

Water allocation policies and mechanisms

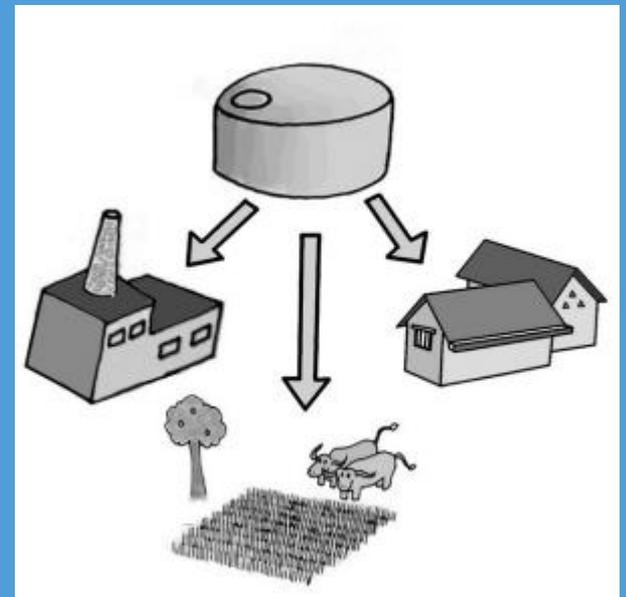
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Structure of the presentation

- What do we know about water allocation?
- What do we need for water allocation reforms?
- What are the challenges related to such reforms?
- What is the role of water economics?

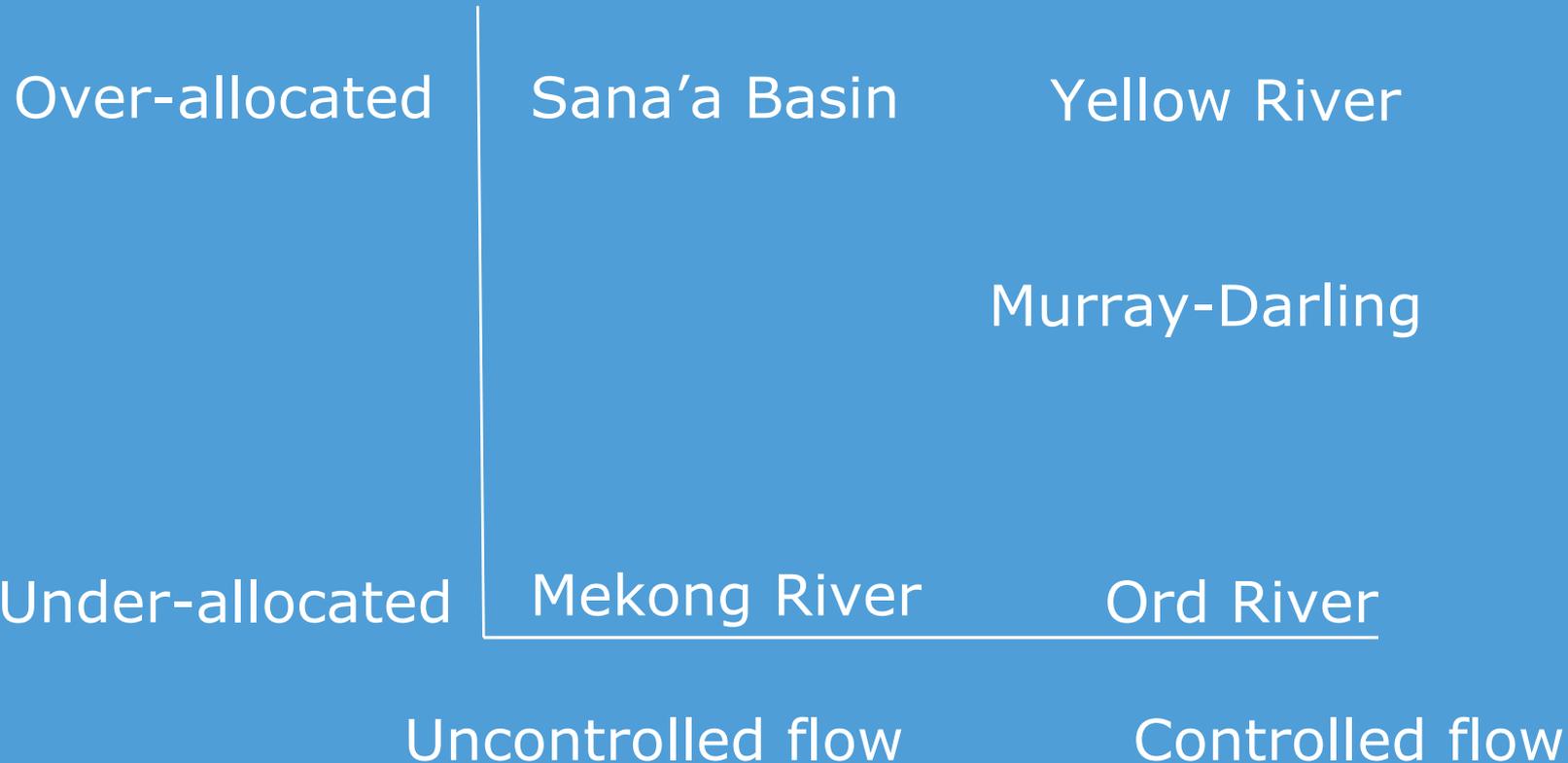


What do we know about water allocation?

- Reform is needed because of increasing competition for water
- Productive allocation is straightforward in theory, not in reality
- The allocation process is guided by political objectives
- Sectoral policies hamper a productive water allocation
- Water is over-allocated in some basins
- No controlled flow in some basins



Basins have different points of departure



It is important to understand the political objectives

- At the global level:
 - trade liberalisation, food & energy prices, land grabbing
- At the national level:
 - food security, equity, poverty alleviation, geopolitics
- At the local level:
 - interests of strong lobby groups

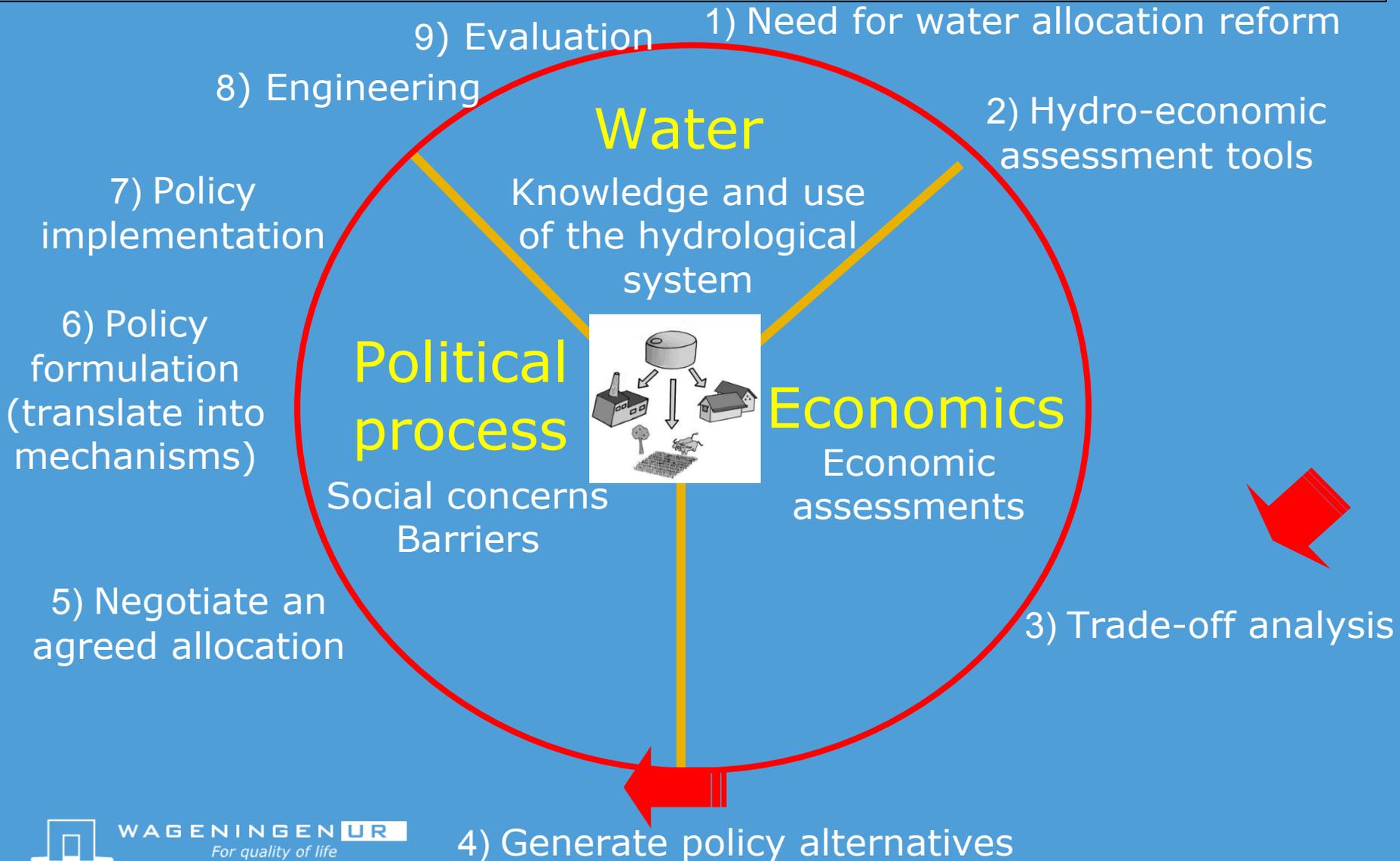


What do we need for water allocation reforms?

- Practical guidance: tools to support water allocation decisions
- **But also** system knowledge (A), regulations and procedures (C), attribution of responsibilities (D) and engineering (E)
- Flexible mechanisms, so that water can be re-allocated when appropriate



The water allocation reform cycle



Tools to support water allocation decisions

- Tools for hydrological system analysis at the basin level
 - Water accounting (rs) and hydrological modelling (WEAP)
 - Scenario studies (IIASA), because of uncertain processes
- Tools to show trade-offs between development paths
 - Hydro-economic models for trade-off analysis (WaterWise)
- Integrated tools to put allocation in the context of IWRM
 - System of Environmental Economic Accounting for Water



Challenges related to such reforms

- The knowledge base can be weak and fragmented
- Political objectives are often not clear
- Various interests need to be weighted to compromise
 - Impact on the competitiveness of some sectors
- Implementation problems
 - Laws and institutions can be missing
 - Design of existing infrastructure may not be suitable
 - Lack of funding
- Policy coherence is required



Role of water economics

- Show the foregone benefits of achieving political objectives such as food self-sufficiency instead of high water productivity
This makes the bargaining game more transparent
- Show the various comparative advantages of basins
- Show the potential water productivity gains ($\$/\text{m}^3$) of
 - water reallocation among regions, users, generations
 - basin cooperation, globalisation and trade liberalisation, which offers opportunities for specialisation in high value crops in water scarce regions



Conclusions

- It is important to understand the political objectives and to anticipate developments in water demand
- Tools can support water reallocation decisions, but the process of reforming water allocation has more dimensions
- Reform requires policy coherence and a global perspective (using trade, specialisation and basin cooperation).



Thank you for
your attention

