Urban Heatwave Impacts & the Urban Context in Asia Pacific

1st Regional Heatwave Meeting

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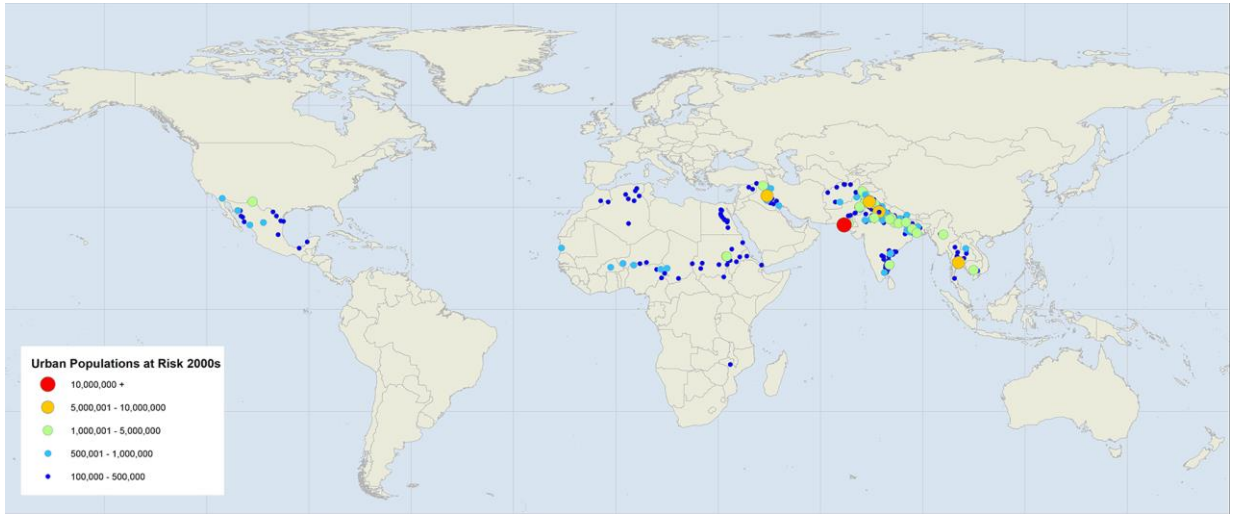
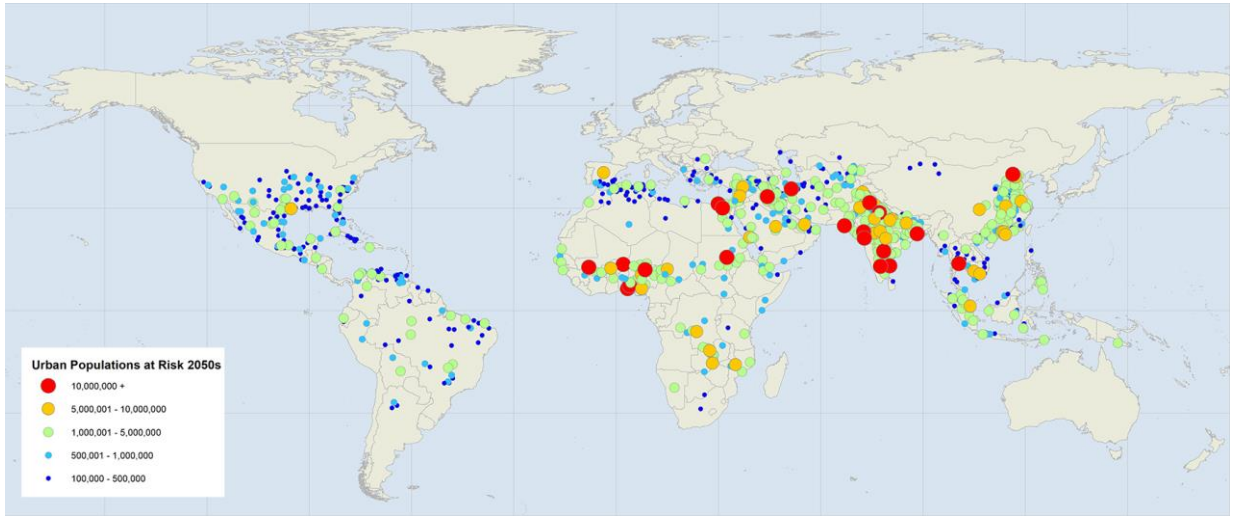
HEATWAVES: GLOBAL URBAN SILENT EMERGENCY

By 2050: the number of people living in cities regularly exposed to heat extremes will increase by 700 percent

Extreme Heat Baseline Period 1980-2005



Extreme Heat 2050



Cities with a three -onth period (consecutive months) where average maximum temperatures exceed 35°C (95°F) in the baseline period (top) compared to those that are projected to experience these temperature extremes by the 2050s (bottom).

- 200+ million people in cities are living under extreme heat conditions
- 26+ million people living in extreme poverty and over 239 cities experience these temperature extremes

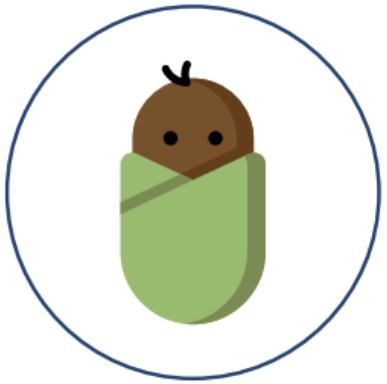
- 1.6+ billion people in cities will be living with extreme high summer temperatures.
- 215 million in extreme heat + poverty

Source: UCCRN, 2018

PEOPLE WHO ARE VULNERABLE TO HEAT

Older people

People working outside

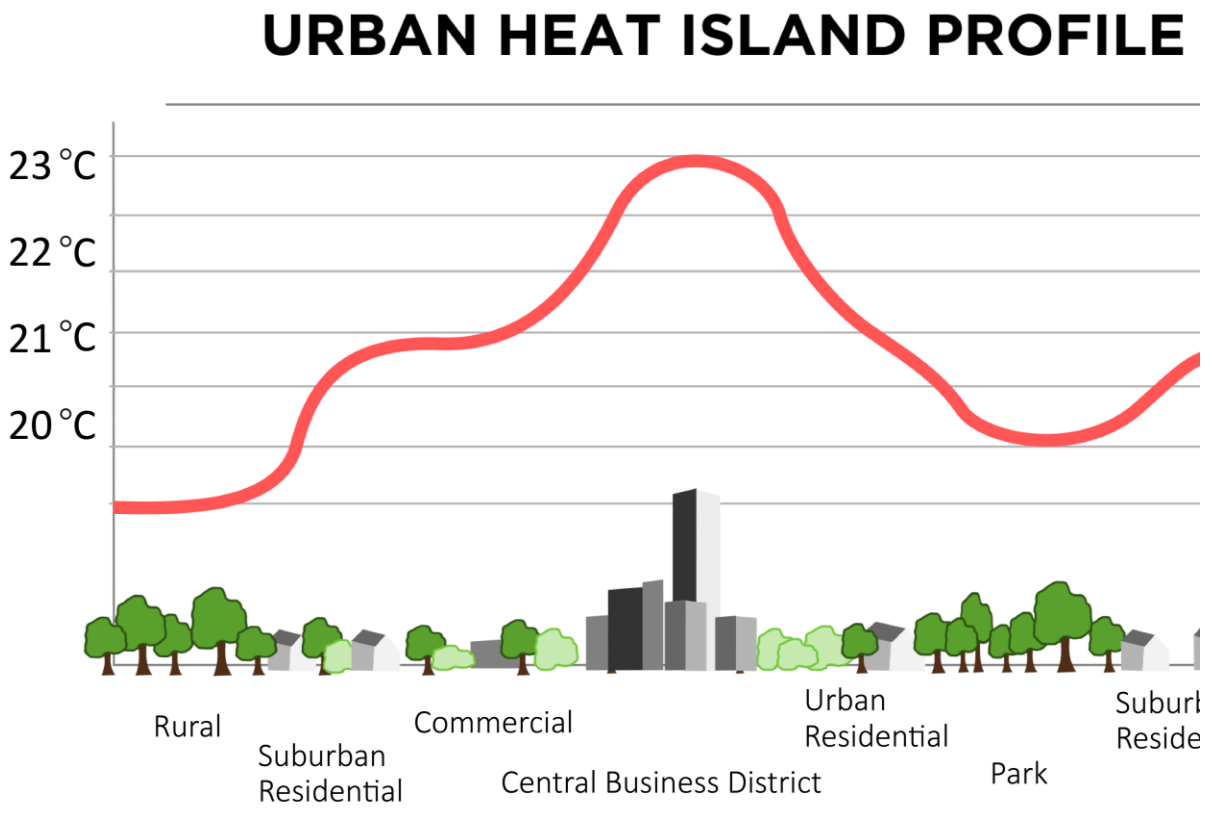


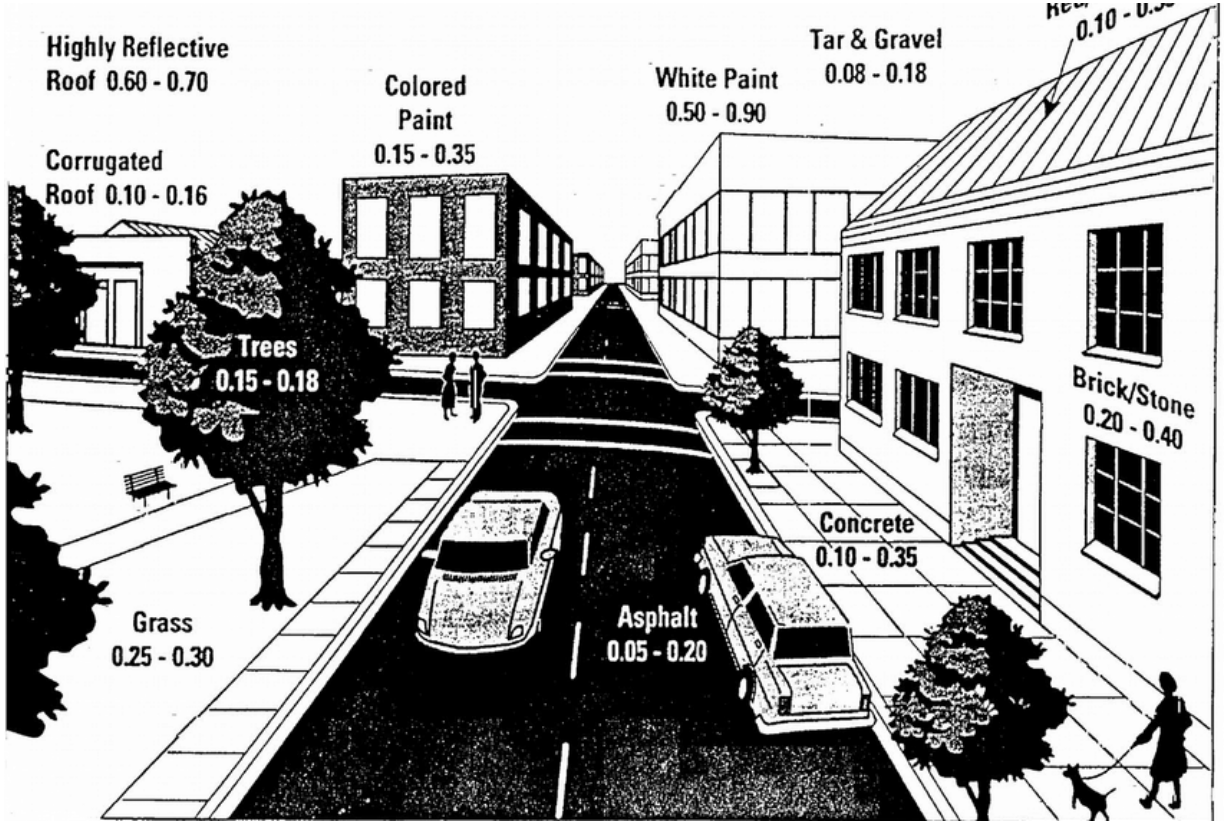
Infants

People with pre-existing medical

Pregnant and lactating women

HEATWAVES AND THE URBAN CONTEXT





Kowloon, Hong Kong Image: Can Pa[illegible] Swi[illegible]e

Dense:

- ✓ Greater access to higher quality public health services and early warning information vs rural
- ✓ Humanitarians can have bigger impact in one area
- ✓ Usually hotter
- ✓ Quick to transmit (disease/(mis-)information)
- ✓ Can make or break access

Diverse:

- ✓ Diverse livelihoods
- ✓ Populations are not homogeneous
- ✓ Communities are not uniformly located, are spread out over large areas/formed of interest
- ✓ Communities with different vulnerabilities can overlap

Dynamic:

- ✓ Market-based
- ✓ Prone to infrastructure and service cascade effects
- ✓ Constantly in flux: people are on the move within the city, and rural – urban

Urban Actions Prior to Heatwave

Link to climate, DRR, resilience strategies, policies and plans

TAKE TIME + ASSESS URBAN CONTEXT:
Collect qualitative + quantitative data to map:
Urban Risk Hotspots, vulnerable groups, access, prepositioning, emergency sites (information, water distribution points, cooling centres), stakeholders + city-wide systems

ENGAGE and IDENTFIY COLLECTIVE ACTIONS:
City stakeholders: (Hydro-Met, DM, Heath, Welfare, affected communities (both area-based/interest), NGOs, research, academia, utility companies, private sector, informal champions, (digital) volunteers

MAKE it OFFICIAL:
Allocate funding, establish MoUs with authorities (e.g. data sharing), link to social protection registries, agreements with Financial Service Providers, utility companies, translators

THINK MOBILE, FLEXIBLE, ACCESSIBLE:
Preposition supplies, targeted service points, mobile distribution and care,
Establish hotlines and awareness campaigns in multiple languages, simulate + develop multi-hazard contingency plans, systems thinking

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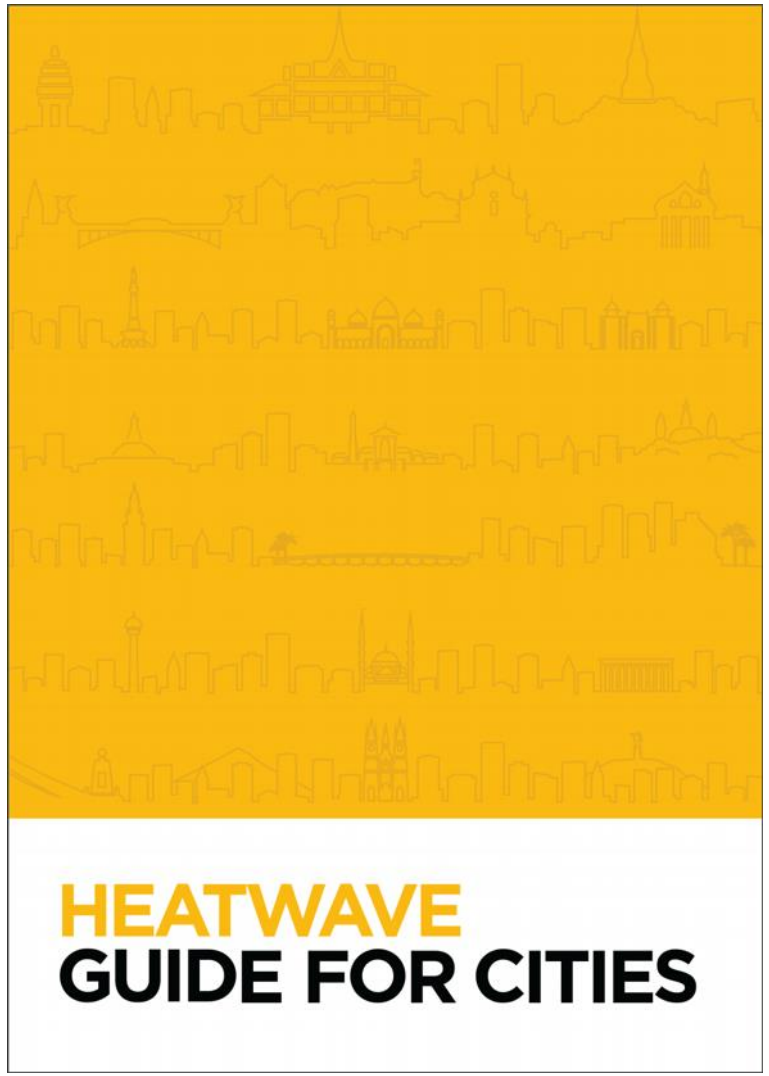
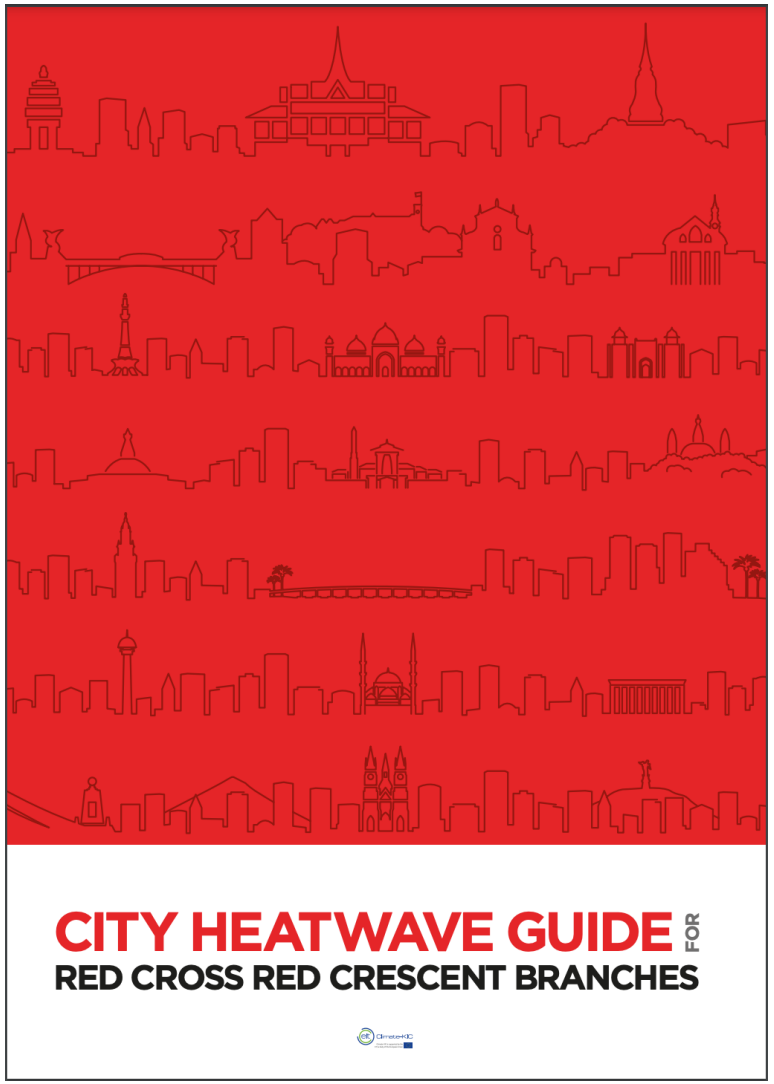
bit.ly/heatwaveguide



bit.ly/branchesHWguide



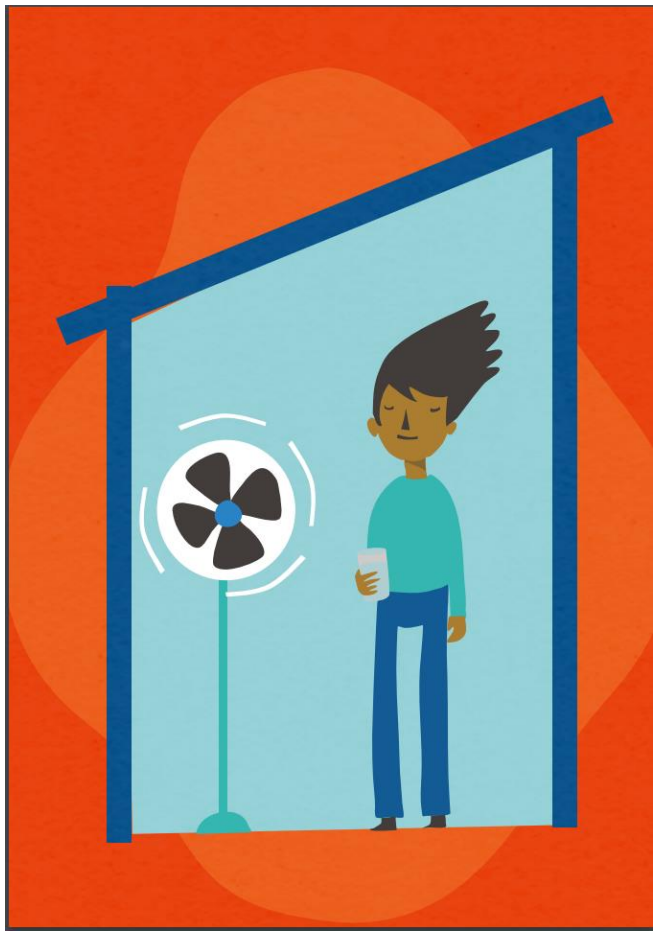
Urban action kit

Cooling Centres

Cooling centres are places where people can rest and cool down during periods of extreme heat. They are used by commuters, outdoor workers and older people – anyone exposed to very high temperatures and at risk of heat stress. As an early action, cooling centres are easy to implement and low budget. They are a lifesaving measure in communities experiencing a heatwave.

1. Identify a suitable location that is accessible and convenient for community members who may be experiencing heat stress e.g. Red Cross offices, public buildings or spaces provided by the private sector. You could also consider going mobile to reach more people with cooling buses or tents. Working with local government and other partners can reduce the costs of setting up a cooling centre.
2. Equip the centre with cooling devices such as shades, fans, cold water sprays or air conditioning units. Make sure you have good air circulation.
3. Prepare refreshments for the visitors – cold water or fruit juice, for example. Providing wet towels is also a good way to provide some relief from the heat.
4. Prepare signs or flyers on the dangers of heat. Use graphics to help accessibility and understanding of the message. Explain the dangers to visitors.
5. Use the national forecast to plan ahead by visiting at-risk communities to warn them about an impending heatwave.
6. Buy the materials and start painting. Appoint a lead artist to sketch out the design on the pavement and to direct others on what to do. It may take several days to complete the painting.

In July 2019, Hanoi, Vietnam was affected by a heatwave with prolonged high temperatures reaching 47.5°C. A Red Cross office and tent were equipped with cooling devices to offer vulnerable people respite from the heat. Visitors were provided with refreshments and a much-needed rest to recover from their exposure to high temperatures. The cooling centres were managed by Red Cross volunteers trained in First Aid.



Global Disaster Preparedness Center

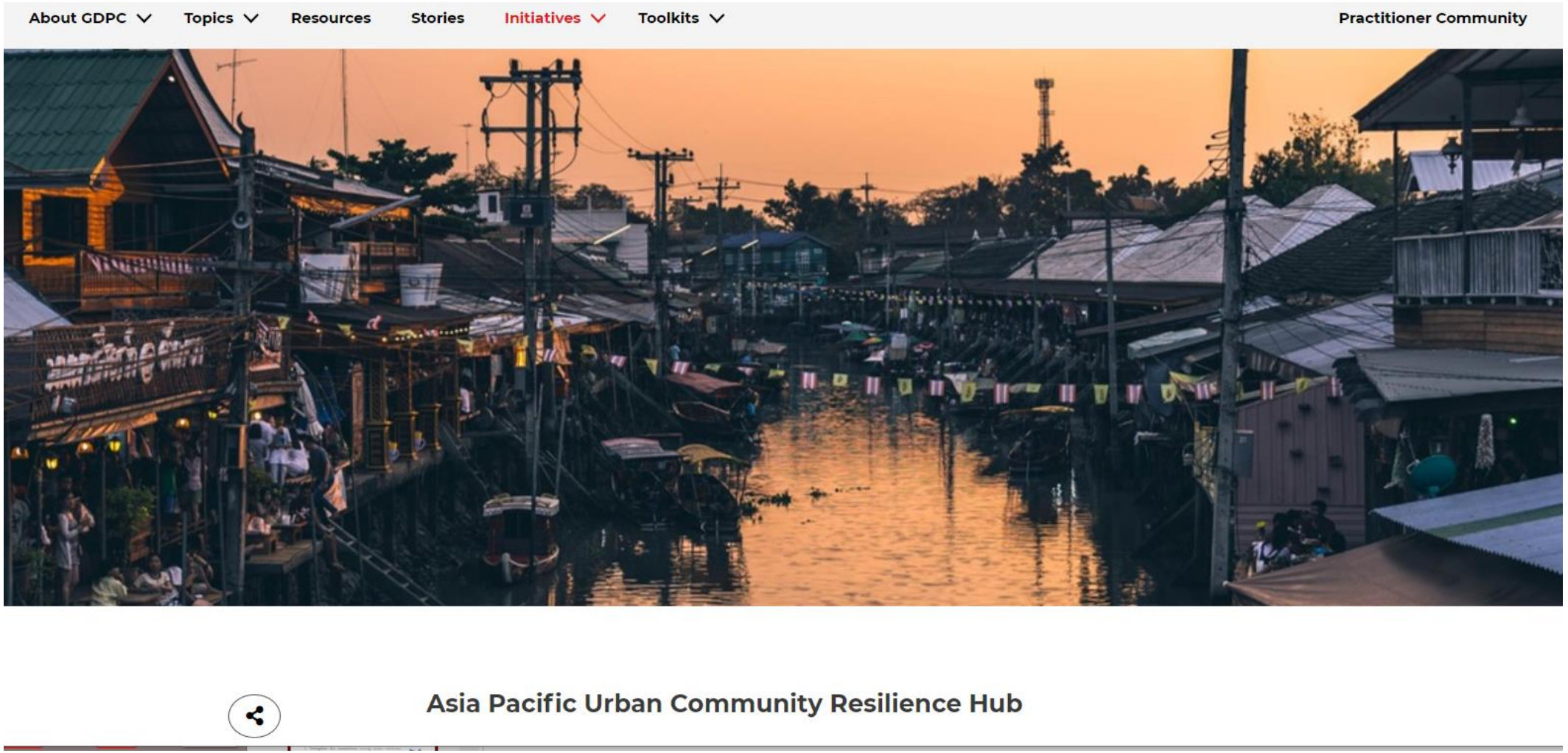
PARTNERS FOR RESILIENCE

Deutsches Rotes Kreuz

Climate Centre

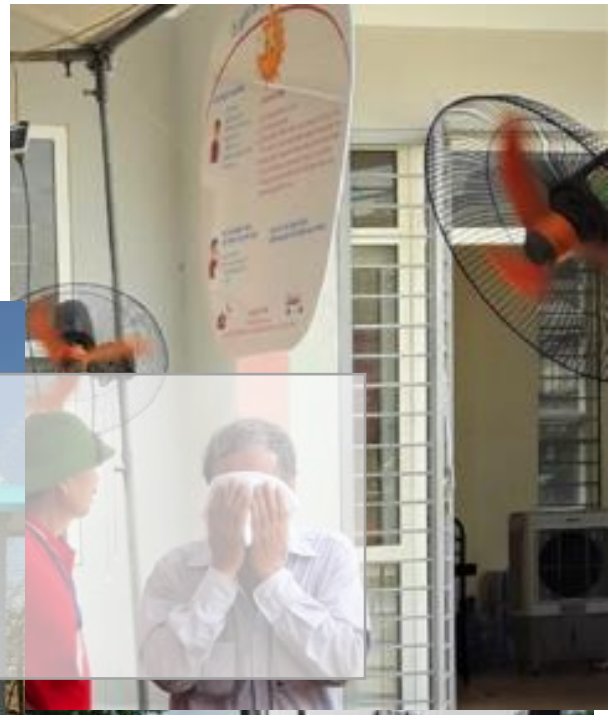
Climate-KIC

Climate-KIC is supported by the EIT, a body of the European Union



https://preparecenter.org/initiative/asian-pacific-urban-community-resilience-hub/

How is your organisation tackling urban heat in Asia Pacific? And who are you working with?



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Thank you!

For further resources:

Asia Pacific Urban Community Resilience Hub:
https://preparecenter.org/initiative/asian-pacific-urban-community-resilience-hub/

Urban Collaboration Platform:
https://preparecenter.org/initiative/red-cross-red-crescent-urban-collaboration-platform/

Contact:

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