

RIVERTWIN

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Achievements and lessons learnt



DG Research



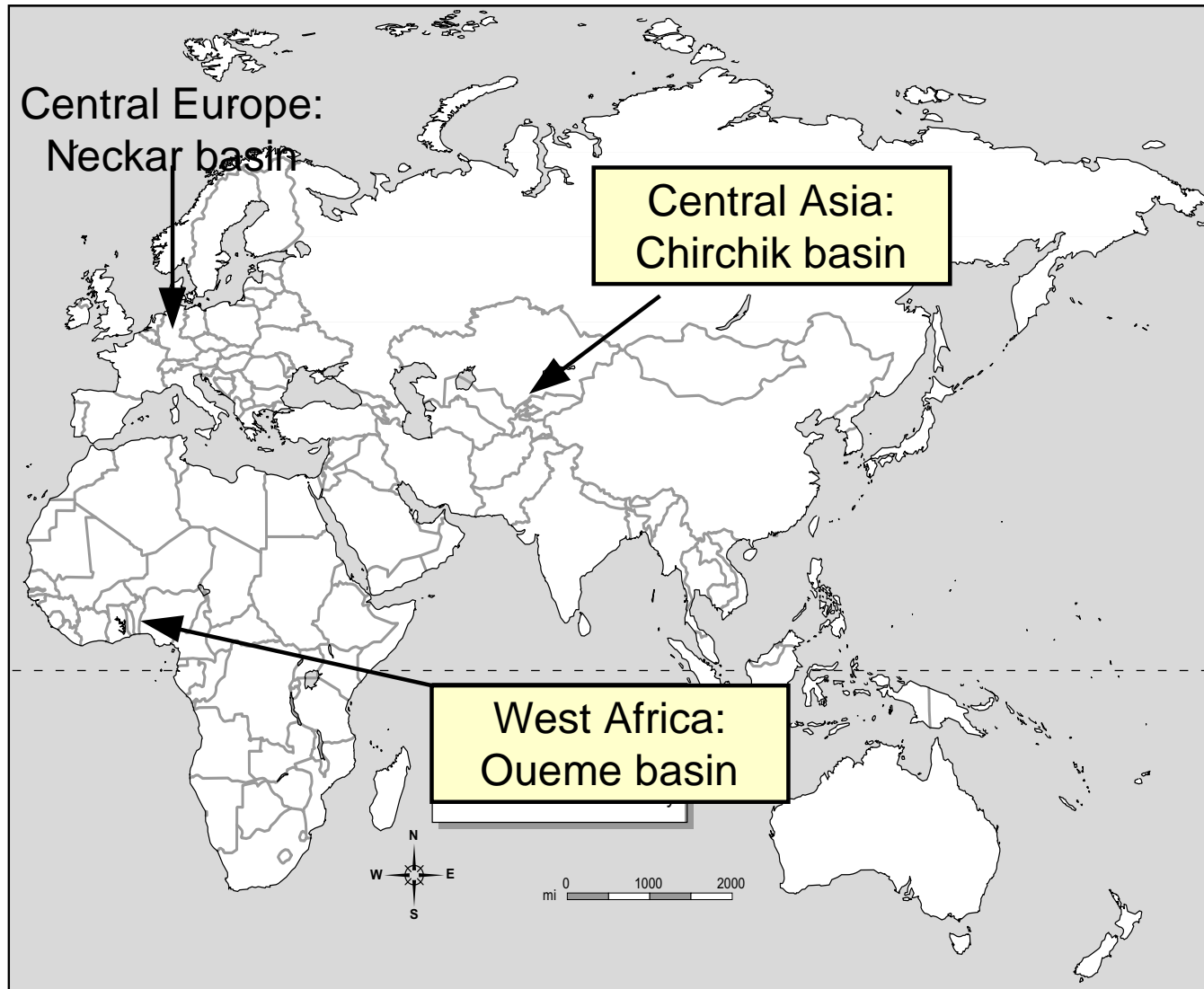
RIVERTWIN

Scientific and Technological Objectives

- **Building scenarios** of integrated water resources management
- **Developing the integrated regional model MOSDEW** for scenario analysis and evaluation



Three selected river basins

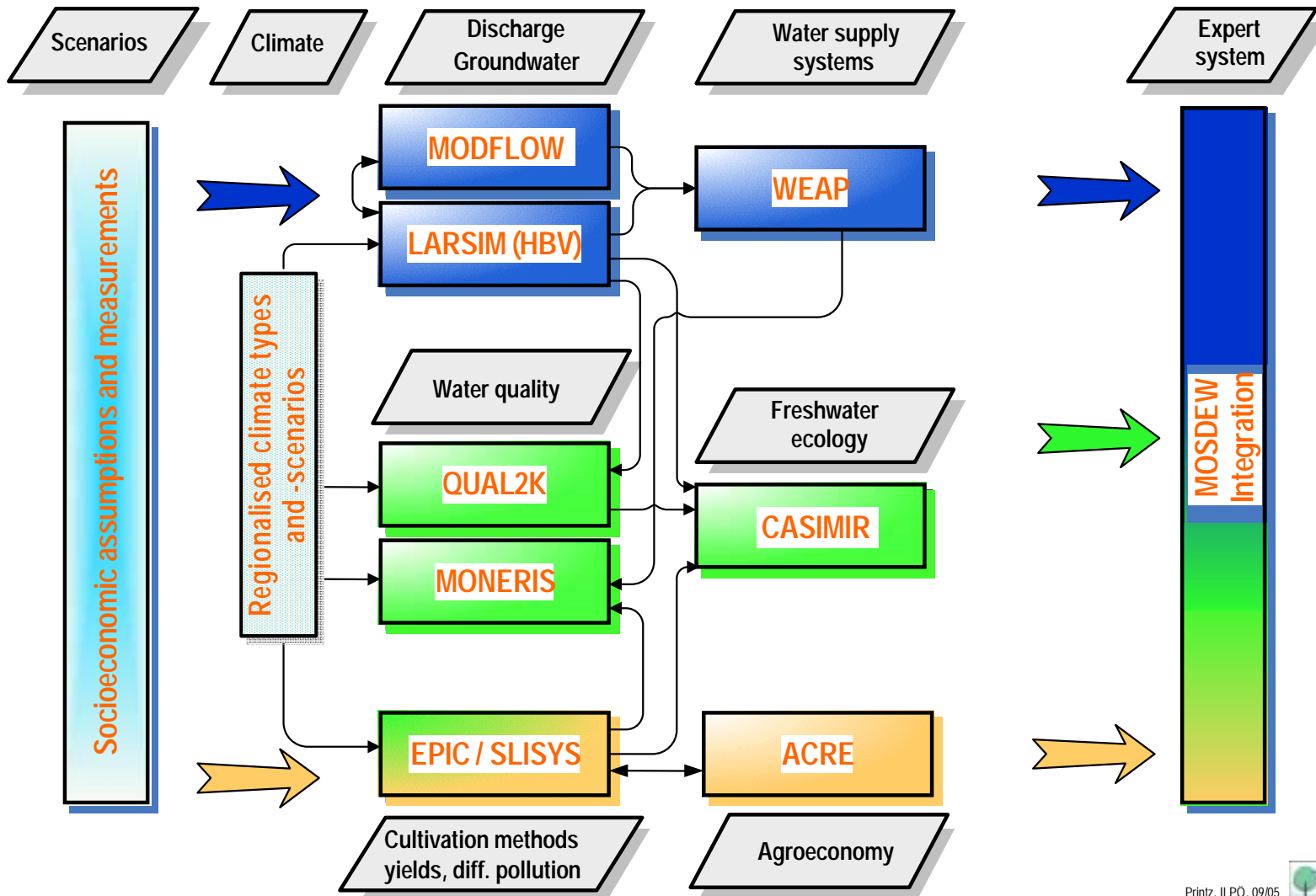


Achievements

Achievement 1:

Building the integrated regional model

MOSDEW



Printz, ILPO, 09/05



Achievement 2:

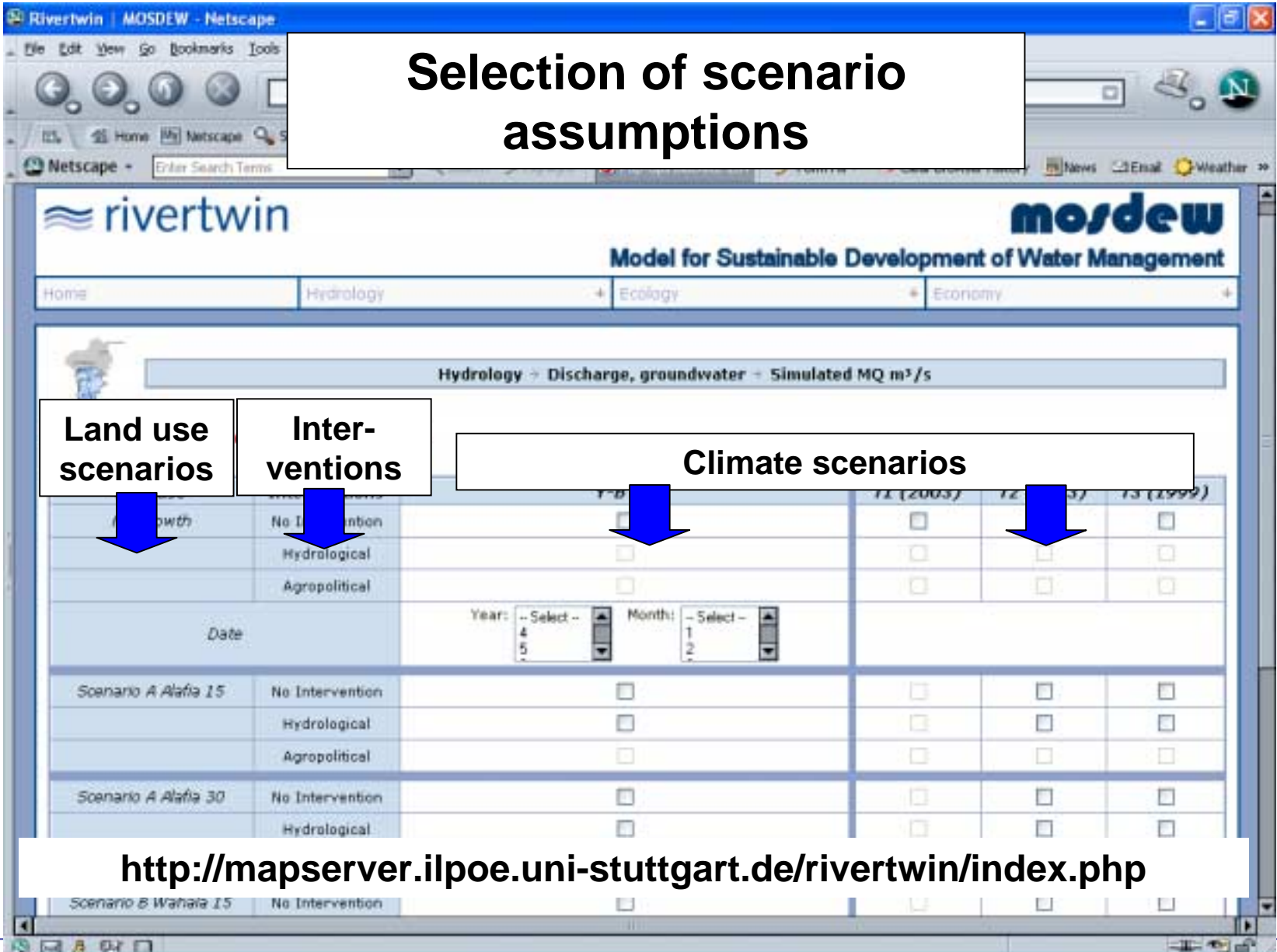
Long-term water management scenarios for three contrasting river basins

Selection of scenario assumptions

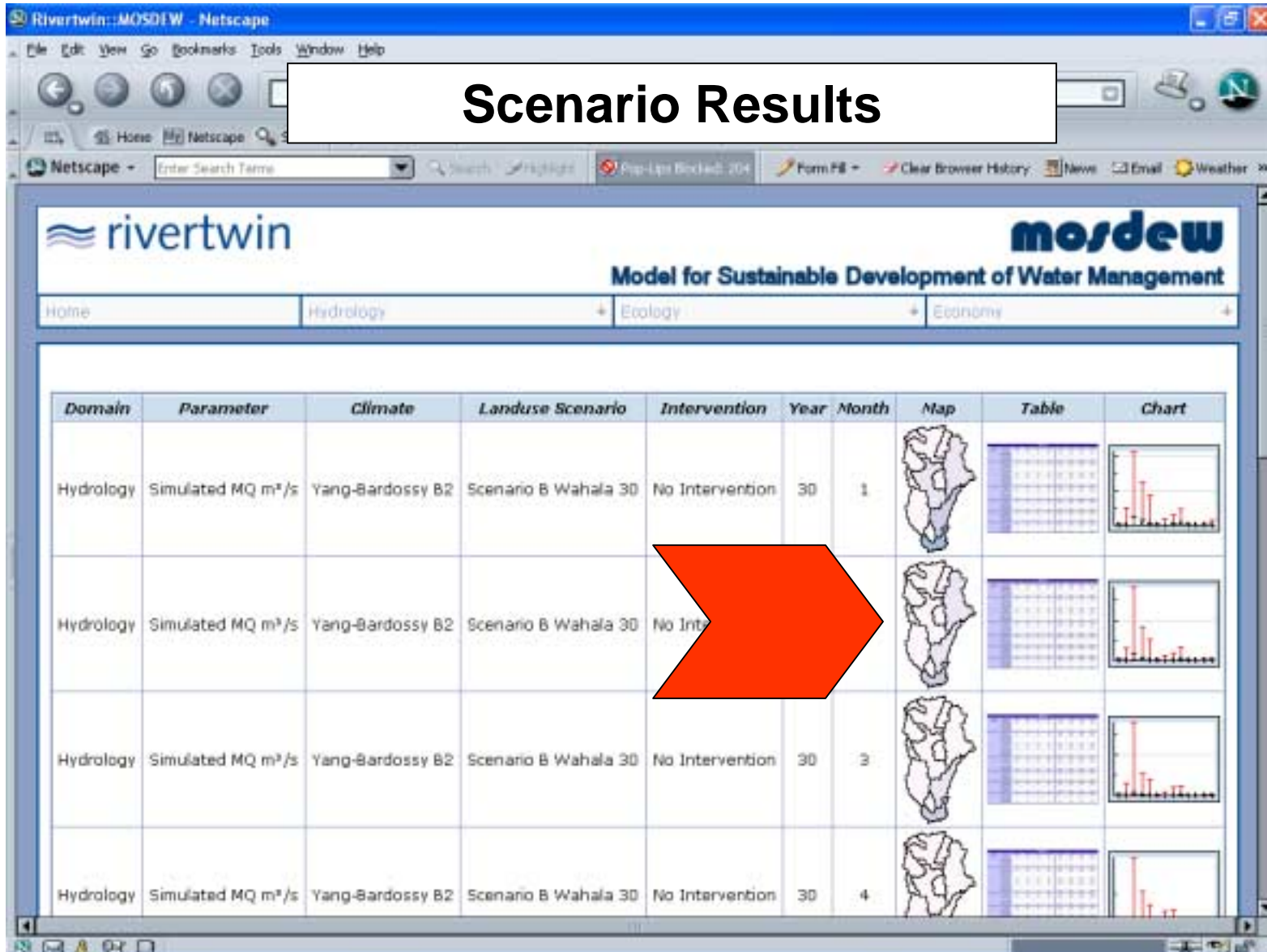
Land use scenarios

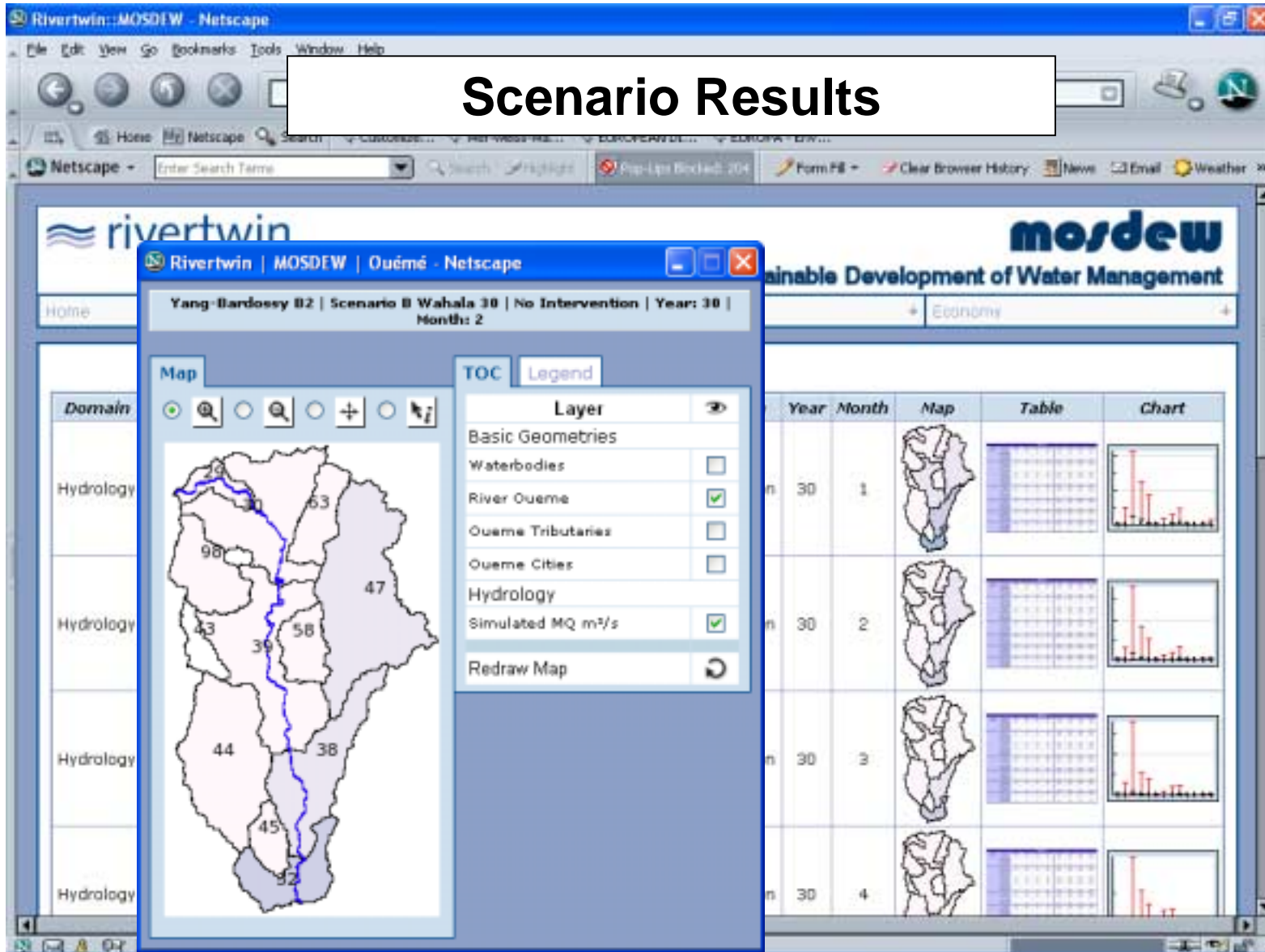
Interventions

Climate scenarios



<http://mapserver.ilpoe.uni-stuttgart.de/rivertwin/index.php>

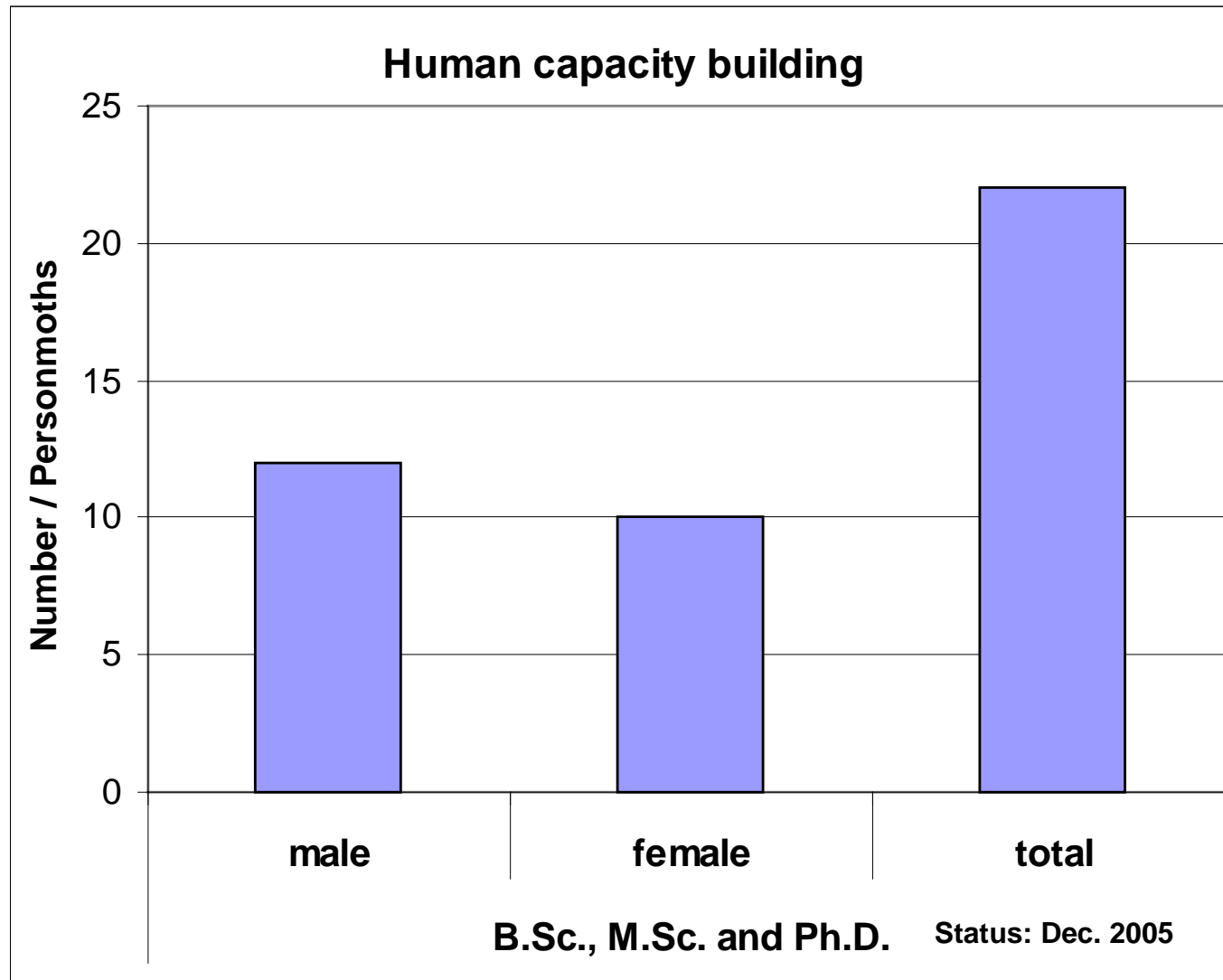




Achievement 3:

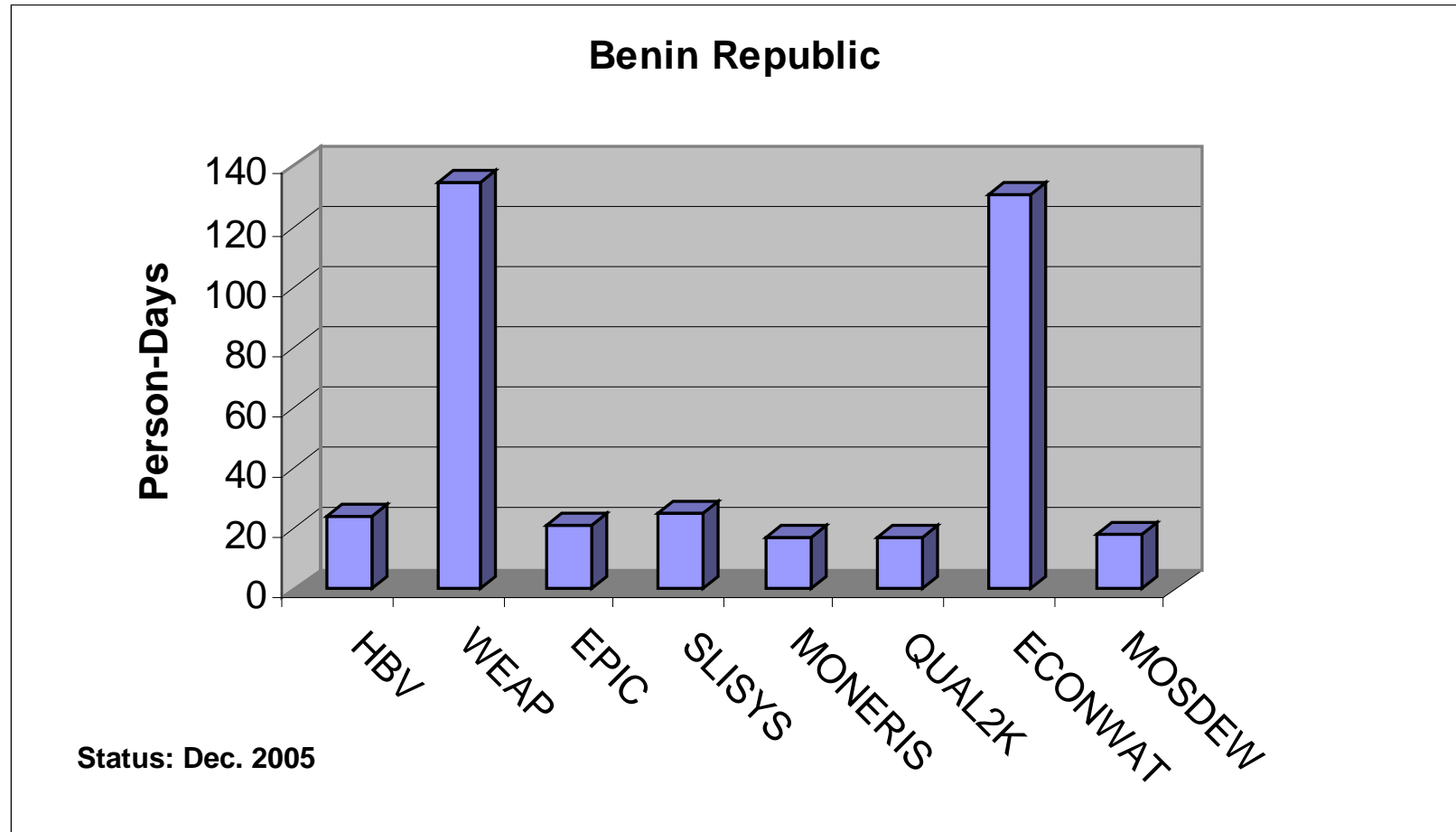
Human Capacity Building

RIVERTWIN - Achievements



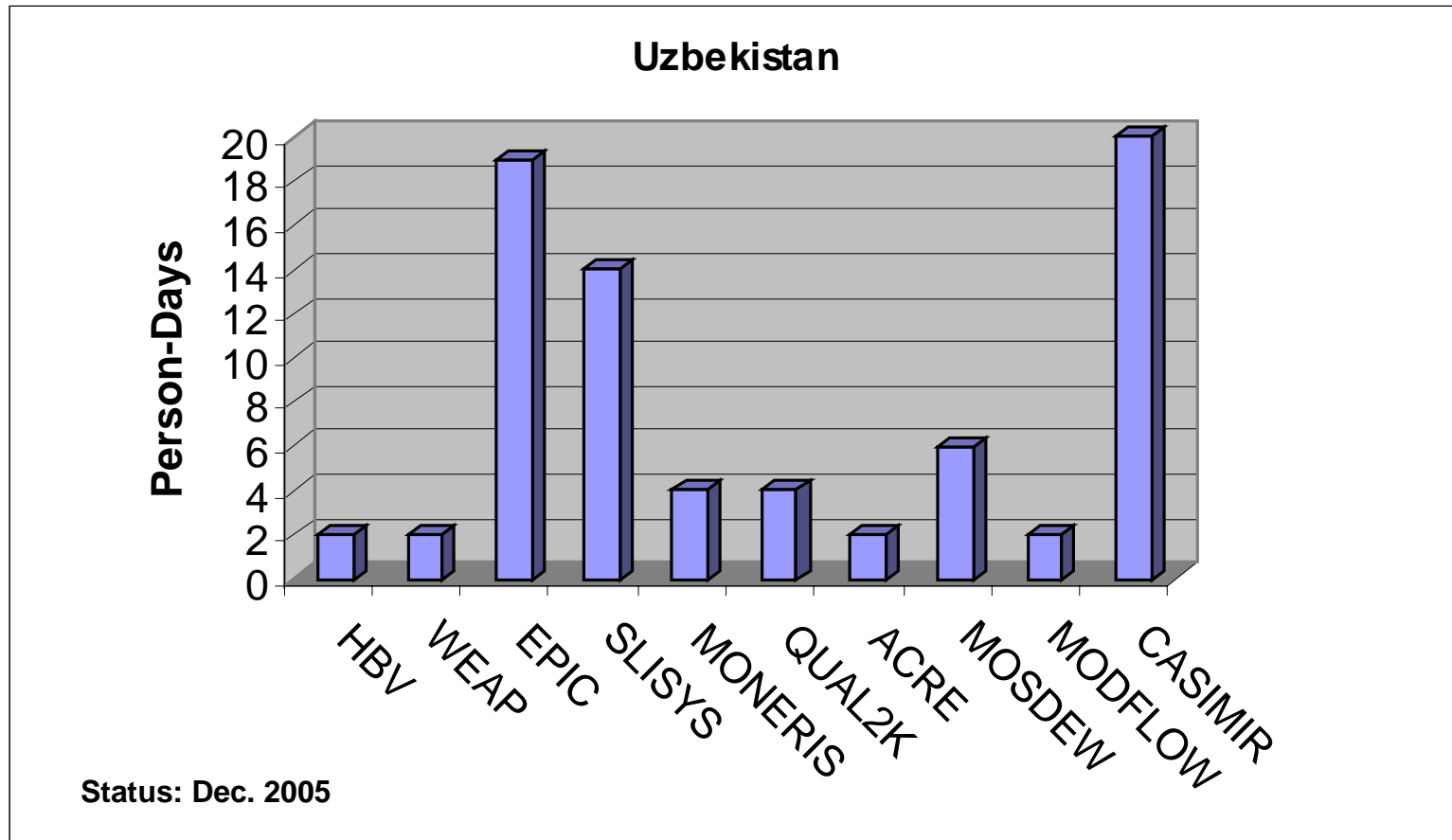
RIVERTWIN - Achievements

Training in model application incl. GIS



RIVERTWIN - Achievements

Training in model application incl. GIS



Lessons learnt- Neckar basin

- **Hydromorphological problems => Ecohydraulic modelling**
 - **Need of an institutional setting for integrated model application**
 - **More public participation (besides water management stakeholders) in scenario definition and evaluation**
 - **Temporal resolution of water quality modelling should be improved**
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- **Key to success:**
Participation of stakeholders/policy makers since the proposal phase

Lessons learnt – Ouémé basin

- **Data availability relatively high (except water quality data and GW monitoring) => Necessity of water quality monitoring**
- **More training in model applications and GIS necessary**
- **Time for public participation in scenario evaluation not sufficient**
- **Institutional setting for IWRM and use of an integrated tool not yet established (New Water Law)**

- **Keys to success:**
- **Involvement of national counterparts as members of the consortium**
- **Participation of stakeholders**

Lessons learnt – Chirchik basin

- **Water scarce regions require model adjustments for water allocation**
- **Data availability relatively high (lack of ecological monitoring)**
- **Ecological modelling and consideration of groundwater quality still underdeveloped**
- **More training in GIS for young staff members recommended**
- **Not sufficient time for stakeholder participation in scenario evaluation**

- **Key to success:**
The coordinating water management institution is legally established and a consortium member

Summary and recommendations

- **RIVERTWIN has combined knowledge and experience of scientists and practitioners from EU, Central Asia and Africa. In order to develop innovative methodological tools and models including soci-economic issues to promote the implementation of IWRM at the basin scale**
- **Submodel selection for integration differs between basins depending on water scarcity and water allocation mechanisms. Thus, the integration approach must be adapted to the prevailing water management problems, the water allocation mechanism and data availability**
- **The transfer of the developed tools to other basins of developing countries requires the completion and refinement of the tools in cooperation with the future users and the preparing of “user manuals” for adaptation of the models to specific basin conditions**



Thank you for
your attention

