



Thailand

Applicant: Bangkok Metropolitan Administration

National Designated Entity:
Mr. Surachai Sathitkunnarat
Ministry of Science and Technology

Duration: 12 months

Status: Under Implementation

Budget: 250,000 USD

Technical Assistance Planned by:
UNEP-DHI Partnership

Strengthening Bangkok's Flood Warning System

CONNECTING COUNTRIES TO CLIMATE TECHNOLOGY SOLUTIONS

The Climate Technology Centre and Network promotes the transfer of climate technologies at the request of developing countries for energy-efficient, low-carbon and climate-resilient development.

By connecting stakeholders with technology experts from around the world, the CTCN delivers customized capacity building and technical assistance aligned with national climate objectives.

CHALLENGE

Bangkok is experiencing an increased frequency and severity of flooding in key sectors of the city. Future projections indicate extreme rainfall events are likely to increase, threatening both lives and livelihoods in this coastal megacity.

CTCN ASSISTANCE:

- Mapping existing drainage
- Building hydraulic drainage models for flood scenario analysis
- Charting network data and work flow
- Validation of monitoring system design including configuration of web-based information system
- Sharing approaches with other flood-prone cities in Thailand
- Identifying possible financial sources for city-wide deployment

INTENDED IMPACT:

- Increased safety and transportation efficiency for the 500,000 people who live in and transit through the targeted flood-prone sector of the city on a daily basis.
- Improved municipal planning to reduce loss of economic productivity and property due to flooding
- Potential for deployment throughout other Bangkok city sectors and Thai cities will further enhance this impact

THIS PROJECT ADVANCES

Thailand's Nationally Determined Contribution to:

- Promote and strengthen Integrated Water Resources Management (IWRM) practices
- Strengthen disaster risk reduction and reduce the population's vulnerability to climate risk and extreme weather events
- Strengthen climate modelling capacity while promoting collaboration among relevant agencies
- Establish effective early warning system and enhance the adaptive capacity of national agencies



What is climate technology?

Any equipment, technique, practical knowledge or skills needed to reduce greenhouse gas emissions and/or adapt to climate change. This includes traditional, modern and high tech technologies.

THE STORY

When a World Bank report on Climate Risks and Adaptation in Asian Coastal Megacities indicated that Bangkok must undertake proactive measures to address increased flooding risks as an integral part of urban planning, the Bangkok Metropolitan Administration sought technical assistance through the CTCN.

The CTCN drew on technical expertise of the UNEP-DHI Centre on Water and the Environment and the guidance of Thailand's National Designated Entity to design an urban flood early warning system for a high-risk catchment within the Bangkok Metro area. This assistance includes technology transfer, a demonstration programme and capacity building.

The flood warning system will provide:

- Information on flood risk zones to residents and commuters through an automated web and mobile platform
- Empowerment of Bangkok city staff with warning management skills
- Proposed methods to expand the system through a citywide warning platform
- Dissemination of findings to other cities and organizations in the region.

Learn more about CTCN technology transfer

Visit: www.ctc-n.org

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The CTCN is the operational arm of the UNFCCC's Technology Mechanism and is hosted by the United Nations Environment Programme (UNEP) and the United Nations Industrial Development Organization (UNIDO).

The CTCN gratefully acknowledges the support of :

