

Water, a Global Good in Essence: Ecological, Social, Economic and Political

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Introduction

Every year, the sun evaporates 577'000 km³ of water, of which 44'000 billion m³ fall on land. This amounts to approximately 6.9 million litres per year and per person. While this means that Nature is generous enough to allow everyone to dispose of sufficient water resources, water is unequally distributed, wasted and polluted.

The availability of safe water depends on such a variety of factors occurring during the water cycle that no one may contend that water "is my property". Water is a gift of Nature, a gift of God, which we have to respect, protect and share as a global common good. The integrated water resource management (IWRM) approach, universally promoted at the 2002 World Summit on Sustainable Development in Johannesburg, is the recognition of the complexity of the water cycle.

Ecosystems

IWRM does not usually address the entirety of the water cycle. It begins with the capture, continues with the distribution and ends with the treatment of water, but does not apply to the origin of the water or to its destination. Ecosystems play a major role in the production of safe water. Forests, wetlands and natural soils capture, filter, store and redistribute rainwater in a regular stream of high quality water. Very few water programmes however include the protection and sustainable management of ecosystems, the true source of safe water.

Ninety per cent of the water distributed in New York originates in the Catskill Mountains, Delaware. The production of the resource is natural, protected by forests and by a low-input agriculture, which is subsidised by the price of water. The cost of this naturally produced water is seven times lower than the price of filtered and treated water. The city of Basle in Switzerland provides 166'000 inhabitants with groundwater. The underground reservoir is refilled with water which is pumped out of the Rhine river and filtered through forest soil. In the canton of Uri, Switzerland, a wetland of 35 hectares and a forest above the city of Altdorf provide 75 per cent of its inhabitants with clean water that does not require any further treatment. The water company Henniez planted 70'000 trees in the last 20 years, creating a 200 hectares forest in order to protect its water springs. Finally, the forests of Switzerland ensure the production of clean water, for an estimated value of 80 million CHF per year.

Economics

No credible evaluation of the economic value of ecosystems for the production of safe water is available. An extrapolation from different studies brings up the figure of thousands of billions of US dollars per year. These figures do not however ever appear in traditional economic evaluations.

Water is principally used for agriculture (80 per cent worldwide), which is the main sector in which water management can be improved. We need to adapt agriculture and grazing practices to the capacity of the local ecology, taking into account the quality of soils, the availability of water and the climatic conditions. Mistakes have led to the acceleration of desertification processes, the salinisation of groundwater and the drying out of major ecosystems such as the Aral Sea and Lake Chad.

Industry, which consumes only 10 per cent of water, plays a large role in increasing pollution with chemicals, oil, contaminated soils and landfills (3'500 serious cases only in Switzerland).

Social Aspects

The water needed for drinking, hygiene and sanitation represents the smallest but most important part of water use (10 per cent worldwide). The Report on Human Development 2006 (UNDP) is devoted primarily to the question of water. According to this report, 17 per cent of the world's population (1.5 billion persons) has no access to clean water, and 2.6 billion has no access to sanitation facilities. Five thousand children die every day because of contamination of drinking water sources. This is a humanitarian scandal and justifies the requirement of a right to water. A right is however always linked to a responsibility. There is enough water, if we manage the resource carefully and share it equitably.

I would like to underline the importance of the direct capture of rainwater. This very simple technology can improve the quality of life of many people among the poorest. I was witness to a very convincing example South East of Nairobi, Kenya, where farmers can cover their yearly needs with the collection of rainwater that falls during only three months out of the year.

Politics

Water will become one of the main causes of political tensions, migrations and armed conflicts. But water remains an exclusively domestic issue. The UN Convention on the Law of Non-navigational Uses of International Watercourses, adopted in 1997 by the UN General Assembly, has not yet been ratified. The topic of water is one of the most sensitive brought up in multilateral discussions and negotiations. I have experienced long debates about one single word in a sentence, because the topic is charged with a heavy cultural, historical, political and emotional burden.

We will not be able to solve the water problems of the world without creating global water governance. We need a multilateral convention on water, as a framework for regional water treaties, which are better adapted to local situations and needs. We also need a multilateral organisation with a clear mandate to monitor the water situation, create the necessary legislation, prevent conflicts and offer a support for water strategies and programmes. In my view this task should be given to UNEP, in cooperation with FAO, WHO, UNESCO and UNDP.

Conclusions

Recently, the UN Security Council addressed for the first time the issue of climate change. It is time that the Council considers environmental issues as a crucial part of the world politics, and of humanitarian and security affairs.

- Because the availability of safe water depends on such a multiplicity of factors, no person or country may assert that it is their property. The legitimate right to water is linked to the responsibility to care for the resource all along the water cycle.

- There is enough water if we manage the resource carefully and share it equitably. To ensure the sustainable use of water we have to protect the ecosystems which capture, filter, store and redistribute safe water, and to recognize their huge economic value.
- We need a global governance on water, both a global convention and a global network
- We need regional water treaties, adapted to local situations and needs.

Water can be a source of conflicts. We can make it a source of cooperation.