



ZEF – University of Bonn, the Host of GWSP IPO

Joachim von Braun, Director of ZEF
Bonn, Dec 9, 2010





Political and Cultural Resources

Institutions and strategic groups
Social and cultural diversity
Knowledge governance

Crosscutting themes

Land use
Water management
Biodiversity
Sustainable energy
Health

Economic Resources

Growth, inequality and poverty
Globalization and international trade
Natural resources, conflict and vulnerability

Ecological Resources

Ecosystem management
Environmental transfers
Environmental change
Environmental impact analysis



Trends in the diverse water policy research at ZEF

Evolution of water related research at ZEF

More links to climate change

Peoples' wellbeing and policy

Value chains and water quality

Trans-boundary issues

Global policy engagement (Rio+20, etc.)

Doctoral teaching

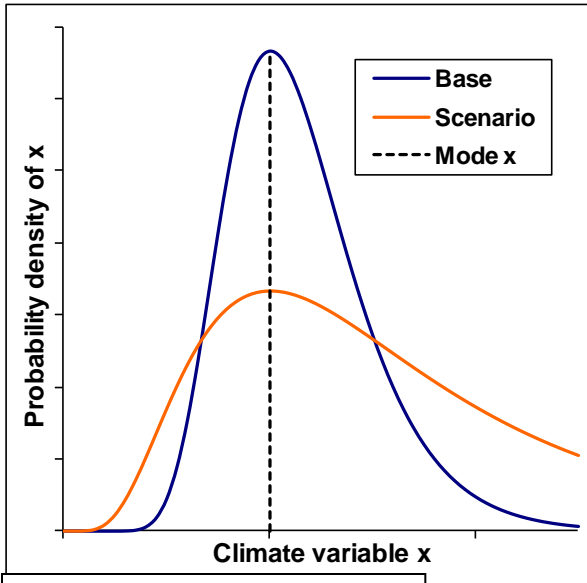
Partnerships, i.e. GWSP



WASCAL: Increased Climate Variability

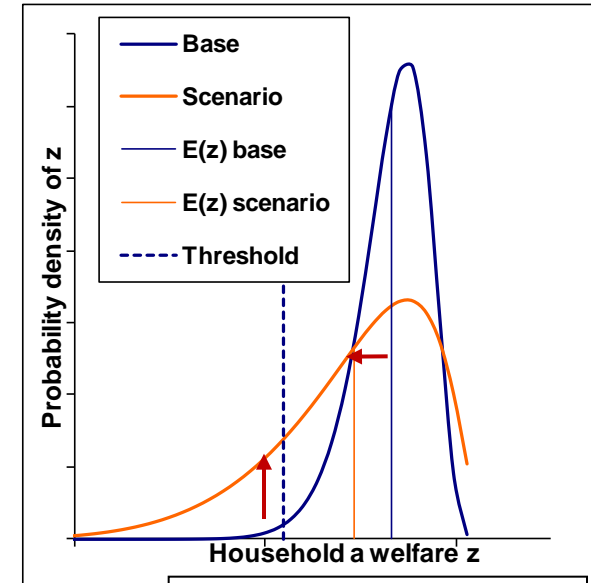
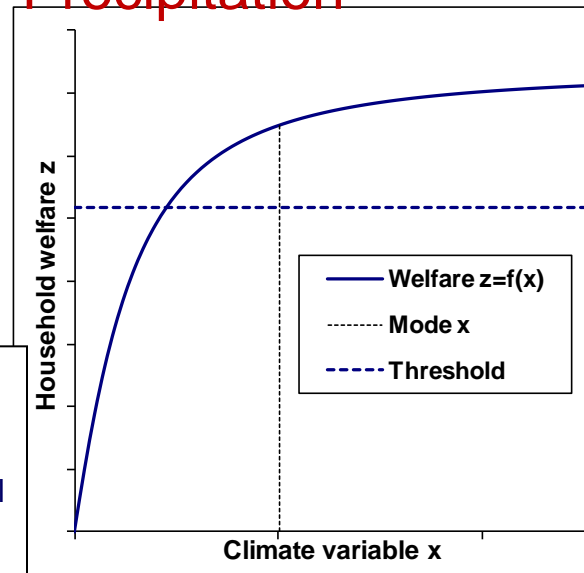
Relevant climate variables:

- Dry spells in veg. period
- Begin of rainy season
- Temperature
- Precipitation



Scenario: Increased variability of one climate-dependent factor x , mode remains unchanged (mean increases!)

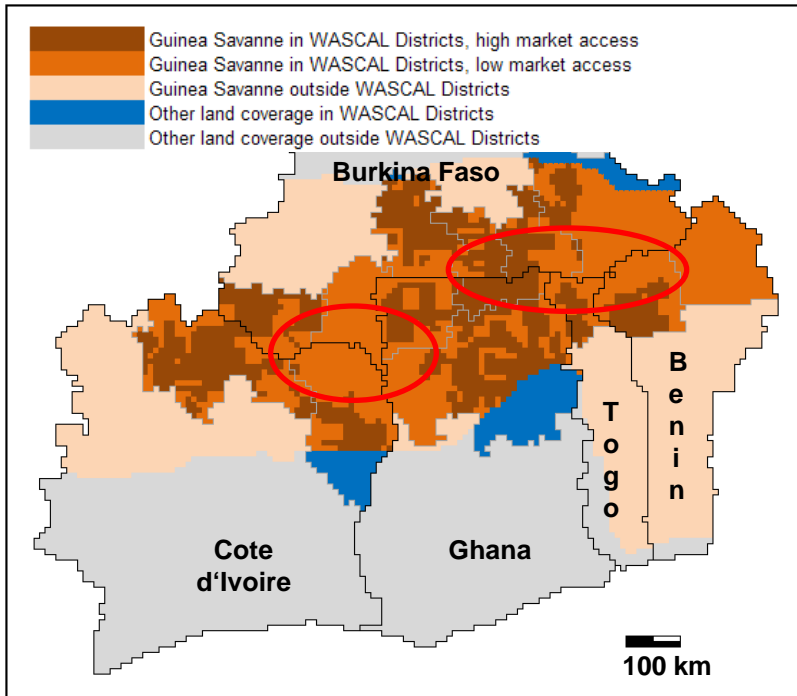
Farm-household uses x to generate welfare z , e.g. by producing agricultural goods. Important: decreasing marginal productivity of x ! (Perhaps even negative!)



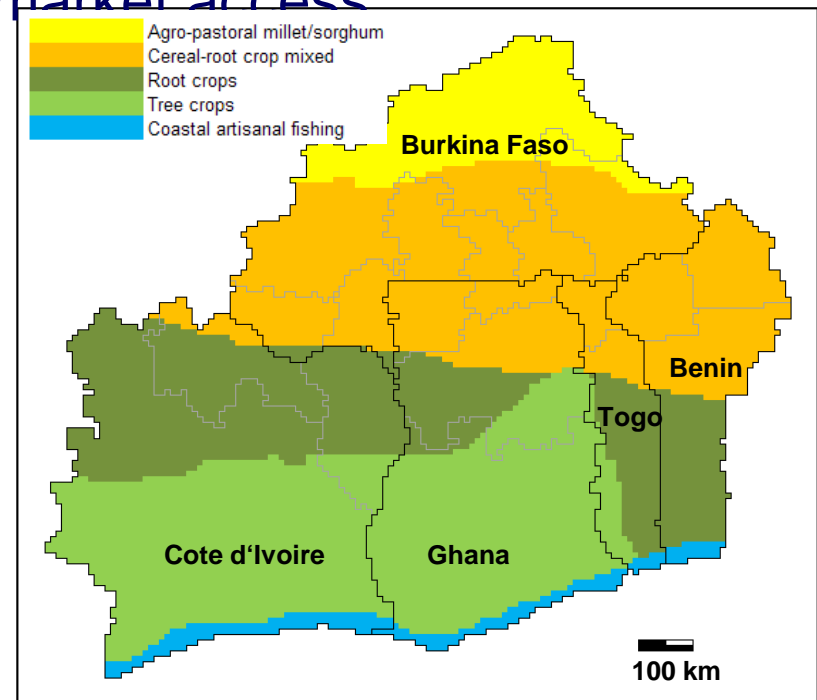
Increased variability of z , lower expected value, higher risk of falling below threshold

Assume there is a critical threshold for welfare z : Lower levels are not sustainable

WASCAL: Regional Scope



- Regional focus : Savanna regions of 5 West-African Countries
- High agricultural potential, low market access



- Dominant farming systems: smallholders, limited assets, partly irrigating, subsistence production of cereals and root crops



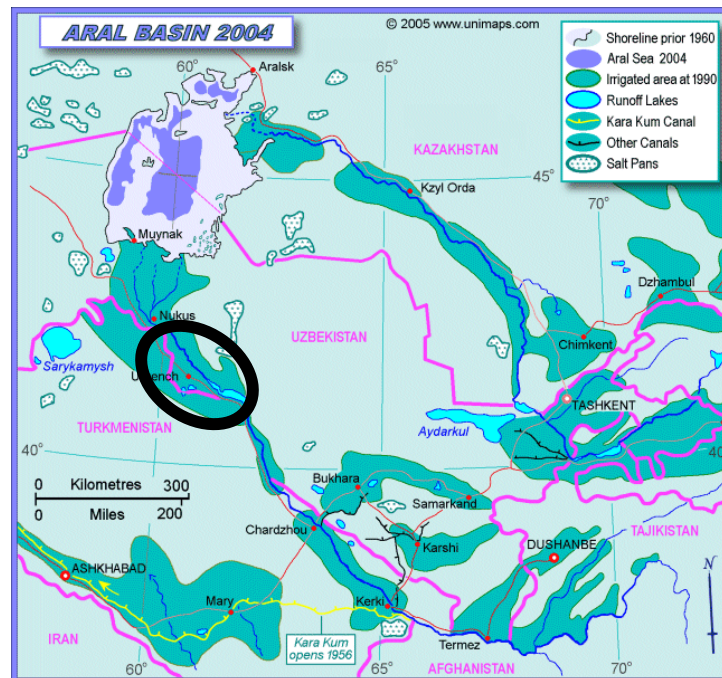
The GLOWA Volta Project Sustainable Water Use under Changing Land Use, Rainfall Reliability, and Water Demands in the Volta Basin





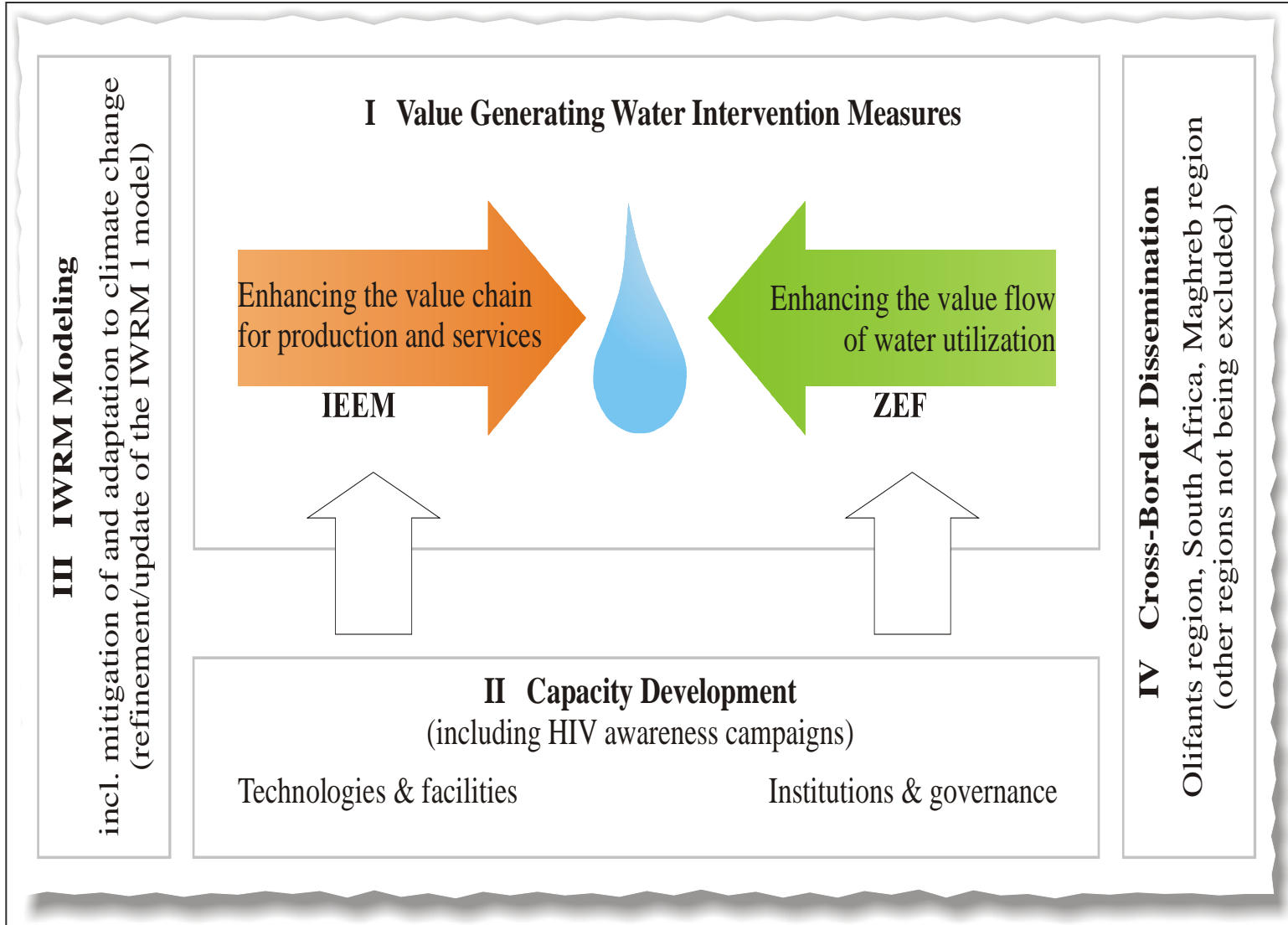
Economic and Ecological Restructuring of Land- and Water Use in the Region Khorezm (Uzbekistan)

Ahmad M. Manschadi, John P.A. Lamers, Paul L.G. Vlek et al.





Olifants – Project Structure





Problem

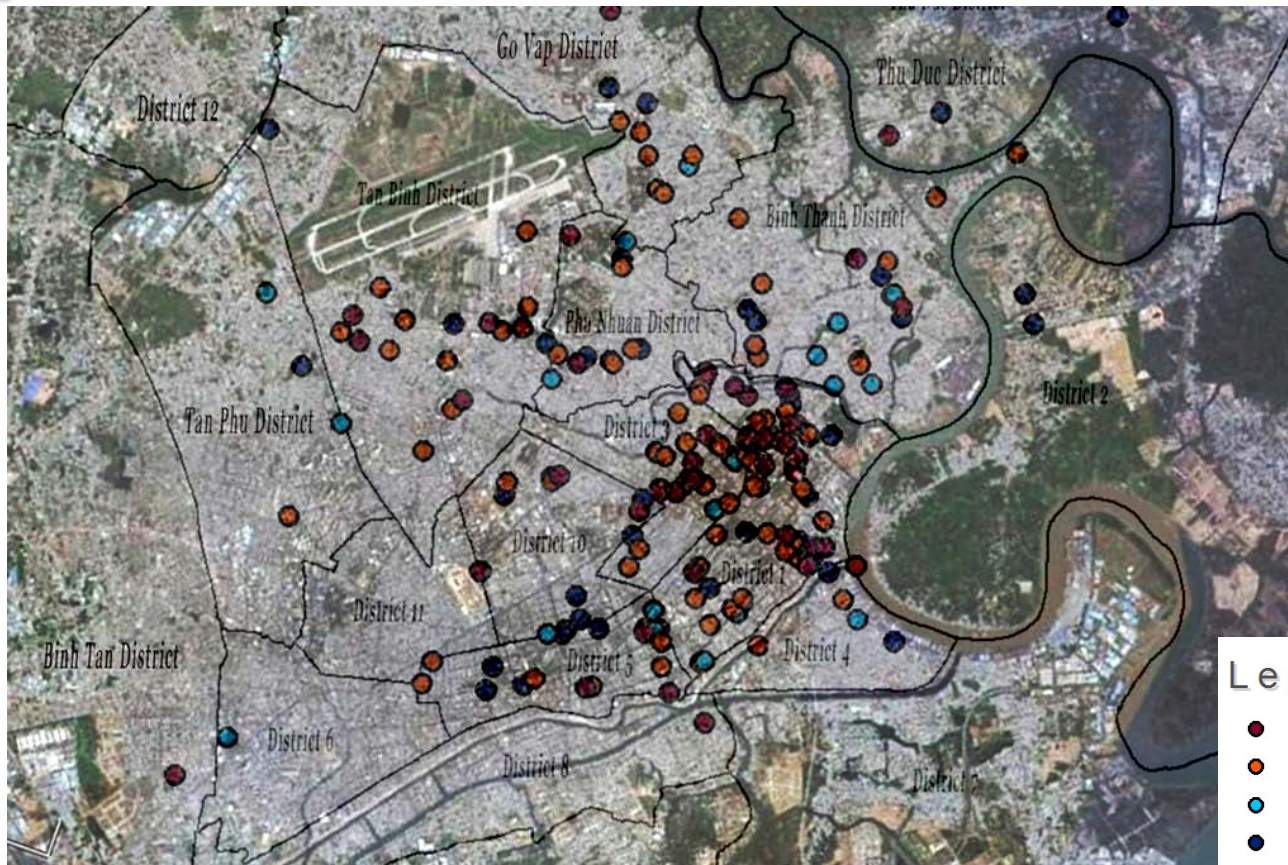
The sustainability of Mekong Delta's ecosystem and livelihoods is under threat

- Natural hazards
- Increasing water demands & pressure on natural resources





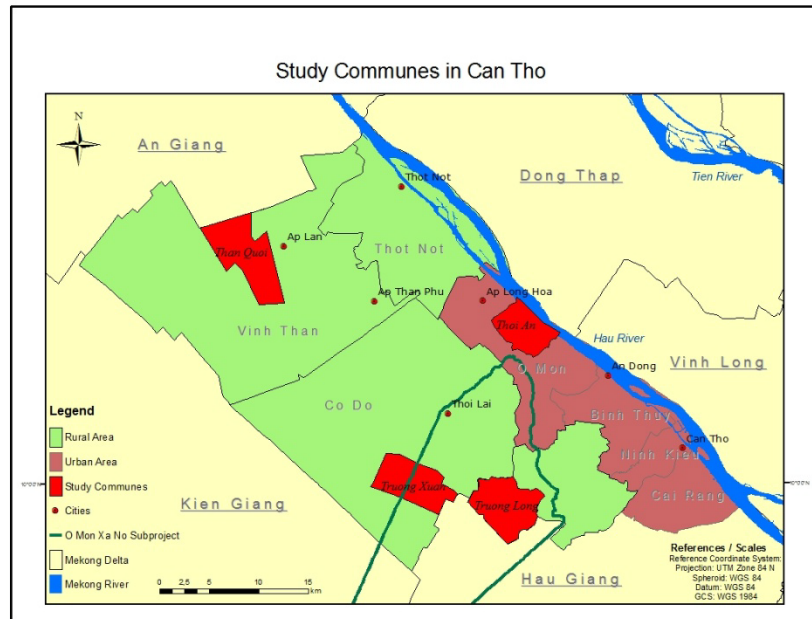
Increase of knowledge production in the water sector



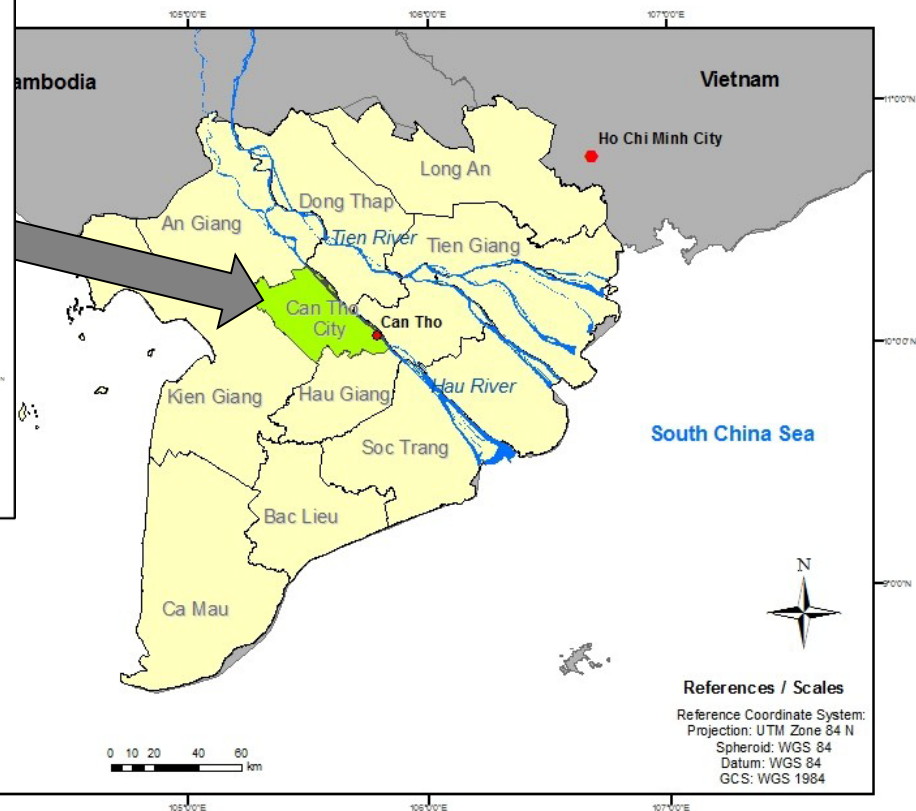
Epistemic landscape of Ho Chi Minh City



Can Tho City



Provinces of the Mekong Delta





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