Presentation from

2016 World Water Week in Stockholm

www.worldwaterweek.org

Securing water resources in changing climatic and socio-economic conditions - Case Vietnam

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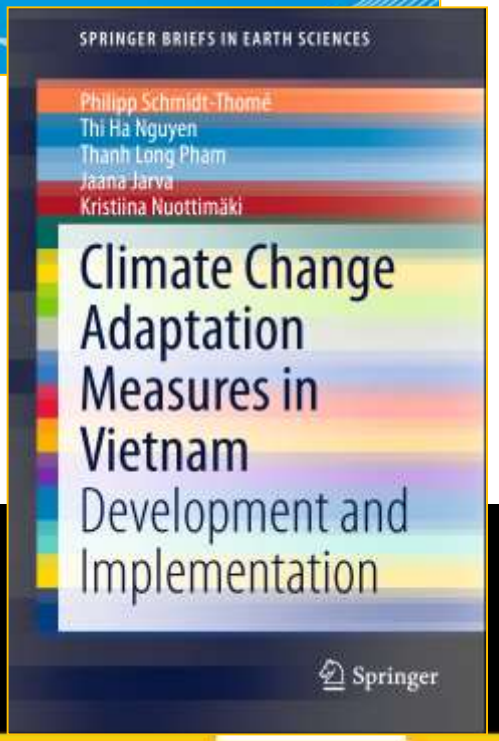
VIETADAPT – Cooperation

- VIETADAPT I and II, 2011 – 2016
- Climate change adaptation measures in coastal areas and at local level in Vietnam
- Funded by the Ministry of Foreign Affairs for Finland by ICI (Institutional Co-operation Instrument)

- Partners:
  - Geological Survey of Finland (GTK)
  - Sub-institute of Hydrometeorology and Climate Change (SIHYMECC)
  - Centre for Water Resources Warning and Forecasting (CEWAFO)



Research chain - DPSIR

- Driving Forces: Climate change impacts and socio-economic changes
- Pressures: Increasing water demand
- State: Hydrogeological and environmental conditions
- Impacts: Salinization, water scarcity
- Responses: Sustainable water resource management, local adaptation measures

Comprehensive knowledge on current situation and conditions

- Evaluating climate change and socio-economic scenarios
- Investigating surface water, groundwater and environmental conditions
- Identifying human development and climate change impacts on the environment and water resources

Photo: P. Schmidt-Thomé

Sharing information

- Interpretation of scientific results
- Training of experts and decision makers
- Open and active science-stakeholder communication

⇒ Understanding the local conditions

⇒ Assessment of local vulnerability and risk patterns

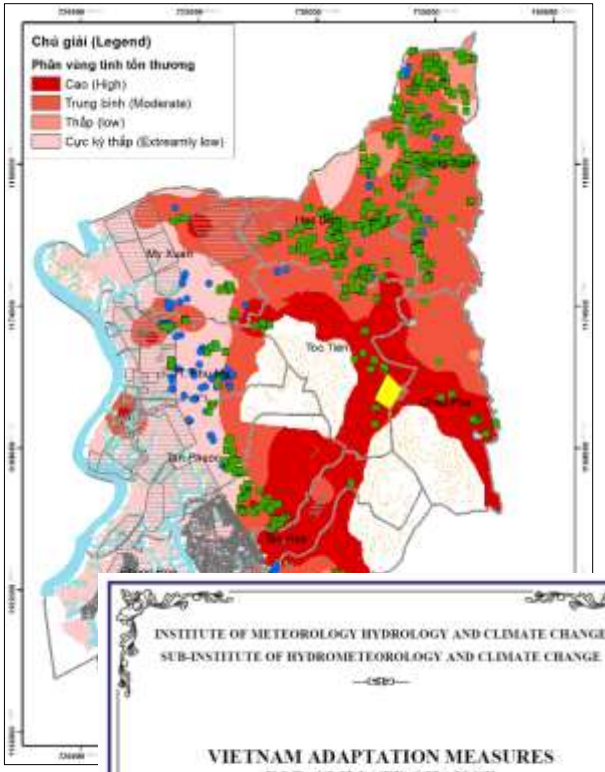
⇒ Integrating local knowledge and expertise on water resources management and climate change impact assessment

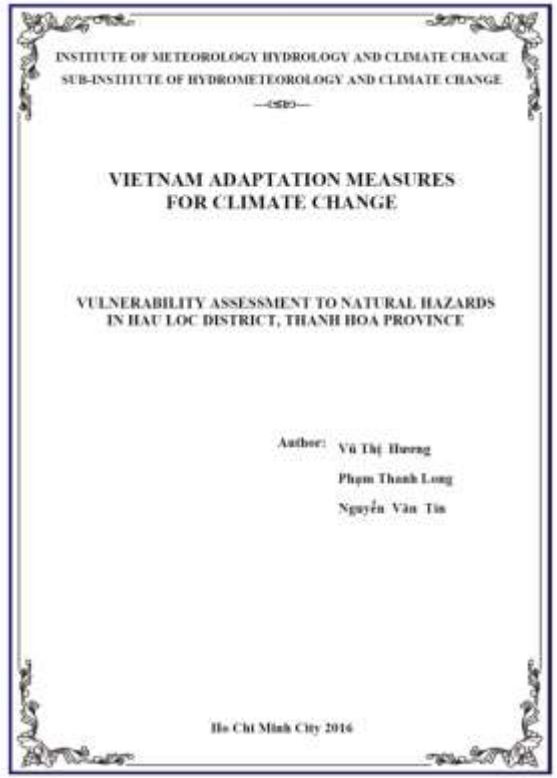
Implementing into practice

- Developing local risk management and climate change adaptation measures for sustainable water resource management
  - Feasible
  - Easy to implement
  - Cost-effective
  - Accepted by the community and local people

Recommendations and adaptation measures for local level - examples

- Water quality
  - Improving monitor network
  - Land use prohibitions; protection zones
  - Improving wastewater management
  - Remediation of contamination
  - Replacement of water intakes
- Water quantity
  - Water balance analysis
  - Setting sustainable pumping rates
- Water supply
  - Promoting water-saving irrigation methods
  - Saline intrusion forecasts; timing for irrigation and planting
  - Artificial groundwater recharge
  - Water storage and reservoirs
  - Dykes for flood protection and salinization prevention




INSTITUTE OF METEOROLOGY HYDROLOGY AND CLIMATE CHANGE
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VIETNAM ADAPTATION MEASURES FOR CLIMATE CHANGE

VULNERABILITY ASSESSMENT TO NATURAL HAZARDS IN HAU LOC DISTRICT, THANH HOA PROVINCE

Author: Vũ Thị Hương
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Ho Chi Minh City 2016

Lessons learnt

- Securing water resources is a common challenge for decision makers, land use planners and citizens
- Comprehensive understanding ranging from hydrogeological and environmental conditions to climate change impacts and socio-economic effects is essential
- Science-stakeholder communication enables developing targeted, site-specific measures
- Strong local involvement promotes public awareness and acceptability of developed measures

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Thank you for your attention!

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