

TERRITORIAL AND ENVIRONMENTAL DEVELOPMENT THROUGH
MODELS OF PUBLIC/PRIVATE GOVERNANCE. A DETAILED STUDY
ON ENVIRONMENTAL LOCAL PUBLIC UTILITIES (LPUs) UNDER
EUROPEAN FRAMEWORK DIRECTIVE 2000/60.

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Abstract

The present study focuses on a crucial issue which is closely related to
innovative global/local scale-designed approach and management forms that
highlight the existence of a genuine trade-off between the tools of
environmental policy and the logics of liberalization and enhancement of the
potentials of environmental public utilities thus giving rise, within Community
policies, to a holistic view of the water sector that considers the “discipline of
waters” as an integral part of the broader “environmental policy” which is
focused on the role of local public utilities that are more and more required to
establish relations with multiple subjects in a perspective of governance.
Unfortunately though, the contributions to the debate on this controversial

issue have so far been very scarce thus not allowing for the definition of the most appropriate theoretical and operative paths likely to lead to the detection of models of collective action. The present study will be developed on two levels closely related between themselves: a theoretical level (the study of EC Directive 2000/60), and a methodological level, focused on the different possibilities of realizing a system of regulation/organization of water distribution services in the form of environmental LPUs which is likely to favor the establishment of management conditions consistent with the needs of community development.

Keywords:

- 1) Public/Private Governance
- 2) Environmental water services
- 3) Territorial economic development.

1. INTRODUCTION

In the last few years the international debate on governance and on the relationship between the public and private sectors has focused on the changes that have been characterizing urban and community policies and collective action models for territorial organization.

In particular, if we think of the situation in “weak contexts” like those that occur in delayed-development countries, we soon realize that capacity building is intended to reduce poverty, and, as emphasized by the World Bank, the public sector accounts for the core of governmental actions and that, defining a sensible institutional and economic system, in line with the re-launching needs of the Countries in question, is crucial.

Indeed, only a sound institutional basis is likely to allow these Countries to reduce poverty, realize environmental sustainability, and develop their private sector.

Hence the role of public institutions, and above all of local ones, gets well-established on normal laws, on informal rules, on practices and on organizational structure, thus embracing all sectors.

As a consequence, we witness to the expansion of those local public utilities that encourage access to the market on the part of those stakeholders capable of providing efficient and economically sustainable services.

Nevertheless the aspect that, more than others, is likely to contribute to an efficient process of institutional reform is the setting up of a clear debate across all the subjects involved and the participation on the part of citizens in a view to improving public actions. Now, on the basis of this opportune premise, the use of the term governance, today so widely used within the scientific debate, seems to raise some perplexities both on the theoretical and methodological levels. In fact, if intended as “new modes of planning”, governance turns out to be a mode of coordinating economic and social dynamics which is based on the involvement and participation of the civil society in the decisionmaking process.

In this sense the role and the modalities of action of the public subject call for a re-definition of the notion of governance as the challenges encountered by a single subject in defining and implementing public policies addressed to more and more complex and fragmented societies are becoming more and more evident. The experience of the World Bank testifies the fact that a government action intended to enhance the economic and social resources of a Country must give a say to and allow for access and participation of all in decisionmaking processes.

But the situation becomes even more complex when, in addition to the required participation of citizens, what is at stake is the issue of “group” control on the part of local governments which, unavoidably, calls for the definition of organizational and management models intended to favor transparency of business choices and appropriate monitoring of business performance.

Intended in this way, governance becomes a tool whereby local governments participate in strategic decisionmaking in terms of both management and control of public utilities. More specifically, a line of research that tries to interpret the debate on governance focuses on the theory of regulation and tries and detects connections between regulation and governance as conceived in the field of political economy with reference to local practices and resource management.

The collection of essays edited by Hay and Jessop (1995) accounts for one of the most important contributions to the debate on governance which puts forward a British interpretation of the theory of regulation intended as a

dynamic, instable, and conflict-raising process, and on the theory of regulation intended as practice. The most interesting interpretation of regulation contained in this collection is the one that contends that regulation must be intended not really as an *a priori* established, fixed model of action, but rather as a “trend” process that evolves according to the needs of the context of reference. Nevertheless also in this case a distinction has to be made, since these modalities of action do not result in positive results in whatever situation and whenever implemented, even if, in spite of this, they turn out to be more efficient than other less flexible ones.

The perspective that has informed the present work calls for a reflection on that set of conditions and practices that give rise to, while being affected by, social and political institutions (Painter and Goodwin, 1995). In this perspective, the relationship between regulation-*régulation*-and governance is characterized by processes that occur in an unexpected manner, whereas governance contains in itself activities intended to pursue specific strategic objectives.

In all these processes there is a strong reference to two notions crucial to the economic-enterprise sector and to the sector of public utilities: corporate governance and new public management.

The first of the two notions, i.e. corporate governance, makes reference to the modalities of management and control of the organizations that operate in both the public and the private sector.

More specifically, the term governance is used to refer to the efficiency-of-organization models based on information exchange, on individual empowerment, and on an explicit distribution of tasks and functions (Rhodes, 1997).

This has aroused the interest of the European Union that, in its “White Paper on European Governance”, has defined the possible applications of this action model within the EU context (Cce, 2001), detecting rules, processes and behaviours susceptible to influence European governments with a special focus on openness, participation, accountability, efficiency and consistency of decisionmaking processes.

Hence, European governance promotes new forms of collective action, new mechanisms and new structures meant to work out and implement policies

whose adoption is considered to be mandatory to induce the changes required to establish a climate of renewed confidence.

The main aspects of this new interpretation of governance, albeit different in nature, are closely interconnected and concern the relations between the ongoing processes of territorial re-definition and the changes induced by the processes of globalization and the change in both forms and modalities of collective action in the urban and community fields.

Other equally important dynamics are linked to the first aspect, including the processes of European integration, the loss of centrality and the partial dissolution of government powers on the part of the Nation-State as well as the resulting required territorial re-configuration by means of re-scaling processes (Brenner, 1999), that are meant to re-organize, re-arrange, and re-define territorial scales and transform the related levels of government. The changes that have characterized the Nation-state, according to Jessop (1994), have resulted in the transfer of some levels of competence of the State to a growing number of macro-regional, transnational or international governments while other powers have been assigned to local or regional governments within the same State. Still other capacities have been taken up by horizontal networks made of both local and regional authorities that go beyond the boundary of “the central government” and link local or regional governments of other countries”.

A second aspect is linked to a different approach, whereby traditional planning is replaced by forms of partnership, inter-institutional cooperation and strategic planning (Healey et al., 1955; Healey, 1997; Le Galès, 1995; 1998).

To this aspect are related in particular urban and territorial modalities of action as it involves the entire public sector and seems to be more pronounced where policies are put in place to allow for competence and power decentralization from central to local governments questioning the new theories on the models of collective action. The traditional approach which, was focused on the notion that the management of water resources, being a service of public utility, had to fall within the range of local policies, is losing ground to a new approach of a global nature under which public and private sectors interact and new room is left to new entrepreneurial realities. The management of water services in an environmental perspective has called for the working out of a detailed action

plan for the integrated protection and management of underground waters as an item of a general policy of water conservation, above all at a Regional level.

Nevertheless the most important contribution to the definition of the role of the Regions (Italian Regional Governments) as strategic stakeholders in the governance of water services, derives directly from the comprehensive strategy of development drawn by the cohesion policies that, not by chance, happen to converge in the broader European Regional Policy as a set of tools and actions intended to allow for a sustainable and harmonized development of the European Union. Nonetheless for a better understanding of the context in question it seems crucial to dwell upon the changes in and the connections of the policies and dynamics that have brought about a change in the relations between the stakeholders involved in the process as well as in the needs of the urban areas.

2 Local Development Policies in a Perspective of Governance: roles and powers in the field of LPUs

The definition of the local territorial development policies has become in the last few years, one of the privileged contexts for interpreting governance models.

Such processes are related to the principle of subsidiarity that re-designs the relationships across public powers and between public powers and the civil society:

- the public stakeholders directly involved include regional, provincial and local governments;
- the economic and social stakeholders include workers, unions, entrepreneurs, universities and the entire field of education as well as the stakeholders of the tertiary sector.

In particular, in the field of environmental public utilities, a strong correlation is observed between merely institutional aspects, political aspects and business logic. It has not been by chance that the principle of subsidiarity has implied a greater self-dependence of public administrations both in terms of efficacy (social, quantitative and qualitative) and of efficiency in a view to

guaranteeing, on the one hand, quality services that meet the needs of local communities and, from the other hand, cost-effective management methods.

Put it simply, a mechanism of a “multilevel system of government” seems to emerge which results from the combination of Community-scale actions with capacity transfer to local governments. To this should be added the growing role of pro-active development strategies whereby different aspects of a same sector interact.

Therefore, as to the protection of the management of water resources, the state is asked to plan and monitor over time the quality and the quantity of water resources, as well as to act as a controller with the help of the other stakeholders involved.

The global approach defines all a series of methodologies and practices that allow to respond to the needs of participation expressed by intermediate subjects, i.e., those subjects placed at an intermediate level between central government authorities and the community. Within this framework there exists a real proliferation of “networks of stakeholders” both territorial and functional and of cross-cutting policy networks (proliferations of advisory panels, organized economic groups) that have a strong desire for greater self-dependence and for a more active participatory role in the process.

In this respect, the community action within water services, as a “networked” system, emphasizes the roles of the different levels (local, regional, national and European) thus calling for a greater local/global, national/supranational interaction inside the networks in a view of implementing a real integration of the different roles and a real cooperation in terms of implementation of projects. In this case negotiated planning, environmental concerted action, and participatory decisionmaking are no longer meant as merely theoretical notions and, in this respect, Directive 2000/60/EC seems to mirror, by means of its provisions, the perspective a macro-level interrelated concerted action amongst the member-States, as well as a micro-level “integrated management” of water resources across the subjects involved at the various levels within the same member-States.

Within the framework of local environmental water public utilities these mechanisms are at the core of the provision of reference contained in Directive 2000/60/EC on a national scale. This same provision can be translated into the

reform of the sector in question on a Regional scale within the process of liberalization and re-definition of powers as already emphasized by Title V of the Italian Constitutional Treaty.

The present reform of environmental LPUs relies on a very practical approach as, while considering the very strong social and economic value of the services provided in this sector, it starts from the observation that said services cannot be totally guaranteed by public subjects as social wellbeing and management efficiency are objectives that do not rule out, but rather envisage the interaction of multiple stakeholders.

Before describing in more detail the provisions envisaged by Directive 2000/60/EC it could be expedient to describe how the regulations on water public utilities have evolved in Italy.

2.1. Short hints at evolution of both national and EU regulations on water management through the role of the stakeholders involved.

National Laws

Since the very beginning and for a long time, the Italian Laws regulating water management have been characterized by a profound fragmentation as they were made of rules meant to give guarantees to different types of users and totally neglected the problem of compatibility between use and persistence in time of well-determined features.

The process of reform of the body of laws on water was started by Law 319/76 (Merli Law), that dictated the rules in terms of waste waters and decentralized the planning activities to the Regional governments requiring them to draw up their *Piano Regionale di Risanamento delle Acque* (Regional Plan of Water Treatment).

The tasks assigned to the Regional Boards under this law have asserted the essential role played by the Regions in terms of setting up planning, programming and coordination activities.

In spite of this today, more than twenty years after the passing of the above law, the results seem to have been poor both in terms of shortage of monitoring facilities and in terms of the establishment of an environmental policies wrongly based on bans and on an ill-coordinated management of water quality and quantity.

What is more, the subsequent amendments to this Law, especially in terms of planning (including the prescriptions on soil conservation contained in Law 183/89, that set up the so-called Basin Authority), have turned out to be sources of uncertainties also on very important aspects.

But the rules and regulations passed after Law 183/89, including Law 36/94 (the so-called Galli Law) and the Legislative Decree 152/99 and ff., have marked the emergence of a new culture of water in line with the principles of sustainable development under which the use of water resources must be environmentally-friendly and meet the needs of future generations.

The process of reform started focuses on the definition of new levels of coordination that, overcoming the traditional administrative boundaries, are expected to account for a new planning and government system destined to water resources

Indeed, this process is in line with the broader trend to re-define the entire organization of roles and powers of both central and local Authorities.

Reference is clearly made to the reform of Title V of Part II of the Italian Constitutional Treaty introduced by Constitutional Law n. 3/2001. Said reform has remarkably widened the sphere of the administrative powers of the Regional Boards putting local governments on an equal standing in a framework inspired to subsidiarity where the central and crucial role of Municipalities stands out.

The reform of the organizational model of the integrated water resource cycle, as defined in the above Galli Law, has dictated a genuine “regionalization” of water public utilities in terms of the organization of their operations on local scale. No doubt, Galli Law has resulted in a multifunctional system based on a greater co-participation on a local level of the subjects involved in the operations of the water sector.

This Law seems to have essentially anticipated the principles of power-sharing across Central, Regional and Local Authorities established by the Constitutional Treaty as it re-assigns to the Central Authorities only those general tasks expected to be evenly available throughout the territory of the country. Regional Boards must, under the same law, i) undertake to adopt water saving schemes and incentives (with special incentives for water recycling), ii) select and set up Optimal Territorial Ambits (ATOs), iii) update

their Regional Program of Water Management, iv) pass additional regulations for water drainage, and v) regulate the forms and modalities of cooperation with local governments.

The extent of the reform in question in terms of regionalization of water services, is even more important if we consider that the range of regional powers has been additionally widened to include the discipline dictated by Law Decree 152/95 and by the same Directive 2000/60/EC. Law Decree 152/99, in compliance with the principle of administrative decentralization, has assigned to Regional Boards substantial functions in the field of planning and programming, as well as legislative powers in terms of full implementation of the principles of both qualitative and quantitative protection of water resources. From the other hand, the regional scale of the processes, dictated at a EU level by the Directive 2000/60/EC, suggests that planning and programming activities be fundamental steps both in terms of protection of the quality and of the use of water.

Directive 2000/60/EC calls, in the first place, for a remarkable effort of rationalization of the planning context and of the powers assigned to Regions, an effort that is intended to support the setting up of hydrographic districts as the final outcome of a path already started by Law 183/89 in a view to framing again the entire field of soil protection and water management within an institutional picture of “ordinary good management” likely to result in additional opportunities of development and economic growth by means of efficient models of public/private governance. From the other hand, it is just the assignment of important powers of regulation of public water utilities to the Regional Boards (in a perspective of a sustainable management of this resource), that suggests the central role these utilities are going to play also in the working out of Hydrographic Basin Management Plans under art. 13 of the same Directive 2000/60/EC.

In fact, in consideration of the fact that the Regions are assigned the task of working out Water Protection Plans (and that these latter are nothing more than a portion of the Basin Plans under Law 183/89), one can readily assume that the Regions will play not only a crucial role of coordination of the activities carried out by subjects operating at a sub-regional level (Basin Authority, ATOs), but also will be asked to make for the integration of the

planning tools in force with the analyses prescribed under art. 5 of the Framework Directive and implement the regulation of the process of internationalization of the environmental costs of the activities linked to water management and consumption.

Finally, as to the qualitative protection of water basins; the attainment of the objectives dictated by Framework Directive 2000/60/EC calls for remarkable investments on the part of the Regions, above all in terms of sewage and water treatment plants for the entire cycle of water use, which imply very complex procedures to find private capital, including e.g. assignments in project financing, tariff regulation for the services related to the construction of water treatment plants for wastewater, and self-financing for the ordinary administration of water works. In this connection it should be observed that it has just been through the partnership agreements subscribed to with the central government for the implementation of the Community Support Framework (CSF), that the Regions of Southern Italy have reinforced and expended their powers of management of water resources in this field in a sort of attempt of cooperative federalism intended to pursue the objectives of sustainable development of the European policies. Structural Fund Policy becomes then a sort of training ground where new models of governance, in terms of sustainable management of water utilities, may be tested. The Regions do, in fact, play a strategic role in the implementation of the objectives of the CSF in the field of water resources. Such tool does indeed establish criteria, deadlines and checks for the use of EU funds that, supplementing national and regional funds, are allocated in a view to putting in place a system of government and management of water resources likely to guarantee the goal of a “good state” of waters.

It should be noted that in 2004 the European Commission started a procedure of infringement **against Italy** under art. 226 of the EC Treaty for failure in transposing the Directive into the national juridical order.

Community provisions

Just one introductory remark to start with. The notion of governance that we it is our intention to explore here overlaps, albeit not totally, the notion illustrated by the White Paper on European Governance published by the EU Commission on July 25, 2001.

In the White Paper such notion is defined as follows: “the notion of governance designates those rules, processes and behaviours that have an impact on how powers are held at a European level, above all in terms of the principles of openness, participation, accountability, efficacy and consistency”.

Now, making reference to the notion of governance in the above sense of the word, the objective of this study is that of indicating those techniques and those coordination efforts that should be put in place, both in terms of regulation and of operation, to allow for an efficient operation of the water sector.

Over the last few years the European Union has promoted development strategies based on synergisms likely to occur in the course of an economic and social reform that takes into account the problems of the environment. In such a context, as stated in “Green Paper on Services of General Interest”, published by the Commission on May 21, 2003, general interest services (among which water utilities stand out in terms of importance) play a crucial role.

The same Commission in its Green Paper expresses the belief that such services account for “an opportunity of dialogue with public Authorities within a context of a good governance”.

The crucial point remains, however, defining the notion of good governance in the sector of the organization, regulation and assessment of public utilities. To this end, the European Commission has identified in the public/private partnership, an appropriate tool to create new forms of cooperation amongst the multiple subjects involved in the system of organization of different sectors, public utilities included.

In line with this view, it is up to the member-States to respond and meet the general criteria indicated by the European Community, defining the specific modalities of enforcement of the individual provisions, in full respect of all the obligations thereof (those related to territorial coverage, those related to quality and safety standards, those related to the rights of the users/consumers, and to environmental requirements).

3. Hypothesis of setting up of a system of regulation/organization of water utilities in the form of environmental LPUs: the case of Region Campania.

The new regulations on waters contained in Directive 2000/60/EC are based on an approach that takes into account environmental issues, as defined in the European Strategy of Sustainable Development (Goteborg, 2001), and that implies an ongoing use of economic analyses in fixing environmental issues. The reason and spirit of the Community prescriptions are evident in some of the initial remarks of the above document. Three such remarks are relevance to our analysis.

- ▶ water has to be considered as a common heritage to be protected and not as a commercial product (1);
- ▶ the cost of water services, in consideration of the possible harm to or negative repercussions on water environment, should be calculated on the basis of the “polluter pays principle” (PPP) (38);
- ▶ from a quantitative perspective it would be sensible to set up general principles for the containment of water extraction and damming up in a view to guaranteeing a sustainable development in terms of the environmental profile of the water systems involved (41).

As to the prescriptions dictated by laws and regulations, it is worthwhile noting that art. 9 of the Directive requires the member-State “to take into account in their policies the recovery of all costs of water services, including environmental and resource-related costs, [...] according to “the polluter pays principles”. The member-States undertake to put in place policies likely to appropriately encourage users to use water resources in an efficient manner by 2010...[...].”

By pursuing the objective of “full cost recovery” Directive 2000/60/EC prescribes to cover the environmental costs of the Integrated Water Service (SII) by applying the “polluter pays principle” and by resorting to methods of economic management and analysis meant to create incentives for a sensible and reduced consumption of water on the part of users. This implies, in the first place, a radical reform of the system of tariff regulation intended to internalize environmental costs into tariffs with evident repercussions in terms of social sustainability.

Now, putting aside the most problematic aspects essentially linked to the issue of the involvement of the public sector in environmental LPU, the recovery of the “environmental” costs of water services is, in fact, an example of tangible application of the “polluter pays principle”, a principle that informs the entire EU environmental policy. One first official definition of the PPP was formulated by the OECD in 1972¹. Such definition has since undergone a conceptual evolution that has ranged from the idea of eliminating the aids meant to cover pollution costs, to a “broad” definition (extended PPP) of full internalization of the environmental costs that tends to charge on the polluter all those costs associated to the negative environmental impacts produced by economically important activities, including compensation for environmental damage and use of market tools, environmental taxes and tradeable permits included. The programmatic and non-binding document adopted by the OECD entitled “Recommendation of the Council on Water Resource Management Policies: Integration, Demand, Management and Ground Water Protection - C(89)12/FINAL” is of fundamental importance in the field of water resources. Under the principle contained in this document, those who use a natural resource have to bear the full costs of their exploitation including the costs linked to the impoverishment of the resource in question.

The 1992 Rio de Janeiro Declaration on Environment, and Development and the Agenda 21 adopted there, have substantially codified the principles worked out by the OECD in terms of the application of the “polluter pays principle”² supplementing this latter with the “user pays principle”.³

In its Principle Declaration, the World Summit on Sustainable Development (WSSD), that was held in 2002 in Johannesburg, reasserted the commitment to complying with the Rio de

¹OECD – Recommendation of the OECD Council “Guiding principle concerning international economic aspects of environmental policies”.

² Principle 16 reads as follows: “National authorities should endeavour 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 cost of pollution, with due regard to the public interest and without distorting international trade and investment”.

³ The application of the “polluter pays principles” to the field of water resources is foreseen under Section 18 of Agenda 21 where reference is made to the more recent notion of the *user pays principle*, that relies on the idea of putting in place not only the reform of the tax system and of the system of business incentives, but also a genuine revolution of the present production-consumption models and of the tariff systems adopted by public utilities (transport, water resources).

Janeiro principles. The WSSD Plan of Implementation makes reference to the application of the “polluter pays principle” in its section devoted to sustainable production and consumption models by stating the need to take into account the environmental dimension in all decisionmaking processes.

To the end of the present work, it is worth mentioning the Communication “Tariff policies for a more sustainable management of water resources” (COM 2000/477), that derives from Framework Directive 2000/60/EC on water resources, which indicates that any aids granted within the framework of a tariff policy – should be progressively abolished as they would be unlikely to promote an efficient use of the water resource. The member-States have to pursue as a priority a sustainable management of water resources and favour investments in this sense (e.g. with the use of counters for different uses)”.

In the 6th Environmental Action Plan, the application of the “polluter pays principle” concerns the use of normalization activities to the end of promoting the integration of the requirements of environmental protection. In addition, a great emphasis is put on the need for the empowerment of producers, importers and end users, as well as on the need to disseminate knowledge on all the chemical substances, on their relevant risks, and on their recovery and disposal. All these aspects have evident implications in terms of “multilevel” governance. Finally, the principle set forth in the Directive 2000/60/EC: “The member-States must provide for water price policies that encourage an efficient use of water resources on the part of the users and that require different economic sectors to give an adequate contribution to the recovery of the costs of water services, including those costs linked to the environment and to the use of water”.

As for this principles, one of the most controversial aspects of them has to do with. Actually, on the basis of the “polluter pays principle”, also the Galli Law identifies in the tariff of the SII (Integrated Water Service) the main tool to internalize the environmental costs of the entire water cycle. The objective is to encourage businesses to adopt efficient and sustainable plans and define a tariff close to cost-effective investments in water infrastructure and distribution systems in consideration of the non cost-effectiveness of said investments, a problem that accounts for the main cause of the lack of

infrastructure⁴ in this field. Nevertheless, the Galli Law has launched a process meant to adjust tariffs to long-term operation and infrastructural costs, a process which is still underway. The finalization of the transformation of the management system (from the present 13,000 operators to the about 80-100 foreseen when the Optimal Territorial Ambits (ATOs) will be in full operation), has been considered to be a preliminary condition needed in a view to containing tariff increases in the weaker areas.

From the other hand, the delays in the implementation of this reform have compromised the possibility of attracting capital for infrastructure investments which are essential for the attainment of the quality targets set forth in the Framework Directive. At the same time, tariff regulation is forced to come to terms with short-term policies and limited incentives.

But, while it could seem expedient to favour a rapid adjustment of tariffs to investment-inclusive costs, it is also evident that water service tariff policies have also to take into account the question of social affordability. Indeed, the closer to the marginal costs (externalities included) tariffs are, the more efficient resource allocation is.

In addition to other things, the Galli Law (and related regulations enforced to the Regional level), assigns the planning of the new investments required to local governments by means of the so-called Ambit Plans. The cost of these investments is charged on the tariff by the operator in charge of the management of the SII that is required to implement the selected plan with the relevant financial burden. This mechanisms accounts for an incentive to the implementation of new works, whose cost turn out to be “neutral” for the operator thus discouraging any investments intended to produce a better and efficient use of the existing resources that should be borne by the same operator.

⁴ Under article 13, comma 2 of the new tariff regulation of Law Galli “*the tariff is determined taking into account the quality of the water resource and of the service supplied as well as the required upgrading works, the management costs of said works, adequacy of the profitability of the capital invested and the costs of the management of protected areas so that a comprehensive coverage of investment and management costs can be assured*”.

Instead, the operator should participate in the coverage of the costs of the new investments and avoid to recognize and include these costs automatically in tariffs. In addition, the operator should be required to describe in detail and be in charge of the investment plans for given periods (financial and tariff programs included); the Ambit Plan should be only a long-term strategic plan. In addition, the adoption of the Plans of Water Protection under art. 44 of Law Decree 152/99, also in view of fulfilling the standards set forth by the Framework Directive, implies the adoption of programs of measures for the qualitative-quantitative protection of the water resource which require investments that would make the increase in tariffs ironically “unsustainable” from a socio-economic perspective.

In conclusion it can be stated that the application of the “full cost recovery”, principle as defined by art. 9 of Directive 2000/60/EC, undoubtedly calls for a full implementation of the tariff reform delineated by the Galli Law, even if some risks should be taken into account. In the first place, binding this strategy to completion of the planning and implementation of the actions planned by the ATOs, should be avoided. At the same time the foundations should be laid for a consistent and efficient system of economic-financial regulation that supplements tariff policies with an efficient strategy meant to attract private investment both through project financing and by involving banks in action planning, in a real multilevel governance.

It is in this perspective that we can now define the issues, and assume possible solutions to the implementation challenges encountered in the reform of water utilities in Campania.

In monitoring the state of enforcement of Community regulations in the field of water resources in Campania, one can readily infer the fundamental function of stimulation that has been exerted by the Structural Fund Policy destined to Regions in view of the transposition of Directive 2000/60/EC.

From a methodological point of view, the absence of an organic national enforcement discipline has to be observed; as a result, the enforcement of the Framework Directive depends on the concrete implementation of those actions instrumental to the attainment of the objectives envisaged by the Directive in

question. The operational tools for the enforcement of Directive 2000/60/EC are the so called “Ambit Plans”, “Water Protection Plan” and “Framework Program Agreement “ for the sector of water protection and of water resource integrated management which was subscribed to on December 30, 2003 by the Regione Campania, and the Ministries concerned⁵. Similarly, the EU Structural Fund Policy, through the Regional Action Plan, plays a fundamental role and gives an impulse to the enforcement of the Framework Directive as well as to that of previous Directives in the field of water resources⁶.

The binding Community Directives⁷ for the first phase of implementation of measure 1.2 “Water integrated cycle” of the Campania Regional Action Plan were, in fact, Directive 76/464/EEC “Dangerous Substances”, and Directive 91/271/EEC “Waste Waters”.⁸ The Directive “Dangerous Substances” has the objective of protecting water environment from pollution with dangerous substances as mentioned in the Annexes thereto.⁹

With the entry into force of Directive 2000/60/EC, the Community set of regulations in the field of water pollution by dangerous substances has been supplemented with a series of provisions whereby the Regions are assigned a role of crucial importance. The Framework Directive, in fact, envisages the adoption of programs for reduction at the “Source” of the emission of “target” pollutants, as well as appropriate measures for drainage monitoring. These

⁵ Ministries of Economy and Finance, of the Environment and Territorial Protection, of Infrastructure and Transport, of Agricultural and Forestry Policies.

⁶ Indeed, in Objective 1 Regions, ATO planning can avail of the fundamental contribution, also in financial terms, of the [European Regional Development Fund that, through the Regional Action Plan, promotes the objective of the](#) improvement of the service levels and of the environmental sustainability of the integrated water cycle. It should however be made clear that only after the recent revision of the Community Support Framework and of the Campania Regional Action Plan, the full application of Directive 2000/60/EC is binding for action implementation. In addition, while being in force in the juridical system, the Directive sets forth that the objectives established be fulfilled according to a system of progressive deadlines that end in 2015 and even later for some postponable obligations.

⁷ Reference is made to the Directives presently being analyzed in terms of compliance in the “Annual Report of Implementation of the Campania Regional Action Plan 2000-2006 – Environmental Aspects” , drawn up under art. 37 of EC Reg. 1260/99 and published by the **Environmental Authority of the Region Campania** in the site: www.regione.campania.it

⁸ Directive of the Council of May 4, 1976 concerning pollution provoked by the discharge of dangerous substances into Community water environments: Directive of the Council of May 21, 1991 on the treatment of urban waste waters.

⁹ Under articles 3 and 6 of Directive 76/464/EEC the member-States must subject any drainage of these substances into a water body to prior authorization to do so issued by the authorities concerned and have to issue rules of emissions not exceeding threshold values.

program activities call for the availability of databases and information systems at a local level, which are meant to assess the environmental impact of drainage into the receiving water body. Among other things, under such requirement the local stakeholders should equip themselves with the same institutionalized mechanisms of communication and transparent data exchange that should underlie any attempts at establishing development policies and decisionmaking processes consistent with the principles of governance in the field of the environment. From the operational point of view, the Framework Program Agreement envisages “Urgent actions for the reduction of drainage of dangerous substances” through the definition of a supplementing agreement across the local stakeholder in charge of industrial and urban policies.

The planning of environmental water infrastructure in Campania is strongly in line with the provisions of the Directive “Waste Waters” 91/271/EEC. The approach to the problems of protection of water bodies of this Directive has been taken up in the strategic frame of Framework Directive 2000/60/EC that requires member-States to comply with the standards of quality and of urban wastewater treatment set forth in Directive 91/271/EEC. Such Directive, which was transposed in the national legislation by Law Decree 152/99, sets forth a series of deadlines by which member-States are required to equip themselves with appropriate plants for the collection and the treatment of wastewaters. The implications in terms of financial investments in community infrastructure for the Campania Region are evident, and even more so, if one considers that in many Municipalities sewage systems are still incomplete or, at the very least, do not comply with the environmental standards, whereas water treatment plants cover on average only 71% of the Campania surface and, in most of cases, exhibit problems of quality.¹⁰

The planning of the works destined to support the full implementation of the Directive “Waste Waters” is contained in the Framework Program Agreement and also in the Ambit Plans.

Crucial in this sense has been the recent completion of ambit planning carried out by all the ATOs of the Campania Region, that, in their capacity of local

¹⁰ Cfr. *Annual Report to the Parliament on the state of Water services by the Monitoring Panel on the use of water resources*, Rome , July **2003**.

stakeholders, have adopted their respective plans resisting to some periodical “centralizing” temptations on the part of the Regional Board.

From the other hand, for the Galli reform to be fully implemented, each ATO should be assigned the Integrated Water Service to a single operator to be intended as an entrepreneurial subject separate from the Ambit Authority. It is evident that the choices of the various ATOs about the form of the licensee in charge of the Integrated Water System will depend on the model of public/private governance actually put into being for the management of water services in the Campania Region.

The national regulations of reference, in fact, confine themselves to establish the principle of separation between regulation and management and prescribe compliance with competition regulations in terms of license assignments. As to the form of the operator, ATOs are given ample discretion under art. 113 of the Single Text on Local Governments. Under this article, local governments can decide to assign the Integrated Water Service to an operator which falls within the following categories:

- a) a capital company
- b) a joint public/private capital company
- c) a public company.¹¹

As a first approximation, considering that the decision of assigning the Integrated Water System has been made in 3 of the 4 Regional ATOs, we can state that the model of management prevailing in the Campania Region is that of a joint public/private capital company. Assigning the Integrated Water System to a single operator has accounted for an indispensable requirement for the Campania Region ATOs to be able to utilize the funds allocated by the Regional Action Plan for the construction of the infrastructure envisaged in the respective Ambit Plans.

Indeed, the Campania Regional Action Plan foresees that, in the second phase of implementation, the Ambit Plans be funded provided that the Integrated Water Service as been assigned for the projects presented after December, 31, 2004. In addition, in case of failure in assigning the Service to an operator, the

¹¹ Law Decree n. 267 of 2000 art. 113 “Network management and supply of economically important public services” comma 5, thus substituted by art. 14, comma 1, letter d), of Law n. 326 of 2003

Regional Board has decided to fund only “the high-priority actions envisaged in the Ambit Plan”¹², with the underlying awareness of being required to guarantee in any case for the construction of that sewage and water treatment infrastructure required for the full enforcement of the Directive 2000/60/EC.

However the Regional Action Plan interim report has highlighted some critical points essentially linked to the implementation of the actions in terms of sewage and water treatment cycle. In particular, economic problems have emerged in the use of public/private capital for the construction of infrastructure related to the integrated cycle of water.

The total demand for investments foreseen by the ATOs plans has been estimated to be on the order of 2,000 MEuros, only for the 5 years of investments, with a demand for public aid, in the form of a tariff integration, on the order of 470 MEuros. In addition, the ATOs Plans do not take into account most of the actions already underway on the part of those entities placed under controlled management to counter the environmental emergencies of the Campania Region. In this sense the Campania Region prescribes to cover only a portion of the demand of public expenditure by the Integrated Water Service, at least in the initial period. The Regional Action Plan resources (265.6 MEuros over an estimated cost of 544.9 MEuros, i.e. 48.7%) are supplemented by other financial resources: tariff increases essentially envisaged to cover the actions planned by the Ambit Plans and by the Framework Program Agreement, as under the legislation in this field, and other funds allocated by national sources.

If we consider that the present public expenditure already exceeds the resources of the Regional Action Plan, we can readily understand how important is to attract private capitals to this sector. From the other hand, also the non elevated profitability of the capital invested has to be considered.

¹² Shouldn't the passage of management functions have been completed, the procedures contained in the guiding notes of the Management Authority of the Community Support Framework in terms of modalities of action implementation (Cfr. “*Note on the modalities of implementation of the Integrated Water System in the Regional Action Plan (2nd Phase 2003-2006)*” worked out by the Management Authority of the Community Support Framework and disseminated by a note of April 14, 2003), and the standardized calculation of the self-funding percentage of the same actions (Cfr. “*Document for the determination of participation of Structural Fund in profit-generating investment*” elaborated by the DPS/SFS and disseminated by a note of June 27, 2003), shall apply.

Because of the limits imposed by the annual tariff increase, such situation risks to delay the pace of the process of management privatization or, anyhow, of the process of management industrialization, thus also delaying the actual start of investments whose coverage is essentially expected to come from tariffs.

To this, we should add a consideration on the smaller profitability of investments made in the field sewage-water treatment plants compared to that of investments made for works of water abduction and distribution, with the possible implication that the former be more sacrificed in case of incomplete implementation of the Ambit Plans. Therefore, during the revision of the Regional Action Plan such considerations have been taken into account and a greater emphasis has been put on the principle under art. 29 c. 4 of Regulation (EC) n. 1260/1999, that states that in the co-financing of the actions of each Ambit Plan, reference must be made to the estimated profitability of the total amount of investments related to the program period considered in the ATO investment plans and not to the profitability of the individual actions defined in the same investment plan.

To address the needs of investment in the sector of water treatment, the Campania Region has, in addition, foreseen the public funding of the most urgent actions by means of the Framework Program Agreement.

But, in spite of the enormous public funds allocated, we have to signal the low amount of private investments in the water sector. Such amount, according to the Report on Economic Reform (2004) of the Ministry of Economy and Finance, is even estimated to be on the decrease, above all in the Southern Regions of Italy.¹³ This finding gives food for thought in the terms of the fulfilment of the objectives established by the Reform of the Water Services envisaged by the Galli Law. Indeed, this reform was intended to support the overcoming of a structural condition of water services characterized by an excessive fragmentation of the supply on the territory, and pursued the objective of encouraging local businesses to reach an optimal dimension by setting up a single operator, likely to act as a licensee for a long period. In spite of the changes occurred in terms of both regulation and management of water services, this sector is still strongly influenced by a poor level of

¹³ Ministry of Economy and Finance. Treasury Dpt. – *Report on Economic Reform - 2004*.

investments made by private investors: what is more in the prevailing private/public-capital company model, private operators account for a minority and, in the Region Campania no license has been assigned by means of public contest.

In addition to the above economic and financial constraints, the infrastructural upgrading of urban waste water treatment plants still encounters a lot of political and administrative challenges. In fact, the Regional territory is still influenced by a long-standing presence of a number of facilities under controlled management which are given extraordinary managing powers in the water sector and are required to implement urgent actions in the sector of water treatment. Clearly, the extraordinary operations underway (which are mainly focused on the construction of final plants), are not helping local institutions to manage in a correct manner – by means of appropriate planning and organization processes – the integrated water resource cycle as their action risks to overlap that of ATOs which are in charge of the ordinary management of the Integrated Water Service.

The same principle under which Ambit Plan and service management should coincide risks, indeed, to be upset due to the effect of the autonomous choices that the extraordinary managers of some entities operate in the field of water treatment without taking into account the efficiency and organization of the “upstream” territorial systems as far as, for example, the municipality management of the sewage system is concerned ¹⁴

The entry into force of the new Framework Directive raises some remarks. In terms of reduction of pollutant emissions, the Directive marks the transition from an “end-of-pipe” approach to an integrated approach that tends to focus on the achievement of objectives of quality for the receiving water bodies through the reduction of the sources of pollution. Such an approach implies, first of all, an activity of inter- sector actions planning which should be consistent with the objective of sustainable economic growth. Such planning must be intended to re-allocate public and private investments to new environmentally-friendly technology. This implies the definitive transition of water policy from a command-and-control approach to a voluntary policy

strategy that is based on giving incentives to economic operators for their sustainable behaviours including the acquisition of best available technology (BAT) available on the market.

Such a strategy, on the other hand, cannot do without resorting to new models of governance meant to guarantee concertation with those economic subjects interested in the productive investments in the sector of water treatment as well as, of course, with the businesses that have to comply with drainage regulations.

A tangible example concerns the incentives to the businesses put into being by the Campania Region, both by means of environmentally-targeted aids, and through Integrated Projects for industrial districts intended to favour the location of productive operations in appropriately infrastructured areas (by means of the Productive Settlement Plans). For example, in the businesses located along the banks of the river Sarno – the most polluted river of Europe – the objective of the Region strategy is that of integrating infrastructural planning with an industrial policy that gives incentives to sustainable behaviours by testing new forms of cooperation amongst economic subjects and models of “consortium-like” management of the district infrastructure. Such an approach appears to be the only one likely to overcome the constraints linked to the use of clean technology in productive processes, above all for those SMEs that are unable to bear the costs of investments for the reduction of their own polluting emissions. Indeed, in a logic of district it is possible to give businesses incentives to equip themselves with commonly owned water treatment or liquid waste disposal plants in a view to guaranteeing a greater sustainability not only in terms of the environment, but also in terms of economic sustainability of the production operations located on a given territory.

4 CONCLUSIONS

The environmental governance and a sustainable management of water services account for fundamental aspects of an integrated policy for the reduction of water pollution. The same Framework Directive 2000/60/EC delineates the elements that characterize environmental governance as fundamental factors for the success of its strategy. In particular, it calls for appropriate mechanisms likely to guarantee information, and public opinion consultation and participation as well as the involvement of users and of institutional partnerships. As a result, the implementation of these principles requires an integration of the present policies of regional development with the priorities identified by the European Strategy of Sustainable Development approved in Göteborg in 2001, and essentially confirmed in the more recent Council of Brussels in 2003.

Relying on the premise that public policy plays a crucial role in promoting a greater sense of social accountability for businesses and in setting up a context meant to guarantee that the same businesses supplement their operations with environmental and social concerns, this strategy has the objective of improving communication between and mobilizing citizens and businesses.

What is more, in the Göteborg strategy the environmental governance has not only to do with the problem of a greater participation of the socio-economic stakeholders, but is also focused on the issue of transparency, and of data access in setting up basic information systems. The lines of development of water utilities do show, indeed, how complex these themes are and how mature assessment methods have become in the process of reform of a sector that contains in itself the three typical dimensions (economic, social and environmental) of the processes of sustainable development. If we want to guarantee transparency in this process, we must avail ourselves of a set of appropriate indicators to evaluate, monitor, and control the state of implementation of the reform of water utilities in the perspective of a sustainable economic growth.

Access to environmental data is, in fact, of crucial importance in the management of the LPUs, above all of water utilities for which new models of public/private governance are envisaged in view of the close inter-relation and interdependence of decisionmaking and information systems. It should be noticed that in the revision of the Regional Action Plan a greater emphasis has

been put on the objective of stimulating and meeting the demand of innovation of local productive systems while expanding, on the front of supply, the availability of infrastructural and research facilities for knowledge transfer and dissemination.

The objectives established in the new water policy, in light of a broader design meant to create efficient management systems, are expected to have a positive impact on the expectations and create the conditions for confidence building *vis-a-vis* businesses thus giving them incentives to invest in innovative solutions and create new high-quality jobs. But what is crucial is that the Regions be able to combine the process of reform of the environmental public utilities with adequate governance actions. Initiatives like “Agenda 21 Locale” have turned out to be efficient in creating a consensus on the need of local-scale changes. Unfortunately though, these attempts have so far been only partially successful because of the challenges encountered in trying and changing the by now well-established and deeply engrained policies and behavioural models as well as in putting together solutions in a coordinated manner. Testing the adoption of innovative methodologies in the decisionmaking processes related to the management of environmental LPUs (Strategic Environmental Assessment included) seems to be of crucial importance. The “missing link” in the definition of the tools for planning and programming an integrated water cycle, has been the reference to public consultation in the decisionmaking process. This specific reference turns out to be of paramount importance as pointed out in art. 6 of Directive 2001/42/EEC and is all the more important in this particular sector which is characterized by “negotiated” actions.

But, while it seems sensible to guarantee a greater involvement of businesses and citizens in the management of this sector, we cannot do without a greater social accountability on the part of businesses. Therefore it is not even unconceivable to invite the operators in charge of the Integrated Water Services listed in the Exchange to publish their “triple approach” in the annual report they submit to their shareholders to allow for an assessment of their performance in economic, environmental and social terms (the so-called triple bottom line). In conclusion, in line with a correct interpretation of the real meaning of environmental governance, structural funds should be used to set

up appropriate plans for communication and information campaigns in a view to showing and disseminating information about compliance to international environmental standards on the part of the utilities in charge of the supply of the services in question. Information about their compliance should cover every aspect of their operations from tariff policies to adoption of environmental management systems.

REFERENCES

- Arrighetti A., Serravalli G. (1999) Istituzioni intermedie e sviluppo locale, Donzelli Editore, Roma.
- Baldassari M., Macchiati A., Piacentino D. (1997), The privatisation of Public Utilities: the case of Italy, Macmillan Press LTD, London.
- Baldwin R. e Cave M., (1999) Understanding Regulation: Theory, Strategy and Practice, Oxford University Press, Oxford.
- Bobbio L., (1996) "La democrazia non abita a Gordio. Studio sui processi decisionali politico-amministrativi", FrancoAngeli, Milano.
- Bognetti G. (1999) Nuove forme di gestione dei servizi pubblici, Working Paper, Università degli Studi di Milano.
- Bognetti G., (1997) I Servizi Pubblici in Europa, Economia Pubblica.
- Boitani A., Petretto A. (1999), Independent Agencies for Regulating Public Utilities: economic theory and institutional evidence, paper presented to the SIEP annual meeting, Milano.
- Boitani A., Petretto A. (2000) I servizi pubblici locali tra governance locale e regolazione economica, XLI Annual Reunion – Società Italiana degli Economisti, Cagliari.
- Brenner N., (1999) "Globalisation as Reterritorialisation: The Re-scaling of Urban Governance in the European Union", Urban Studies, Vol. 36.
- Cappellin R., Batey P.W.J. (eds.) (1993), Regional Networks, Border Regions and European Integration, Pion Ltd, London.
- Caruso I., Vitolo T., (2003) "Governance through "public utilities" models: a regional social interaction approach", 43rd Congress of the European Regional Science Association August, University of Jyväskylä, Jyväskylä, Finland, CD Rom.
- Caruso I., Cocchis L. Vitolo T., (2003) "The innovative role of public utilities: a strategy for local development", 43rd Congress of the European Regional Science Association August, University of Jyväskylä, Jyväskylä, Finland, CD Rom.
- Cassen B., (2001) "Il tranello della governance", Le monde diplomatique, giugno.
- C., Cocchis L., D'Andrea C., Vitolo T., (2003) Modelli di gestione e evoluzione delle strategie di sviluppo locale nella riforma dei servizi idrici a Napoli, XXIV Conferenza Italiana di Scienze Regionali, Perugia 8/10 Ottobre, CD Rom.
- Commission of the European Communities (2001) - CCE, European Governance. A White Paper, Brussels.
- Corali E. (2000), Un modello di riforma regionale dei servizi pubblici, Franco Angeli, Milano.
- D'Andrea C., Greco C., Ragozzino S., (2004) "La Legge Galli,

organizzazione, affidamento, erogazione e controllo del servizio idrico integrato”, Black & Veatch.

Demsetz H., Why Regulate Utilities?,(1968) in “Journal of Law and Economics”, vol.11.

Fazioli R.,(1995) Dalla proprietà alle regole. L’evoluzione dell’intervento pubblico nell’era delle privatizzazioni, Ciriec, Franco Angeli, Milano.

Fusco L., Nijkamp P., (1997) “La valutazione per lo sviluppo sostenibile delle città e del territorio” Ed. Franco Angeli, Milano.

Governa F. (2003), “Fra government e governance. L’azione collettiva in ambito urbano e territoriale”, in Government e Governance in Emilia Romagna, Franco Angeli, Milano.

La Camera F. (2002) “Sviluppo sostenibile. Origine, teoria e pratica” Ed. Riuniti, Roma.

Le Galès, P., (1995) “Du gouvernement des villes à la gouvernance urbaine”, Revue Française de Science Politique, n. 1.

Massarutto A. (2002) “Politica ambientale ed energetica e servizi pubblici locali: dalla pianificazione alla responsabilizzazione”, relazione presentata alla XXIII Conferenza dell’Associazione Italiana di Scienze Regionali Reggio Calabria, 10-12 ottobre.

Ministero dell’Economia e delle Finanze, Dipartimento del tesoro - Rapporto sulle riforme economiche-2004.

Osmont A.,(1998) “La ‘gouvernance’: concept mou, politique ferme”, in Querrien A. e Lassave P., a cura di.

Painter J. e Goodwin M.,(1995) “Local governance and concrete research: investigating the uneven development of regulation”, in Hay C. e Jessop B., a cura di.

Regione Campania, Dipartimento dell’Economia, Piano Operativo Regionale 2000-2006.

Rhodes R. A. W., (1997) Understanding governance. Policy networks, governance, reflexivity and accountability, Open University Press, Buckingham – Philadelphia.

Robotti L., (2002) Competizione e regole nel mercato dei servizi pubblici locali, Il Mulino.

Roseneau J. N., (1992) “Governance, order, and change in world politics”, in Roseneau J.N. e Czempiel, a cura di.

Stigler G., (1971) The Theory of Economic Regulation, in “ Bell Journal of Economics and Management Science”, vol.2, trad. It. La teoria della regolamentazione economica, in Mercato, informazione, regolamentazione, Il Mulino, Bologna, 1994 pp. 349-384.

Stiglitz J. E. (1992) Il ruolo economico dello Stato, Il Mulino, Bologna.

Newbery D.M., (1999) Privatization, Restructuring and Regulation Network, The Mit Press, Cambridge.

Vitolo T. (2003) “La riforma dei servizi idrici in Italia e le public utilities” in Economie Mediterranee Rapporto 2003 a cura di G. Pace, Edizioni scientifiche Italiane, Napoli.

Williamson O. E. (1996), The Mechanisms of Governance, Oxford University Press, New York – Oxford.