

Network for Cooperation in Integrated Water Resource Management for Sustainable Development in Latin America and the Caribbean



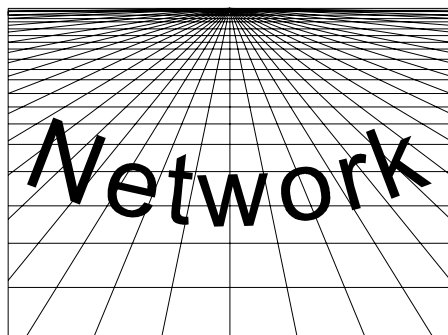
United Nations Economic Commission for Latin America and the Caribbean (ECLAC)

N° 26

November 2007

CIRCULAR N° 26

The negotiation of international investment agreements — bilateral, regional or multilateral — has become an increasingly complex task. What was once considered a simple agreement of limited legal importance — many negotiators have themselves labelled them as photo opportunities — is now clearly understood as a very significant act of treaty making. The substantive rules of international investment agreements set real limits on developing countries', and also developed countries', policy space. Because of this, and also because of the gap between domestic law principles and international investment principles, there may be negative impacts on domestic governance.



In recent years, there has been a dramatic increase in disputes arising out of international trade and investment protection agreements. The precise number of such disputes is unknown, partly because of the secrecy of many proceedings, but it is currently estimated that there have been over 200 cases of foreign investors taking governments to international arbitration tribunals.

Many of these cases relate to the Americas, and the ones with the greatest economic magnitude concern investors in infrastructure sectors and public services. Consequently, investment protection agreements have important consequences for sustainable development and the management of natural resources, especially water, which are essential inputs for the provision of public services. There is therefore an urgent need to expand and improve countries' capacities in

terms of negotiating such agreements and taking part in disputes arising out of them. Among the key capacities needed are:

- Understanding the state of the art in international investment law.
- Knowledge of the workings of the investor-State dispute settlement processes.
- Awareness of current trends in investment protection agreements.
- Understanding the reasons for the emergence of those trends.
- Ability to identify national objectives in the area of international investment.
- Developing negotiating skills to be able to achieve these national objectives.
- Understanding compliance issues under existing investment protection agreements.
- Identifying best practices in regulatory law and legal loopholes and shortcomings in national systems.

Some of the countries of the region have experienced and effective negotiators, but others have weaknesses in that area. As a result, investment protection agreements may be negotiated by inexperienced officials or external consultants. Similar issues arise in the context of defending against international arbitrations initiated by investors under existing agreements. This is complex litigation under a legal system that is usually foreign to the experience of public officials. Such litigation requires an array of skills that include:

- Administration of the international arbitration formalities.
- Strategic planning for the arbitration, including the selection of arbitrators.
- Pre-trial negotiations and alternative avenues for dispute settlement.
- Understanding of the evolution of the case law.
- Working with the rules of evidence.
- Legal drafting and oral arguments skills.
- Strong team work skills with multiple partners.

The lack of trained legal staff often requires recourse to outside legal expertise at

very high cost, but the alternative of not using qualified lawyers is even more risky now, with several arbitrations yielding awards against governments of US\$ 100 million and more. Another area where training is necessary is the implementation of investment agreements. Indeed, it is the lack of internal government capacity to understand and respond to the agreements that often creates the very kind of problem that leads to the arbitrations in the first place.

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Thus, there is a growing need in the Latin American and Caribbean countries for capacity-building in both negotiation and arbitration, a task which the ECLAC Natural Resources and Infrastructure Division has already begun by organizing meetings of experts, cooperating with other organizations concerned with this issue (such as Social Vision of Water in the Andes of Bolivia, and the International Institute for Sustainable Development (IISD) and the International Development Research Centre (IDRC) of Canada), providing technical consultancy services to the countries of the region, organizing the course described below under "Courses", and producing the document "Revisiting privatization, foreign investment,

international arbitration, and water” prepared by Miguel Solanes, ECLAC Regional Advisor on Water Resources Legislation and the Regulation of Public Services, and Andrei Jouravlev, Economic Affairs Officer of the Natural Resources and Infrastructure Division, which is due to be released in late 2007.



The Natural Resources and Infrastructure Division, through Miguel Solanes, has cooperated with the governments of several countries of the region in the formulation of new regulatory frameworks for drinking water supply and sanitation services. The presentation of lessons learned from this experience began in the previous issue. On that occasion, the discussion focused on the current situation in the sector, interjurisdictionality and subsidies. The present issue will look at the following subjects:

- whether regulatory frameworks should be established by laws or decrees; and
- the implications for the formulation of regulatory frameworks of conflicts of interest, transfer prices and undue influence.

Law or decree?

- Given the magnitude of public interests linked with drinking water supply and sanitation services, and the need to clarify complex and controversial issues, regulatory frameworks are best established by means of laws rather than decrees. This also has advantages in terms of the solidity of the legal structure of the system, the breadth, seriousness and depth of the debate and the clear interest of the government and other political forces in a subject which is vital for the well-being of the population, environmental sustainability and socioeconomic development.
- For a regulatory framework to function effectively, the regulatory body must have access to relevant, reliable and consistent information, enabling it to exercise proper control over the costs of inputs, products and services. A law will be a stronger

guarantee than any agreements entered into by the regulatory body itself. Furthermore, in federal systems, a law of national scope can set up a general system for the exchange of standardized information among regulators.

- The fact that a company is state-owned does not rule out potential conflicts of interest in the areas of contracts and transfer prices; it merely changes the identity of those who would benefit. Although systems of incentives may be adopted as mechanisms to promote appropriate behaviour, they should be complemented by personal, pecuniary and criminal sanctions, with joint and several liability when violations involve more than one offender. This system would be more robust if it is based on a law.
- In federal countries, public health problems are not confined to a single local jurisdiction. A federal law can create a system whereby other provinces or states may choose to adhere to the regulatory framework.

Conflicts of interest, transfer prices and undue influence

- A regulatory framework for state-owned companies is something that has considerable similarities with the regulation of private firms, but also differs considerably from it. Efficiency incentives in private firms, and the means of managing them, are different from those in the public sector. A private firm has an incentive to be efficient in relation to its shareholders, even if it is not socially efficient. In the case of a state-owned company there can be incentives in terms of personal gain, not for its owners but for its employees, who can take advantage of their functions to profit themselves from transfer prices, wage increases, overstaffing, contracts with undue influence, or overpricing.
- The issue of how to regulate such companies is open to speculation. There is no doubt that the controls applied normally in state-owned companies are relevant, but it is also undeniable that the specific nature of drinking water supply and sanitation services will require specially-designed measures.
- In high-quality regulatory systems, the roots of regulatory texts lie in the criminal law, with prohibition and penalty structures. Private individuals may initiate legal proceedings in response to infringements of that legislation. This is complemented by a system of objective responsibilities relating to financial matters, especially against corporate offences. Objective responsibility applies where it is expressly called for by the law, where the social objective of the regulation

provides for such a solution (“regulation for public welfare relating to a particular activity”), where the respondent or the accused is clearly located in the institutional structure in order to prevent regulatory infringements, and where proving the state of mind is difficult and costly. The right of private citizens to initiate prosecutions for offences against the regulatory legislation is considered to be a constitutional right, providing them with safeguards against the inertia or corruption of public officials. This right is fundamental to the strategies of pressure groups defending the public interest. Sanctions may include fines and imprisonment, not excluding civil penalties. In all cases, the punishment must be of a magnitude such that the risk of being subjected to it will eliminate any advantage that might be gained by contravening the regulation. In the case of a public corporation, punishments must be personal rather than institutional in order to be effective. Otherwise, the benefits of the wrongful act would accrue to the offender or the guilty party, and the cost would be borne by the State.

- At the operational level, regulations must be clear and express in the definition of regulatory objectives and of the duties of the officials, board members, employees and legal representatives of the companies concerned. Those objectives should be broadly defined, in order to facilitate the definition of undue acts by the persons concerned as violations of the regulations. Thus, in addition to the traditional concepts of defining institutional goals and the related obligations of staff (to provide the service in an appropriate manner, with regard for issues such as continuity, regularity, universality and non-discrimination) the rules should also expressly provide for other generic duties, at all levels of the organization, relating to the economically efficient provision of services, which means seeking out lowest-cost sustainable alternatives for the consumer; to competitiveness in the acquisition of inputs and the generation of products; and to transparency in the provision of information. It must also be made clear that failure to comply with these duties entails criminal, administrative and civil penalties, applied equally throughout the chain of command, management and all those with direct implementation responsibility.
- It has been suggested that public policymakers, rather than maintaining a position of moral neutrality, should introduce a level of ethics and retribution into regulatory legislation; penalties should apply to individuals as well as companies. In the case of state-owned companies, penalties should apply to individuals, since it is absurd, and somewhat shocking, that

the State should, through one of its own entities, act as a cover for individual offences.

- In mature regulatory systems, the designated entities have certain common characteristics. In all cases, they enjoy a degree of independence and non-interference, whether *de jure* or *de facto*. In many cases, their staff are prohibited from engaging in political activity and enjoy job stability, and the entities are responsible to the legislative power and have administrative independence inasmuch as their decisions can be appealed only in courts of law. This last point is highly important; it is what ensures that, ultimately, the regulator is not the executive branch acting through administrative channels. The recent history of regulation in some of the countries of the region provides a number of examples of executive interference with the regulatory body, usually to the advantage of the regulated companies. A similar danger should be anticipated for the future, eliminating the possibility of administrative appeals, which favour capture.



Presented below is the contribution of Gonzalo Delacámara, professor in the Department of Economic Analysis and Coordinator of the Environmental Economics Group, University of Alcalá (Madrid, Spain), on the *provision of public goods and water*.

When dealing with public goods, decision-makers are faced with an apparent contradiction. Were any of the consumers of the public good to be asked if they would be prepared to pay for its continued use, the response would probably be unanimously negative. Where is, therefore, the contradiction or surprise? It lies precisely in the fact that the most likely response will be that, even in the case of those who are already paying more than they would for access to the public good if costs were to be shared out. This apparently irrational behaviour is justified precisely by the very characteristics of the public good.

The nature of public goods combines joint supply (an individual consumes the good in question and that does not prevent others from doing so, the so-called non-rivalry of consumption), and the impossibility of price exclusion (it is not possible to deny access to the good for other individuals through the payment of any amount). In cases of congestion (that is, situations where the density of users becomes a restriction on the amenity of the good), they become impure

public goods. Otherwise, provided that the two aforementioned characteristics apply, one can refer to pure public goods.

Incentives to pay for the use of a public good are scarce to nonexistent: to pay is to accept the existence of the "free rider" problem. This behaviour appears when some people are dishonest in declaring their marginal benefit: by stating a lower level of marginal benefit they can obtain a slightly lower level of the public good, but pay nothing. There are two circumstances which may aggravate the problem: the anonymity in which such people take shelter and the high number of individuals in those circumstances. It should be recalled that there are rational incentives for everyone to engage in such behaviour although, if everyone were to do so, everyone would lose out. Non-payment, furthermore, does not prevent the individual from enjoying the good. Public goods, therefore, are not rationed, but must be provided freely. Also, the marginal cost of allowing another person to benefit from a pure public good is zero, whereas the marginal benefit resulting from the consumption of a higher level of the public good is positive.

It should be noted that public goods are not necessarily free of charge for society as a whole; in other words, it is not possible to charge directly for its use and enjoyment, but its provision involves a production cost which has to be borne indirectly (through taxation, for example). A public good can also be provided by the private sector; to take one example, the quality guarantee of water and sanitation services in any municipality, provided by a private firm under a concession contract. The key issue is to determine who is to solve a problem with an unsatisfactory allocation of a public good: those who cause it or those who are affected by it? In any case, it would clearly be complicated to establish a system of payment for environmental services associated with particular public goods, such as the water quality in a river or local air quality. This is because it would clearly be impossible to deny access to that public good for those who are not bearing the proportionate cost which, as previously mentioned, is to be borne by society as a whole to ensure a certain level of supply.

In more specific contexts, the two characteristics involved in the conceptual definition of a public good contribute to the fact that, for example, the owners of land incorporating valuable natural habitats (part of a wetland, for example) receive no payment for the environmental services they provide. Thus, there are no economic incentives for the conservation of such land in the face of competitive opportunities for its use for productive purposes, such as irrigated agriculture, or the exploitation of the natural resources it offers, such as the felling of

primary tropical forests for the sale of noble wood on the world market.

Thus, natural spaces provide a series of exploitable resources which can generate an income flow for their owners. This is true, for example, of the Panamanian forests which, in addition to having an extraordinary level of biological diversity, helping to reduce the concentration of greenhouse gases by fixing carbon as part of the photosynthesis process and contributing to soil stability and the water cycle, are also a source of timber with an obvious market value that is reflected on the world market. These same natural spaces, in addition to providing marketable resources, also have a number of alternative uses, generally of a productive nature, as is the case with agricultural development.

The absence of markets in which to obtain the ecosystem services offered by various natural resources is one of the fundamental causes which, from the viewpoint of economic analysis, does explain the trend in the pace of environmental damage. The owners of natural spaces (that is, citizens whose right to use and develop them is recognized by society) receive no income in exchange for positive externalities generated by such spaces; this is not the case with the exploitation of the resources contained in those spaces or the use of land for alternative purposes. Thus, the opportunity cost of conserving natural spaces is very high for their owners; faced with the choice of exploiting or conserving those spaces, they choose to exploit them, in accordance with the principle of economic rationality.

It might be thought that the absence of prices receives too much attention, but their absence is in fact more important than might be thought. From an idealized viewpoint, prices contain critical information on the value of environmental goods and services: on the one hand, the priority attached by an individual or by society as a whole to the needs which are satisfied by those goods and services, and on the other, the necessary sacrifice in order to meet those needs.

Is water a public good?

The first thing to be recognized is that there is some confusion between the legal status of water as a good in the public domain and its occasional consideration as a public good in the economic sense. Two basic characteristics make it an economic good: its relative scarcity (the fact that it cannot simultaneously contribute to two competing uses) and its ability to provide utility (contributing either directly or indirectly to individual well-being). The issue of whether it is a public good does not appear to be very important. To analyse the question in some detail: too much importance is often attached

to goods, not realizing that what truly contributes to well-being is not always the good itself, but one of its characteristics.

This is not always the case, but it is true for water. Water, as such, is not a public or private good, although there are some nuances that should be taken into account. In practical terms, some of its attributes may effectively be considered as private goods, mainly in its distribution. What makes an economic good become a public good is, as mentioned above, the convergence of joint supply (one person's consumption does not compete with that of others) and the impossibility of exclusion by means of the payment of a certain price. Obviously, when a person acquires a (private) water right, he or she is appropriating some of the characteristics of that good, making it a strictly private good. There are nonetheless some attributes in which the theoretical conditions for a public good can be found; such as those relating to water quality, measurable on the basis of physical, chemical, biological and geomorphological parameters. That is not the only confusion in relation to water: it is generally categorized as a renewable natural resource, but the truth is that on the spatial scale, water is a strictly non-renewable resource; this is reflected in the exhaustion of aquifers or the concept of fossil water.

What can be stated without any doubt is that water management should not keep quality and quantity considerations separate — indeed, this warning seems to be more critical than discussions on whether water is a public good. The economic analysis approach to these matters is particularly revealing: for example, if a particular volume of water were exactly equal to another but located at a different point in a river basin, it could always be stated that the two volumes of water are completely different from an economic viewpoint. The one located upstream will by definition have more potential energy and be able to generate, for example, one kilowatt-hour of electric power, among many other alternative uses. At the mouth of the river, the other volume of water would have almost zero potential energy. Does that mean its value is less? It does not, as this article will seek to argue.

As we see all too often, most analyses of water resources management are conducted on the basis of a very narrow view of the value of water. From a strictly economic viewpoint (that is, considering efficiency in resource allocation), society should seek to ensure that needs which are satisfied through a particular use of water are no less than those which are sacrificed because of its unavailability under the same conditions in terms of factors such as time, geographical space, gradient, salinity and quality. In other words, it is important that they should have no less value for society

as a whole. It is obvious that water is a basic need; thus, its primary function of maintaining life dominates all others. In Latin America and the Caribbean, which possesses a large proportion of the world's water resources and shows rates of domestic connection to drinking water supply networks of 90% for urban areas and 45% for rural areas, that is not always the problem of social decision-makers, at least in the cities; rather the challenge is to manage access to the resource for competitive or exclusive uses, which do not have that vital nature. This goal demands attention to the resource's various functions in the water cycle and, at the same time, to the economic and social value associated with each of those functions. Economic value tends to be reflected in the benefit produced, directly or indirectly, by each function of water for the various individuals who use it. This seems to be the crux of the most important matter: what should be the benefit in each case, for each decision?

Financial rate of return is that which is reflected in a positive cash flow (or the reduction of a negative cash flow) for the owner of the resource generating it or the person recognized as entitled to its use and enjoyment (for example, a Chilean farmer or a private company responsible for providing drinking water and sanitation services under a concession). It therefore affects a legal or natural person and is determined by the explicit market valuation in respect of the functions performed by the resource and which can be exclusively appropriated by its owner (hence the condition of a private good). Economic rate of return, on the other hand, refers to how water, in performing its various functions, affects the welfare of society as a whole, when all persons have the same status in relation to that welfare. The economic rate of return goes beyond the financial rate of return because it includes all the externalities produced by the presence of the resource for economic agents other than its owner. Lastly — and this is not a trivial consideration if attention is paid to the need to manage water on the basis of criteria not only of efficiency but also of equity — social rate of return relates to the impact of water on social welfare when the well-being of each individual is given a different weighting, in terms of certain particular characteristics which are seen as important (for example, the relative degree of poverty).

Summary

From an economic viewpoint, many of the characteristics of water result in its being considered as a private good: for example, it can be divided almost infinitely, it can be stored, it can be private property, it can be sold on a market — the right to its use or enjoyment can be sold, but so can bottled water. From the ethical viewpoint of the right

to life, for which water is an essential good, it could be said that the right to access to water of a certain quality should be recognized for all the people of the world without any kind of additional consideration. Thus, the public good characteristics of water are essentially derived from the need to ensure that water of a specific quality is available for every use and as accessible as possible.

It is true that there is much confusion concerning the relationship between the legal definition of water and its economic conceptualization, between the ownership recognized by most water laws, and the characteristics which lead to water being identified as a public good — a definition which, as argued above, relates not to the ownership of the good but to its dynamics in terms of supply and demand. It appears to be clear that when water does not contribute directly to a utility or welfare function but serves indirectly as an input or production factor, the management of the resource should not reproduce the mechanisms of institutional regulation, definition of rights and allocation or provision of water understood as a public good, since this practice has led to countless problems.

Economically, water has a dual function: the main one is that of a stock, a determining factor in the configuration of ecosystems and a true public good which satisfies rights and needs for public use and service; the second is that of a natural resource which is available for a number of productive functions for obtaining goods and services; that is, a (capital) stock with the ability to generate flows. In both cases, water continues to have a unique legal nature (as a good in the public domain) but it appears that this unique ownership status should not necessarily affect its institutional management and the definition of rights, always with the goal of maximizing the social rate of return on the resource.



By Act N° 26,168, published on 5 December 2006, Argentina created the *Matanza-Riachuelo River Basin Authority* as an

interjurisdiccional public entity, coming under the Environment and Sustainable Development Secretariat. The Authority is made up of eight members. It is chaired by the head of the Environment and Sustainable Development Secretariat; there are three representatives of the executive branch of the Government, two of the Province of Buenos Aires and two of the City of Buenos Aires. The components of the Authority are: (i) a Municipal Council, made up of representatives of all the municipalities located within the areas involved, for the purpose of assisting, advising and cooperating with the Authority; and (ii) a Social Participation Committee, which comprises representatives of organizations with interests in the area, and has an advisory role. Also established is an Environmental Compensation Fund, managed by the Authority and mainly designed to protect human rights and prevent, mitigate and remedy environmental damage. The Authority has regulatory, monitoring and promotion powers in relation to industrial activities, public services provision and any other activity having environmental impact in the river basin. It can take administrative measures for prevention, clean-up, and the restoration and rational use of natural resources. In particular, it is empowered to:

- Unify the rules applying to the discharge of effluents into water bodies and to gaseous emissions.
- Plan the environmental management of the area.
- Establish and levy charges for services provided.
- Conduct any legal action or administrative procedure necessary or desirable in order to implement the Comprehensive Plan for Pollution Control and Environmental Restoration.
- Obtain and administer the funds necessary for implementing the Plan.



The new *Water Act* adopted in the Bolivarian Republic of Venezuela was published in the Official Gazette on 2 January 2007. Under the Act, integrated water management includes, among other things, all technical, scientific, economic, financial, institutional, managerial, legal and operational activities relating to the conservation and management of water in the public interest, taking account of water in all its forms and the associated natural ecosystems, the river basins in which they are located, the actors involved and the users' interests, the various geographical levels of government and environmental policy, of territorial management and of the country's socioeconomic development. The Act states

that integrated water management has the following main objectives: (i) conservation; with emphasis on the protection, sustainable development and recovery of both surface and groundwater, in order to satisfy human and ecological needs and meet the demand resulting from the country's productive processes; and (ii) prevention and control of possible negative effects of water on people and property. The Act also sets out the following principles governing integrated water management:

- Access to water is a fundamental human right.
- Water is vital for life, human well-being and social and economic development, and is an essential resource for the eradication of poverty; it must be managed with respect for the integrity of the water cycle.
- Water is a social good. The State shall guarantee access to water for all urban, rural and indigenous communities according to their requirements.
- The river basin is the basic territorial unit for integrated water management.
- Integrated water management is to be conducted in a participatory manner.
- The use and exploitation of water must be efficient, equitable, optimal and sustainable.
- Water users shall contribute collectively to river basin conservation in order to ensure the quantity and quality of water across time.
- It is a basic duty of the State, with active participation by society, to ensure the conservation of water sources.
- To protect the country's sovereignty and national security, the exploitation of water may not be entrusted to foreign corporations which do not have their legal domicile within the country.
- Water, as a public good, may not be part of the private domain of any legal or natural person.
- Water conservation shall take precedence over any other economic or social interest.
- Water is part of the natural heritage and the sovereignty of peoples and thus represents an instrument for peace among nations.



The *Fifth Brazilian Congress on Regulation* was held from 6 to 9 May 2007 in Recife,

Brazil, organized by the Brazilian Association of Regulatory Agencies (ABAR). The Natural Resources and Infrastructure Division was represented by Andrei Jouravlev, who gave a presentation on consumer participation in the regulatory process.

The presentation stated that there were two main factors in the crucial importance of consumer participation. First, the goal of the regulator is to protect the public interest, which includes, but is not limited to, the interest of the consumers. The regulated companies, both public and private, pursue their own interests. Consequently, in order to balance the interests of all parties involved, the regulatory process must involve participation by someone who can represent the particular interests of consumers and counterbalance the pressures and arguments of the companies. Second, in modern economic theory, the issue of regulation is basically understood as a problem of control in the framework of asymmetric information between the regulator and the regulated companies. From this perspective, consumer participation can help to lessen the asymmetry of information and serve as a channel to present to the regulators information favourable to the consumers, and thereby influence their decisions. Otherwise, the regulated companies would dominate the regulatory process by controlling information.

The experiences of countries with mature regulatory systems suggest that, in order for consumer participation to be a useful source of information and to play a constructive role, two main conditions must be met. First, consumer participation in the regulatory process must be institutionalized. This means, as a minimum, that consumers must: (i) be notified with sufficient anticipation on the initiation of regulatory decision-making processes which concern them; (ii) have the opportunity to formulate and put forward their viewpoints, which must be duly taken into consideration by the regulator; and (iii) be informed of the final decision and the reasons underlying it, and have the right to appeal it. Second, consumers must have the right to organize themselves, have timely access to accurate and appropriate information, and have sufficient (financial, professional, etc.) resources to carry out their work properly. In countries that have a long tradition of public service regulation, governments generally finance consumer participation in the regulatory process, either directly (for example, through payments to consumer organizations so that they can hire experts and conduct their own research) or indirectly (for example, through the creation of special bodies to represent consumers' interests and provide technical and other assistance to their organizations). To help consumers to organize themselves and collect their own funds, it has proved useful to allow them to insert into

utility bills an invitation to join or contribute to an independent organization to represent their interest before regulators, the courts and legislatures.

The Experience of Water Management in the Southern Cone

Through the work of Miguel Solanes, the Natural Resources and Infrastructure Division cooperated in the holding of “*Global Dialogues: Water and Urban Development*,” held by videoconference and organized by the Faculty of Architecture, Design and Town Planning of the University of Buenos Aires, Argentina. The meeting’s overall objective was to generate areas for discussion and consensus on issues related to social and economic development in urban areas, with approaches that can lead to increased sustainability, with improvements and transparency in urban management. There follow the conclusions of the presentations made in the module “*La experiencia de la gestión del Agua en el Cono Sur*” (*The Experience of Water Management in the Southern Cone*) (20 April 2007), by Miguel Solanes (“*Experiencia de 15 años*” (*Fifteen years of experience*)), and Emilio Lentini (“*La experiencia de la gestión del agua de Buenos Aires. La experiencia del control del servicio y la actual coyuntura*” (*Water management experience in Buenos Aires. Experience of service supervision and the current situation*)), representative for South America of the Research Group “Res-EAU-Ville” of the National Centre for Scientific Research (CNRS) of France and Sectoral Economy Manager for the Tripartite Body for Sanitation Works and Services (ETOSS), Argentina.

Fifteen years of experience

- Drinking water supply and sanitation services are local consumption goods. If local economies cannot generate, through wages and taxes, sufficient resources to pay for those goods, foreign investors would not of themselves contribute additional financial resources, and so the services would not be sustainable.
- Government priorities are very important. Without subsidies for the poor, whether direct or in the form of cross-subsidization, the services cannot be socialized. Political priorities are reflected in government budgets, not in statements to the press.
- Efficiency reduces the cost of providing services. Low costs imply better affordability and greater opportunities for use. The most common inefficiencies are transfer prices, excessive debts, overstaffing and the loss of economies of

- scale and scope, as well as transaction costs. By artificially raising the cost of service provision, inefficiency is harmful for equity.
- In many cases, reforms encounter difficulties and fail owing to the lack of local or national conviction, their forced external imposition, or capture by corporations, trade unions or bureaucracies.
- Governments should impose appropriate regulation on both private and state-owned companies, based on the notions of fair and reasonable rate-of-return, good faith, due diligence, the duty of efficiency and the transfer to consumers of the benefits of efficiency. Artificial guarantees and protections such as guaranteed exchange rates increase the moral risk of inefficiency and failure because they give unsustainable assurances.
- Most of the region’s privatization processes have failed to take account of the structural limitations of national economies and the principles common to the countries with relevant experiences in the area of public interest, water and public utility regulation. In many cases, these problems have been caused by an excessively mercantile viewpoint, as a result of which foreign investment protection treaties tend to focus on certain issues, ignoring the socioeconomic context and the characteristics of the privatization processes.

Water management experience in Buenos Aires

The main lessons learned from the period of private provision of water supply and sanitation services in the metropolitan area of Buenos Aires, Argentina, in terms of goals, financing, sustainability and regulation mechanisms, show that it is necessary to:

- Formulate a service development plan which is consistent and sustainable, emphasizing the satisfaction of social demands.
- Define *ex ante* the economic and financial structure of the service, ensuring its sustainability.
- Reconcile future price increases for the low-income population with changes in their ability to pay.
- Promote active State policies to cover financing deficits and provide direct or focused subsidies to the low-income population.
- Implement a rational and efficient charging regime with micro-measurement and explicit and focused subsidies.
- Develop instruments to ensure the appropriate use of resources destined for investment (such as trust funds).

- Improve information systems for regulation and control.
- Adopt purchasing and contracting procedures to improve transparency, competitiveness and efficiency.
- Strengthen community participation mechanisms.
- Disseminate information on the performance of service providers and investment plans.

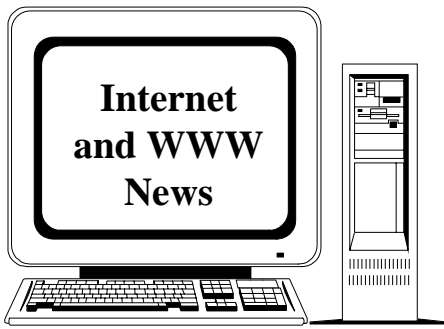
Courses

Course on international investment agreements, water and public services

A course on international investment agreements, water and public services, organized by the Natural Resources and Infrastructure Division, took place at ECLAC headquarters in Santiago, Chile, from 28 June to 6 July 2007, and from 13 to 17 August 2007. The objective of the course was to provide developing country practitioners with the perspectives and skills essential to assist them and their governments in understanding how best to maximize influence and impact in the relevant decision-making forums on investment agreements, inside their own governments, and in international processes of negotiation and arbitration. The specific goals of the course were:

- Enhance understanding of existing and emerging legal and policy issues related to investment agreements in a development-oriented context.
- Improve the quality of participation and outcomes in multilateral investment rule-making processes, including negotiations and arbitrations, by providing key actors with the skills, tools and resources needed to engage more effectively in these processes.
- Improve the capacity of officials to manage investment disputes.
- Promote the exchange of lessons learned and experiences of countries with respect to the management of investment negotiations and disputes.
- Promote increased networking and interface amongst government officials from different countries within the region.

Additional information on the course is available on the web page of the Natural Resources and Infrastructure Division, at <http://www.eclac.org/dmi>.



Useful websites in relation to water management and use include:

- The **Water Institute (INAG)** of Portugal, under the authority of the Ministry of the Environment, Regional Planning and Regional Development, is the national water authority and is responsible for implementing water-resource policies at the national level (<http://www.inag.pt>).
- The **Report of the United Nations High Commissioner for Human Rights on the scope and content of the relevant human rights obligations related to equitable access to safe drinking water and sanitation under international human rights instruments** is available at <http://www.ohchr.org>.
- The **design of aerated-lagoon based effluent treatment systems** is discussed at <http://www.lagunasaireadas.com>.
- The **Corporación Ambientes Acuáticos de Chile (Aquatic Environments Corporation of Chile)** (CAACH) is a non-governmental organization created for the purpose of promoting the conservation and sustainable management of aquatic environments (<http://www.humedalescoquimbo.cl>). The essential mission of CAACH is to promote rational use of such valuable ecosystems, particularly in communities which depend directly on them for subsistence. Its main strategic areas of action are: conducting applied research, coordinating key actors, communication and promoting public awareness, sharing experience and cooperative contacts particularly within Latin America.
- The **Comisión Nacional del Agua (National Water Commission)** (CONAGUA) of Mexico integrates and disseminates basic information on water by means of the periodical publication **Estadísticas del Agua en México (Water Statistics in Mexico)**. The 2006 issue contains eight sections. The first two provide information on the frame of reference for situating the water sector on the national scene. The next three sections report on the water resources situation in Mexico, its uses, infrastructure and the instruments generally used for water management. Given the importance of water for the environment, the sixth section refers to the relationship between water and the woods and forests, ecosystems, and reforestation, among others. The last two sections describe future scenarios and provide information on water worldwide (<http://www.cna.gob.mx>).
- The **Consejo Directivo del Río Cachapoal (Cachapoal River Management Council)** and the **Mesa Ambiental “Aguas Limpias para Colchagua” (Environmental Board for Clean Water for Colchagua)**, Chile, are alliances of private companies and State entities, formed for the purpose of maintaining and improving water quality in the Tinguiririca and Cachapoal river basins (<http://www.riosdeohiggins.cl>).
- The **Corporación del Acueducto y Alcantarillado de Santo Domingo (Santo Domingo Aqueduct and Sewerage Corporation)** (CAASD) of the Dominican Republic is an autonomous public-service body created by Act N° 498 of 13 April 1973. Its essential purpose is planning, coordination, consulting, study, design, construction, supervision, administration, marketing, operation and maintenance of drinking water services and the collection, treatment and disposal of urban and rural wastewater and stormwater within the National District and the province of Santo Domingo (<http://www.caasd.gov.do>). Its Documentation and Information Management Centre (CENDOC) is dedicated to the collection, analysis, description, organization and dissemination of specialized information relating to areas including environmental issues, drinking water services and appropriate disposal of sewage, and environmental health.
- The study entitled **“Groundwater in international law: compilation of treaties and other legal instruments”** by Stefano Burchi and Kerstin Mechlem, published jointly by the Food and Agriculture Organization of the United Nations (FAO) and the United Nations Educational, Scientific and Cultural Organization (UNESCO), brings together a variety of binding and non-binding international law instruments that, in varying degrees and from different angles, deal with groundwater (<ftp://ftp.fao.org/docrep/fao/08/y5739e/y5739e00.pdf>). Its aim is to report developments in international law and to contribute to detecting law in-the-making in this important field. Despite the social, economic, environmental and political importance of groundwater, international law has paid relatively little attention to this resource. While surface water treaties abound, groundwater is either nominally included in the scope of these instruments, mainly if it is “related” to surface waters, or it is not mentioned at all. Only few legal instruments contain groundwater specific provisions, and even fewer address groundwater exclusively. As groundwater quickly emerges from the limelight and gains strategic importance as a source of often high-quality freshwater in the face of the impending water crisis world-wide, the need for rules of international law addressing groundwater management and protection becomes ever more compelling.
- The **Autoridad de Acueductos y Alcantarillados de Puerto Rico (Puerto Rico Aqueduct and Sewerage Authority)** (AAA) provides water supply to 98% of the island’s population (<http://www.acueductospr.com>). Its website contains interesting information on AAA activities, including the text of the Reglamento de Puerto Rico sobre los Servicios de Agua y Alcantarillados (Puerto Rican Regulations on Water and Sewerage Services).
- The **Comisión Estatal del Agua (State Water Commission)** (CEAG) of the state of Guanajuato, Mexico, was set up in 1991 as a decentralized public body, part of the state administration, and was formally inaugurated in 1992. When the Guanajuato State Water Act was passed in May 2000, CEAG was renamed as the **Comisión Estatal del Agua de Guanajuato (Guanajuato State Water Commission)** (<http://www.guanajuato.gob.mx/ceag>). Its work is focused on water planning and support for a number of water-related operational bodies in the state. In recent years the commission’s duties have been diversified, moving towards integrated participation, not only in infrastructure but also in water management, relations with other bodies, and training.
- The **Sistema Nacional de Información Territorial (SNIT) (National Territorial Information System)** of Chile contains registers, reports, products and services relating to the country’s geography, through a metadata catalogue (<http://www.snit.cl>). It also offers visual access to maps and digital cartography through links to various public bodies involved in that national coordination.
- The function of the **Dirección Nacional de Saneamiento (Department of Sanitation)** (DNS) of the Ministry of Housing, Construction and Sanitation of Peru is to strengthen the sanitation sector in the framework of the Government’s strategic objectives and policies, in accordance with the goals of development, sustainability, increased efficiency and productivity in the provision of services, by promoting

recognition of their economic value, the setting of appropriate prices and the execution of investments in accordance with the National System of Public Investment and Private Sector Participation (<http://www.vivienda.gob.pe>).

- Organized by the Government of Guatemala and the Inter-American Water Resources Network (IWRN), the *Sixth Inter-American Dialogue on Water Management* took place in Guatemala City, on August 12-17, 2007. The Dialogue was the most prominent regional event on water management in the region, and it gathered almost 400 participants from a wide array of stakeholders and practitioners from the Americas (<http://d6.iwrn.net>).
- The *Equipo Huarango-Ica (Huarango-Ica Team)* is a non-governmental research group seeking to solve the problems of flooding and mudslides in the Ica Valley in Peru using a watershed management approach (<http://huarangoica.iespana.es>). The group has collected data from almost 300 records of hydrometeorological events in the Ica Valley over an 82-year period from 1921 to 2002. For the department as a whole, it has about 1,000 records in all, for Chincha, Pisco, Ica, Palpa and Nazca.

(LC/W.125), April 2007 (also available in Spanish). The seminar was organized by the Natural Resources and Infrastructure Division, together with the Institute of Sciences and Techniques of Equipment and Environment for Development (ISTED) of France and with support from the French Government (see Newsletter N° 23). The event was held on 18 and 19 October 2005, at ECLAC headquarters in Santiago, Chile. The overall objective of the seminar was to discuss critical regulatory issues in the region in relation to local and international experiences, with a view to suggesting guidelines for dealing with them better in the future. The specific objectives were: (i) to compare different experiences with policies for regulating public services; (ii) to enrich the discussion with different points of view and the perspectives of the local and institutional stakeholders; and (iii) to identify, at the regional level, critical issues requiring further reflection in order to suggest strategies for dealing with them better in the future.

- “*Servicios urbanos de agua potable y alcantarillado en Chile: factores determinantes del desempeño*” (*Urban drinking water and sewerage services in Chile: determining factors of performance*) by Soledad Valenzuela and Andrei Jouravlev (*Natural Resources and Infrastructure Series* N° 123, LC/L.2727-P, April 2007) (available in Spanish only). The experience of the provision of drinking water supply and sewerage services in Santiago, and in the other urban areas in Chile, is of interest for two main reasons: (i) high levels of coverage and efficiency achieved in the public sector provision of those services; and (ii) the scale of investments and the absence of significant regulatory conflicts or the ability to settle such conflicts quickly and pragmatically once the private service provision model was established. The purpose of this study is to identify the

main factors which have influenced service provision in urban areas in Chile, particularly in the city of Santiago, with a perspective applicable to other countries in the region. The analysis centres both on factors endogenous to the drinking water supply and sewerage sector (such as institutional and industrial structures, private sector participation, regulatory frameworks, policies in relation to financing, tariffs and subsidies, sequencing of the reform process and phasing of economic, social and environmental objectives) and on exogenous factors (such as macroeconomic policy, social situation, the place the sector occupies in the political priorities reflected in government decisions, and water and environmental management policies). Particular attention is paid to the impact of macroeconomic policies on the sustainability patterns of the services. The document is structured as follows: the first section presents a description of the sector’s historical evolution, seeking to examine its development over a period of three decades, and shows the main results obtained, mostly in terms of performance factors, investment levels and demand behaviour. The second and third sections of the study analyse the main endogenous and exogenous factors which explain the system’s good performance. Lastly, a number of conclusions are outlined.

The publications of the Natural Resources and Infrastructure Division are available in two formats: (i) *electronic files*, which may be downloaded from <http://www.eclac.org/dmri> or requested from Andrei.JOURAVLEV@cepal.org; and (ii) *printed documents*, which should be requested from the ECLAC Distribution Unit, either by e-mail to publications@eclac.cl, by fax from (56-2) 210-20-69, or by mail to ECLAC Publications, Casilla 179-D, Santiago, Chile.

Publications



Recent publications of the Natural Resources and Infrastructure Division related to water management and water utility regulation:

- “*Seminar on the Regulation of Public Utilities ‘Water and Electricity’ (Santiago, Chile, 18-19 October 2005)*”

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