

Building on a Legacy of Excellence

AdaptX builds on AIT's legacy of over 60 years in institutional and professional capacity development for disaster risk reduction and climate change adaptation. Thousands of professionals from across the region have benefited from specialized academic programs, hands-on trainings, and technical support.

Partners

AdaptX collaborates with a wide network of stakeholders to drive inclusive, scalable, and sustainable adaptation and resilience solutions: National / Local Governments, Communities, UN Agencies, Academia, Development Cooperation Partners, Regional Organizations.



Our Team




At AdaptX Hub, our strength lies in a multidisciplinary and innovative team comprising hydrologists, meteorologists, environmental scientists, spatial data and GIS experts, social scientists, urban planners, and specialists in policy, gender, and public health. We leverage expertise in artificial intelligence (AI), machine learning, and emerging technologies to develop cross-cutting, technology-driven solutions that address complex climate and development challenges faced by vulnerable communities across Asia and the Pacific. By combining advanced science, spatial data analytics, and local insights, we deliver tailored interventions that build resilience and foster sustainable adaptation.



Our Contact

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AdaptX Hub

Smart Adaptation and Resilience for Asia



Introduction

AdaptX Hub at AIT Thailand is a pioneering initiative driving adaptation to climate change and emerging technologies through cross-cutting innovation. Established in 2019 within the Asian Institute of Technology (AIT), Thailand, it leverages AIT's global expertise in resilience, disaster risk reduction, and sustainable development to help communities, institutions, and governments navigate evolving environmental and technological challenges.

By integrating data, digital tools, and inclusive approaches, AdaptX Hub delivers scalable solutions that strengthen resilience and prepare societies for the future.

Vision

To be a leading hub for transformative adaptation and resilience solutions that promote cross-cutting innovation, strengthen systems, and empower communities. AdaptX drives sustainable development through data-driven strategies, inclusive partnerships, and scalable technologies across Asia and beyond.

Goals

- Support countries and communities across Asia and the Pacific to integrate adaptation, technology, and resilience into development planning using data-driven and evidence based approaches.
- Strengthen systems and capacities through inclusive, technology-driven, and scalable solutions that address multi-dimensional risks and vulnerabilities.
- Serve as a regional resource hub, offering technical expertise, tools, and collaborative networks to accelerate both climate and technology adaptation.

- Promote cross-sector knowledge exchange by sharing applied research, innovative practices, and lessons learned from diverse contexts.
- Catalyze innovation by incubating and piloting emerging technologies and localized solutions to tackle evolving adaptation and resilience challenges.

Strategic themes

AdaptX addresses resilience and adaptation challenges by focusing on the following themes:



AI for Climate Resilience



Urban and Infrastructure Resilience



Early Warning Systems



Nature-Based and Ecosystem-Based Adaptation



Risk Governance



Health Risk Management



Innovation and Technology Integration



Gender and Social Inclusion

Cross-cutting themes



Data-Driven Decision Making



Tech-Enabled Collaboration and Partnerships



Monitoring, Evaluation, and Learning (MEL)



Sustainability and Scalability



Community Center and Locally Led Adaptation



Capacity Building and Knowledge Transfer

Innovation in Action

At AdaptX Hub, we design and build our own tools to meet the pressing needs of governments, development partners, and communities. Our solutions are scalable, data-driven, and tailored for impact.



HydroAdapt – AI-powered flood simulation and early warning system



SmartAgroX – Smart agriculture tool for drought monitoring and irrigation optimization



CleanAirX – Emissions monitoring platform that quantifies harmful emissions from forest fires, crop burning, traffic, and industry.



UrbanX – Urban resilience toolkit with heat mapping and urban planning