

Key elements for good governance in water management

by Stephanie Heiland¹

More than 1.1 billion people lack sustainable access to safe drinking water, and 2.6 billion people do not have access to basic sanitation. Every year some 3.4 million people, mostly children, die from diseases associated with inadequate water supply, sanitation and hygiene.

The water crisis is increasingly about how we govern the access to and control over water resources and their benefits. The insufficiency of water, particularly for drinking water supply and sanitation, is primarily driven by an inefficient supply of services rather than by water shortages. Inefficient irrigation and poor operation and maintenance of water works lead to huge wastes of water. Much water goes unaccounted due to leakages in pipes and canals and illegal tapping.

What is water governance?

Water governance is defined by the political, social, legal, economic and administrative systems that are in place, and which directly or indirectly affect the use, development and management of water resources. Importantly, the water sector is part of broader social, political and economic developments and is thus also affected by decisions outside of the water sector.

According to the United Nation's Development Program (UNDP) "the term water governance encompasses the political, economic and social processes and institutions by which governments, civil society, and the private sector make decisions about how best to use, develop and manage water resources" (...) "water governance is more than national-level water

legislation, regulations and institutions, though these are important components. It also refers to the processes that exist to promote popular participation in designing water and sanitation systems and where decisions about those systems are made (in the capital city or the community itself) as well as how and by whom".

Governance systems determine who gets water, when and how. Water is power, and those who control the flow of water can exercise this power in various ways.

The legal nature of water

Water plays an important role in sustaining life, socio-economic development and the environment. Therefore, as far as legal systems are concerned, water usually belongs to the public domain parting from the concept that the particular characteristics of water resources and their importance to economy, environment and life, do not allow private ownership of water as a resource, but rights to use it are granted to economic agents and legally protected. Nowadays, legislation includes protective measures, because the interdependence of surface and ground water is confirmed, as well as groundwater depletion.

Regulatory norms should not suffocate the economic system nor perpetuate antiquated patterns of use that conflict with efficient water allocation. The application of water norms should neither cause social or environmental deterioration, nor result in monopolies or speculation. Therefore it is an important challenge to find a balance between norms that refer to the stability and flexibility of water rights granted to economic agents and regulatory norms that relate to the characteristics of water as a natural resource and an integral part of the environment and aim to ensure

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its equitable and efficient use. The quantity of water granted in use should be no more than needed and the right may be retained only as long as the water is put to a generally recognized socially beneficial use.

In Bolivia, for example, one month after the privatization of water supply and sanitation services in the city of Cochabamba in 1999, Parliament adopted a law to provide the legal framework for sector regulation. The law did not include provisions concerning the recognition of the rights of indigenous peoples and farmers. The privatization and the law, combined with irregularities in the tender process, caused strong protests among the public against rate increases in urban areas without any prior improvement of services and the new legislation's effects on rural communities. Social unrests broke out in February and April 2000, followed by the declaration of a national state of emergency. The contract signed with the private consortium had to be terminated.

Nowadays, one of the major subjects in water legislation is the environmental dilemma of water. More detailed and demanding legislation is needed because water becomes scarcer relative to demand, externalities increase, knowledge improves, the deterioration of water quality has to be controlled and environmental uses have to be safeguarded when facing excessive exploitation of water and water pollution control.

The institutional and administrative structure for water management

The institutional design of the administrative system for water management is an important issue in national debates on reforming the legal framework of the water sector. Many jurisdictions assign responsibilities for policy formulation, water allocation, and programme and project evaluation to an agency that does not have responsibilities for the use of the resource (agriculture, energy, etc.). In most cases it seems to be inappropriate to place water management within the remit of purely economic ministries or environmental agencies because of the technical specifications and the environmental and social functions of water. There is the risk of neglecting relevant considerations.

Many countries got to the conclusion that it is best to establish clear divisions among the various institutional functions in the water management: Policy-making for the sector, regulation and operation of services. Such a distinction marks a major step in institutional development.

In some countries the State has decided to transfer functions of water management to users and user organizations, as it was the case in Chile, where this situation and the increasingly intense and complex impacts that society has on water resources have given rise to many conflicts concerning water. It has not been possible to resolve these conflicts through existing user organizations or negotiations between parties. Many of these conflicts ended up in ordinary courts, but the results have not been particularly effective due to a lack of technical capacity and expertise.

Due to the fact that the resource is not limited either by administrative or by institutional boundaries, it is a particularly complex and conflictive matter to decide which administrative level is best suited for managing water and its services. Water also has a direct impact on commercial activities, on transport, and on services, such as electricity generation, which are managed at a national or municipal scale.

Economic and social interests

In many countries, there are tensions between the expectations of the people to improve their life quality and economic limitations, which in turn have repercussions on the governance of the sector and the maintenance of social order.

The deficiencies in drinking water supply and sanitation that exist in many countries are reflected in the low service penetration in poor areas, the chronic under-funding of water supply and sanitation services and the increasingly expensive supply. Often, tariffs do not cover the costs of the services, which in turn lead to inefficient management and lack of investment. All these elements make up a vicious circle that pushes towards low service quality. Most countries will not be able to get out of this vicious circle due to the lack of financial resources and investments.

Water laws imply the establishment of preferences among uses in order to allocate water at times of scarcity, or to grant water rights in case of competing applications. The allocation of water resources in areas of water scarcity can generate tensions between social interests (such as drinking water supply and agricultural use) and economic benefits (mining, industry, export-oriented agriculture, etc.). Often, this conflict is solved by declaring drinking water supply and sanitation to be a priority. In order to guarantee an efficient management of water resources, it is essential to define priorities and in doing so, consider all influencing factors (social, economic, traditional or indigenous water uses, etc.).

Public participation

An important characteristic of successful water management is the participation of users, either in field activities or in the integration and consultation with administrative and political institutions. Participation aims to take into consideration the interests of the users. It produces a sense of community between the administration and the user and can even lower central administration costs. The users that are interested in water-related issues are allowed to participate in public hearings or consultations aimed at analyzing policies, programmes, projects, or legislation. Participation requires a legal framework allowing for public action and giving access to those who make political decisions.

The mere creation of participation mechanisms does not mean that all interested parties will participate, neither that it will guarantee a balance of interests and more rational decision-making. The role of the governments should be to stimulate and facilitate the participation of interested parties, for example by providing access to information, authority to act in meetings, and, in general, provide the possibility of expressing opinions and formulating positions. If this is not



Participation of users in the construction of a new water system in Cochabamba, Bolivia.

the case, special stakeholders or interest groups could capture participation for their means. For example, in certain areas privileged user groups have a dominant position, a higher educational level, are better organized and are more powerful in collective negotiations aimed at, for example, keeping water rates low. These have more influence than poorer peasants.

Conflicts originating in different water uses

In some countries, serious conflicts occur between indigenous and traditional users and economic activities, such as mining and irrigation. The extraction of groundwater for supplying cities sometimes also affects traditional uses and ecosystems. In general, there is a lack of clear and careful definitions of the rights and obligations of interested parties and the government, even though some countries have created systems for protecting indigenous right (for example Brazil, Colombia, Chile).

In the United States, for example, at the end of the nineteenth century there was a conflict between Indians of Fort Belknap Reservation in Montana and nearby non-Indian settlers over waters of the Milk River that both groups used for irrigation.

The settlers however diverted water upstream from the Indians, preventing them from getting enough water. The Supreme Court held that although the settlers had established rights under state law and had begun using the water before the Indians did, the Indians held a prior water right. The court resolved the conflict by applying the established rule of construction that ambiguities in an Indian agreement or treaty should be resolved in the Indian's favour.

The most frequent conflict is the destruction of traditional habitats for the sake of assigning rights for mining, water supply for cities and hydro energy generation. Part of the problem is that legislation does not recognize non-extractive customary uses, such as fishing activities in lakes.

The potential of water to generate conflicts is huge, given its physical and economic characteristics. These conflicts can involve anyone from private individuals and companies to municipalities, provinces, institutions, sectors and nations. A poor administrative capacity for conflict resolution is thus a practical limitation. Water legislation should enable interested parties to settle disputes by agreement, adjudication by communities or user associations, or other friendly means and guarantee user representation, in particular of weak or minority sectors of the society. Another important aspect is the right to a defence and appeal system, Nobody should be left undefended and legal action should not become eternal.

The lack of universal and simple answers

Water is so closely linked to economy, society and the environment, therefore simple answers to guarantee good governance do not exist. The only possible suggestion is that although governance may be expressed in different organizational systems and its formal content arranged differently (such as laws and institutional settings), every society has natural conditions, power groups, power structures, and requirements that must be considered specifically in the process of designing the system in order to ensure viability.