

## **For a New Water Culture**

If we speak of “management” and “forest policies” rather than “management of wood”, it is because we have accepted that a forest represents much more than just a source of wood: it is a landscape, a part of natural heritage and a hallmark of a land’s identity. It performs vital functions for many ecosystems and is home to biodiversity that we can appreciate. Forests preserve lands from erosion, facilitate the slow percolation of rainwater that feeds aquifers and are full of self-defining and collective values for those who live in them, around them or thanks to them; they offer all that, in addition to wood, on the sole condition that their own health and sustainability are guaranteed.

Unfortunately, when it comes to rivers, the prevailing notion is still that water is a resource, as we are far from understanding that they represent much more than just tubes of H<sub>2</sub>O. The Water Framework Directive, in force in the EU since 2000, implies that we should change our point of view about managing water as a resource and accept the new idea of managing rivers as ecosystems.

Today, we are aware of the need to put an end to waste and inefficiency as we try to improve water management, insofar as we consider water a rare asset. However, the economic rationalization of the productive use of water alone is not enough. A major objective of the European Directive is to recover the good ecological status of ecosystems, it being understood that new economic criteria concerning water management is only a means to an end, and not an end in itself.

### **Water functions and values**

The usefulness of water in its various functions is evident. It has been abundant for a long time and often considered to be a resource that could be used freely. However, when it became necessary to build important regulation and transportation infrastructures to meet the different needs of cities, agriculture or industry, water began to be considered as a common or public good, in line with the Roman law tradition. But in many countries, when it comes to groundwater, its ownership remains linked to land ownership, as users may dig and exploit wells.

The insatiable voracity of our consumer society has, over time, brought us to the limits of sustainable aquifers, humid zones, and lakes and rivers, to the extent that freshwater has become a rare asset on the Blue Planet. This double quality of water as a rare and useful asset has given rise to the idea of considering it an economic commodity. The liberal pressure characteristic of the current globalization model strengthens this notion. It favours privatization processes and management models that call for reflection.

Treating water as a purely economic item implies that its various functions are considered to be interchangeable values that can, therefore, be measured in monetary terms. However, the values linked to water are often complementary and, thus, cannot be replaced by money. Here are a few examples: the fundamental values of life, which are essential to dignified living conditions for people or communities; the values of preservation of the environment and aquatic ecosystems; the values of intra- and inter-generational equity or the values of social cohesion that water-distribution services bring. The value of these functions ought not to be administrated according to market rules since they cannot be measured in monetary terms. However, it is important to distinguish between different categories of values at stake and the ethical criteria of fairness and sustainability in order to establish an order of priority among user rights, as well as management criteria for each level.

Water for life, as regards its basic function of providing survival for both human beings (individually and collectively) and other living beings, must be recognized as the highest priority in order to guarantee the sustainability of ecosystems so that access for all to a minimum quantity of good quality water is recognized as a human right.

Water for general interest purposes, as regards public health or the promotion of values of equity or social cohesion, must be ranked as the second level of priority, in connection with citizen's social rights and in the general interest of society as a whole. This is the role of public institutions. Water for development, which is an economic function relating to production activities and which in general concerns private interests, should occupy the third level of priority, in connection with the individual right of all to improve their standard of living. This function consumes the largest part of all water resources from rivers and aquifers, and is, therefore, largely responsible for the problems of scarcity and pollution arising in the world. This production-based demand must be managed in accordance with economic efficiency.

Lastly, we witness every day an increasing number of activities based on the illegitimate - if not illegal - use of water. Abusive exploitation of aquifers, excessive extractions or irresponsible use followed by polluting waste - are but a few examples of such activities. Such practices must obviously be avoided and condemned through rigorous application of legislation.

### **Access to water: a human right**

Over recent decades, the urban-industrial model of life has developed so dramatically, that it has generated a serious crisis of rural disintegration and urban saturation, creating public health problems in poor countries. This crisis has been aggravated by accelerating population growth, the increasing inequalities in many places, wars and national or regional conflicts.

Today, an estimated 1,200 million people have no access to clean water and 2,400 million have no access to basic sanitation services. Consequently, some 8,000 people die every day (WHO estimated for 2004), mostly children. If serious and efficient measures are not taken in this regard, international institutions forecast increasing structural economic imbalances between rich and poor countries and, by 2025, 4,000 million people without access to clean water. The reasons for this humanitarian disaster are partly linked to the persistence of authoritarian regimes at the service of the privileged, to individual and collective irresponsibility, as well as to the corruption of many local, regional or national authorities which favour the interests of a few. The inefficiency and lack of will on the part of international institutions and the main world powers are also at fault when it comes to prioritizing efforts to solve these problems.

Water scarcity is often presented as the most serious issue of the 21<sup>st</sup> century. It is raised in terms of quality rather than quantity. We are witnessing the consequences of the most serious world ecological crisis ever: the ecological crisis of continental water ecosystems. In the long term, the solution can only be found in recovering the good ecological status of these water ecosystems. Nevertheless, in the short and medium term, we must provide the necessary resources to guarantee access to drinking water for all: pressurized water networks, reliable chlorination systems, sewage collection networks and sanitation systems. These techniques are all well known, yet the main problem lies in securing the necessary investments to construct and modernize basic networks and systems in the poorest urban districts, and to set up effective decentralized systems in rural areas. Recently, access to a minimum quantity of drinking water and to basic sanitation services has been recognized explicitly as a human right by the United Nations Committee on Economic, Social and Cultural Rights (2002).

Two parameters to take into account are efficiency and effectiveness, the former for economic values, the latter for the management of values linked to the respect of human

rights. From this point of view, no government has any valid excuse. Even in the poorest countries, the priority that should be given to this matter renders the argument of lack of financial means as unacceptable, while important military spending continues. Such arguments are even more unacceptable when formulated by international institutions such as the World Bank. Forcing these countries to liberalize their urban services of water distribution, as the World Bank currently does under the liberal influence of the WTO, is a grave mistake. The market efficiency proves to be ineffective for solving problems of inequality and poverty, especially when these problems are very serious.

### **General interest uses**

Water supply and wastewater disposal by sewerage systems, as well as waste water purification constitute essential basic services in urban communities around the world. The availability of good quality water for multiple uses and at reasonable rates represents a conquest of public health, welfare and social cohesion, in addition fulfilling the fundamental right to a minimum quantity of drinking water. The access to these general interest values must be recognized and guaranteed for all as a social right of every citizen, beyond strictly civic rights. But the effort needed to fulfill these rights must also produce an efficient socio-economic service. Unfortunately, the deterioration of public services that we are witnessing, the problems of bureaucratization and ever stronger international pressures that debilitate public institutions politically and financially, often result in inefficient services and significant levels of individual and institutional irresponsibility. These problems, in terms of poverty, lead to dramatic situations with both water supply and public health. The option of privatizing service management, while emphasizing in many cases deregulation, seems to be a good way of rationalizing it economically.

A purely empirical analysis shows that, in all cases, the crucial element that guarantees satisfactory services in cities is not so much the public or private status of the operator, but rather the level of professionalism that the latter can guarantee and also the level of citizens' participation. In fact, in numerous cases, technocratic bureaucracy, administrative opacity and political arbitrariness render public management inefficient and inaccessible to citizens. On the other hand, we witness an increasing number of forced privatization failure, especially in developing countries, while social mistrust towards these processes is on the increase.

Before envisaging liberalization, local and regional public institutions need to be reinforced by facilitating a profound reform of the public service aimed at increasing participation. It is only through such reinforcement of the technical, social and political competencies of these institutions that the bases of efficient control and/or service management can be developed. Socio-economic efficiency should relate to the priority given to the goals of social cohesion and the fulfillment of citizens' rights. It is with these competencies and this strengthening of the public service that it would be possible to make a choice between public management based on a new participatory model and different possibilities of private management, while guaranteeing necessary regulation.

There are many arguments against the alleged advantages of such market logic and in favour of revitalizing public service according to a new model of participatory public management.

The rigidity imposed by the use of a single network (be it supply or disposal) limits the so-called competition to the process of obtaining a contract; this is competition for the market and not in the market, with the ultimate goal to manage the service as a monopoly based on long-term concessions. Furthermore, the domination of just a few trans-national companies in the market reduces the much sought-after benefits of competition that is practically nonexistent. If the public service is not strengthened, the immense power of these companies, in contrast to the weakness of public institutions, often increases the phenomenon of "regulatory capture". As for citizens' participation, the confidentiality rights

that protect the interests of any company create a lack of transparency and thus render control by the public difficult, even where there are regulatory bodies in place.

In the face of various privatization options for water services, the participatory modernization of public management must be energized with appropriate tariff models that guarantee citizens' responsibility, so that all costs could be covered through a socially oriented distribution system. Another solution would be to use benchmarking methods that ensure public comparison between services in different cities (a competitive, rather than a market formula), and also public market formulas (water banks), which should help modernize public management, including elements of competition, flexibility and economic rationality.

The promotion of citizens' social rights, for these and other services (education, healthcare, etc.) alike, should make it possible to identify and manage the values of fairness and social cohesion with regard to those who do not interest and are not supposed to interest the market. From this perspective, pro-active citizen participation is a key element that must be taken into account.

### **Economic activities of general interest**

The concept of general interest needs to be reviewed from the viewpoint of sustainability. It is unacceptable, for instance, to classify hydroelectricity production as a general interest activity, without taking into account its possible social and environmental impacts. The significant and sometimes dramatic consequences of large dams or the abusive proliferation of small-scale hydropower stations require specific debate on a case-by case basis, in which these consequences must be compared with the obvious benefits of hydraulic electricity, which is a renewable energy source that does not produce CO<sub>2</sub>. In any case, it seems unreasonable to allocate public funds to an activity that proves to be highly profitable in the market. On the other hand, it would be necessary to impose taxes on energy production methods that generate gases contributing to the greenhouse effect or dangerous waste materials.

By the same token, it seems unreasonable to accept irrigation as a general interest activity for the sake of the social interest that may be associated with certain models of family farming, without distinguishing between their different types or environmental impacts. Nowadays, agri-business accounts for an increasing percentage of agricultural production, in particular in irrigation, all the while creating serious environmental problems and providing little value to rural communities in social terms.

Nevertheless, traditional agriculture and especially certain traditional irrigation systems in many countries deserve to be supported as general interest activities, not only for social (basic resources for many communities), but also for environmental reasons (sustainable agricultural techniques). Good practices in family farming that contribute to land sustainability should be developed and encouraged as agro-environmental practices of general interest.

We must encourage a process of social and political re-engineering in the concept of general interest, through broad-based citizens' participation and on the basis of the new assets and objectives implied by the sustainability principle. Frequently the declaration of "general interest" has been used as a way of avoiding debate over controversial projects; now, such declarations must motivate that debate, justifying themselves through pro-active citizen-level participation.

That being said, it is important to specify in what ways public institutions could reasonably support economic activities of general interest. In concrete terms, as regards support that irrigation activities would merit in certain cases, it would be preferable to offer a direct subsidy to the family farm concerned, including a subsidy equivalent to the present subsidy for irrigation water, so as to be able then to require that all users install a counter and pay for every cubic metre of water used. Thus, by paying them entirely what is currently given in the

form of a subsidy in kind (water), the users would be encouraged to use water in a more rational way.

### **Water for business and economic growth**

Today, the water used in private business - including an important part of agriculture - represents more than 50% of all water abstracted from rivers and aquifers in the world. These activities, legitimate as they are, cannot be classified as activities of general interest nor can they be justified in the name of human rights and citizen's rights. Once these activities have been identified, the main problem to solve is the economic rationalization of water management, guaranteeing, through public responsibility, the management of water ecosystems based on strong commitments to sustainability and social fairness.

The need to establish a new economic rationality does not necessarily imply adopting market dynamics. The complexity of socio-environmental values and economic interests at stake on the one hand, and the imperatives of sustainability, on the other, make it advisable to keep under public control the management of water taken from nature for business uses.

The application of the cost recovery principle (required by the EU in the Water Framework Directive) - as a basic criterion of economic rationality - must be clearly accepted for the water used by companies through appropriate tariff policies. As regards this type of use, it is a question of avoiding traditional subsidies across the board, which cause perverse, unfair and undesirable consequences.

The application of this principle usually provokes fierce controversy, especially over irrigation, as it is understood that this could ruin the agriculture of many countries, thus creating social problems and aggravating hunger in the world. Nonetheless, extensive experience of irrigation using groundwater (with exceptions such as India, where the State subsidizes electricity for pumping) reveals that cost recovery, paid by the irrigator, is not only viable but has also stimulated economic efficiency and profitability beyond the usual level for land irrigated with subsidized surface water.

Economic rationalization must promote responsible and efficient use on the part of the user and it must be a tool for scarcity management capable of constructing models of sustainable management, by limiting the availability of this resource, everywhere, within the sustainability limits of ecosystems.

Since we are discussing the economic uses of water, it should be noted that scarcity is a general and inherent characteristic of all economic commodities. From this perspective, the price or tariff must be considered a tool to moderate demand at sustainable levels, limiting the growth of current economic uses in many places.

As far as water used for development is concerned, the application of the cost recovery principle, including the opportunity value of the resource (the rare good value) and the environmental costs must be straightforward and strict, without neglecting, however, social sensibility that should be taken into account in order to ensure the progressive acceptance of these criteria everywhere and in all cases.

### **The emerging new water culture**

The Water Framework Directive heralds a radical change in the approach to water management in Europe. It represents a new ecosystem-based approach driven by new demand management and conservation strategies, in contrast to the traditional approach to managing a natural resource based on supply management strategies supported by massive public subsidies.

Citizens movements mobilized for the emerging New Water Culture represent a positive change but they require a clearer and more active societal commitment based on an ethic

that marries the principles of sustainability and fairness; an ethic that enables them to distinguish the various functions and values of water in order to prioritize fundamental human and social rights over private and market interests without neglecting economic (not necessarily market) efficiency with regard to the purely economic functions of water.

The European Declaration for a New Water Culture, which was signed in Madrid in February 2005 by about a hundred university teachers of all subjects and experts in water management, represents a step forward in this regard.