

THE PROJECT DESIGN

The project design of CuveWaters reflects the transdisciplinary research approach. The scientific components *Research & Concept Development*, *Empirical Studies* and *Technology* are closely connected to integrative societal components such as *Participation*, *Good Governance & Institutionalisation* and *Capacity Building*.

RESEARCH & CONCEPT DEVELOPMENT

- to develop a scientifically based and technologically supported concept for the implementation of an integrated water resource management that is adapted to regional conditions

EMPIRICAL STUDIES

- to identify the most urgent problems related to water in the model region as well as potential sites for technology implementation

TECHNOLOGY

- to establish alternative water sources and to foster a multi-resource mix (water from different sources and of unequal quality is used for different purposes)
- to determine viable and innovative technological options (e.g. rainwater harvesting, decentralised solar desalination processes, artificial recharge of groundwater, use of wastewater as a source for mineral nutrients, humus and energy generation)
- to select technology options in a participatory process

PARTICIPATION

- to embed the project in the on-site context
- to involve stakeholders of different groups (users, practitioners, politicians) and different levels (national, regional, local)
- to integrate stakeholder's knowledge, interests and capacity in the development and implementation of an integrated water resources management concept

GOOD GOVERNANCE & INSTITUTIONALISATION

- to promote permanent legal institutional structures that ensure the implementation of an integrated water resource management concept

CAPACITY BUILDING

- to raise awareness of water related issues on local, regional and national level
- to provide for knowledge transfer to administration and institutional actors, scientists as well as citizens
- to initiate a national and bi-national policy dialogue

The results of all project components will be integrated and disseminated via www.cuvewaters.net and in publications, workshops, etc. adapted to specific target groups.



CUVE integrated water
resources management
Ewaters



Integrated Water Resources Management in the Cuvelai-Etosa Basin (Central-Northern Namibia)

Institute for
Social-Ecological
Research (ISOE)



Fraunhofer Institut
Grenzflächen- und
Bioverfahrenstechnik

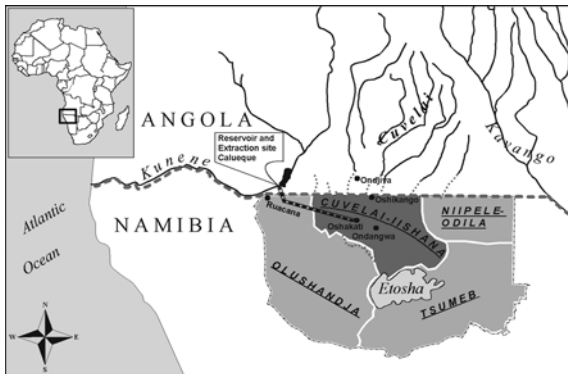
TECHNISCHE
UNIVERSITÄT
DARMSTADT
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Groundwater Protection

THE MODEL REGION

In Namibia the north-central region is the most densely populated area, with 42% of the population living in the region. Seasonal alterations of drought and heavy rainfall, mostly saline groundwater, lack of permanent rivers and climate change make water supply for the population as well as water management difficult. An annual population growth of 2.1%, high population density, ongoing urbanisation, missing sanitation facilities and soil degradation cause severe stress for the ecological system.

Focussing on water issues in this region, one has to consider that at present the two main sources of water lie in Angola: the hydrological important upper reaches of the Cuvelai-Basin (intra-basin) and the Kunene River (inter-basin) which feeds a long-distance canal and pipeline system.

The shared Cuvelai-Basin has been selected as the main model region for this research project.



THE PROJECT CUVEWATERS

Over the coming years the joint research project CuveWaters aims to further the conceptual development and practical implementation of an integrated water resources management (IWRM). This IWRM shall be embedded in existing processes and adapted to the specific political, social and economic conditions.

Technology transfer and adaptation (water use, energy and nutrient returns), knowledge management and stakeholder participation will be essential to optimise water allocation between various sectors. The research focus is to secure and develop the endogenous resource potential of the region.

In the CuveWaters research project the integration of science, technology and society into a transdisciplinary research and development process is an essential part. Research results will contribute to the solution of practical problems for actors and to scientific progress.

Workshop activities – integral part of the transdisciplinary research approach – will play an important role throughout the project.

The following workshops are important milestones:

- Feb '06 – Kick-off Workshop
- Oct '07 – First Stakeholder Workshop (technology assessment)
- Middle '08 – Second Stakeholder Workshop (wrap-up of first project phase and preparation for second project phase/pilot site implementation)

CUVEWATERS – INTEGRATED WATER RESOURCES MANAGEMENT
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