Redefining Water Rights[1]
Can privatisation of water be prevented?

Water rights are acknowledged authorisations to use a water source like a river or a lake. They regulate access and allocation of different usages – as drinking water, in agriculture, for the environment etc. – and between different users like riparian parties of a river. Controlling access to and allocation of water rights is the more important the scarcer water is in a region – regardless if due to natural conditions or owing to over-exhaustion, pollution and waste.
The precise implementation of water rights is subject to historical changes and national characteristics – but water's own special nature also leaves its mark. The reason being that water is likewise nutrition and means of production, the availability and allocation of which bears considerable economic, cultural and social relevance. In contrast to land and produced commodities, water's natural traits cause simultaneously great difficulties in measure, limitation demarcation and assignment.

The design of water rights has considerable effect on deciding who benefits most from the use of water, thus reflecting social power structures as well as economic and development political priorities. Hence great estates often also acquire the control of water resources, whereas many small farmers have no secured user's rights. But similar to the rearrangement of land rights, for instance by privatising communal land, the current rearrangement of water rights threatens to dispossess the poorer population and produce a reallocation in favour of the cities and modern sectors in economy and agriculture. Attempts to facilitate a comprehensive trade with water rights even would reinforce this expropriation .

History

Particularly in all places where water is scarce, social and/or public regulations determining its use and allocation have existed ever since. The beginnings of European water law go back to the Romans: In the era of the emperor Justitian (A.D. 535) water law has generally vested the primary right to surface water in the public (*res communes*). Individual water users, especially those who had direct access to water source owing to tenure, were given the right to use the water, without being able to possess it.

Roman law had a strong impact on European water law and thus often as well in the colonies governed by European powers. Here the *Riparian Doctrine* ruled until the end of the 19th century. The owner of land bordering a water body acquires automatically certain right to the use of the water, if that does not interfere with its use by other riparian landholders. He is allowed to keep the "usufructuary rights", the use, however, is supposed to be reasonable (as for instance English legislation appended), and quantity or quality of the downstream water supply should not be affected in a way that damaged others. The landlords usually have the right to use "private water" on or in their possession liberally, yet are obliged to take into account effects on third parties.

In the Western States of the USA the *Doctrine of Prior Appropriation* was established in the 19th century. Following the principle of "first come, first served" primary rights were assigned to farmers, gold diggers and mines/miners during conquest and settlement. Here water also remained a public good, yet individuals can assert rights if they can prove the beneficial use of water. Inspections are often performed by local authorities capable of disallowing water rights, if necessary ("use it or loose it"). Younger rights will only be served when primary users have satisfied their needs (seniority principle). Quite the opposite in case of "proportional allocation", where distribution is adjusted to availability, that is during shortage all right holders receive less water – but nobody will leave empty-handed. Thus the water quantity linked to the rights will vary.

Apart from these variably formalised regulations of use, which are strongly marked by the so-called

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"territorial principle", a variety of traditional regulations, customary rights and indigenous legal conceptions existed or still exists especially in the countries of the South. Thus participation in erecting or maintaining a water tank on the Indian subcontinent endows you with a privileged right to water. This is often a matter of collective rights, like belonging to a social group, such as nomadic herdsmen, often closely linked to land, use of forest and pasture as well as water rights. Likewise they are often equity-oriented like the rotation of water rights among villages (e.g. Morocco) or the Warabandi system in South Asia, which allocates water in turn to small farmers. In addition to that there are multiple de facto rights of use for different user groups, some of them referring only to subsidiary uses, but still form a decisive part in the rural livelihood systems.

Rights of Use and Water Law

Owing to its historical development and economic importance, agriculture – being the most important water use by humans – holds the oldest and majority of water rights. Increasing requirements, for instance by cities, industries and modern industrial irrigation gradually produced since the end of the 19th century new and modern statutory regimes.

Governments and authorities now strive to establish a system of state controlled and operated water resources management as a key element of a comprehensive water management. The objective is to allocate the available amount of water according to certain criteria among the different rights of use, including environmental claims and different usages, like consumptive and non-consumptive use. Laws define in particular the role and responsibility of the parties (organisations, institutions and authorities) involved, the user's rights, their privileges and obligations and determine control tools for the compliance with water rights as well as for the sanctioning in case of their violation. Of great importance in doing so, is a clear separation between the so far multiple and complex entangled land and water rights. Thus governments are assigned "the power to issue water rights, to influence the allocation of water resources, and to regulate water works and water use." (Productivity Commission 2003:44).

Water rights can be classified into four categories:

- *Rights of surface water* ("Blue Water") account for the biggest part due to numbers. This includes above all bulk water supply for public utility services and irrigation systems.
- *Groundwater rights*: here groundwater close to the surface often belongs to the landowners, while the government hold the rights to aquifers and can assign them to individual users. Regulation of groundwater rights is particularly difficult. In some countries attempts are made at regulation by asking farmers for a permit for drilling a well, especially a deep well.
- Likewise water rights might exist for *precipitations* ("Green Water"), for instance for use on private tenure. Since they could influence the availability of water in rivers and lakes, legal framework might apply here as well, either in form of a licence system for rainwater harvest (like in Mexico or South Africa) or by prohibiting the installation of tanks (e.g. dams).
- *Customary laws*, traditional usages and indigenous water rights, the recording and codification of which has, however, not always been explicitly taken care of in the new water laws, as for example in some parts of Australia, in Mexico or South Africa.

Water rights can be defined according to quantity, for instance as a share of a river. The right of use can be limited to a period of time or to surplus water only; it can be confined to availability or a certain kind of use, for instance in agriculture. In California, for example, the water law defines the order in which the right holders are allowed to use the water ("the devil takes the hindmost"). In other cases, different users receive proportional distribution. Rights can be allocated both to individuals as well as to groups of users.

In most cases allocation gets charged; the fee depending on the amount of water, the area and kind of use, the specific source or the expected proceeds, or merely on the administrative costs for allocation and administration of water rights.

While water as such remains in most cases public property, and – in contrast to land and products – is not for purchase, the rights of use, however, have "many, though not all attributes of property rights, just like land rights" (Hodgson 2004, 15). Depending on the strength of this property character, chances are limited for the state to modify or revoke rights once assigned.

Pioneer Chile

In Chile tradable water rights were registered as shares of a variable water quantity as early as the 1980s, based upon existing rights of use. In doing so traditional water rights, however, were principally not registered (Productivity Commission 2003:65). Rights are divided into consumptive and non-consumptive use, for instance power generation, in limited and unlimited rights, etc. An obligation of use doesn't exist. Eventual rights are assigned for surplus water. Environmental protection, for instance by establishing environmental restrictions and guaranteed minimum flows , is only taken care of in unsatisfactory manner.

The allocation of formalized rights of use requires a whole set of conditions:

- Reliable data regarding the quantity of water available for the allocation of privatised rights of use, that is not only determined by natural variations but also by political and social priorities and restrictions (which often are determined by power relations and development conceptions) protecting for instance environment and basic needs.
- Institutions, which assign concessions according to transparent and democratic procedures; determine conditions of use; control their compliance; and make independent decisions in case of conflict.
- Given that the reallocation of rights of use may have effects on the environment and the poorer population groups without the resources to legally secure their access to water; measures for their protection have to be taken. While there are several concepts to protect environmental demands, like for instance fixed minimum flows in rivers, so far considerations and research regarding the complex relationships between water rights, gender, poverty and livelihood don't exist. (Hodgson)

Demands for the Water Law Reform

Reforms of the Water Law are required to improve use and allocation of the water resources , adjust it to altered conditions and requirements as well as abolish obvious inequities and monopolies, like for instance large estates or antiquated primary rights. Yet such a rearrangement has to comply with a series of requirements and criteria:

Equity: So far rearranging water management, with its focus on the reform and codification of water rights, seems to militate almost by their very nature against the interests of the poor due to relatively complex institutional arrangements, coupled with trends in the water sector such as the introduction of charging schemes (Hodgson, 100). In order to change that, principles of ecological sustainability, equity and gender must have priority over commercial objectives. A hierachy of rights like in South Africa could serve as a model here: it determines that first basic needs have to be satisfied, followed by ecological demands – and only the remains ought to be assigned for privatised rights of use. Basic needs should not only extend to drinking water, but also include food security through small farming/subsistence agriculture. Proportional distribution of rights of use produces greater equity and a rather versatile use than the seniority principle.

Traditional rights: Prerequisite for each reorganization is to sort out and acknowledge existing informal, collective and customary rights, including rights of subsidiary use. Here as well gender aspects have to be considered in particular, since traditional rights of use by women are the most

informal, least regulated and hence the weakest. At the same time, one has to evolve mechanisms to remove unfairly acquired rights of use or monopoly, owing e.g. to large estate or seniority principle, and reallocate them. Yet the currently often-aspired invariable separation of land and water rights should not be put into practice especially for small landowners until the manifold effects especially on small-scale farming and the value of tenure have been considered.

Framework: Technical prerequisites like a reliable assessment of the water quantity available for assigning privatised rights of use, and control of their both, admissible as well as undamaging use for third parties (such as no pollution), and institutional conditions like transparent allocation procedures and arbitration mechanisms have to be created.

Participation: Legal and institutional reorganization requires the participation of all user groups to preserve existing rights, create new, transparent allocation regulations and conflict resolutions, and to impede the domination of economically and politically more powerful interest groups in the reestablishment of rights of use.

Restriction: Communal rights, for instance of user groups in irrigation systems, should receive priority treatment over individual rights. Water rights should generally have a time limit and be confined to effective und beneficial use, calling for a hierarchy of (socially desired) ways of use, for instance with precedence for food security. It should be possible to revoke them, if they are not benefically used over a longer period of time.

In case of urgency, such as sudden water crises, interference in rights of use has to be feasible, if necessary without compensation so as to maintain in the interest of the public well-being the government's autonomy versus private owners.

Likewise water rights should not be transferable beyond the local area (irrigation systems, watersheds) and each transfer should be limited in time. Much less should they be tradable between different sectors like e.g., agriculture and industry.

Sustainable development: Water rights are a highly explosive social focus of conflict, putting in effect rather inconsistent interests and power structures. Their design has to be marked in general by the principles of an ecologically, socially and economically just and sustainable development and not by primarily technical and commercial interests, preset modernisation and development strategies or attempts to facilitate trade with privatised rights of use. The required creation of a coherent legal and institutional framework should safeguard the democratic design of water rights, the security of all local livelihood systems and effective participation of everyone involved.

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Literatur:

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