



WATER AND INDUSTRY: INTERNALISING THE COSTS OF ITS DEGRADATION.

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The welfare and health of people, as well as ecosystems, maintaining its capacity, should be at the heart of any sustainable development strategy. This requires, first, that the biosphere provides sufficient natural goods and services in the long term, not only in the use of sources, but above all, for the use of pollution sinks belonging to the "heritage global environmental "as a new category of" global commons "in addition to services such as the climate system and the systems that support life.

The economies of many countries have experienced a significant increase in the production of goods and services, while enjoying the benefits it brings them, the environment is seriously threatened by pollution and depletion of natural resources also entails , since production is associated, in many cases, hazardous doses waste chemicals (sulfur and nitrogen oxide which, when combined with water vapor originating the "acid rain", for example), radioactive waste waters, toxic fumes, high noise levels, etc..

For individuals, these negative effects result in air can be irritating because the gases emanating transportation and industries, drinking water can be unhealthy, high traffic decibels can damage your hearing, among other problems that may be mentioned.

UN warns about the need for a profound change in patterns of production and consumption if we are to avoid ecological collapse. The measures have to go to the roots of the problem which is in production systems and consumption patterns. But the commitment to a green economy and society should not, nor should they lead to damage to development and social wealth but, on the contrary, sustainable policies are those that guarantee a fairer development model.

Water is a fundamental human need, a human right and an essential element in the maintenance of biodiversity and cultural diversity is a vital resource for the socio - economic and cultural development, and thus for the welfare of the population. It is essential both for life and for industrial, agricultural, etc. . . . As more technological advances are achieved in much of the world the demand for water is increasing generating, therefore, the shortage of available water. Therefore, it is a finite natural resource, strategic, fundamental to human existence on the planet, and as such, it is necessary to preserve the quality of surface water sources and groundwater, prevent deterioration of the courses water and pollution. Water is not a commodity, but has an economic dimension, is, above all, a natural resource necessary for survival, not only of man but of all ecosystems, and social well-qualified is a public domain can not left in the hands of the market.

The most obvious device to influence environmental issues is that of voluntary changes in behavior, whether companies or individuals. However, the limits of these changes are very large because, in the case of the first, solve or reduce environmental impacts associated increased costs and therefore lower profits, which are its reason for being, and in the case of citizens can not be expected that most systematically slaughtered when they act as consumers, since it is very difficult to resist what one economist called "the tyranny of small decisions" that is, no behavioral changes for his personal contribution to a collective problem is almost negligible.

It can be argued that the State is responsible for the preparation of an environmental policy that protects the environment, but at the same time showing that their actions do not hinder economic activity. Caring for the environment and economic development are closely linked and both are essential to the life of the people; hence, environmental policy must strike a true balance between them. Its design also impacts international competitiveness and may cause disadvantages compared to importers of goods and services not subject to regulation.

The public intervention mechanism is the most common legal regulation, which is to put rules on what companies and consumers may or may not do. Also economic and fiscal instruments are part of the "toolbox" of policies in force, but tools are still considered "difficult". However, environmental taxation is becoming an environmental policy goal as prudent and rational utilization of resources includes the need for sustainable development, based on criteria of efficiency and operating in line with scientific and technical knowledge available and appropriate. The supposed efficiency internalize the costs of environmental degradation on those who cause them to be reflected the social impact of natural resource. The market is bound to show a shortage before the resource is depleted.

The fact is that those who are served free of natural resource use, make a profit from "goods that have no owner": public goods, air, sea, rivers and lakes, others, and therefore are considered resources free use. Goods are characterized by "inclusiveness and indiscriminate supply", when a property is provided to someone provides for all, of "non-rivalry in consumption" which means that when a person consumes does not prevent another it can consume at one time.

In the process of using these resources deteriorate and damage costs are not supported by the pollutant, but by society as a whole. From the point of view, the "environmental costs" are external to the product, as they are supported by all those who consume and also, who does not serve the product.

At present, environmental protection, is articulated through various legal means of administrative law, criminal and civil, but with these three areas of law, it is necessary to include measures projected tax law, which differ from the others by being an economic instrument at the service of the environment.

The European Environment Agency and other international organizations consider that:

1. Sustainability should also be applied to taxation. This premise provides answers to well established and accepted principles of cost internalization "the polluter pays". This principle, enshrined in the Rio Declaration on Environment and Development (1992) states that "National authorities should endeavor to promote the internalization of environmental costs and the use of economic instruments, taking into account the approach that the polluter should, in principle, bear the costs of pollution, taking into account the public interest and without distorting international trade and investment".

2. The principle of "who uses the resources pays" is the conclusion of the State Council's Environment 12/12/1991: "In order to ensure the necessary reallocation of economic resources to achieve sustainable development, all social and environmental costs must be integrated into economic activities, so that they can internalize environmental externalities. This means that environmental costs and other costs associated with the exploitation of natural resources in a sustainable and supported by the provider country should be reflected in economic activities. Among the measures employed to achieve this could include economic and fiscal instruments. "External costs not only refer to those caused by environmental pollution, but also those related to unsustainable resource use and costs required for ecosystem recovery.
3. Main objectives are :
 - Internalization of external costs.
 - High static and dynamic efficiency.
 - Increase revenues for environmental purposes.
 - Creating environmental and economic benefits.
 - Changes in systems and production and consumption habits. Market signals.

According to Pablo Gutman⁽¹⁾ economic incentives may be more effective than regulation because instead promote self-control and instead of the fixed obligation (follow the law) propose a mobile financial incentive that promotes improvement.

Pollution, in general, is not resolved by decree, setting emission standards only by imposing the obligation to submit an affidavit, applying sanctions, etc. Environmental decision relates to economic convenience. Consequently, an environmental standard should include economic instruments to encourage compliance, or be supplemented by another standard for this purpose, so that the costs of such compliance are included in the economic equation pollutant, computing also externalities.

Over time, countries (France, Germany, Holland, Denmark, Spain, Autonomous Communities, Poland, Malaysia, United States, Colombia, Brazil, among others) are making greater use of environmental taxes and are designing them closely with environmental issues involved.

To Cela Arizkun⁽²⁾ goals green taxation can be summarized into two main sections:

- 1) Modify the behavior of the agents.
- 2) Obtain funding for environmental activities.

Changing business costs or final product prices to some extent alter the behaviors of entrepreneurs or consumers. From the point of view of employers increased costs, the tax levy the use of a resource, can lead to the replacement of the resource by another or modify production processes to reduce their use. If the tax is levied on polluting practice, increasing input costs can lead to techniques that avoid or lessen. From the point of view of the consumer, the higher price of the product may direct their demand to other goods with less environmental condition or to forgo their use .

Also consider that taxes that promote business practices to save resources or employment of less polluting technologies may have less difficulty accepting or even entrepreneurial support if they lead to a reduction in business costs .

The application of fiscal instruments supports the free individual decision in productive activities or consumption, but with penalties or incentives that influence these decisions.

In Argentina the various tariff regimes for different uses of water, according to the Report on Water Management in Argentina⁽³⁾ are far to integrate the concept of economic value of water. Rates are barely sufficient to cover the costs of operation and maintenance of water systems. In general, provincial legislation recognizes three main types of taxes: usage fees or discharge; remuneration fees or service fees and contributions for construction of improvements.

The collection of "usage fees" is little widespread water except for certain industrial uses strong sectors of the economy such as oil exploration, while charging "fees for polluting discharges" application and acceptance is more widespread. The rate structure adopted is simple type, with annual unit charge discharge volume that varies with the type of polluting industry or a more complex type, such as that prevailing in the metropolitan area of Buenos Aires -decree 674/88 and amendments- in which the amount payable is determined based on the weighted load and concentration of pollutants .

In the sanitation sector, the fees for the services provided by government agencies are not based on consumption, following the criteria imposed by the then National Health Works. The system creates cross-subsidies between different sectors of purchasing power, while conditions of inequality between users and discourages the use of water. The rates have historically been set by the political power for each jurisdiction, even in cases of private companies. No company has the autonomy to set their rates, as they must bring to the attention of the enforcement authority, the price adjustments and is the latter that are approved.

In the opinion of the authors of the report "... The Argentina still has a long way to go, to recognize and fully appreciate the economic value of water. The same applies to the explicit inclusion of externalities or negative environmental costs involving the mishandling of the same ..."

In the province of Santa Fe, the Law 11220/94 for regulating the provision of public drinking water, sewage and sanitation- force -not envisage the use of economic instruments in particular environmental tax- related discharges of industrial establishments based in the province. But other legislation, among other things, about the quality standards, concentration of substances and volumes of "industrial waste" (Annex B) and Title V refers to protection against pollution of the environment and natural resources, including a system of offenses and penalties as well as the power to establish "rollover rights tributaries and industrial substances" to natural water courses in the province. Respect of these rights has not been possible to obtain information.

For its part the project "Water Act Santa Fe" in Book III of "Control activities related to water resources", Title I: "Impact on the environment by water and by human action", Chapter I: "water Resources protection" legislation on the water authority, the degradation, the change in regime or water quality, environmental protection of water intake works, discharges into streams, networking, allowable discharge limits, among others.

FINAL THOUGHTS

The tasks required to successfully manage the water can not be carried out only by technical and bureaucratic strata, but require understanding and support of the Company, both through the acceptance of the rules of use, and actively participating in idea generation and implementation of measures aimed at proper management of the water resource governance can be improved with more effective management of available water resources and the current and future uses of water and greater information to consumers, stakeholders and those responsible for making decisions about the consequences of the actions taken (or not) to address these problems .

Industrial development requires water as one of its basic inputs. In turn, produces liquid effluents whose provision is a source of pollution of surface and ground water resources. The industrial sector has a substantial role in improving the quality of life for people today and for future generations and at the same time preserving our natural resources and the environment. This represents important responsibilities to ensure that industry understands and respects the multiple needs both in the products and services it provides and in the way in which it operates.

The sector has constant opportunities to improve resource productivity and reduce the generation of waste (management life cycles and ever cleaner production, are tools to be used in this context). It is necessary for governments and companies generally encourage it. The fair and effective implementation of the principle that "the polluter pays" principle, the implementation of more preventive measures and compliance with international agreements are essential to meet these objectives.

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