

PUBLIC PARTICIPATION AND WATER POLICY IN PORTUGAL
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Abstract

This paper is intended to show how water policy is the oldest and most important area of environmental public policy in Portugal. Water issues in Portugal are amplified by a set of national and international challenges that the country is currently facing. In addition, water policy provides a good opportunity for public sector initiatives such as those assumed by NGOs. In fact, they contribute to the implementation of environmental legislation and the 'internalisation' of environmental protection measures in civil society.

Environmental policy in Portugal first sprang under the external push forward of the UN Conference on Human Environment (1972) and later under the impact of the country's entry in the European Communities (1986). Public participation around water issues is now leaning toward a more internal, democratic and effective Portuguese environmental policy.

This paper has been divided into five parts: a) Overview; b) Brief political and legal framework of water management in Portugal; c) Socio-cultural constraints and democratic opportunities for public participation; d) A case study on the quality drinking water; e) Critical approach.

1- Overview

Water policy issues precede the introduction of the first indicators of environmental concerns in Portuguese public policies at the national and the regional level.

Looking back to the twenty-five years which separate us from the establishment of the first government body -- aimed at co-ordinating sketchy and primitive environmental matters i.e.-- the National Environment Commission (1971) or instead, looking ahead to the near and long-term future, we are forced to admit that in both cases water policy issues were, and will continue to be, a core element in the construction of a sustainable Portuguese development strategy.

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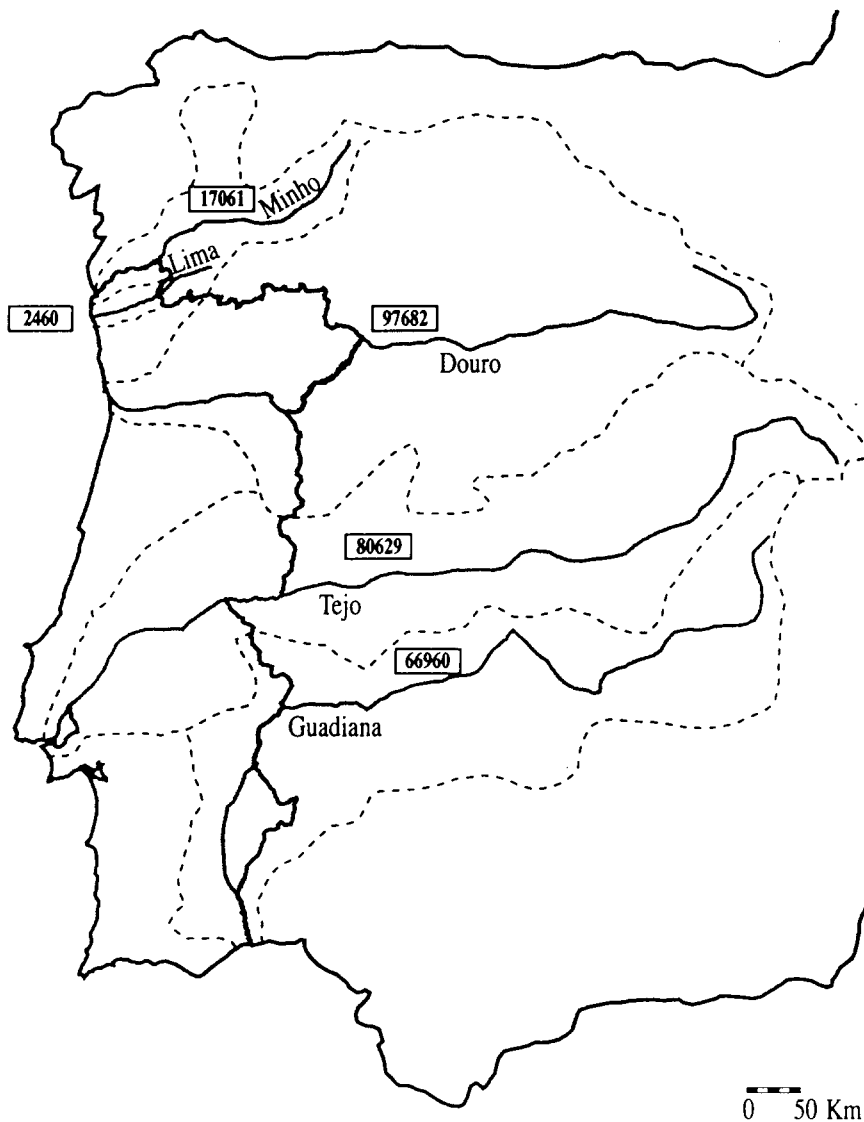


Fig. 1-Portuguese-Spanish shared river basins with areas in Km2 (adapted from Cunha et al, 1980 and Correia & Silva, 1996)

Fig. 1-Portuguese-Spanish common river basins with areas in Km2 (adapted from Cunha et al, 1980 and Correia & Silva, 1996)

Analysing in general the natural conditions and constraints upon which the Portuguese water policy is based, three main factors must be stressed:

- Remarkable amount of global available resources (7,700 m³/per capita/year).
- Striking difference between North/South regions, considering the Tejo river as the geographic border line. The southern areas are influenced by the Mediterranean climatic characteristics, given, in particular, the occurrence of cyclic droughts and severe water shortage periods.

- Similar to other EU downstream countries, like the Netherlands and Belgium, Portugal depends on the annual discharges generated in international rivers. In the specific geographic and political conditions of the Iberian Peninsula, the status of Portugal's downstream implies a strong dependence on Spain with which Portugal shares the river basins of five major rivers: Minho, Lima, Douro, Tejo and Guadiana. Near 56% of the annual discharges of available water resources in Portugal have their origin in upstream Spain (Table 1).

	Population (106)	Area (106 Km2)	Resources (Km3/year)	Specific drainage	
				(l/person/day)	(mm/year)
Portugal (including tributaries from Spain)*	10	92	64	17500	700
Spain	38	505	114	8200	225
France	57	552	185	8900	325
Italy	58	301	187	8800	620
Greece	10	132	59	16200	450
United Kingdom	58	245	120	5700	490
Germany	81	357	171	5800	480
Western Europe	380	3750	1750	12600	465
Portugal (without tributaries from Spain)*	10	92	30	8200	325

Source: World Bank, World Development Report, 1994.

* includes Azores and Madeira

Table 1

Concerning the structure of water consumption, and despite some heterogeneity in international classification criteria, Portugal registers greater similarities with some less industrialised countries than with its most important EU partners. Agricultural activities, although contributing with a few 4.2% to the GDP demand almost 80% of available national water resources. This huge waste of resources is due both to natural causes and socio-economical shortcomings which are far from being re-directed by current modernisation trends (OECD, 1992: 28-29 and Table 2).

	Drinking water (%)	Agriculture (%)	Industry (%)
France	39	31	30
Germany	33	12	55
Netherlands	44	22	34
Portugal	8	76	16
United Kingdom	77	6	17

Source: Institutional Dimensions of Water Resources Management.
 Comparative Analysis in the E.U. and U.S.A.

Table 2

In 1995, concerning the structure of water supply, 79.6% of the Portuguese population had access to a water supply system. Considering that in 1984 -- two years prior Portugal's entry in the European Communities, this figure ranked remarkably low, reaching only 52%. Admissibly, a positive push forward was accomplished in just a decade. However, Portugal is still lagging behind as compared to the 95.1% average registered in the European Union.

In light of more demanding criteria, as far as what concerns the good performance of water services and the regular and efficient monitoring of the quality of the water, the situation seems highly unsatisfactory. Only 21 % of the population has access to a water service system which may be considered "good".

The lack of basic infrastructures is also evident in the area of collection and treatment of domestic water waste. Only 55% of the population is served by a sewer system and only 21% is connected to an adequate effluent treatment system (MARN, The National Environment Plan, 1995: 13; MARN, Recursos Hídricos, 1995: 97-99).

The National Environmental Plan -- approved in 1995 as a strategic public policy tool to be applied in conjunction with the Regional Development Plan (1994-1999) — considers the shortcomings in water infrastructure an absolute priority. Out of a total of 1, 000 billion P.E. escudos, 460 billions will be channelled to water supply systems (250 billion escudos) and 210 billion escudos to collection, drainage and treatment of effluents (MARN, Recursos Hídricos, 1995: 84).

It must be mentioned here that, in many circumstances, fast investments in water equipment do not often match the positive results expected. For example, in October 1996, a report commissioned by the Ministry for Environment acknowledged that 21% of water treatment plants built during the first wave of European Structural funding — within the first Community Support Plan of 1989-93 -- were out of order and that 45% presented serious construction flaws. Therefore, during the next up-coming years, an invaluable amount of 80 billion escudos will be applied to redress such mistakes.

Municipal and central government management policies have clearly been unable to combine and integrate the essential link that must exist between environmental issues and economic growth.

Among the several surface black spots of water pollution, the following deserve particular focus:

- urban and agricultural pollution sources in the Guadiana river, with its main spring in Spanish territory;
- high level of industrial pollution in the Cávado, Ave, Leça and Neiva river basins;
- partial contamination in the Vouga river basin due to paper industry effluents;
- highly polluted spots in the coastal region between Nazaré and Lisbon due to the absence of adequate treatment of industrial and urban effluents.

Regarding ground water resources, which represent 80% of Portugal's drinking water facilities in operation, the situation could, in part, be described as follows (bearing in consideration that ground water monitoring began only in the last quarter of 1970) :

- severe contamination with nitrates in the Alentejo and the Algarve regions; the latter also suffered serious salinity intrusion given the exploitation of aquifers near the coastal area;
- chemical pollution in Ria de Aveiro, due to an outdated factory complex;
- pollution and exploitation of important aquifers in the Region of Lisbon, the Tejo Valley and in the Setúbal area;
- contamination spots in Ovar/Estarreja, Almada/Seixal and Sines due to serious technical problems and mismanagement in municipal landfills (MARN, Recursos Hídricos, 1995: 86-90).

2- Water management in Portugal. Brief political and legal framework

Public water policies in Portugal began, roughly, in 1892, with the enactment of the Hydraulic Services Regulation (Regulamento dos Serviços Hidráulicos).

Other important milestones worth mentioning -- prior to the April '74 democratic revolution — are:

- 1919: Approval of the first Water Bill (Lei da Água) -- of which some of its chapters are still in force -- which constituted the first systematic and coherent legal set of rules. In order to guarantee its implementation a special police force (guarda-rios) was created with monitoring and enforcing responsibilities;
- 1923: Beginning of the regular collection and study of hydrological and climatic data;
- 1930: Foundation of the Junta Autónoma de Obras de Hidráulica Agrícola, with the specific mission of designing and planning major public works with the purpose of improving the agricultural sector's economic performance;

- 1949: Merging of the Serviços Hidráulicos with the Junta Autónoma de Obras de Hidráulica Agrícola in a new institutional structure, the Direcção-Geral dos Serviços Hidráulicos. Credit must be given to this institution as responsible for having carried out major hydraulic works in Portugal during the 80's. In many instances, however, the highly developed construction engineering skills disregarded environmentally friendly approaches necessary to prevent the negative side-effects of many hydraulic facilities;
- 1964 and 1968: Two important agreements were signed with Spain during this period with the goal of settling existing conflicts on the use of international rivers. These two Agreements were the ending result of other two major Iberian countries' diplomatic successes, specifically the Boundary Treaty of 1864, which in 1926, was extended to other areas not included in the first regulation, and the 1964 agreement aimed at sharing the hydroelectric capability of the Douro river.

Following the 1974 democratic revolution, another factor that contributed to a greater awareness towards water policy issues and political environmental regulations in a broad sense, was Portugal's entry in the European Communities.

Following are the most relevant facts about water policy issues:

- inclusion of several European directives into the domestic legislation related to the official 'internalisation' of environmental concepts, methods and goals (Dec.-Lei , nº 74/90);
- 1993-1994: approval of several legal rules and regulations defining water planning responsibilities and operational timings for both national and international rivers; approval of water management systems; and the economic water regulation, which opened water facilities and activities to the private business sector, etc.;
- 1994-1995: initiation of the water planning process, centred around the river basin unit, with the purpose of preparing the Portuguese Master Water Plan; creation of the first water business companies, mostly state-owned, in charge of the management of all water facilities and tasks at a multi municipal level.

3- Public Participation in Environmental Public Policies Socio-cultural constraints, legal initiatives and democratic opportunities

To fully grasp the complexity involved in public participation in Portugal, attention must be given to some historical and societal conditions that relate to Portugal's -- one of the world's oldest nation-state -- deeply ingrained identity.

By just looking at those explanatory conditions, special emphasis should be given to the following five main characteristics of the recent Portuguese historical trends:

- Portugal can be defined as a country with a very slow 'rationalisation process', according to Max Weber's notion. Example: today, ten years after Portugal's entry into the EU, the country is still registering, comparatively speaking, the same active labour force that Great Britain registered in the agricultural sector at the end of the Victorian Age (9-11%);

- in the last century, the Portuguese population traditional linguistic and cultural identity served as a deterrence factor to the generalisation of an expanded urban public policy literacy. We can detect in this area sharp contrasts with the dramatic national educational objectives carried out by such States as Italy, Germany, and even France after the Revolution;
- the predominant rural features of the Portuguese society facilitated the development of community forms of association, rather than civilian forms of self-organisation. The Gemeinschaft-dynamics prevailed over the Gesellschaft-dynamics of modern societies;
- the lack of a competitive private sector given, to some extent, the artificial maintenance of a huge colonial empire until 1974, which favoured the continuation of an outdated production system;
- the persistence of a dictatorial political regime for almost half a century (1926-1974) prevented regular democratic participation at all levels of the public spectrum.

The April 1974 revolution led to the emergence of legal and institutional conditions required to the reshaping of the Portuguese society towards democracy.

Within the diversified aspects of the Portuguese democratic process, environmental protection concerns spurred the development of non-partisan forms of political engagement and created a large set of opportunities for the exercise of the right of direct participation from citizens and NGOs.

The forms of Portuguese environmental democracy actions are rooted in the following legal framework:

- inclusion in the 1976 Constitution of two main constitutional perspectives: a) the notion of environmental rights and; b) the principle of “peoples' right to action” (direito de acção popular), allowing individual citizens or NGOs to take legal action in matters of public interest, such as environmental protection actions, defence of consumers' rights or preservation of historical monuments;
- the Environmental Law of 1987, which considered that every citizen had a role to play in environmental policy issues, enjoying corresponding rights and duties;
- the Environmental NGO Law, which was designed to promote the capability to independently represent environmental interests without hampering communication channels with democratic political powers;
- the Environmental Impact Assessment Law of 1990, which introduced consultation procedures for citizens in all major public and private construction works with eventual environmental impact;
- the representation of environmental NGOs in the Council for Economic and Social Affairs allowing direct contact with the major participants in the Portuguese political arena;
- the adequate use of a set of planning tools in the multiple aspects of environmental protection which favoured participation initiatives both at national and local levels. Among such planning tools the following are to be considered: a) Municipal development plans; b) national

ecological reserve; c) national agricultural reserve; d) network of natural protected areas (Carius & Soromenho-Marques, 1996: 5).

4- Campaign for Improving the Quality of Drinking Water. A Case Study

One of the most impressive examples of public participation in the Portuguese water policy scenario began with a coalition of two NGOs: Quercus, the most influential environment NGO, and Deco the most representative NGO of consumers' interests.

The campaign to control the quality of drinking water throughout the 275 municipalities in continental Portugal (there are also other 30 municipalities in the Atlantic Islands of Azores and Madeira enjoying political autonomy) was based on an extremely simple but efficient idea: given the impact of European directives, citizens were now able to put pressure on the different state powers to enforce legislation on the quality of the water, a legislation which had already been included in the Portuguese legal system.

Therefore, based on the Law of Environment, NGOs (article 6 of the Law nº 10/78) like Quercus and Deco demanded November, 24th, 1992 the National Institute for Environment (an institution of the Ministry for Environment purposes similar to those of the German Umweltbundesamt) to evaluate the current level of legislation enforcement criteria on the quality of drinking water (Dec-Lei, nº74/90).

Like fire on oil, the NGOs initiative spread throughout all levels of public opinion, discussions turning into a nation wide topic, hitting headline news and prime time TV newscasts, forcing the government and municipalities to increase monitoring actions to regain citizens' confidence.

A tragic sanitary incident that occurred in a public hospital in Évora, five months after the campaign began, provided new momentum to the fight for water quality. Public Health and Welfare authorities, and university labs, supported the action by widening the scope of participation efforts and showing the synergetic dynamics existing in real environmental causes.

As a result of Quercus'-Deco's campaign in their fight for quality in drinking water the following positive aspects are to be considered:

- a dramatic increase in the number of municipalities that answered the annual inquiry on compliance with water quality rules;
- better co-ordination among the several public administration institutions involved in monitoring water quality methods;
- development of private and public technical know-how in the area of monitoring water equipment and facilities;
- a tremendous improvement in the transparency of information treatment methods, giving Portugal a pioneering role in public access to relevant water and other environmental data through the Internet.

5- The Tasks Ahead. A Critical Approach

The major shift in Portuguese environmental policy issues up until the late 80s can be linked to the priority of an external impulse forward, namely, to the challenge of representing the country in the United Nations Conference on Human Environment (Stockholm, 1972) and, at a later stage, the ordeal of adapting the Portuguese Legislation, and above all the Portuguese reality, to the complex conditions of the European Communities after 1986.

Any public policy measures policy will not be sustainable if lying solely on an external source of energy. They can follow that path, but will not register any progress nor will they be able to consolidate their gains in a purely extrinsic path.

The value of public participation in the Portuguese water policy is of crucial importance: it represents part of the global and uncertain efforts of finding and building a sound environmental and sustainable development model: it is of decisive importance to bring about the internal and endogenous driving forces the country needs to integrate the civil society and the public administration, environmental goals that are part of a new social consensus. A kind of new political and social agenda ready to face the titanic tasks of the next century, when structural, environmental and social crisis will be decided.

So, it is legitimate to anticipate four conflicting areas where public participation initiatives, some of them already underway, will play a key role:

- increase in the implementation of further UE legislation, namely those concerning treatment of urban sewage water (Directive 91/271/CEE) and pollution by nitrates caused by agricultural activities (Directive 91/676/CEE). Currently, Portugal is not enforcing them.
- negotiations with Spain in order to co-ordinate water policies in both countries. Spain was able to advance some essential planning and implementation measures in its water policy, creating a *fait accompli* in many hydraulic construction works with negative environmental impact on downstream Portugal (Correia & Silva, 1996: 25). Although the Portuguese government insists in a bilateral approach, there are already some participation trends assumed by NGO like Quercus and April which are giving a more regional emphasis to the several matters at stake (giving way to Spanish-Portuguese coalitions on a shared-interest regional basis);
- drafting of a National Water Master Plan, which is now facing some problems, due in part to the separation between planning and management structures. NGOs are represented both in the National Water Council and in the several river basin councils. The task of defending the public environmental rights against municipal and economic growth interests is obviously difficult;
- balancing conservation and economic interests. The fact that water is a commodity in the present international trend toward the privatization of water services could lead to a neglect in the quality of the services offered to the less affluent rural areas of the country and secundarize conservation strategy primary goals.

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REFERENCES

- Carius, Alexander; Soromenho-Marques, V. (1996), "Integrating Waste Management Strategies into National Environmental Policy Planning: the Case of Portugal", paper to be presented at the III International Conference of Green Planners, San José, Costa Rica, October 23-26 1996.
- Correia, F.N.; Silva, J.E. (1996), "Transboundary Issues in Water Resources", paper presented to the NATO Advanced Research Workshop in Conflict and the Environment Bolkesjo, June 12-16 1996.
- Cunha, L.V.; Gonçalves, A.S.; Figueiredo, V.A; Lino, M.,1980, A Gestão da Água em Portugal: Princípios Fundamentais e sua Aplicação em Portugal, Fundação Calouste Gulbenkian, Lisbon.
- Cunha, L.V. (1996), "Recursos Hídricos Luso-Espanhóis: O Passado e o Futuro", 3º Water Congress, Portuguese Water Resources Association, Lisbon.
- MARN, The National Environmental Plan-Abridgment (1995), Lisbon.
- MARN-Instituto da Água (December 1995), Recursos Hídricos de Portugal Continental e sua Utilização, vol.1, Lisbon.
- MARN-Instituto da Água (January 1996), Recursos Hídricos de Portugal Continental e sua Utilização, vol.2, Lisbon.
- Ministerio de Obras Públicas y Transportes-Secretaria de Estado para las Políticas del Agua y el Medio Ambiente (April 1993), Plan Hidrológico Nacional-Memoria, Madrid.
- OECD (1992), OECD in Figures. Statistics on the Member Countries, Paris.
- Quercus-Deco (April 1993), Diagnóstico Nacional sobre o Controlo da Qualidade da Água para Consumo Humano, Lisbon.
- Soromenho-Marques, V. (1994), Regressar à Terra. Consciência Ecológica e Política de Ambiente, Lisbon, Fim de Século.
- Soromenho-Marques, V. (1996), "Role of NGO in Sustainable Development Decision-Making", Environmental Democracy, Sustainable Development and Agenda 21, Luso-American Development Foundation & Earth Summit Watch, Lisbon-Washington.
- Universidade Nova de Lisboa-Faculdade de Ciências e Tecnologia (July-August 1993), Relatório Sobre a Qualidade da água de Distribuição para Consumo Humano em Portugal, Lisbon.