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Challenges for basin organisations in governing the water-energy-food nexus

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Introduction

What if

IWRM is used as entry point for nexus governance

Then

Implementation by Basin Organisations

But

The challenges are manifold, so how would it work?

Methodology

- Study for UNEP

http://www.unep.org/delc/Portals/119/ForumBasinOrganization/water-energy-food_theme2.pdf

- Theoretical framework
 - aimed at water, energy, food security
 - ecosystem perspective
 - Background literature
 - Informant interviews
 - 16 case studies
- Peer review & update in 2016

Case studies

Inner Niger Delta	Mali
Lesotho Highlands water project	Lesotho
Latin American Water Funds	Ecuador, Costa Rica
Sarapiqui wetlands	Costa Rica
Penobscot River	USA
Austin City, Texas	USA
Great Lakes Commission	USA
Mekong River Commission	South East Asia
Four Major Rivers Restoration Project	South Korea
Lighted village scheme	Gujarat, India
Nam Theun hydropower scheme	Laos
Biofuels on contaminated land	Thailand
Alazani/Ganikh River Basin	Azerbaijan, Georgia
Murray-Darling river basin	Australia
Danube / Sava	South East Europe
Jucar river basin	Spain

Role of IWRM and Basin Organisations

- Integrated and recognized approach (in SDG 6)
- Inter-sector collaboration, involving many stakeholders
- Potential for mitigation of environmental impacts
- Multiple benefits from multipurpose measures
- Water, energy and cost savings, increased efficiency
- Especially important in transboundary context
- Does it work in practice?

What works?

1. Mandate
2. Partnerships
3. Coordination
4. Capacity

1. High level mandate

- Essential to coordinate and cooperate between water, energy, food, environment sectors
- For implementation, local-level actors important
- Successful transboundary examples
 - Mekong River Commission (MRC)
 - International Commission for the Protection of the Danube River (ICPDR)
 - Both: decision-making at ministerial conferences, combined with broad participatory process in countries
 - Both: driven by the need for more (renewable) energy

2. Formal partnerships

- Across sectors: water, energy, food, environment
- Across levels: local, national, transboundary, global
- With private sector: constructors, food industry etc.
- Various modalities, e.g.
 - broad stakeholder participation process
 - advisory boards
 - public-private partnerships
- Successful examples:
 - Latin American water funds, e.g. Quito Water Fund: payment for upstream environmental services
 - Jucar River Basin/municipality Benaguasil, Spain for innovative and green stormwater control

3. Coordination

- Common understanding of practices, priorities, concerns
- Identification of mutual benefits
- Development of common solutions & incentives
 - Could encompass sector-specific measures
- Joint planning, coordinated implementation
- Successful examples:
 - The Penobscot river restoration project, USA: removal and adaptation of dams
 - Lesotho Highlands Development Authority (LHDA): environmental flows and compensation payments

4. Capacity building

- Knowledge base, fill data gaps
- Analytical tools
- Institutional capacity
- Ecosystem approach as entry point
- Successful examples
 - atlas and interactive viewers of Mekong River Basin, Great Lakes Commission, Danube River Commission, Inner Niger Delta
 - guidance documents, e.g. the 2013 'Primer for Monitoring Water funds' for the Latin-American Water Funds Partnerships

Discussion

- Crucial factors / conditions for success
 - High level mandate
 - Formal partnerships
 - Coordination
 - Capacity building
- Not only applicable to Basin Organisations / IWRM
- Other models possible, e.g.
 - Network of partnerships
 - Coordination by other entities (national Ministries of Environment, other regional organisations)
- Environmental concerns could become main driver



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