









Climate Resilience Learning Exchange

GMS Regional Integration under Climate Change: A Close-Up on Quy Nhon City

Nestled between beaches and rolling green hills on Vietnam's Central coast, Quy Nhon is a small, scenic city known for a welcoming culture, bountiful fisheries, and a major port. The drive from the downtown northwards to the airport tells a story of growth and ongoing change. New shops, a university, and industrial areas line the road. Just east, developers are breaking ground on both sides of the Thi Nai Lagoon, which will soon be home to a third port, a cargo station, and a new industrial zone. New opportunities are emerging in the city for a new generation. Others, especially older people, are losing their land and traditional forms of livelihood from aquaculture and farming, with unclear alternatives to turn to.

Quy Nhon, like all of Vietnam's central coasts, is considered highly vulnerable to the impacts of climate change. Since 2009, the Asian Cities Climate Change Resilience Network (ACCCRN) initiative has engaged with local officials in the city to learn more about its current and future vulnerabilities to climate change. These partners have with ACCCRN and ISET supported an <u>analysis</u> of hydrology and urban development, showing how planned expansion into the lowlands will exacerbate climate risks in the future. A newly established Climate Change Coordination Office is supporting other agencies in the city to understand climate change, establish an improved early warning system, and foster co-management of mangrove reforestation.

Yet importantly, Quy Nhon's dynamism is linked not just to changes within its boundaries but changes in the region of which it is a part, as well. From being a region characterized as largely agricultural, the pace of urbanization in the Greater Mekong Sub-region (GMS) is accelerating at a scale never seen before. Urbanization represents a dramatic shift in landscapes, resource flows, and demographics, creating dependency on critical systems that are often beyond the control of city administration.

The process is set to intensify with the ASEAN Economic Community (AEC) coming into place in 2015. AEC will eliminate trade barriers between ASEAN countries, facilitating movement of goods and capital. New road infrastructure is planned to link urban commercial and industrial centers across the Greater Mekong Sub-Region, including the East-West Economic Corridor connecting Da Nang to Myanmar. Quy Nhon itself will be linked directly to Bangkok through upgrading of Provincial Highway 19, an ancient trade route linking the coast to the highlands.

As a region, the GMS has been identified as particularly vulnerable to the physical shocks and stresses of climate change such as floods, droughts, and crop failures, as well as their economic consequences in rising energy costs, inflation, and impoverishment. Thus,

while the region may become more economically resilient through regional integration, these anticipated benefits could dissipate under the influence of a changing climate.

ISET, Binh Dinh People's Committee, and Binh Dinh Climate Change Coordination Office (CCCO) invite to take a "close-up view" of regionalization in Quy Nhon City, and begin a conversation on the opportunities and challenges for the GMS under climate change. The visit will focus on the areas north of Quy Nhon historical city center, a low-lying region dominated by farmland and fisheries but being increasingly urbanized.

Time	Event	Facilitator
		T desired
7 th May 2013	Guests arrive in Quy Nhon City	
15:15	Thailand team arrives at Phu Cat Airport	
7 pm	Welcoming dinner for Thailand team, hosted by ISET-International	
	Anh Nhat Gia Vien restaurant, 1087 Tran Hung Dao	
8th May 2013	Field Trip	
6 May 2013	rieid Trip	
7:00	Meet at Quy Nhon Saigon Hotel , 24 Nguyen Hue Welcoming remarks from Mr. Dinh Van Tien, Director of Binh Climate Change Coordination Office Travel to Nhon Hoi – see assigned bus list	
8-9:00	Tour of the Nhon Hoi Economic Area	
9:15	Board boat to Con Chim Nature Reserve	
9:45-11:30	Meet with Core Group for Mangrove Protection	Mr. Tuong Phi Lai (Research Centre for Resources and Rural Development)
11:30-12:30	Lunch at Con Chim hosted by ISET- International	

12:30-13:30	Introduction to Quy Nhon Early Warning System	Mr. Trần Sĩ Dũng, Binh Dinh Hydromet Centre
13:30-14:30	Bus Travel to Nhon Binh ward Introductory information provided aboard bus	Dr. Michael DiGregorio (ISET Senior Consultant), Huynh Cao Van (Binh Dinh Department of Planning and Investment)
14:30-17:00	Tour of Nhon Binh and Nhon Phu Ward . Dr. DiGregorio and Mr. Van share the approach they used to understand the causes and severity of Quy Nhon's worst flood in history	Dr. Michael DiGregorio, Huynh Cao Van
17:00-17:30	Return to Quy Nhon Saigon Hotel: Question and Answer on buses	Dr. Michael DiGregorio, Huynh Cao Van
19:00	Reception hosted by Binh Dinh Climate Change Coordination Office Hoang Hau Restaurant	
May 9 th 2012	Workshop	
8:30-17:00	GMS Regional Integration under Climate Change Quy Nhon Saigon Hotel, 8:30-17:00	Detailed agenda will be provided
17:00	Dinner reception hosted by ISET-Vietnam Location to be announced	

Site Visit Guide

- **Nhon Hoi Economic Zone**: Currently under construction, the new Nhon Hoi Economic Zone is located on Phuong Mai peninsula, to the east of Thi Nai Lagoon north of Quy Nhon's city center. Nhon Hoi is part of Quy Nhon's strategy that intends to make Quy Nhon an economic hub in the central region of Vietnam and seaport for eastern Thailand, northern Cambodia, and southern Laos. It includes a

new industrial zone, urban residential area, deepwater seaport, oil refinery, wind power area, ship building and repairing area, and tourism area. Participants will have the opportunity to ask questions about how planned developments in Nhon Hoi connect with regional markets and new transportation systems, and what kinds of risks are being considered in planning.

- Con Chim Nature Reserve: Participants will travel by boat to the headquarters of Con Chim Nature Reserve, which encompasses the north of Thi Nai lagoon. This area was formally a mangrove area, but mangrove eco-systems have been degraded or replaced by aquaculture over the past several decades. ACCCRN is supporting partners in Quy Nhon to replant mangrove forests, with the goal of providing flood protection for the city, discouraging further urban encroachment onto the coast of the lagoon, and developing livelihood alternatives for local people. Reforestation is requiring local government to experiment with new institutional arrangements to promote co-management of the mangrove resources.
- **Early warning system:** While in Con Chim Nature Reserve, we will meet with leaders from the Binh Dinh Hydro-Met center, who will share plans for a new early warning system for floods on the Kon and Ha Thanh river system and enhance local flood response systems.
- Nhon Binh and Nhon Phu wards: In November 2009, Quy Nhon experienced its worst flood in living memory. ACCCRN partners felt that in order to prevent this kind of disaster from occurring in the future under conditions of climate change, it would be necessary to better understand the sources of exposure and vulnerability that caused the 2009 flood. Michael DiGregorio (ISET-Vietnam Senior Consultant) and Huynh Cao Van (Department of Planning and Investment) will give a tour of two heavily impacted wards, Nhon Binh and Nhon Phu, to share their grassroots methodology for understanding the causes and severity of the flood.

The tour will be guided by the **Binh Dinh Climate Change Coordination Office**, an office established with support from the ACCCRN program but which has since been recognized as a Provincial level agency under the Binh Dinh People's Committee.