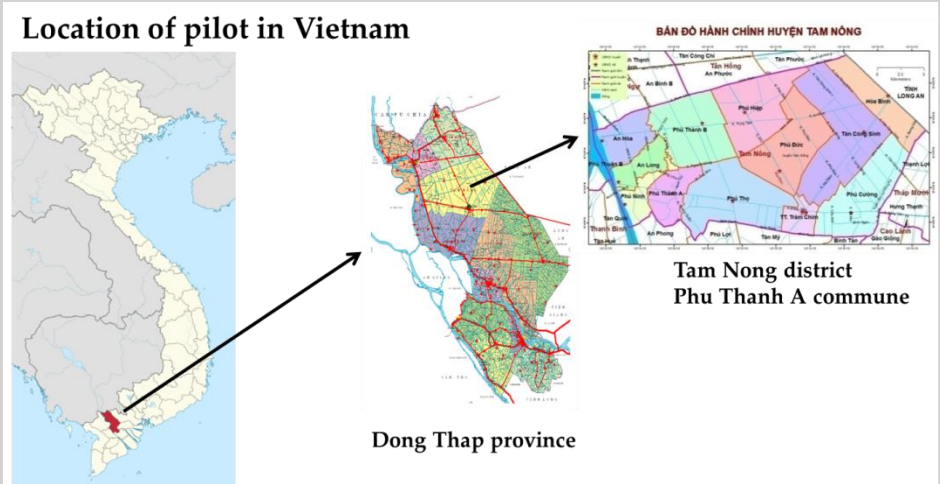


Project Fact Sheet: Viet Nam

Climate-Sensitive Flood Risk Mitigation in Dong Thap Province

Background on Tam Nong District

- Located in the lowest lying areas of Dong Thap province in Viet Nam's Mekong Delta, bordered by Pray Veng Province of Cambodia in the north.
- Floods are influenced by water discharge from the Mekong and Bassac Rivers, rainfall in the delta, and changing tides of the South China Sea to the southeast.
- In Dong Thap's rural floodplains, slow-onset floods annually occur from late July through December, peaking in late September to mid-October.
- Average rainfall ranges from 1682-2005 mm, mostly in the rainy season which accounts for 90-95% of rainfall.
- In recent years, flood regimes in Dong Thap Province's rural floodplains have changed significantly due to the development of flood mitigation infrastructure



Project Overview

Time frame: August 2014-February 2016

Budget: approx. 140,000 Euro

Location: Phu Thanh A Commune, Tam Nong District, Dong Thap Province

Impact: 582 direct beneficiaries, flood risk was integrated into Phu Thanh A Commune's 2016 socio-economic development plan

Partners: Asian Development and Management Institute (AMDI), Sub-Institute of Hydrometerorology and Climate Change (SIHYMECC)

Relevant information on pilot site	*Phu Thanh A Commune*	
Size	2,116 hectares in area, contains 6 villages: Long Phu A, Long An A, Long Thanh, An Phu, Tan Dinh and Phu Dien.	
Population	Population of Phu Thanh A Commune is 11,519 (in 2014), with 2,853 households	
% of labor force involved in rice farming	In the two target villages (Long An A and Long Phu A), 95% of the population have rice cultivation as their main occupation	
Other economic activities	Livestock, fish farming, and small household businesses	
	Long Phu A Village	***Long An A Village***
Drinking water supply	20% of residents use tap water, 14% use wells and 60% use water from the river. The remainder use combinations of the different sources	44% of residents use tap water, 20% use wells and 30% use water from the river. The remainder use combinations of the different sources
Access to sanitation	38% of households have a septic tank, 62% discharge into river	70% of households have a septic tank, 30% discharge into river.

Results of vulnerability assessment

- **Baseline flood behavior:** Based on the results of the field survey, the 2011 flood had a maximum depth of about 4 m.
- **Climate change-induced flood behavior:** The results of the analysis show that by 2030, baseline (2011) flood depth will increase by about 0.2 m or less due to climate change. Thus the estimated cost of flood damage is expected to be relatively small under climate change scenarios
- **Economic vulnerability:** For Viet Nam, annual average flood damage (AAD) was calculated for the entire district rather than at the village or commune level. AAD for Tam Nong District is $1.06 million USD.
- **Economic vulnerability increases due to climate change:** Estimated AAD under climate change conditions in Tam Nong District increases by $21,000 USD for floods with 10-year annual return intervals (ARI) and $56,000 USD for 100- year ARI floods.
- Women play an important role in flood risk management, particularly in food preparation before floods and post-flood clean up. However fewer women than men participate in flood-related trainings and fewer receive flood early warning information.
- During flood season, transportation (especially for children going to school), inadequate fresh water supply, lack of medical equipment, and lack of an adequate flood warning announcement system are some of the greatest challenges for Phu Thanh A Commune residents.

Suggested adaptation measures

Based on an assessment of the focus region's exposure to floods, sensitivity, and adaptive capacity, over 20 adaptation measures were identified to help the target villages reduce their vulnerability to flood risk. Below is a list of some of the identified measures.

1. Trainings to strengthen villagers' capacities to adapt to flooding
2. Provide clean water supply and rural sanitation
3. Encourage diversification of livelihoods through exchange of experience
4. Establish an effective flood warning system (loud speakers, flood gauge boards, etc).
5. Assist farmers and the poor in flood-proofing of houses and post-flood recovery
6. Implement policies to maintain sanitation and restore the environment following floods
7. Mobilize community-based activities to assist in post-flood clean-up and repair

Implemented adaptation measures

After a series of consultations with relevant stakeholders, the following measures were selected for implementation based on their potential for upscaling, technical feasibility, financial feasibility, gender sensitivity, willingness of communities, and sustainability. These measures were implemented between September and December 2015.

Objective 1: Improved capacity of villagers and leaders for flood early warning and communication

1. Procure and install 29 clusters of loudspeaker system and technical devices for wireless broadcasting system (20 sets of wireless transceiver, 1 desktop computer and 1 radio cassette

Objective 2: Improved capacity of villagers to obtain fresh water and sanitation and to perform community-based disaster risk management (CBDRM)

2. Awareness raising and communication event on DRR skills, water and sanitation with secondary students and 1 training for community members on how to use water filter and water containers, practical hygiene behaviours during floods
3. Procured equipment for search and rescue team (5 canoes with engines, 25 benches, 5 portable speakers, 15 flashlights, 75 life vests, 15 round lifebuoy)
4. 1 Training for communal/village rescue team on first aid, search and rescue and housing consolidation;
5. Procured 200 household water filters and 200 water containers (1000L container)

Objective 3: Improved capacity for local leaders to conduct flood planning

6. Capacity building for local authorities and communities including 1 training on flood planning and integration into SEDP, 1 training on flood risks and impacts, preparedness and mitigation and adaptation measures under the climate change context