

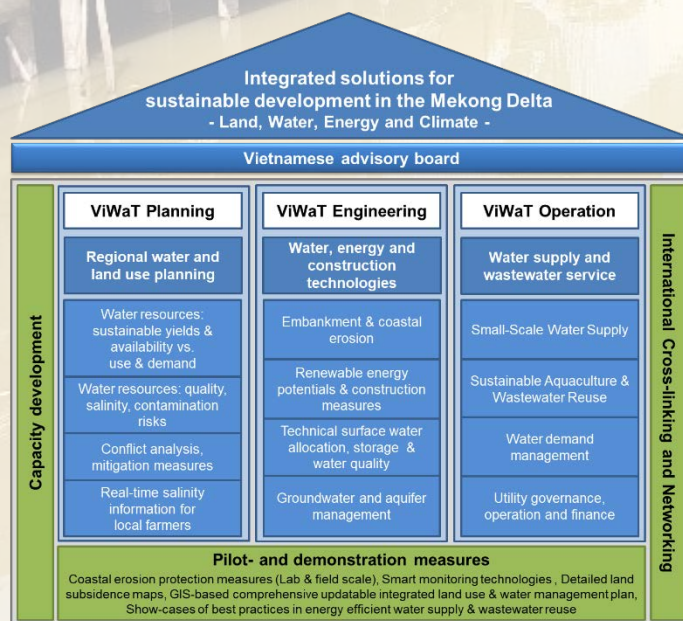
Background

In the Mekong Delta in southern Vietnam, about 18 million people live in an area that is about the size of Baden-Württemberg in Germany. Climate and land use change as well as groundwater overexploitation are putting a heavy strain on this economically important region of Vietnam. Consequently, land and fresh water resources in the Mekong Delta are strongly impacted by erosion, subsidence, pollution and salinization.

One Joint Project – Three Subprojects – Integrated Solutions

In the face of this significant pressure, the Vietnamese government started to redesign water and land use in the Mekong Delta.

Within this framework, research groups of the Karlsruhe Institute of Technology (KIT), Ruhr-University Bochum (RUB) and University of Witten/Herdecke (IEEM) launched the interdisciplinary joint project ViWaT-Mekong to support Vietnam to sustainably improve water and land use in the Mekong Delta.



Information

German project partners

KIT	Karlsruhe Institute of Technology - Faculty of Civil Engineering, Geo and Environmental Sciences
RUB	Ruhr-University Bochum - Environmental Engineering+Ecology (EE+E)
IEEM gGmbH	Institute of Environmental Engineering and Management at the Witten/Herdecke University
Aquantec	Aquantec GmbH, Karlsruhe
bbe	bbe Moldaenke GmbH, Schwentinal
Disy	Disy Informationssysteme GmbH, Karlsruhe
TZW	DVGW-Technologiezentrum Wasser (TZW), Karlsruhe
Fraunhofer	Fraunhofer UMSICHT, Oberhausen
KAAD	Katholischer Akademischer Ausländer-Dienst, Bonn
Martin Systems	MARTIN Systems GmbH, Berlin
ribeka	ribeka GmbH, Bornheim
SEBA	SEBA Hydrometrie GmbH & Co. KG, Kaufbeuren
TH Köln	Technische Hochschule Köln
Tilia	Tilia GmbH, Leipzig
TU Dortmund	Technische Universität Dortmund

Vietnamese project partners

DMHCC	Department of Meteorology, Hydrology and Climate Change, Hanoi
HCMUNRE	Ho Chi Minh City University of Natural Resources and Environment, HCMC
MWII	Mekong Water Innovation Institute, HCMC
NAWAPI	National Centre of Water Resources Planning and Investigation, Hanoi
SISS	Southern Institute of Social Science, HCMC
SIWRR	Southern Institute of Water Resources Research, HCMC
SIWRP	Institute of Water Resources Planning, HCMC
TLU	Thuyloi University, Hanoi
VAH	Vietnam Association of Hydrogeologists, Hanoi
VAST	Vietnam Academy of Science and Technology, Hanoi
VAWR	Vietnam Academy for Water Resources, Hanoi
VIGMR	Vietnam Institute of Geosciences and Mineral Resources, Hanoi
VNU-HUS	Vietnam National University, Univ. of Science, Hanoi

Funding measure

Client II – International Partnerships for Sustainable Development

Grant number

02WCL1474 A to O



ViWaT

INTEGRATED SOLUTIONS FOR SUSTAINABLE DEVELOPMENT IN THE MEKONG DELTA

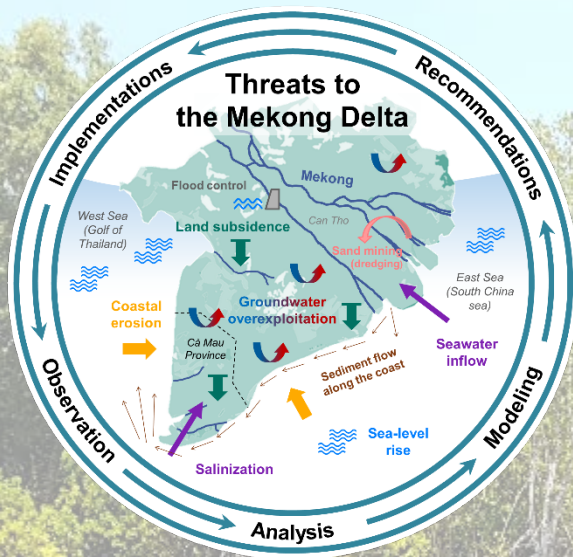


ViWaT-Engineering (KIT)

Funding period: 01.08.2018 – 31.07.2021

- Coastal protection and land reclamation
- Land subsidence processes
- Water dynamics and the identification of sustainable water resources to counteract groundwater overexploitation

The aim of ViWaT-Engineering is the development of effective coastal protection measures and the assessment of local water availability and quality with regard to substitute groundwater by alternative water resources to reduce land subsidence.



ViWaT-Planning (RUB)

Funding period: 01.11.2018 – 31.10.2021

- Regional Water and Land Use Planning

Regional water and land use planning creates a strategic framework and orientation for subordinate provincial or local planning and implementation of measures. ViWaT-Planning develops assessment tools for regional water and land use planning as well as recommended measures to avoid water quantity and quality problems. ViWaT-Planning cooperates directly with the ongoing Vietnam government project "Mekong Delta Integrated Regional Plan".



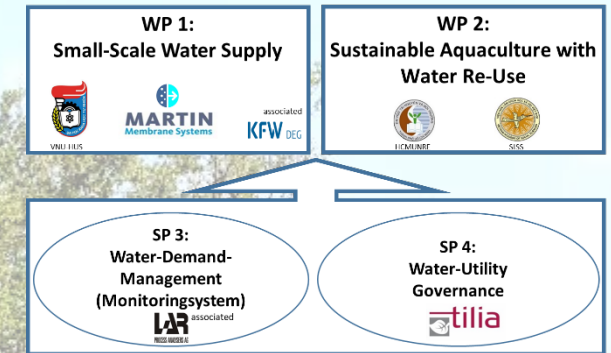
ViWaT-Operation (IEEM gGmbH)

Funding period: 01.01.2019 – 31.12.2021

- Water supply for remote settlements
- Wastewater treatment and re-use for aquaculture

The aim is to develop and implement a replicable and financially viable technology for micro-waterworks and aquaculture wastewater treatment and furthermore a concept to ensure a sustainable operation. These concepts will initially be developed for several selected locations in the provinces of Ca Mau, Kien Giang and Bac Lieu and shall subsequently be replicated for a number of other locations in Vietnam and beyond.

The work packages of the project, which can be seen in the figure, are accomplished in collaboration with farmers, organizations, institutions, universities and stakeholders in implementation areas.



Coastal erosion



Groundwater sampling



Rice and shrimp farming



Salinity protection gate



Existing rainwater harvesting is often insufficient



On-site testing of filter-components

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