



Discussion Minutes

C3: The Nexus in Transboundary Basin Governance

Chair: Lars Ribbe

Speakers: Anik Bhaduri, Eline Boelee, Ines Dombrowsky, Mahsa Motlagh

Minutes: Joanne Vinke-de Kruijf

Presentation notes:

Anik Bhaduri - Water Energy Food Nexus in the Amu Darya basin, Central Asia

The presentation focuses on the case of the Rogan Dam where cooperative behaviour could maximize benefits at the basin-level. A new cooperation model is needed that, for example, pays attention to issue linking to maximize the benefits of the dam. Cooperation is only possible when there is mutual trust. Participants discuss whether there are benefits or incentives to cooperate for individual actors or whether, for example, trade could be linked. A reference is made to treaties that were signed between Bangladesh and India. Trust is being discussed as a key requirement and the role of the scientific community is questioned in cases where there is no trust. In the presented case there is some trust and altruism since the countries are also cooperating on other issues. Lastly the mediating role of the World Bank is being discussed. In this specific case, the World Bank report lacked a proper analysis of the downstream effect. What is needed is a study that analyses the effects of the dam as if there were no administrative boundaries.

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

Based on various sources, including 16 successful cases, four requirements for governing the nexus are presented: (1) a high-level mandate; (2) partnerships; (3) coordinated planning; and (4) capacity building. Whether river basin organizations (RBOs) are the right organizations to govern the nexus remains an open question. Partnerships could be more suitable. The participants discuss, given the need for a mandate from various Ministries, whether there are differences across countries. Older, well established RBOs tend to be more effective than younger ones. Also, national RBOs tend to be stronger than international ones. A participant notes that RBOs should take a more holistic approach but already have difficulties in governing water and to apply IWRM. Also the political representation of organizations governing the nexus is discussed. The key seems the need to have political representation that is accountable. It is concluded that, in any case local partnerships are needed to address local issues. Partnerships are seen as an alternative model that might function better than, or complementary to, basin organizations in governing the nexus.



Ines Dombrowsky - Governing the Water-Energy Nexus related to hydropower on international rivers: what role for river basin and regional energy organizations?

Findings from four different cases are presented, each of them with a different constellation in terms of: (1) being a border or transboundary river; and (2) being governed by an RBO or a regional energy organization (REG). The presenter concludes that not only RBOs but also REGs may play a role in fostering cooperation regarding hydro power plants on shared rivers. REGs may in some cases be more effective but are likely to be less concerned with the environmental and social effects on such projects. In relation to the case of the Mekong river basin, the question is raised whether the Mekong RBO is a success or a failure. The presenter responds that the RBO had some, but limited, impact on the planning process, which might be as much as can realistically be expected. The participants observe that China in the meantime has indicated that it might be willing to engage in the Mekong River Commission in future. This according to the discussion can be explained due to mutual dependencies. First, for the construction of railways and roads China depends on neighbouring countries. Second, as most trade is going via water, China depends on water for navigation. It is reiterated that governing the nexus does not need to be done by an RBO but can be done by an energy-driven organization as well. Whether environmental issues would receive sufficient attention in the latter case remains an open question. Energy-driven organizations are certainly more interested in what happens upstream than downstream. In any case, governing the nexus requires a holistic approach that pays attention to all ecosystem services.

Mahsa Motlagh - Prospect of trans-boundary cooperation among Eastern Nile riparian countries

No summary available

General Discussion:

The participants highlight a couple of aspects that were underrepresented in the presentations:

- Ecology: Where does ecology come in? The 'nexus' concept has many different variations. Ecology is important but not made explicit in the Water-Energy-Food nexus. Ecology is often introduced later on in the planning process. Would it help or only add complexity when ecology is considered from the beginning? Could synergies be found in ecological approaches or e.g. multifunctional 'green' infrastructure?
- Benefits: Presentations largely focused on economic benefits whereas the focus should be on quality of life and welfare.
- Mining: The issue of mining seems to be underrepresented. Mining is not on land use maps and there is hardly literature on impacts. From a global perspective, mining is a relatively small water user, especially when compared to agriculture. At the local level the impact of mining on land use as well as water quantity and quality can be considerable. In Australia there is a group of scholars investigating the nexus in relation to mining.
- Function of dams: The presentations focused on the construction of dams for hydropower. However, they have an important role in the management of flood risks



and droughts. One participant notes that only 25% of the existing dams were constructed to produce hydropower. How this is for dams that are being planned is unclear.

- Climate change: Small upstream dams are often seen as means to adapt to climate change. The role of dams in reducing greenhouse gas emissions remains unclear and is a politically sensitive issue. There is a lack of data and knowledge. There are studies but most people are not aware of those. Especially in tropical areas, dams are not climate-neutral.

Further reading

- UNECE report (2015) Reconciling resource uses in transboundary basins: assessment of the water-food-energy-ecosystems nexus. Available from: <http://www.unece.org/index.php?id=41427>
- UNEP Technical Background Report (2014) Governing the Water-Energy-Food Nexus: Opportunities for basin organisations. Available from: http://www.unep.org/delc/Portals/119/ForumBasinOrganization/water-energy-food_theme2.pdf