

ViWaT-Mekong-Planning

Instruments for sustainable regional water and land use planning



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Objective

The land use in the Mekong Delta mainly depends on the water resources, particularly the salinity of surface water and the quantity of groundwater. The recent development of land use partly leads to unadapted/disharmonious use of the water resources: local over-exploitation of groundwater, surface water pollution etc..

The R&D project ViWaT-Mekong-Planning develops tools for improving regional water and land use planning.

The study area south of the Hau river includes the provinces An Giang, Can Tho, Kien Giang, Hau Giang, Soc Trang, Bac Lieu and Ca Mau.

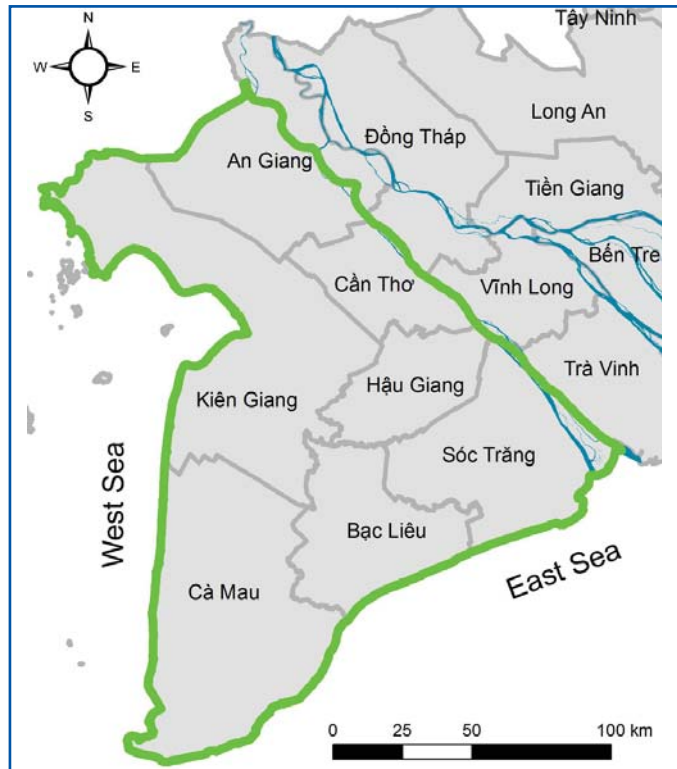


Fig. 1: Study area

Methods

ViWaT-Mekong-Planning investigates water balances and contamination risks for groundwater and surface water resources.

ViWaT-Mekong-Planning identifies water and land use conflicts and derives recommendations for adaptation of sustainable regional water and land use planning.

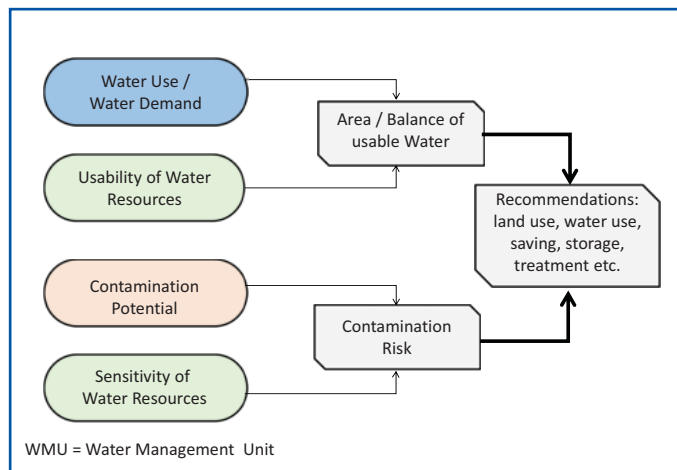


Fig. 2: ViWaT-Mekong-Planning Tools

German project partners

EE+E - Environmental Engineering+Ecology, Ruhr University Bochum

LSU - Urban Management and Environmental Engineering, Ruhr University Bochum

RIM - Spatial Information Management and Modelling, Dortmund University

FRU - Fraunhofer UMSICHT Inst. for Environmental, Safety & Energy Technology, Oberhausen

ITT - Inst. for Technology & Resources Management in the Tropics and Subtropics, TH Köln

Ribeka GmbH, Bornheim

Disy Informationssysteme GmbH, Karlsruhe

Vietnamese project partners

NAWAPI - National Centre of Water Resources Planning and Investigation, Hanoi

MPI - Vietnam Ministry of Planning and Investment

SIWRR - Southern Institute of Water Resources Research, Ho Chi Minh City

VAH - Vietnam Association of Hydrogeologists, Hanoi

CTU - Can Tho University, Can Tho

Background

The Mekong Delta in Vietnam is one of the regions most affected by climate change as well as human impacts: rising seawater, salinisation, untreated wastewater and overuse of groundwater are threatening the living conditions of 17.5 million people.

The original marshy Mekong Delta has been reclaimed by numerous canals, sluices and dikes for over 100 years and has developed into a highly productive rice growing area with up to three annual rice crops. There are aquacultures for shrimp and fish as well as industry for the further processing of agricultural products.

Intensified by climate change and cross-border competition for Mekong water, there are now serious land use conflicts and problems, especially for agriculture.

Currently, the Dutch-German consortium Royal Haskoning (NL) / GIZ (D) is developing on behalf of the MPI (Vietnam Ministry of Planning and Investment) the innovative "Mekong Delta Integrated Regional Plan" (MDIRP).

The result will be a cross-sectoral and interprovincial regional plan for the Mekong Delta with respect to the overall national planning and a coordinating function for the provinces.

The plan will regulate all regionally important activities and measures and will guide the planning of the provinces. It is therefore also crucial for the future water management in the Mekong Delta.

[ViWaT-Mekong-Planning is cooperating closely with the MPI; continuously contributing its results of the developed instruments for sustainable regional water and land use planning to the Integrated Regional Planning project.](#)