

INSTITUTE FOR SOCIAL AND ENVIRONMENTAL TRANSITION-INTERNATIONAL
CLIMATE RESILIENCE CASE STUDY

Can Tho, Vietnam

PROGRAM OVERVIEW

2011–2015 | Lead Partners: Can Tho People's Committee, Can Tho Climate Change Coordination Office(CCCO), Can Tho Climate change Steering Committee, Can Tho University, Challenge to Change (CtC) National Institute for Science and Technology Policy and Strategy Studies (NISTPASS), ISET-Vietnam



Can Tho



Traditionally a center of agriculture, forestry and fishery, the Can Tho economy is increasingly moving toward commerce, service, and construction. It is the fifth-largest city in Vietnam and growing rapidly.

© Thơ Nguyen, ISET-Vietnam

VULNERABILITY & RISK OVERVIEW



SYSTEMS

Increased flooding from sea level rise, increased drought and salinization from changes in precipitation timing and intensity, and increasing temperatures will stress both urban, and ecosystems in the delta. Water supply, transportation systems, and public works, as well as private property and productive assets like homes, agriculture and aquaculture will all be put at increasing risk.



AGENTS

Health risks and inundation from river flooding and river tides puts stress on poor households, particularly mothers and children, and threatens income-generating opportunities. Risks are heightened for unregistered migrant workers who lack access to public services, are ineligible for disaster compensation under government programs, and suffer from livelihood insecurity.



INSTITUTIONS

Climate change is a new and poorly understood challenge within City Government, and has not yet been integrated into City planning mechanisms despite strong interest on behalf of the local government. Most plans are developed without strong public participation and coordination between agencies. There is a lack of adequate or accessible information on environmental impacts, urbanization trends or climate change to enable sound public planning or household and private sector investment decisions.



EXPOSURE

Climate projections suggest higher temperatures, higher variability in precipitation (unpredictable and intense wet seasons, as well as occasional prolonged drought), a possible increase in typhoons as storm tracks shift, and sea level rise. The Mekong Delta will be strongly impacted by these changes, exacerbated by upstream dam development on the Mekong and other major rivers.

For more information about The Climate Resilience Framework, please visit: www.i-s-e-t.org/CRF

Summary

This document describes how stakeholders in the city of Can Tho, Vietnam are taking action to build resilience of physical systems, agents, and institutions in the face of rapid urban change and a changing climate. With support from the Asian Cities Climate Change Resilience Network (ACCCRN) program, stakeholders are working to:

- understand how vulnerabilities result from, and may be exacerbated by climate change and urbanization, in order to
- plan for resilience building activities;
- establish a Climate Change Coordination Office (CCCO) within the city government;
- enhance city resilience to salinization of surface water;
- research and identify key risk factors for Dengue Fever, with the aim of finding targets for intervention; and
- Develop practical mechanisms for community-based flood and erosion management.

Can Tho City lies at the heart of the Mekong Delta. It is the fifth-largest city in Vietnam and growing rapidly. Traditionally a center of agriculture, forestry and fishery, the Can Tho economy is increasingly moving toward commerce, service, and construction. Yet Can Tho's exposure to the physical environment is inescapable. The modern city center in Ninh Kieu District floods regularly when monsoon-driven waters swell the Mekong to bank-full conditions. Ninh Kieu is home to administrative buildings, domestic housing, commercial banks, higher education institutes, hospitals, supermarkets, and communication stations. Outlying areas, criss-crossed by a dense system of rivers and canals, experience more intense flooding. Sea level rise is poised to exacerbate these risks.

Low water levels are beginning to pose equal challenges. There is concern that in the coming decades, saline encroachment, driven by a combination of higher sea levels, increasing upstream water withdrawals, and extended dry seasons will impact the city's municipal water supply. Exposure to other climate related hazards is also increasing. Changing storm tracks are bringing typhoons to southern Vietnam in an increasing number; temperatures are rising, posing threats to urban populations, agriculture, and aquaculture alike; and vector-borne diseases appear to be on the rise.

Through ACCCRN, ISET-Vietnam, the National Institute for Science and Technology Policy and Strategic Studies (NISTPASS), and Challenge to Change have supported a diverse stakeholder group in Can Tho to understand the linked challenges of climate change and urbanization, to plan strategically, and to implement key priority interventions to build resilience. This process has engaged local actors from the provincial to community level, including the People's Committee, government departments, mass organizations, non-government organizations, and academic institutions.

In 2009, stakeholders embarked on a process of shared learning for resilience planning, which included:

- **participatory shared learning dialogues (SLDs)**, call together stakeholders and experts from a variety of backgrounds to understand more about climate risks, exchange research and experiences related to the city's vulnerability, and to deliberate on next steps;
- **vulnerability assessments**, with a focus on climate impacts on poor and vulnerable households;
- **pilot projects** to engage local community members by testing their innovative ideas for building resilience;
- **sector studies** to provide in-depth analysis on priority issues;
- **development of a City Climate Resilience Action Plan**, led

by a local Climate Change Working Group, to analyze and prioritize interventions for building urban resilience; and

- **ongoing implementation of priorities** are identified in the City Climate Resilience Strategy, as described in the box below.

The City Climate Resilience Action Plan

A City Climate Resilience Action Plan is a broad local-level guidance document that provides the context, evidence, and analysis to justify and prioritize actions to strengthen urban resilience to climate change. It is a living document, granting platform for planners and other stakeholders to revise based on new learning and discussions. In Can Tho, the ACCCRN-supported Action Plan has informed the city's official Action Plan to Respond to Climate Change, which has been approved by the Ministry of Environment and Natural Resources. The action plan prioritizes further identification of climate impacts for groups, sectors and areas, integrating climate change into approved programs, enhancing preventative health system to respond to climate change, raising awareness and capacities of communities, and establishing a climate change data base.

Through ACCCRN, the Rockefeller Foundation is supporting Can Tho and ISET-International to implement a number of priority actions. These actions were developed by the Climate Change Working Group; the team developed resilience responses, prioritized them using qualitative cost-benefit analysis and multi-criteria analysis, and included them in the Can Tho Climate Resilience Action Plan. In this Climate Resilience Case Study, we explore how we are:

- establishing new coordination and management mechanisms (Climate Change Coordination Office);
- developing a real-time salinity monitoring network linked to public warning systems (Enhancing city resilience to saline intrusion);
- participatory research and intervention on dengue fever; and
- developing new mechanisms for joint management and protection of riverbanks and restoration of drainage channels (Community-based urban flood and erosion management).

ISET-Vietnam Contact Information

Country Coordinator:	Address:
Ngo Le Mai	22A 1/42, 1 Au Co, Tay Ho
lemai@i-s-e-t.org	Tel: 04.371.867.02
	Fax: 04.371.867.21