



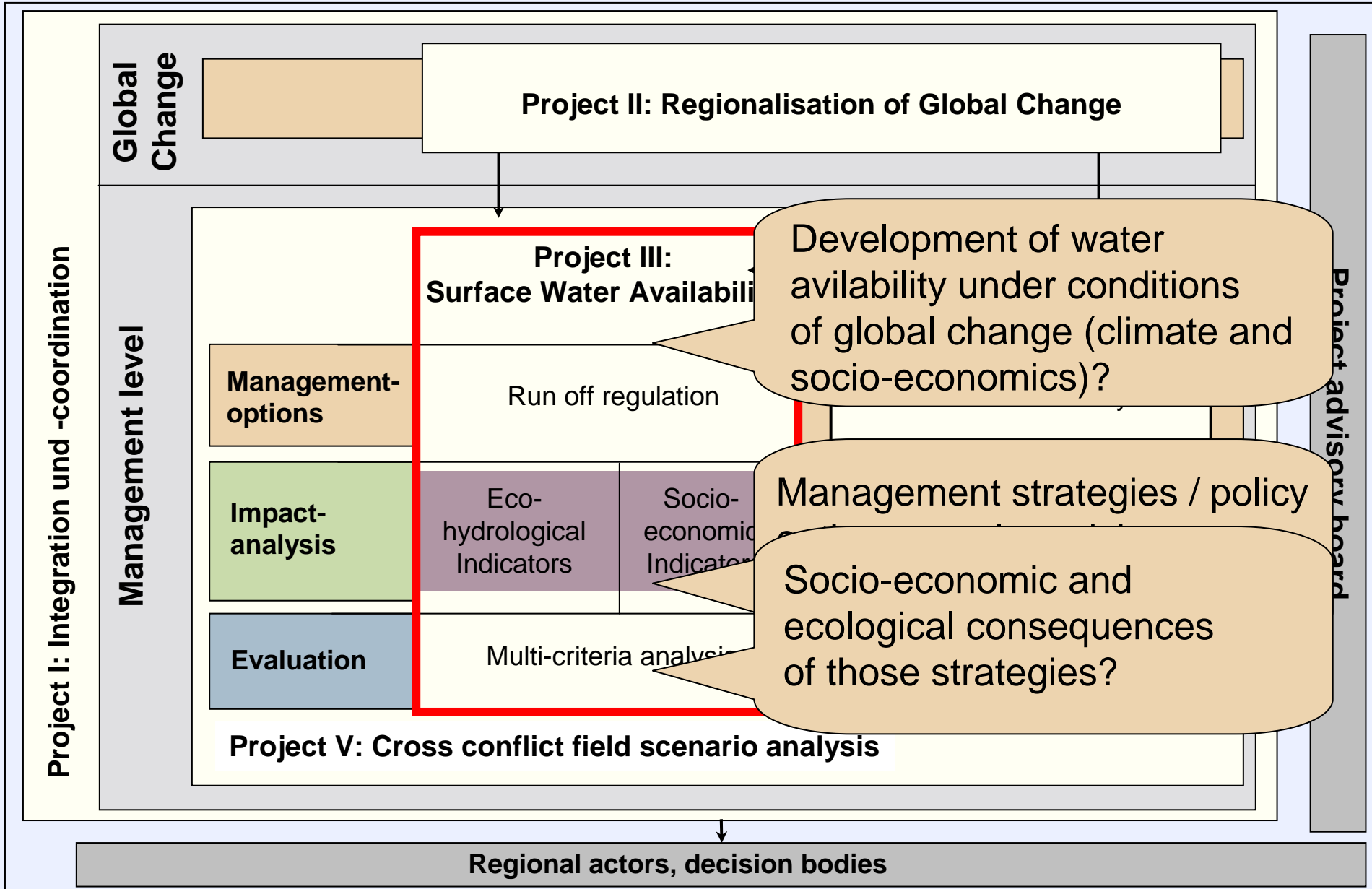
Conflict area water availability under global change

- Introduction -

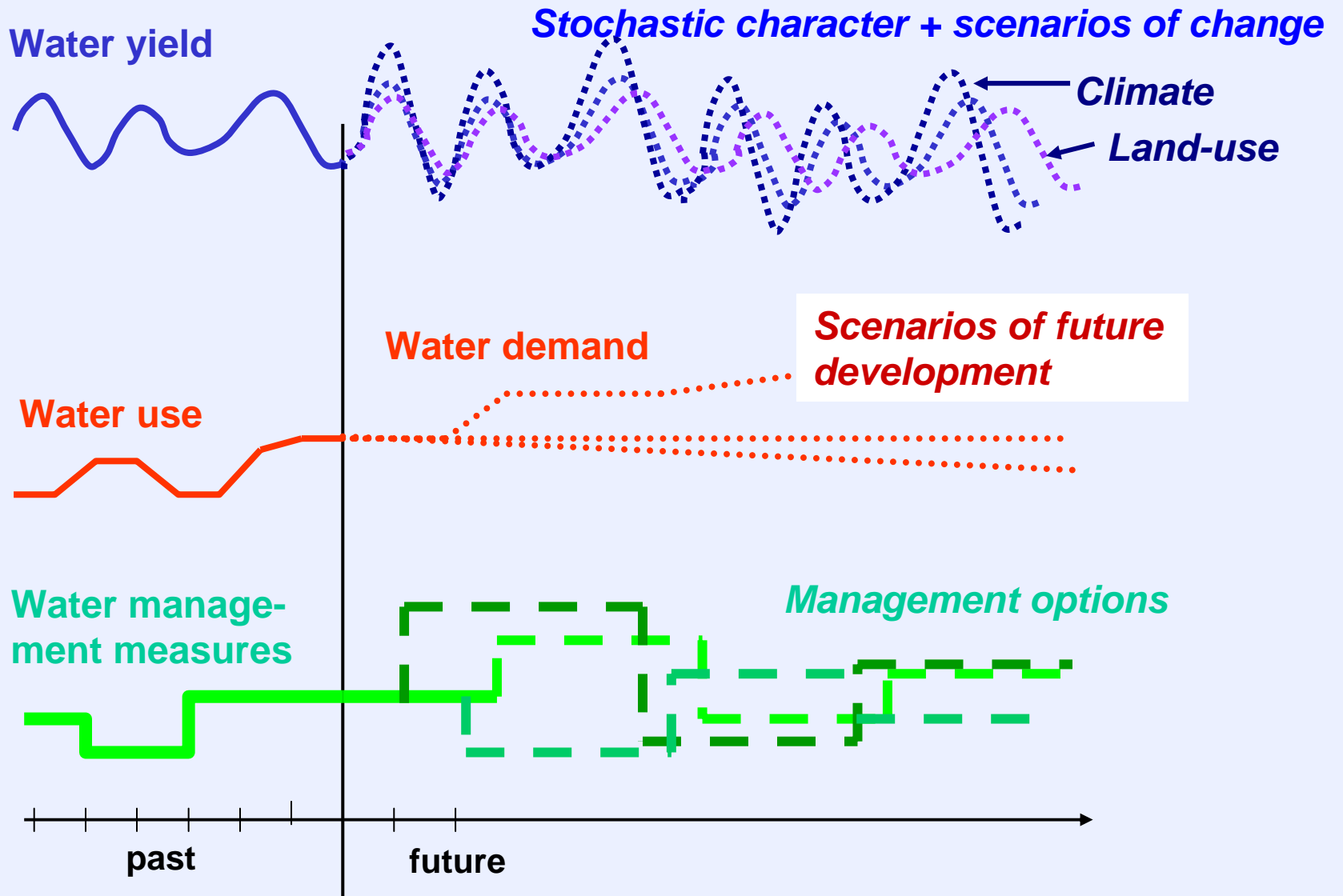
S. Kaden



Sub-project III – main goals



Conditions for water management





Water resources management – objectives and constraints

Water management – a task with stochastic input (natural water yield, runoff) and determined but uncertain requirements and constraints

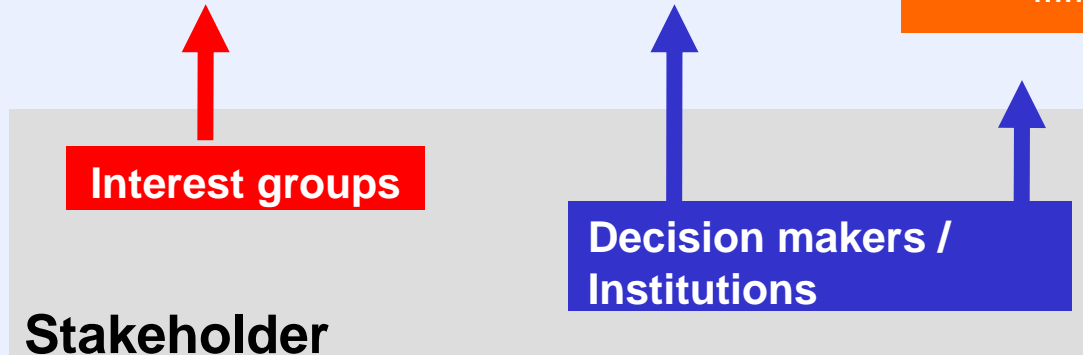
Objectives

- Satisfaction of water demand (municipalities, agriculture, industry, navigation, etc.) - quantity and quality
- Minimum discharge
- Good ecological state
- Flood protection
-

Constraints

- Capacity of reservoirs
- Hydro-morphology of rivers
- ... and usability of water resources
- ... climatic ecology
-

Global Change!

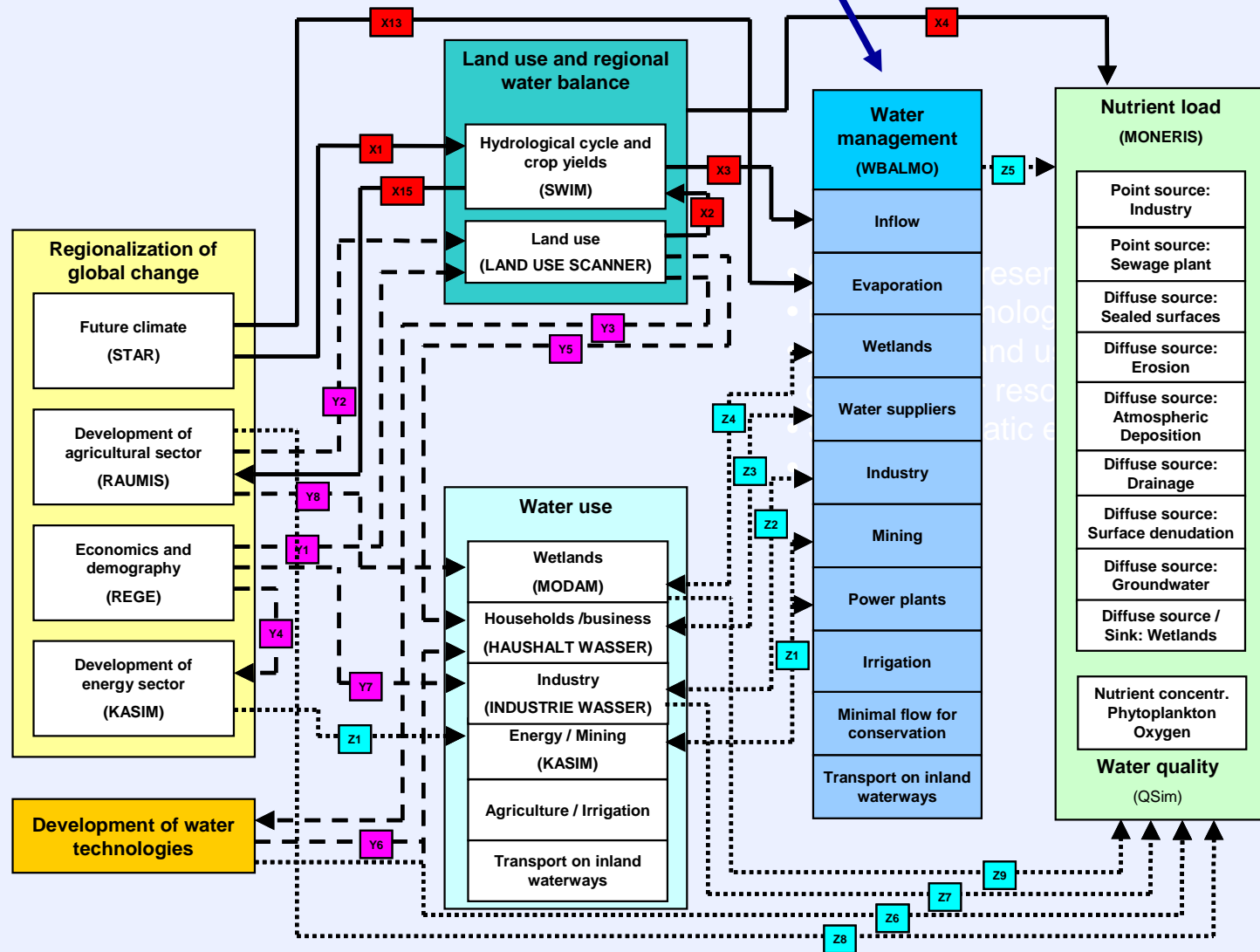


Stochastic long-term simulation of water management in river basins

Management alternatives

- Reservoirs,
- Ranking
-

The basic tool: simulation system WBalMo, developed and applied for the entire Elbe river basin.





M. Kaltofen:

**The water management model WBalMo Elbe -
methods, application fields and first results**

H. Koch:

**WBalMo Elbe / module Czechia -
application fields and first results**

F. Messner:

**Vulnerability of surface water users and its reflection
in WBALMO Elbe**



Thank You
for your attention!

