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Authority and responsibility in river basin management

by

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Contributions are most welcome - in English or in Bahasa Indonesia.

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Summary

Some river basin organisations have a high degree of formal authority, while others do not. In both cases, the organisation can hold important responsibilities and can fulfil these responsibilities in a useful and expedient way.

Authority is required, or is at least highly useful, in connection with management tasks such as water-sharing, and implementation and operation of physical infrastructure (such as public water supply, irrigation systems, or structural flood protection).

Generation of authority can be difficult and time-consuming and is not always necessary. This is the case for important management tasks such as development scoping, policy formulation and planning; and inter-sector coordination.

The authority of a basin organisation can be changed in the course of time, depending on the need of basinwide management (for example benefit-sharing for large development initiatives) and the physical and institutional context.

Acronyms and abbreviations

CRBOM:	Center for River Basin Organizations and Management
GWP:	Global Water Partnership
INBO:	International Network of Basin Organizations
IWRM:	Integrated water resources management
RBC/RBO:	River basin committee/river basin organisation

Glossary

- Apex body: An administrative 'top' body (placed above other bodies) (for example a National Water Resources Coordination Council). (Apex is Latin, meaning 'mountain peak')
- Decentralization: The allocation of decision-making authority to a lower (local) level (for example a commune council). Deconcentration: The implementation of central decision-making via local departments (for example a provincial department of a ministry)
- Drainage basin (according to the 2004 Berlin Rules on Water Resources): An area determined by the geographic limits of a system of interconnected waters, the surface waters of which normally share a common terminus. (Basically the same as '*river basin*' and '*watercourse*')
- IWRM (integrated water resources management): (as defined by Global Water Partnership): A process which promotes the co-ordinated development and management of water, land and related resources, in order to maximise the resultant economic and social welfare in an equitable manner without compromising the sustainability of vital ecosystems
- Opportunity costs: The cost difference between one course of action and another (better or '*best*') course of action. In a wider sense: The implications of one course of action relative to alternative strategies. There is often an opportunity cost related to doing nothing
- Riparian (country): A country on a river bank; a country that is wholly or partly located within a river basin. (Same as a '*basin state*', in the terminology of the 2004 Berlin Rules)
- River basin: An area that drains via a specific river; an area where the surface runoff flows towards and passes through the mouth of a specific river; for example, the Mekong Basin, the Nile Basin, etc.
- River basin management: Management of water resources, water-related resources and water-related development in a river basin
- Sub-basin: A river basin of a tributary (which is a smaller river that discharges into a larger river)
- Subsidiarity: The principle that a higher authority should only make decisions that cannot reasonably be made at a lower level. According to this line of thought, the water allocation within a river basin must reasonably be made for the basin as a whole, and hereby by an authority that covers the entire basin. At the same time, however, the operation of an irrigation scheme within the basin may be better undertaken at the scheme level

1 Introduction

Managed development is based on decisions on whether and how to act. These decisions must be timely and appropriate. Otherwise, the development will take its own course, expectedly along a path of least resistance, and without a goal. The outcome can be a change, and perhaps even a positive change - but this will be a matter of pure coincidence, rather than intent.

Even a managed development can reflect unnecessary losses of opportunities if the process is exposed to undue delays. An otherwise good decision will lose value if it is made too late.

On this background, the present paper provides observations on measures in support of a functional decision process in river basin management.

The note offers opinions as much as facts and should be read with a cautious mind!

2 Basics

2.1 Terminology

Authority (1): The ability to enforce decisions. Can be legal (based on law) or informal (based on respect); (2) a public administrative agency designated to enforce decisions (made by itself or by others). Example: A government has authority to enforce the country's laws.

Mandate (in public administration): An official allocation to somebody of responsibility and/or authority.

Responsibility (1): Making suitable decisions and/or acting in an appropriate way. Responsibility can be a formal obligation or an informal expectation. In public administration, formal responsibility can relate to a position or an administrative body; (2) liability related to a decision or an act or a duty. Example: A parliament can have responsibility for a country's legislation.

In public administration, a minister (assisted by a ministry) has both authority and responsibility. A coordination body or an advisory council has responsibility but no authority. The same could be the case for a flood forecasting unit. Authority without responsibility should not occur.

In river basin management, a conventional distinction is made between a *committee* (with responsibility but low authority); a *commission* (with responsibility and some authority); and an *authority* (with responsibility and a high authority). For example, in 1995 the former Mekong Committee was 'upgraded' to the present Mekong River Commission; and in 2008, the Murray-Darling River Commission was 'upgraded' to the present Murray-Darling River Basin Authority.

2.2 River basin management

River basin management can from case to case involve a variety of tasks, depending on the geographic, social and economic context and the surrounding institutional landscape. Examples of such tasks are

- **supplies:** Safe water and sanitation to households, water for production, hydropower, etc., as well as wastewater and solid waste disposal (possibly on a commercial basis);
- **resource allocation:** Water allocation and water-sharing (preferably IWRM-based);
- **related services:** Reservoir operation, flood and drought management, management of aquatic habitats and water quality, morphological management, navigation, ...; and
- **water-related development** (sector-wise or integrated).

The distinction is a question of ends and means - the supplies represent a major objective and justification of the resource management.

River basin management can comprise any or all of the tasks, but they require different institutional capabilities and different professional skills, and they can take place at different management levels. Some tasks can be undertaken by private utilities, while others are more suited for the public sector. (They also differ with respect to the scope for cost recovery).

Some tasks must, by necessity, take place within hydrological boundaries - at the river basin level. These include (i) over-all water allocation; (ii) water quality management; and (iii) flood and drought management. Other tasks can equally well (or sometimes even better) be undertaken at a higher (national) level or at a lower level.

3 The need of authority

The authority allocation and the character of an appropriate decision process depend on the suite of management tasks and responsibilities. In river basin management, tasks indicating a high degree of authority include:

- Water-sharing within the basin (between sectors, upstream/downstream, between sub-basins, in-stream/off-stream ...);
- supplies of raw water, tap water, sewage collection and disposal ... ;
- construction and operation of infrastructure (for water supplies, sanitation, sewage treatment and disposal, irrigation, flood protection, ...); and
- disaster mitigation (floods, drought, ...).

Other tasks are less dependent on authority (but still require a high degree of responsibility). Examples are:

- Monitoring and knowledge-building;
- forecasting services (rainfall, drought, floods, ...); and
- water-related development scoping, policy formulation and planning.

Still other tasks will be supported by some extent of formal authority but can be undertaken without it if need be:

- management tasks with a significant stakeholder participation; and
- management tasks that span across several sectors.

4 Authority of river basin organizations

National organisations

National river basin organisations are wholly located within one country, but can span across administrative (province or state) boundaries. Their legal basis will be national law.

Some countries (for example Indonesia and Viet Nam) have instituted different categories of river basin organisations, depending on their tasks, their geographic coverage relative to existing administrative boundaries, and their national significance. They differ with respect to authority and management level (whether national or de-central).

Both in Indonesia and Viet Nam, different management bodies can exist side by side in the same river basins - some with authority (and responsibility), in charge of implementation and operation, and others without much authority, but with important responsibilities for integrated development decision-support, scoping and planning, inter-sector dialogue, and stakeholder involvement.

International organisations

Transboundary water-sharing is best supported by adequate authority that covers the entire basin. This can be difficult to achieve, however, if the basin is shared by several countries that hesitate to oblige themselves in a way that affect their sovereignty. In consequence, many international river basin organizations are '*commissions*' (or similar) with high responsibilities but little authority - for example Mekong River Commission, the Joint Rivers Commission of Bangladesh and India, or the various commissions involved in management of water uses, navigation and data sharing for the Rhine Basin. The authority can be higher for river basin organizations that cover several states in the same country. For example, the Tennessee Valley Authority has its own police force. The Murray-Darling Basin Authority was formed (in 2008) in replacement of the Murray-Darling Basin Commission, because a need was seen of enhancing its authority (in response to a lengthy and severe water shortage).

5 Thoughts to share

Provision of authority is difficult and time-consuming. New legislation (or new administrative decrees) can take a long time to prepare and promulgate. If authority is transferred from one body to another there can be political or institutional resistance that can delay or impede implementation. This can cause undue opportunity costs (if the decisions are made much later than required). A gradual approach can be more expedient, starting with some coordination body without much authority but with a high degree of support from involved or affected agencies.

In case of integrated (IWM-based) development planning, it can sometimes be an explicit advantage if the responsible body does not hold too much authority. This is because the authority required for implementation and operation is in many cases available already with various sector agencies involved in (for example) public works, rural development, agriculture, environmental management, tourism, and so forth. It could lead to duplication or confusion if such authority was partly or wholly shifted away from the sector agencies.

The co-existence of different management bodies for the same river basin can be mutually beneficial. Between them, they can provide an open-minded, IWRM-based

development agenda, required stakeholder dialogue, and competent and authoritative implementation and operation of useful development initiatives.

6 Bottom line

Authority is required, or is at least highly useful, in connection with important river basin management tasks such as water-sharing, and implementation and operation of physical infrastructure.

Authority is not always necessary. This is the case for some other important river basin management tasks, such as development scoping; policy formulation and planning; and management tasks that span across several sectors.

Provision of authority to (a new) river basin organisation can be difficult and time-consuming, because re-allocation of authority tends to be a zero-sum game - what is given must be taken - in order to avoid duplication. The consequence can be late response to new challenges and postponement of attractive developments. Provision of responsibility is not a zero-sum game - a new body can have responsibilities that are not shifted from existing bodies.

The authority of a basin organisation can be changed in the course of time, depending on the need of basinwide management (for example benefit-sharing for large development initiatives) and the physical and institutional context.

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Appendix 1: RBC/RBO characteristics

(Based on Paul Taylor, July 09)

The following characteristics may apply from case to case.

One extreme does not need to be 'better' than or 'preferable' to the other extreme - that depends on the legal and institutional context (whether tasks are already well undertaken by bodies other than the RBC/RBO), as well as the geography and development agenda of the river basin.

Most RBCs/RBOs will be somewhere in between the extremes.

One territory - within one province (in one country)	.....	Multiple territories, covering parts of several provinces or several countries
Single sector (such as raw water allocation)	.....	Multi-sector (IWRM-based); for example covering raw water allocation, irrigation, hydropower, flood and drought management, land management, waste and wastewater disposal, aquatic environment, navigation, inland fisheries, water-related tourism
High formal authority; autonomous decision-making capacity; involved in regulation and/or implementation and/or operation and maintenance	.....	Low formal authority; providing guidance, recommendations, policy support, programme preparation; decision-making, implementation and operation undertaken by other bodies
High informal authority; ability to make timely decisions; enjoying respect from policy-makers, decision-makers, other stakeholders, and the general public	.....	Low informal authority; producing suggestions to other bodies; networking and knowledge-sharing; perhaps in some cases less 'visible' to policy-makers and the general public
Commercial model (including state corporations); direct revenue generation, employees recruited directly; often involved in (raw) water supplies and perhaps sanitation	.....	Non-commercial model; ordinary public administrative body at state or province level; funded by a national or province budget; employees allocated within the public administrative system or assigned on an ad hoc basis from the public sector
Mainly conservation-oriented; involved in water-sharing	.....	Mainly development-oriented; involved in identification and formulation of pro-active water-related development programmes
Big; large budget, large staff, in-house expertise and knowledge-base	.....	Small; low budget, small staff, building on external expertise, data and knowledge
Central, for example placed under a ministry	.....	De-central, for example based under a province, or independent/semi-autonomous
Focused, top-down decision-making, implementing government policies and plans	.....	Broad, bottom-up decision-making, with strong and continuous stakeholder involvement, consensus-oriented
Involved in (or responsible for) water-related conflict resolution and dispute settlement	Not involved in water-related conflict resolution and dispute settlement

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