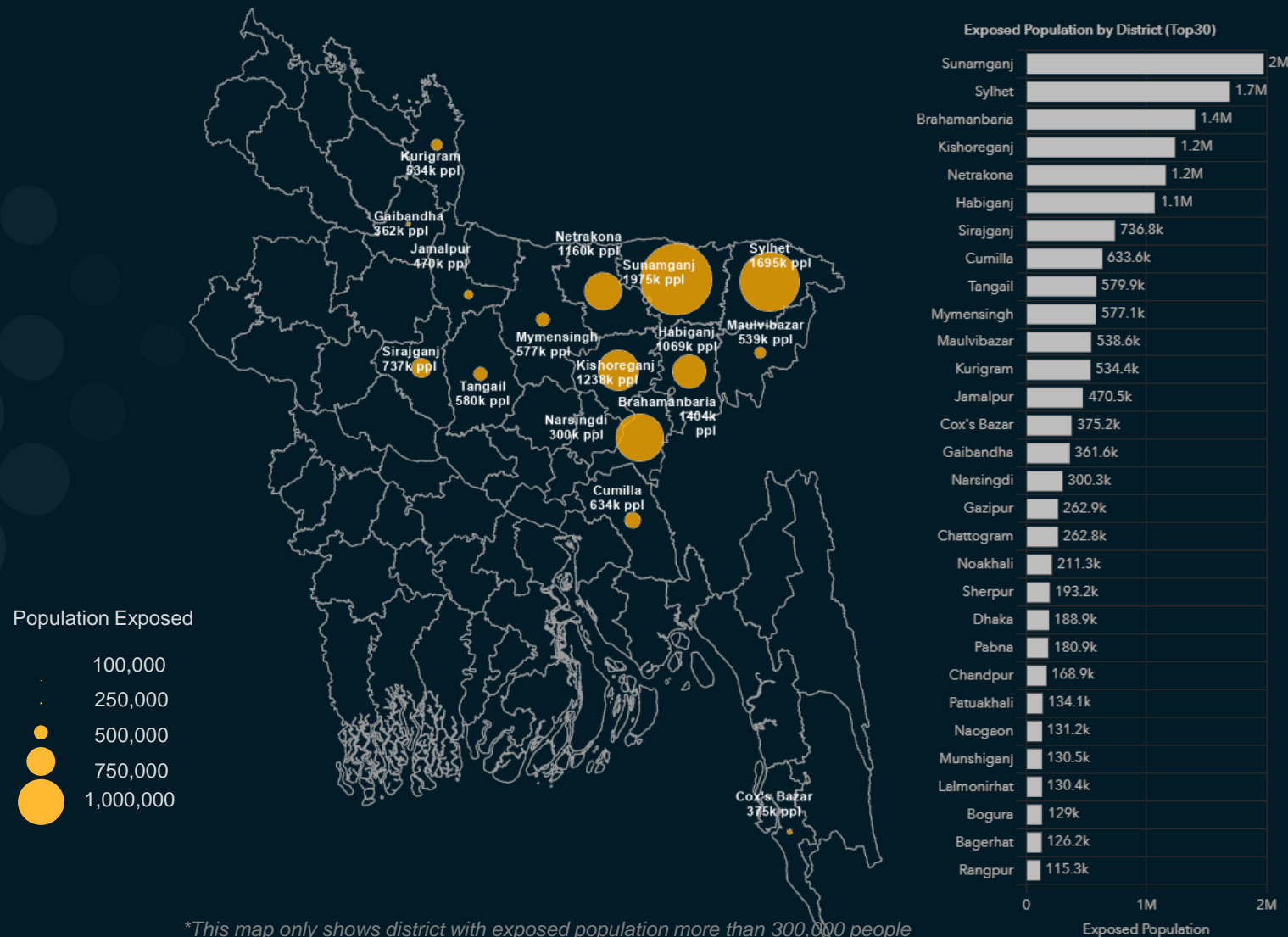


Flood Situation

- A monsoon flash flood, triggered by an onrush of waters from upstream India's northeastern states along with in-country heavy monsoon downpours, since June 16 2022, hit Bangladesh's north-eastern & northern regions, destroying crops and damaging homes and road network;
- According to India Meteorological Department (IMD) Cherrapunji of India, the most rain-prone region in the world, had 972 millimeters rainfall in 24hrs which is the highest in June in 122 years on the same day. It was also reported that a record 2500mm rainfall was observed in the previous 3 days in the same location;
- Major rivers in the two north-eastern districts of Sylhet and Sunamganj have swollen to dangerously high levels because of heavy downpours, according to data from the country's Flood Forecasting and Warning Center (FFWC);
- According to FFWC, water in the Sunamganj region's main Surma River was flowing 120 centimeters above the danger level on Friday 17 June. In Sylhet, the Surma River was flowing 70 centimeters above the danger level on same day;

- Electricity supply was shut-down in Sunamganj and Sylhet as the sub-stations were submerged leaving people without electricity;
- Due to disrupted electricity connections, mobile communications became difficult to get updated information in the affected areas;
- Flight operations in Sylhet's Osmani International Airport was suspended for six days as flood water reached the runway;
- Major regional highways, including Sylhet-Sunamganj and Sylhet-Bholaganj, are submerged, and road connectivity has already snapped due to the intensity of flooding. Sunamganj has been disconnected from the rest of the districts of the country;
- National authorities postponed the SSC exam countrywide. Educational institutions have been closed in the affected areas. Government primary schools have been designated as flood shelters in Sylhet and Sunamganj districts.

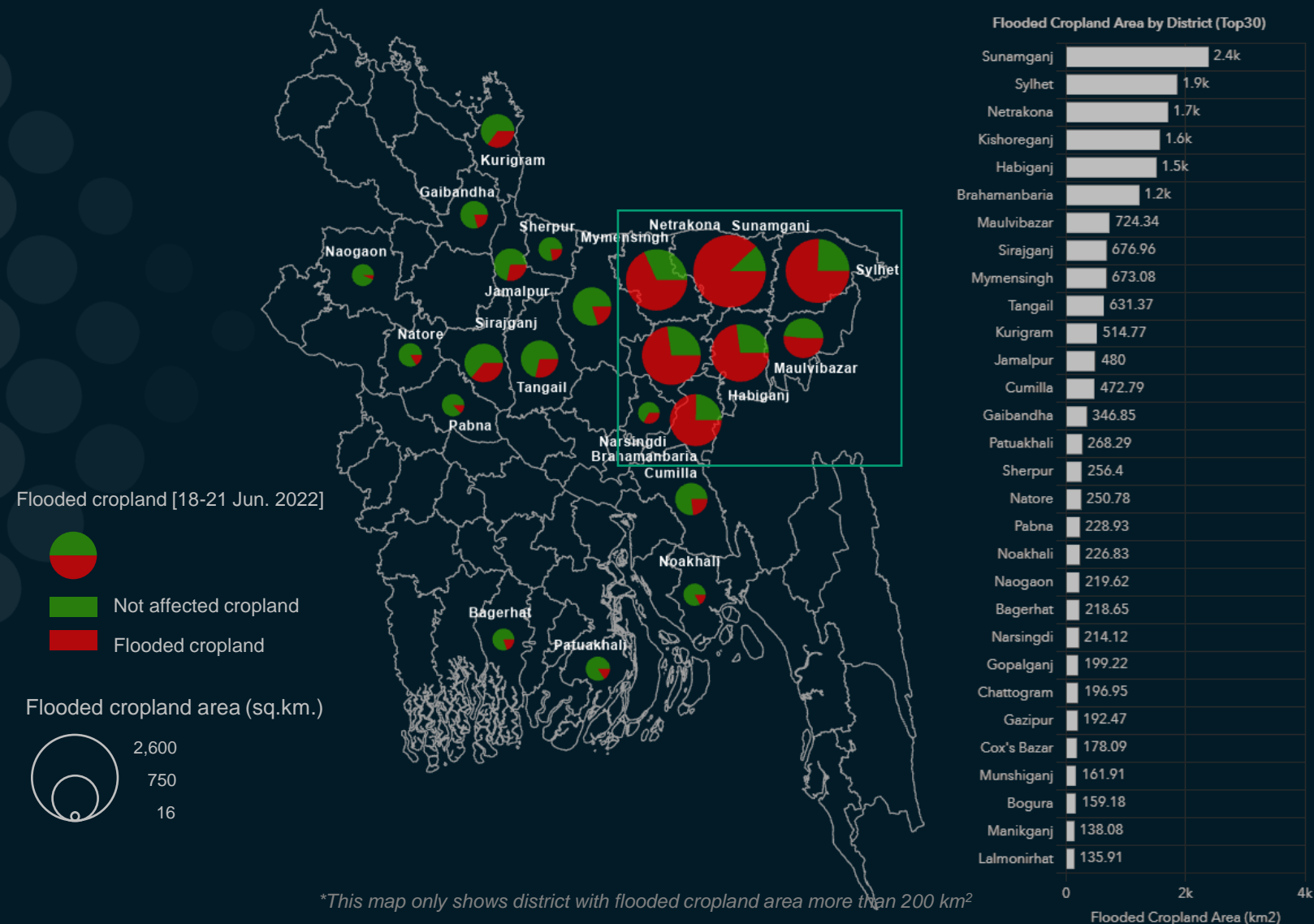
Population Exposed to Flood as of 18 & 21 June 2022



*The population exposure analysis based on the cumulative flood extent of 18-21 June 2022 reveals the following,

- A total of about 17 million are directly exposed to the inundated areas
- Sunamganj, Sylhet, Brahmanbaria, Kishoreganj, Netrakona, Habiganj, districts are severely affected

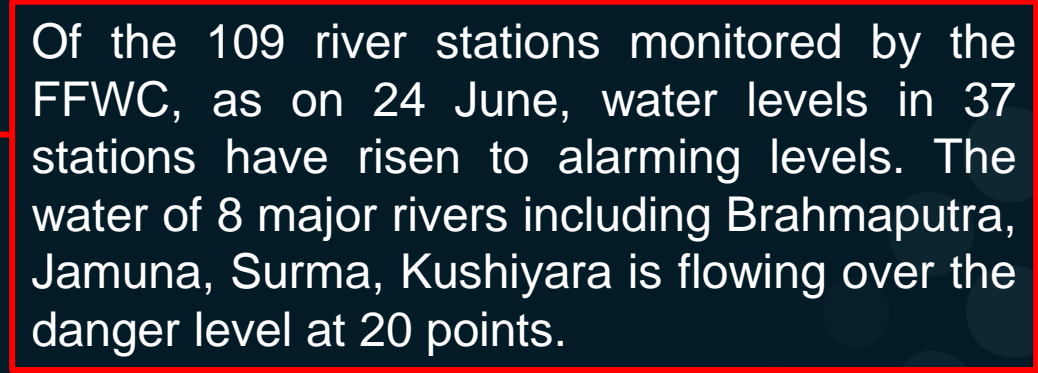
Cropland Exposed to Flood as of 18 & 21 June 2022



*The crop exposure analysis based on the cumulative flood extent of 18-21 June 2022 reveals the following,

- Total inundated cropland is estimated to be 19,500 km²
- The most affected is Sunamganj district, where 90% (2,400 km²)
- In Sylhet, Netrakona, Kishoreganj, Habiganj, Brahmanbaria and Maulvibazar districts are severely affected with roughly 75% of the cropland inundated.

*This map only shows district with flooded cropland area more than 200 km²



8

Summary of Current Situation

According to the Rainfall and River Situation Summary Report by the Flood Information Center of FFWC as on 24 Jun. 2022

- Except Ganges and Padma, all the major rivers in the country are in falling trend;
- According to the numerical weather forecast of meteorological agencies, except Teesta basin, heavy to very heavy rainfall inside Bangladesh & different upstream Indian regions is unlikely in the next 48 hours;
- The Brahmaputa-Jamuna, Dharala, Dudhkumar and all the major river of the north- eastern region of the country (except the Titas) may continue falling, while the Ganges-Padma river may continue rising in the next 24 hours;
- In the next 48 to 72 hours, there is a chance of medium to heavy rainfall in the sub-Himalayan West-Bengal (Jalpaiguri, Sikkim). As a result, the water level of Teesta River may rise and remain near danger level ;
- Flood situation in the Sylhet, Sunamganj & Netrokona districts may improve, while in the Kishoreganj & Brahman Baria districts may remain unchanged in next 24 hours;
- In the next 24 hours, the flood situation in Kurigram, Gaibandha, Bogura, Sirajganj, Tangail & Jamalpur may remain improve;
- There is chance of short duration flood in the low-lying area of Rajbari, Shariatpur & Madaripur districts in next 24 hours.

COPYRIGHTS AND SOURCES

Data sources:

(1) Satellite Image

Sentinel-1 / 18 & 21 June 2022

Resolution: 10m

Copyright: Contains modified Copernicus Sentinel Data [2022]

Source: ESA

(2) Ancillary data

Administrative boundaries: : Bangladesh Bureau of Statistics (BBS)

Population data: WorldPop [2020]

Populated place: OpenStreetMap

Permanent Water Bodies: ESA WorldCover and JRC

Copyright: © ESA WorldCover project 2020 / Contains modified Copernicus Sentinel data (2020) processed by ESA WorldCover consortium”

Analysis : United Nations Satellite Centre (UNOSAT)

Production: United Nations Satellite Centre (UNOSAT)



@UNOSAT



@UNITAR.unosat



UNOSAT, United Nations Institute for Training
and Research (UNITAR)
7 bis, Avenue de la Paix, CH-1202 Geneva 2,
Switzerland

T +41 22 917 4720
E unosat@unitar.org
www.unosat.org