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Institute for Integrated Management  
of Material Fluxes and of Resources



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# Integrated Modelling and Management of Water Resources: the Ecosystem Perspective on the Nexus Approach

Stephan Hülsmann, Wolf Mooij



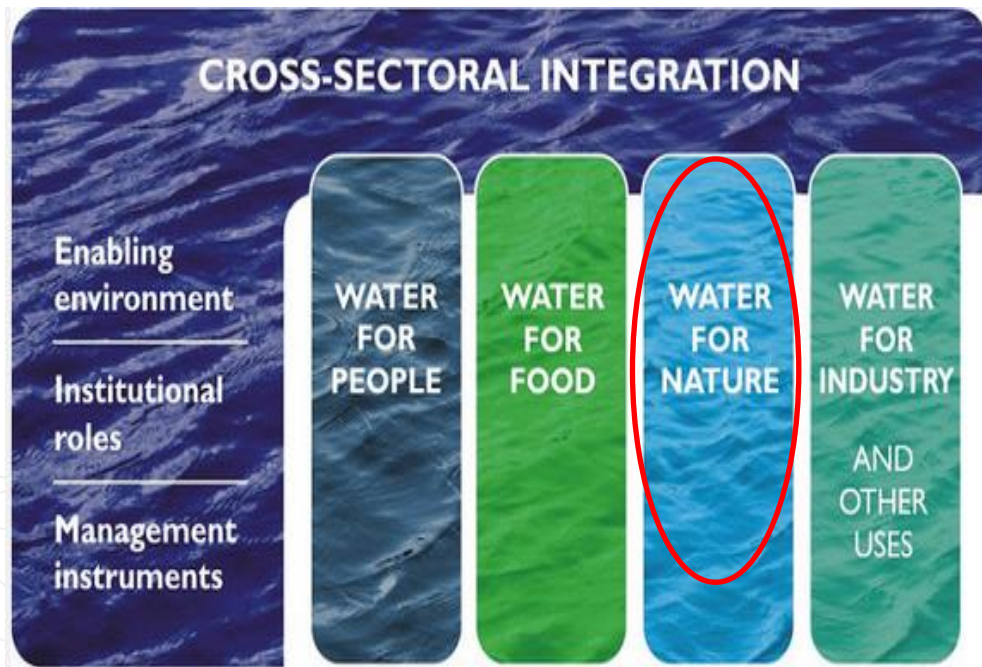
Advancing a Nexus Approach to the Sustainable  
Management of Environmental Resources



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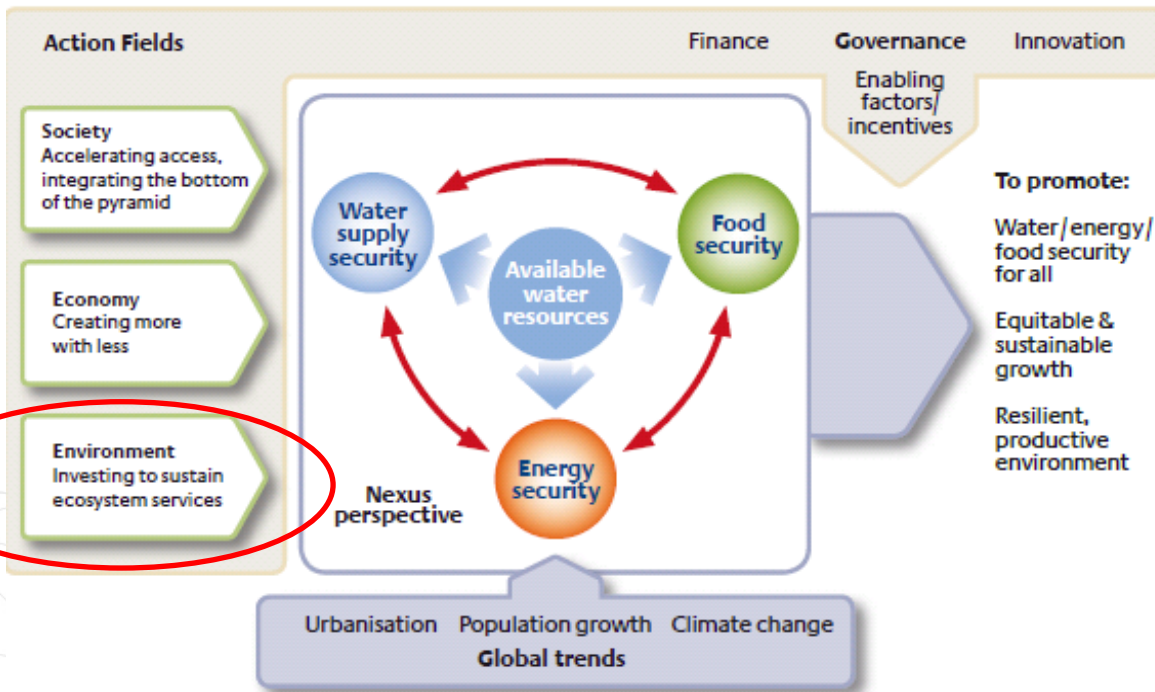
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# Focus on Water: IWRM





# Nexus concept: more than only connecting resources



Hoff 2011: The water, energy and food security nexus. Solutions for the Green Economy



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# Aquatic ecosystem models in IWRM context

- Hipsey et al. 2015
- Trolle et al. 2012
- .....
  
- But in nexus context?
  - Wolf Mooij et al.
  - Karsten Rinke et al.



## Ecosystem within nexus?

- covered to some extent in popular tools: WEAP, SWAT
- Identified as missing element: Howells et al. 2013 (CLEWS, includes WEAP)

➤ Simon Langan et al.

➤ Janez Sušnik



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# How to move forward?

- Nexus – AEM: separate communities?
- AEMs: useful tools in nexus context?
- Nexus tools: role for AEMs?
- How to link?