

Regional Organisations Promote Nexus Governance for Hydropower Along International Rivers

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The nexus issue

Many African and Asian countries are currently investing in hydropower in order to contribute to a low-carbon energy supply system. This is often done along international rivers, frequently by a single country, but sometimes even jointly by co-riparian countries. Because hydropower plants are negatively impacted by upstream land and water use and can also have a detrimental effect on ecosystems and water and food security downstream, the water-energy-food nexus plays a key role in the planning of such facilities. If the investments are made along international rivers, it is not only necessary to ensure coordination between the energy, water, agricultural and environmental sectors within the investing country, but often also with sector institutions in neighbouring countries in order to prevent the development or escalation of conflict between states. However, such inter-state, inter-sectoral coordination cannot be mandated but relies on voluntary negotiations. Nonetheless, it can be supported by inter-state organisations at regional level (regional organisations), such as international river basin commissions and regional energy organisations.

Research goals

The project therefore investigates the role of regional organisations in the governance of the water-energy-land-environment nexus (hereinafter “nexus governance”) in hydropower investment programmes along international rivers.

- Under what conditions is it in the energy sector’s own interest to coordinate activities with water and environmental sectors on an inter-state basis?

- Under what conditions do regional organisations promote nexus governance for hydropower investment projects?
- What other factors favour or hinder inter-sectoral coordination between states?

There are three cases under examination (see Table 1): (i) Planned by Burundi, Rwanda and Tanzania, the Rusomo Falls project on the Kagera River, a tributary of the Nile, is being coordinated by the Nile Equatorial Lakes Subsidiary Action Program (NELSAP), a sub-organisation of the Nile Basin Initiative, and financed primarily by the World Bank. (ii) Planned by Burundi, the Democratic Republic of Congo and Rwanda, the Ruzizi III hydropower plant on the Ruzizi River is being coordinated by Energie des Grands Lacs (EGL), a regional energy organisation. There are plans to involve a private investor as part of a public-private partnership (PPP) which is being supported by several development banks (including KfW). (iii) The Xayaburi Dam on the Mekong is being constructed by Laos with the support of Thai banks; the investment decision was taken outside of the Mekong River Commission (MRC). While (i) and (ii) are trilateral investment projects, where the river forms the border between two neighbouring countries in each case, (iii) is a unilateral project on a cross-border river.

Results

Motives for cross-border, cross-sectoral coordination. Hydropower plant operators have a vested interest in coordinating with hydropower plants and the water and land use organisations upstream if they are negatively affected by their land and water use activities. This was particularly true in the case of Ruzizi III where EGL, as the regional energy organisation, supported the establishment of an international river basin organisation for Lake Kivu and the

Regional organisations contribute to nexus governance by supporting the application of international legal principles and international environmental and social standards.

Characteristics	Rusumo Falls (80 megawatts)	Ruzizi III (147 MW)	Xayaburi (1285 MW)
Investment	Trilateral, donor supported	Trilateral PPP, donor supported	Unilateral PPP
Regional organisation	River basin organisation: NELSAP/NBI	Regional energy organisation: EGL	River basin organisation: MRC
- coordinates investment	Yes	Yes	No
- coordinates SEA	Yes	Not necessary, as conducted by NELSAP	Yes
- coordinates agreement upstream	Not known	Yes	To limited extent
- coordinates notification downstream	Yes	Not necessary, as all neighbouring states are involved	Yes
- coordinates ESIA	Yes	Yes	No

Ruzizi River: the ABAKIR Convention was signed in 2011. Furthermore, a centre for regulating water discharge was set up on the Ruzizi River.

Role of regional organisations. Regional organisations facilitate inter-state, inter-sectoral agreements, as they offer a negotiating forum and use a range of instruments to reduce the costs of coordination. For investments coordinated by regional organisations in particular, these can use strategic environmental assessments (SEAs) and environmental and social impact assessments (ESIAs) to reduce the negative consequences of hydropower plants, thereby taking into account the interests of downstream water and environmental institutions. For instance, Rusumo Falls and Ruzizi III were identified as high priority energy investments in a SEA published by NELSAP in 2005 at the recommendation of the World Bank. ESIAs and resettlement action plans have been coordinated in both cases by the respective regional organisations, but were also donor requirements (though the ESIA for Ruzizi III has to be confirmed by the private investor). As a result of the ESIA for Rusumo Falls, a run-of-the-river hydropower plant will be built instead of a multipurpose dam and with far fewer environmental and social consequences.

Another instrument used by international river basin commissions is the international legal principle of prior notification of neighbouring countries in the case of investment projects on international rivers. Although the Xayaburi Dam was planned by Laos without coordination within the MRC, Cambodia and Vietnam requested using the prior notification process envisaged by the MRC. The notification and a donor-supported SEA of the MRC ultimately

led to slight adjustments in the design and to Cambodia and Vietnam granting formal approval, even if not all fears were allayed.

Other favourable and detrimental factors. International donors play a key role in the application of international environmental and social standards. At the same time, an increase in private sector investments is making it more difficult to ensure the application of international legal principles and international environmental and social standards. This is likely to become even more difficult without regional organisations.

Recommendations

- Because private hydropower investments are increasing along international rivers, development cooperation should continue to support river basin organisations, but also regional energy organisations: they play a key role in the governance of nexus issues.
- There should be an insistence when promoting regional organisations on compliance with international law principles (avoidance of significant damage, prior notification) and procedural rules, and joint investments coordinated by regional organisations should be encouraged.
- Measures for developing the capacity of regional organisations should enhance their ability to carry out cross-border SEAs and ESIAs.
- Moreover, support should be provided to initiatives such as the Sustainability Assessment Protocol of the International Hydropower Association. This instrument helps project executing agencies to ensure the sustainability of hydropower projects.

Given the increase in private sector investment in hydropower in particular, development cooperation initiatives should continue to support international river basin organisations and regional energy organisations.

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