Heatwaves in Dhaka

Problem

Climate change has increased the frequency and intensity of heatwaves, with severe repercussions for human health, including heatstroke, heat exhaustion, and dehydration. Poverty, large-scale informal housing, and occupational hazards amplify the vulnerability of specific urban populations to heat stress.

A 2017 study revealed that Bangladesh's heatwaves were becoming hotter and more frequent. Given its geographic location, dense population, unplanned urbanization, and pre-monsoon climate, Dhaka City was identified as acutely vulnerable. However, little action has been taken to designate heatwaves as a national emergency or to allocate resources to preparedness and response.

Solution

Recognizing this, the Bangladesh Red Crescent Society (BDRCS) collaborated with disaster preparedness and response partners to develop an Early Action Protocol (EAP) to minimize health risks during intense heatwaves.

The EAP clearly defines what should be done during a heatwave, where it should be done, and with what funds. The EAP has three core components:

1. **A "trigger", or a specific threshold value based on climate forecasts and risk data;**
2. **Pre-defined actions to be taken when a trigger is reached; and**
3. **Forecast-based financing, or the release of funds to carry out the pre-defined actions.**

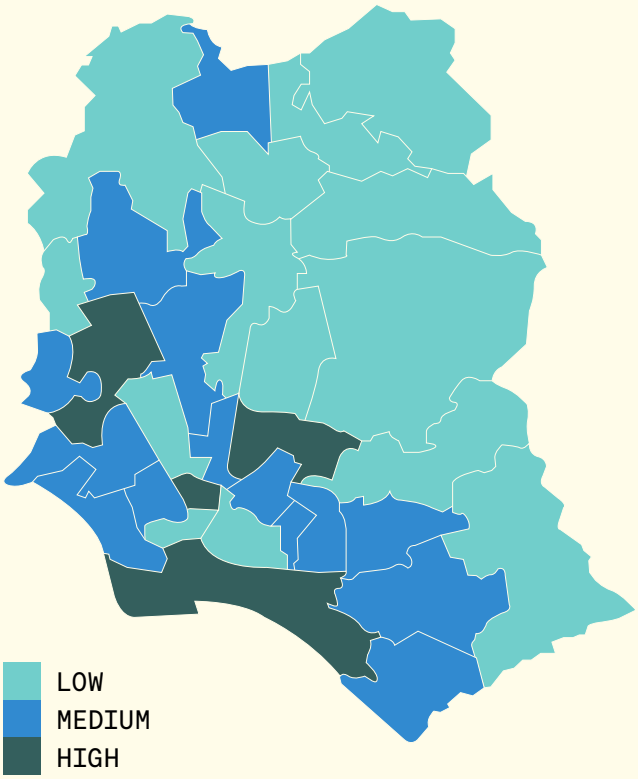
Impact

The EAP was activated in April 2024, as Dhaka experienced its longest heatwave in recorded history. Over 13 days, BDRCS and partners protected the lives and livelihoods of vulnerable groups in Dhaka through the:

- Installation of 3 cooling stations with in-house medical teams, psychosocial health experts, and first aid teams, serving 15,000 individuals;
- Provision of safe drinking water to 30,000 recipients at critical locations;
- Distribution of 3,500 umbrellas and 3,500 protective caps to at-risk populations;
- Dissemination of awareness messaging to 1 million residents in 129 localized wards;
- Distribution of multi-purpose cash grants of at least 5,000 BDT (43 USD) to 4,000 households, including a top-up of 2500 BDT.for 243 households with persons with disabilities.

The BDRCS is now engaging with Bangladesh's Directorate General of Health Services and other actors to explore the development of a National Early Action Protocol for heatwaves.

Relative exposure to heatwaves after combining heat island, population density and built-up area using weightage



Relative vulnerability to heatwaves in Dhaka city