

# ADAPTS: Adaptive Water Management at a Local Scale

## Vietnam case study

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### GOAL OF ADAPTS

Climate change is expected to result in gradual changes in temperature, rainfall patterns and sea level, but also increased climate variability and extreme events, threatening water availability and food security for millions of poor people. Adaptation strategies to deal with these impacts are urgently needed from the level of communities to national governments.

In 2008, the Institute for Environmental Studies, ACACIA Water and Both ENDS started the ADAPTS project. The overall aim of ADAPTS is to increase developing countries' adaptive capacities by achieving the inclusion of climate change and adaptation considerations in water policies, local planning and investment decisions.



Fig. 1: The six case study areas.

### SUB-OBJECTIVES

To achieve this goal, ADAPTS focuses on:

- **1. Knowledge development:** developing climate change information and studying how local water management can be made climate-proof.
- **2. Local Action:** the identification, support, documentation, analysis and dissemination of innovative, locally-based interventions to assure that local knowledge and visions are included in basin and national policy dialogues.
- **3. Dialogue:** Establishing policy dialogues between local and national stakeholders on the issues of sustainable water management and adaptation to climate change.

ADAPTS sets out to show that adaptation is already taking place at the local scale, and to provide practical experiences and lessons from various contexts that can feed into the discussions on climate-proofing water management from the local to the (inter) national level.

The project is being implemented in six river basins around the world. Projects with a three year duration are being carried out in Ethiopia, Ghana and Peru. Studies with a one year duration are being carried out in Botswana, Brazil and Vietnam. This fact sheet provides an overview of the main challenges and activities in the Huong river basin in Vietnam.

### VIETNAM CASE STUDY

The impact of climate change is an important issue for the 2830 km<sup>2</sup> Huong River basin in Central Vietnam. The region is already heavily impacted by natural disasters, notably floods, which are projected to increase in frequency and intensity due to climate change. Around 800,000 people live in the Huong River Basin. Their livelihoods, mainly small-scale agriculture and fisheries, largely depend on the river and the lagoon into which the river drains. Hue City, an UNESCO world cultural heritage site is the most densely populated area located in the downstream section of the basin. The local partner 'Centre for Social Research and Development' (CSRD) aims to take climate change and adaptation into account in their work with local communities and to support a number of specific local adaptation measures. Furthermore, CSRD intends to play a leading role in facilitating a dialogue between communities, researchers and government authorities on climate change and adaptation in the basin.

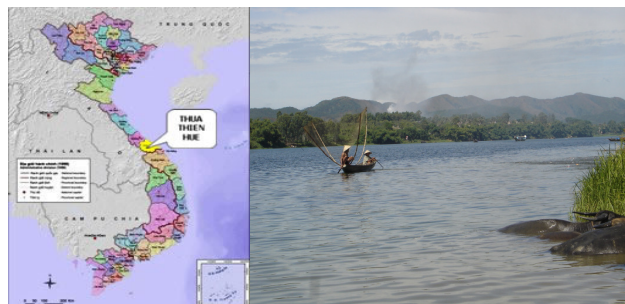


Fig.2: Huong River Basin

## CLIMATE CHANGE AND VULNERABILITY

Climate change can already be observed in the basin. Average temperature, as well as the number of hot days, has increased. Rainfall has increased during the rainy season and decreased during the dry season, leading to a higher risk of floods and droughts. The observed changes have already caused crop failures, animal loss, power cuts and damage to houses and roads.

These trends are projected to continue and to further aggravate under climate change, posing multiple challenges for peoples' livelihood, economic sectors and ecosystems. Also, the projected sea-level rise constitutes a major threat for the region.

## LOCAL ADAPTATION

So far, the government has mostly focused on disaster risk reduction and the construction of reservoirs, river embankments, an anti-salinity dam and sea dikes. Meanwhile, local people have gained some experience in preparing for and dealing with natural disasters and adapting to the climate variation in their daily life, especially after the massive flood in 1999. However, little attention has so far been paid to the long-term effects of climate change.



Fig. 3: Water storage on household level



Fig. 4: Protect river bank by planting vetiver grass

To gain knowledge on climate change, its regional impacts and adaptation, CSRSD participated in a tailored training course provided by the Institute for Environmental Studies (IVM) and other experts. It also conducted an extensive stakeholder consultation, using the Participatory Rural Appraisal method, to identify local adaptation measures. From the findings of these studies, a selection of successful measures will be chosen to further elaborate and support. Furthermore, CSRSD supports the establishment of a platform on Climate Change in Central Vietnam.

## DIALOGUE AND UP-SCALING

In May 2009, CSRSD organized a first stakeholder workshop in Hue City which was attended by local and regional policy makers, civil society organizations and scientific institutes. The objective of the workshop was to gain a better understanding of climate change and adaptation, to raise awareness and to establish a dialogue on how to jointly address climate change and adaptation in the Huong river basin.

The workshop also provided initial ideas and input for the development of a provincial action plan on climate change adaptation. Such an action plan will be required by the 'National Target Program on Climate Change' that was enacted by the Prime Minister in December 2008. This program puts climate change high on the political agenda in Vietnam, one of the five countries in the world that are believed to be most affected by climate change.

## FUTURE PLANS

CSRSD will select and further support a number of specific local adaptation measures. The identified local measures and priorities of local communities will be documented and published in a handbook for use in other parts of Vietnam. The findings will also provide input for the provincial 'Action Plan on Climate Change' and other provincial policy documents. CSRSD will continue to involve all stakeholders in the basin and to raise awareness of the population and governmental authorities on climate change. CSRSD hopes that a platform on Climate Change in Central Vietnam is created this year, where a constructive dialogue takes place between communities, researchers and governmental authorities, facilitated by CSRSD.

## PARTICIPATING INSTITUTES

Centre for Social Research and Development (CSRSD)  
IVM/VU University  
Both ENDS

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