RIVERTWIN

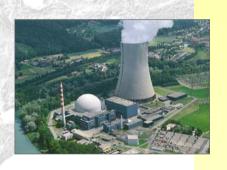
A Regional Model for Integrated Water Management in Twinned River Basins



















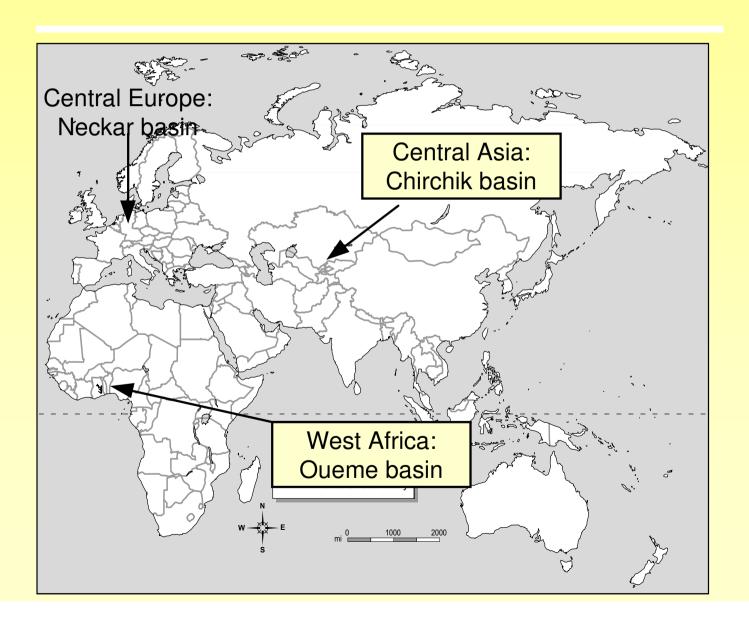
RIVERTWIN

Scientific and Technological Objectives

- •Building of scenarios of integrated water resources management together with stakeholders to support the establishment of River Basin Management Plans (RBMP)
- •Developing an integrated regional model for scenario analysis and evaluation in three river basins under contrasting ecological and socioeconomic conditions
- Capacity building in basin authorities, academic and research institutions towards application of modelling and GIS techniques in IWRM



Three selected river basins





Consortium

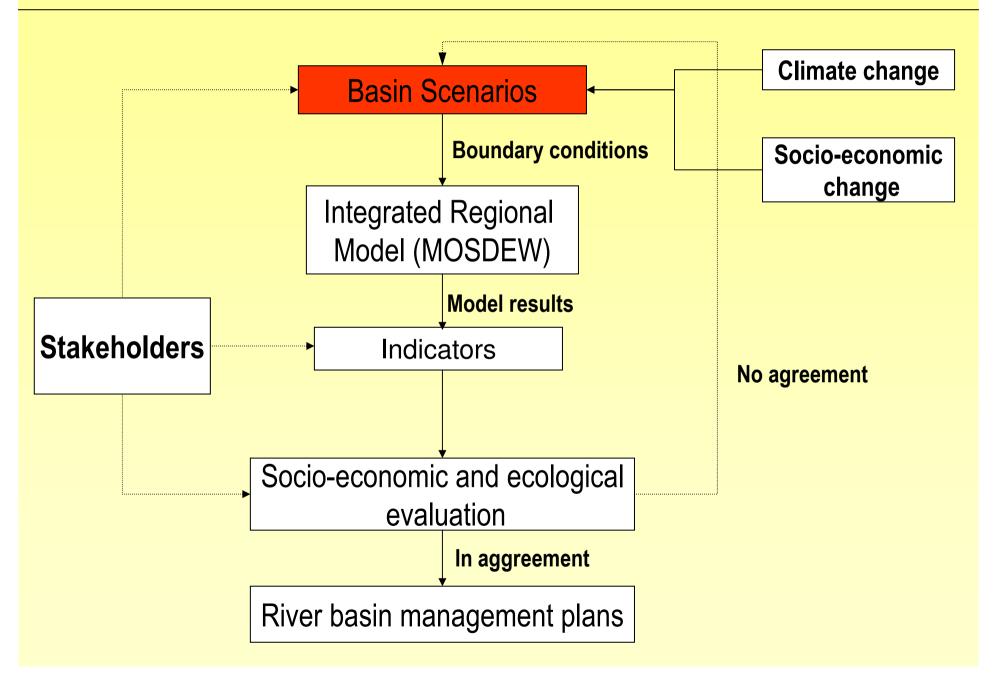
- **♦ University of Hohenheim Germany (Coordination)**
- ◆University of Stuttgart Germany
- **◆Centre for World Food Studies The Netherlands**
- Stockholm Environment Institute Sweden
- **◆Aristotle University of Thessaloniki Greece**
- **◆Terra Fusca Germany**
- **Schneider und Jorde Germany**
- **◆Interstate Commission for Water Coordination Uzbekistan**
- **◆Institut National des Recherches Agricoles du Benin - Benin Republic**
- **♦Université Abomey-Calavi Benin Republic**
- **◆ Direction Generale de l'Hydraulique Benin Republic**



Comparison of RIVERTWIN basins

River Basin	Country	Climate zone	Popula tion	River basin study area (km²)		Water management problems
Neckar (RB1)	Germany	Temperate humid	5.5 Mio	13.000	High	Water quality (biol./chem), hydromorphology, flooding
(RB3) (RB3) Oneme (RB3)	Senin Benin	continental altitude, High Tropical, subhumid	5-3 Wio 1-2 Mio	50.000 40 000	-	institutional tramemork Mater dnalith, mater snbblh' Water quality, Flooding, Water supply (in dry season), infrsatructure, institutions

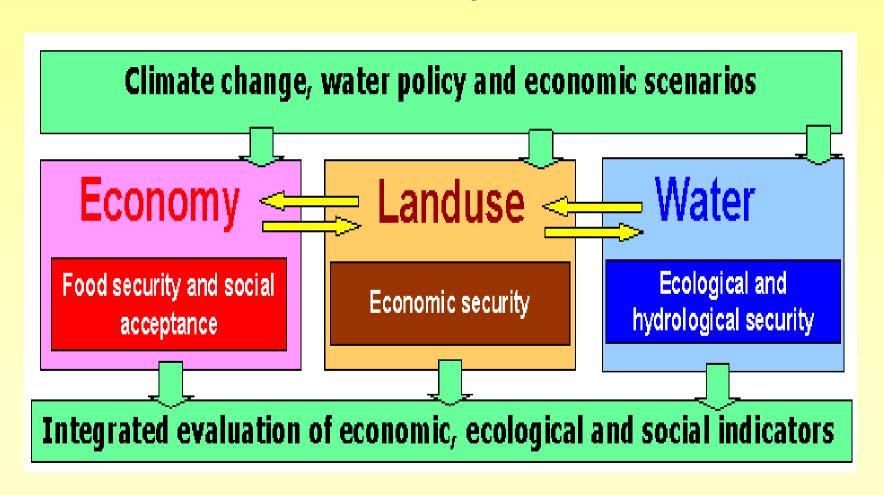




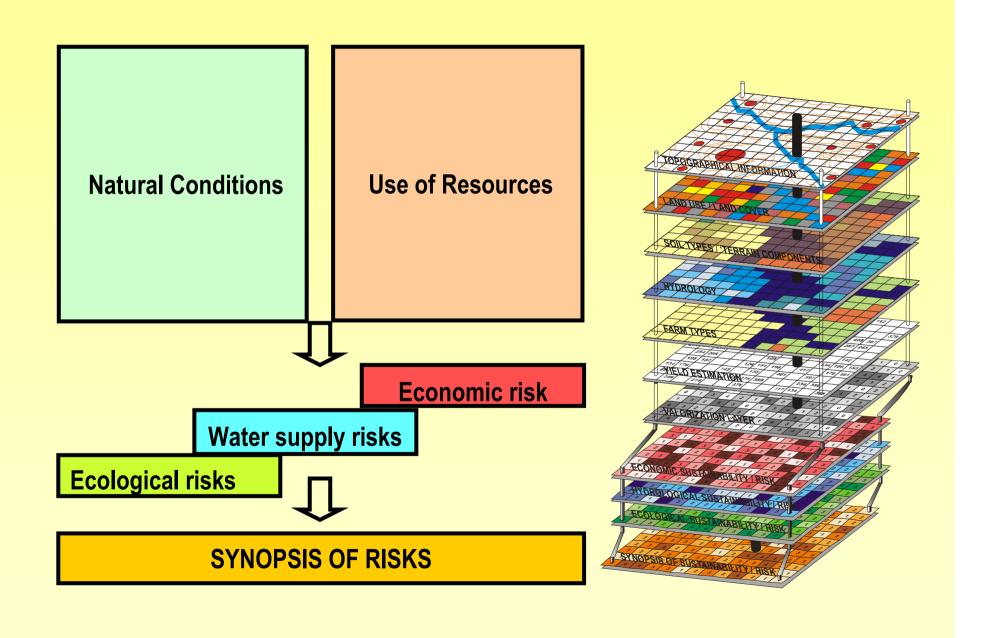


MOSDEW

<u>MO</u>del for <u>Sustainable DE</u>velopment of <u>Water resources</u>

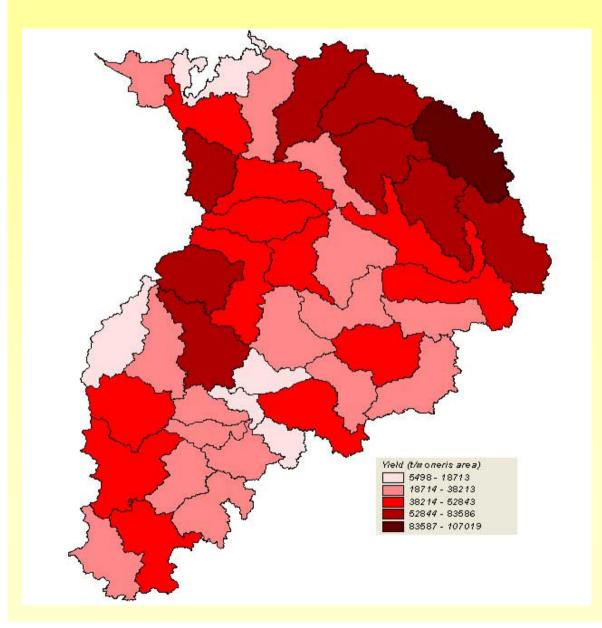








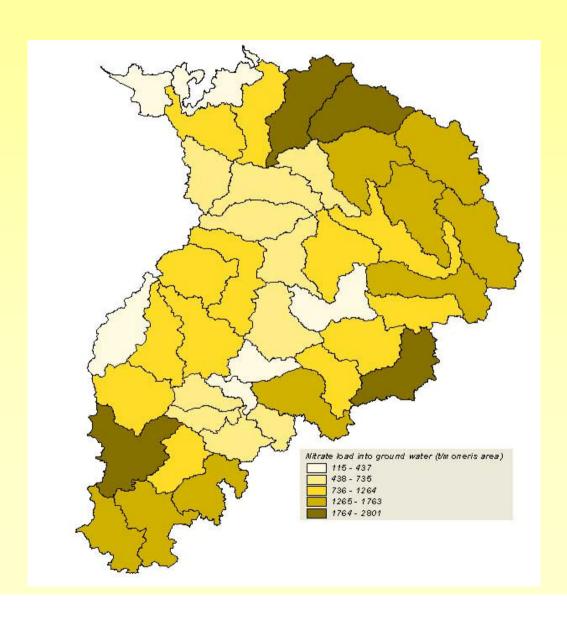




Wheat production (tons per water body and year)



Model Results: Nitrate load into ground water

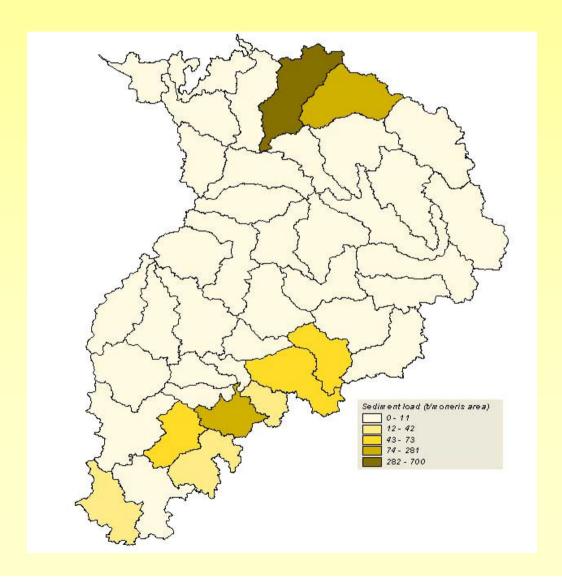


Nitrate load into ground water

(tons per water body and year)



Model Results: Sediment load

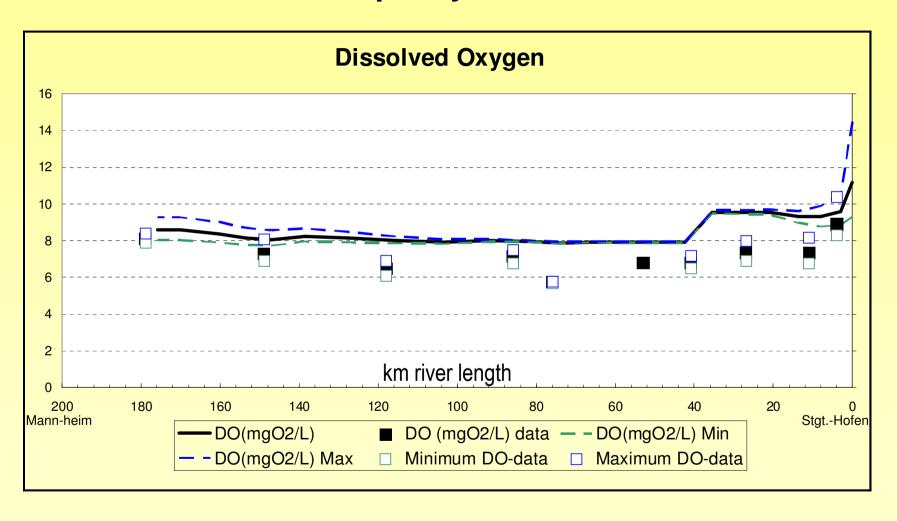


Sediment load

(tons per water body and year)

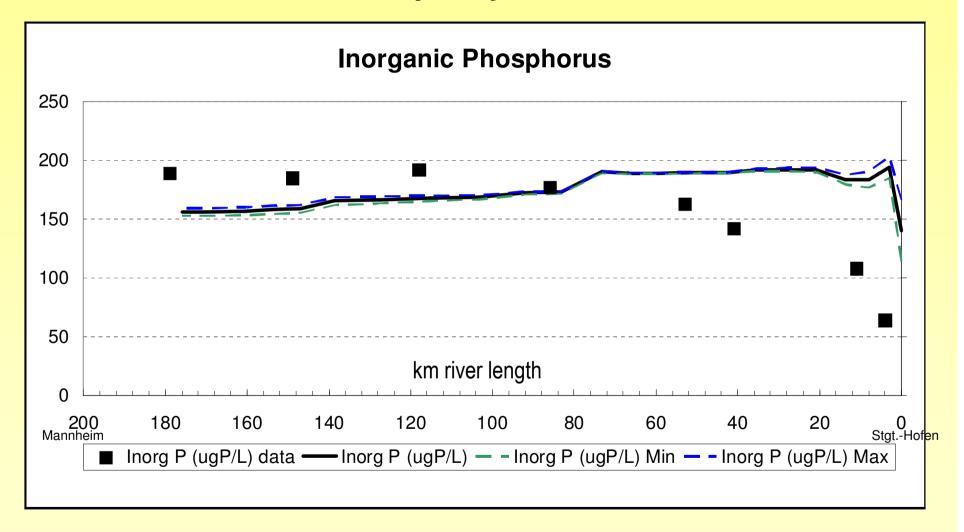


Water quality indicators

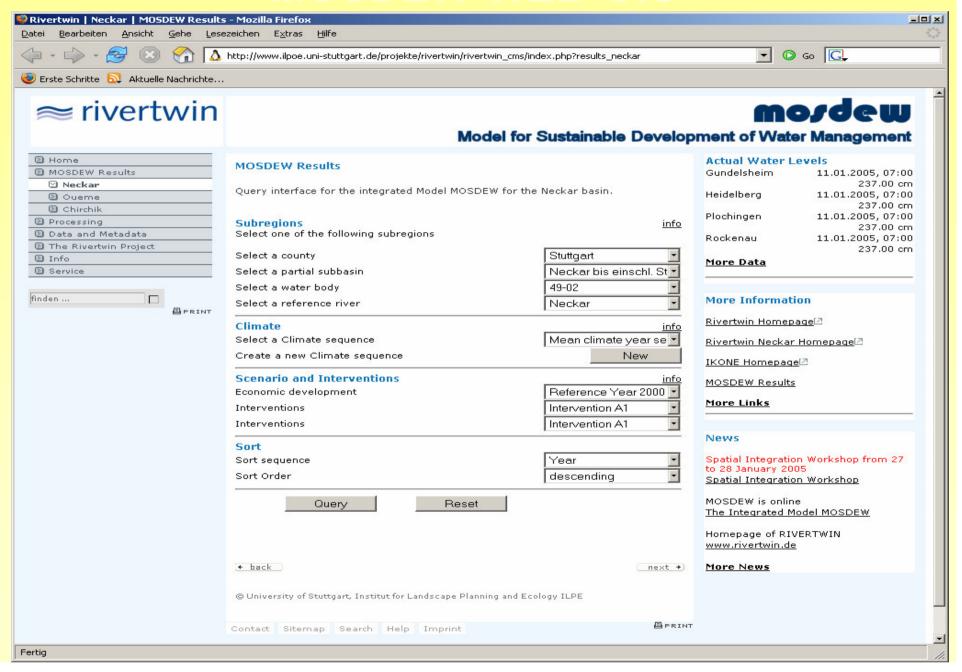




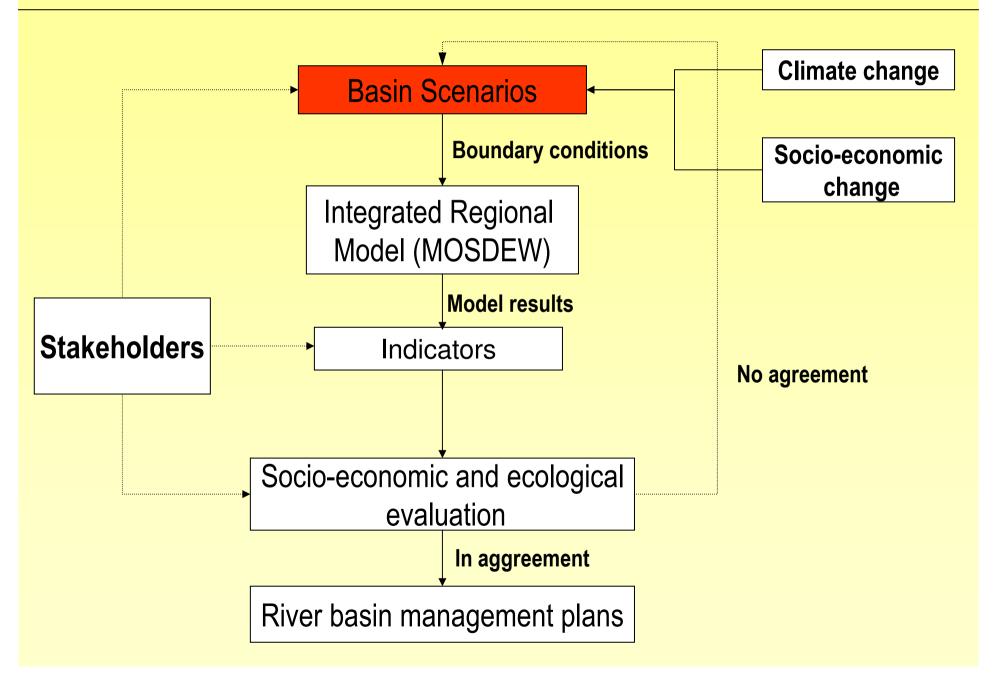
Water quality indictors



MOSDEW-WEB-GIS









RIVERTWIN contribution to the IWRM process Summary

- Scenario development to support RBMP
- Integrated regional models for selected basins in Central Asia, West Africa and Europe
- Capacity building of river basin organisations and national research organisations
- Strengthening national efforts towards IWRM in Benin and Uzbekistan



Thank you for your attention