

COMMUNITY INVOLVEMENT IN THE IMPLEMENTATION OF THE WFD IN GREECE

Dimitrios Zikos ^a

^a Humboldt University Berlin, Department of Agricultural Economics, Division of Resource Economics, Email: dimitrios.zikos@agrar.hu-berlin

Abstract

The paper provides critical reflections beyond the mere rehearsal of existing arguments and theories of participation within the Water Framework Directive. Following a critical overview of the pilot river basin projects, originally aimed at testing in practice the provisions of the WFD, the paper addresses empirically questions related to participatory issues involved in the implementation of the directive in rigid top-down and strongly hierarchical settings. The paper argues that the participatory requirements of the directive may reach the actual stakeholders in a rather distorted way turning participation into an “ornamental” issue instead of a substantive element of the directive. Reflecting on the selected case, part of Pinios river basin project in Greece, the paper argues that only a distorted version of public participation is assessed on the official documents, questioning the very purpose of the pilot projects. The paper concentrates on how local stakeholders can learn to participate, overcome existing barriers of the water governance structure in Greece and following, by upscaling their “experience to participate” at regional level, contribute to the participation requirements of the WFD.

Keywords: Water Framework Directive, water governance, participation, Greece

Resumen

El presente artículo ofrece una reflexión crítica más allá del simple ensayo de los argumentos de las teorías existentes y de la participación dentro de la Directiva Marco del Agua (DMA). Tras una revisión crítica de los proyectos piloto de la cuenca del río, originalmente destinados a comprobar en la práctica las disposiciones de la DMA, se abordan empíricamente cuestiones relacionadas con temas de participación concernientes a la implementación de la directiva con configuraciones rígidas de arriba hacia abajo y fuertemente jerárquicas. El documento sostiene que los requisitos de participación de la Directiva pueden llegar a los actores de una manera más bien distorsionada, convirtiendo la participación en una cuestión “ornamental” más que en un elemento sustantivo de la Directiva. Reflexionando sobre el caso seleccionado, que forma parte del proyecto cuenca del río Pinios en Grecia, el documento sostiene que en los documentos oficiales sólo se evalúa una versión distorsionada de la participación pública, lo que cuestiona la propia finalidad de los proyectos piloto. El documento se centra en cómo los actores locales pueden aprender a participar, a superar las barreras existentes en la estructura de gobernabilidad del agua en Grecia y, después, por la ampliación de su “experiencia de participación” a nivel regional, contribuir a los requisitos de participación de la DMA.

Palabras clave: Directiva Marco del Agua, participación, gobernabilidad del agua, Grecia

1. INTRODUCTION

Traditionally the problem of water scarcity was particularly intense in EU southern member states (in countries like in Spain, Italy and Greece), Central, Western and even Northern European countries are increasingly subject to similar threats on their water resources. In qualitative terms a reversed trend is noted and the southern member states gradually recognize the importance of quality issues on the overall water availability discourse. This makes water management strategies crucial to ensuring both water availability and quality in the long term (Alcamo et al, 2007; EEA, 2007).

However, the mounting pressures on water resources arise not only from the natural variability and climatic changes but are also strongly linked to national and international social, environmental and economic policies. Thus, effective water governance has become an important issue at the European level and a key focus of European environmental governance debates, and is still gaining further momentum. Sustainable water management is one of the European Commission's environmental priorities with the framework directive 2000/60/EC on water (Water Framework Directive or WFD) setting out the guidelines for water policy in Europe.

Under the above-mentioned shift, public participation has been recognized as a central element of a "good" governance approach in the European Union. This is clearly illustrated by the White Paper on Governance in which participation appears as one of the five "principles of good governance" (European Commission 2001). In the environmental domain, participation was visibly introduced in the 1993 Fifth Environment Action Programme (European Communities, 1993). In its successor – the 2002

Sixth Environment Action Programme – participatory environmental governance was fully incorporated through systematic inclusion (European Communities, 2002). In parallel, participation is directly integrated in an increasing number of European environmental policies and Community legal instruments.

This paper takes as a reference point the implementation of the Pilot River Basin (PRB) projects and, more specifically, the Pinios River PRB in the region of Thessaly, Greece (see fig.1). It studies the effects of a participatory pilot project at local level, in Volos metropolitan area, on the broader public participation efforts in the context of the WFD implementation. The author moves beyond an assessment of WFD's requirements and focuses on participation-related issues from the stakeholders' perspective. The paper argues that only a distorted notion of participation is reflected on the official assessment documents of the PRBs, represented by a "ticking-boxes" process and evaluation. The research question concentrates on how civil society together with private and public sector actors at the local level can be included in a participatory process and following, upscale their "experience to participate" at the regional level.

The author draws on an experience launching an informal social network on water resources in a region within the PRB area. The lengthy involvement of the author with the network, which started just after the initiation of Pinios River PRB project and has continued until the present day 2007, allows a critical view of the way the WFD can be implemented in strongly hierarchical settings without a well-established participatory culture. It highlights the crucial role that a participatory approach that starts from a "learning to participate" perspective can have to enhance actors' involvement in the

implementation of the WFD. From this perspective the paper largely questions à la carte recipes for successful participation within the WFD, offering insights on certain opportunities and risks in European Member States with traditional water governance structures and lack of participatory mechanisms and culture.

The first section of the paper sets the stage of the discussions that preceded the approval of the WFD, by connecting issues gaining momentum in the European arena, namely the value of water as a resource, the broader governance debates and the growing importance of participation as expressed through the changing logics evolving around European water policies. Following, the second section of the paper reviews key documents relevant to the WFD, introduces the RBP projects and some of the public participation issues that arise. The third section focuses on the first PRB project that was implemented in Greece. In the fourth section, the participatory processes that took place at the community level in one sub-region of the Pinios PRB – the Volos Metropolitan area- are presented. This process offers an insight on how these actions influenced the stakeholders and led to the genesis of community-based participatory mechanisms and at the same time contributed to an upscaling of the acquired experiences at the regional level. The paper concludes by providing some key findings and lessons-learned with relevance to policy implementation.

2. SHIFTS IN EUROPEAN GOVERNANCE AND THE RISE OF PARTICIPATION

Water is perhaps the most emblematic natural resource when viewed from the perspective of the direct linkages and interfaces of nature and society. Managing the whole spectrum

of water's functions and uses, presents a fundamental example of how ecological, physical, social, economic, political and even cultural processes can fuse together in the modes of organising, regulating, controlling, and/or accessing natural resources. Water bodies provide an extremely variable multitude of functions crucial to the human population. They are a source of drinking water, providers of relaxation and recreation, as well as a transportation route. They receive treated wastewater, provide water for irrigation, industrial cooling etc. Water is also closely connected to traditions, cultural or historical events. Furthermore, water sustains life and as such it is absolutely essential for a healthy ecosystem to fulfill its ecological functions. Therefore, water, conceived as a hydro-social cycle, constitutes an "encompassing vector" (Swyngedouw et al., 2002) to such a degree that the ecological processes of water, the natural hydro-cycle, can no longer meaningfully be abstracted from its twin social hydro-cycle of socio-political, economic and cultural embeddedness.

Under this perspective, water becomes a lens through which shifts in environmental governance can be traced and new modes of governance can be assessed. Indeed, it is one of the most comprehensively regulated areas within European environmental legislation and it constitutes an ideal empirical area where the relevant discourses at the European level can be traced and where important shifts in European environmental governance are highlighted. Additionally, the growing role of participation in the new logics developed around the governance of natural resources was manifested through pieces of legislation such as the WFD (European Communities, 2000). European discourse on water resources gradually moved from strictly quality issues, addressed with a regulatory

approach based on setting limits, to an integrated holistic approach manifested in the WFD. This shift can be traced through three distinct phases that the European legislation on water has undergone. These three “waves” pinpoint the change of logic around water governance.

European water policy, following the general pattern of the EC environmental policy, began in the 1970s with the First Environmental Action Programme followed by a first wave of legislation starting with 1975 Surface Water Directive (75/440/EEC) and culminating with the 1980 Drinking Water Directive (80/778/EEC). This first wave was characterized by setting binding quality targets for water and focused mainly on quality objectives for particular water types. The second wave of water legislation, beginning in 1988, followed a review of existing legislation and an identification of necessary improvements and gaps to be filled. This resulted in the second wave of water legislation focused on an emission limit value approach. and was reflected in the adoption of the Urban Wastewater Directive (91/271/EEC) and the Nitrates Directive (91/676/EEC).

But pressure for a fundamental rethinking of Community water policy led the Commission, which had already been considering the need for a more global approach to water policy, to accept relevant requests from the European Parliament’s environment committee and from the Council of environment ministers. Under the above logic, the Commission developed a consultation process whereby the Communication was formally addressed to the Council and the European Parliament, and at the same time interested parties (local and regional authorities, water providers, industry and agriculture representatives, enforcement agencies, NGO’s, and water users) were invited to the process. In February 1996 the Commission’s Communication

on European Union Water Policy was adopted (COM(96) 59 final), based on the principles for environmental policy of the Treaty and on the 5th Environment Action Programme, “Towards Sustainability”, and it recommended the making of a Water Framework Directive. This process was concluded with the adoption of the Water Framework Directive as the milestone for future European water policies, introducing some innovative practices aiming both at the protection of aquatic and terrestrial ecosystems and seeking to encourage sustainable water management in respect to both sustainable quantities and qualities (European Commission, 1997 and 1998). It is therefore clear that from its very roots, the WFD was designed with an eye on integrating environmental policy and increasing awareness and involvement of citizens and other interested parties in water resources policy making.

The implementation of the WFD by member states requires re-enforcing or establishing sub-national forms of governance at the river basin level, while there is a call for inclusive participation at that level. It could be argued that participation is actually imposed with article 141 of the WFD. However the directive leaves leeway for member states to determine how exactly participation targets will be reached and what form participation will take. Meanwhile, national governments are pressed to delegate some of their former power both upwards to the EU level and downwards to the regional level. This rescaling results in a more complex articulation of scale-dependent, multi-level forms of governance (Swyngedouw et al. 2002). As a result, some European states are more willing than others to adopt the European governance shift, reflecting these changes in their national

¹ Article 14 of the WFD requires member states “to encourage the active involvement of interested parties” in the implementation of the directive.

policies. This implies that some European states have greater capacity to adopt this shift. Countries like the UK for example, with pre-existing institutions like regional river authorities and well established mechanisms that may enable or facilitate participatory processes, are more likely to follow the European water governance agenda, than member states with a strong tradition of hierarchical and strictly top-down governance structures like the Mediterranean Member States as various documents and reports indicate (Galbiati et al, 2008 and 2005; PRB, 2007; De Stefano, 2004; Jordan and Liefferink, 2004).

The EU member states have an urgent task and important challenge ahead. In order to achieve the ambitious goals of the WFD, especially concerning participation, they must formalise, codify and regulate participatory practices, which are structural elements of the new forms of environmental governance the EU envisages. And this process poses a crucial challenge concerning the successful implementation of the WFD's participation requirements. How can those EU Member States with traditionally hierarchical and lagging well behind the rest in terms of participatory structures meet this challenge? Before addressing this question, it would be useful to examine some key documents, mechanisms and provisions concerning participation and the WFD.

3. PARTICIPATION IN THE PRBS: A PROBLEM SOON TO EMERGE?

Under the evolving European water governance, the EU member states are asked to achieve the ambitious goals—especially concerning participation—set by the WFD, by 2015. This section will discuss the difficulties encountered in the preliminary implementation phase of the

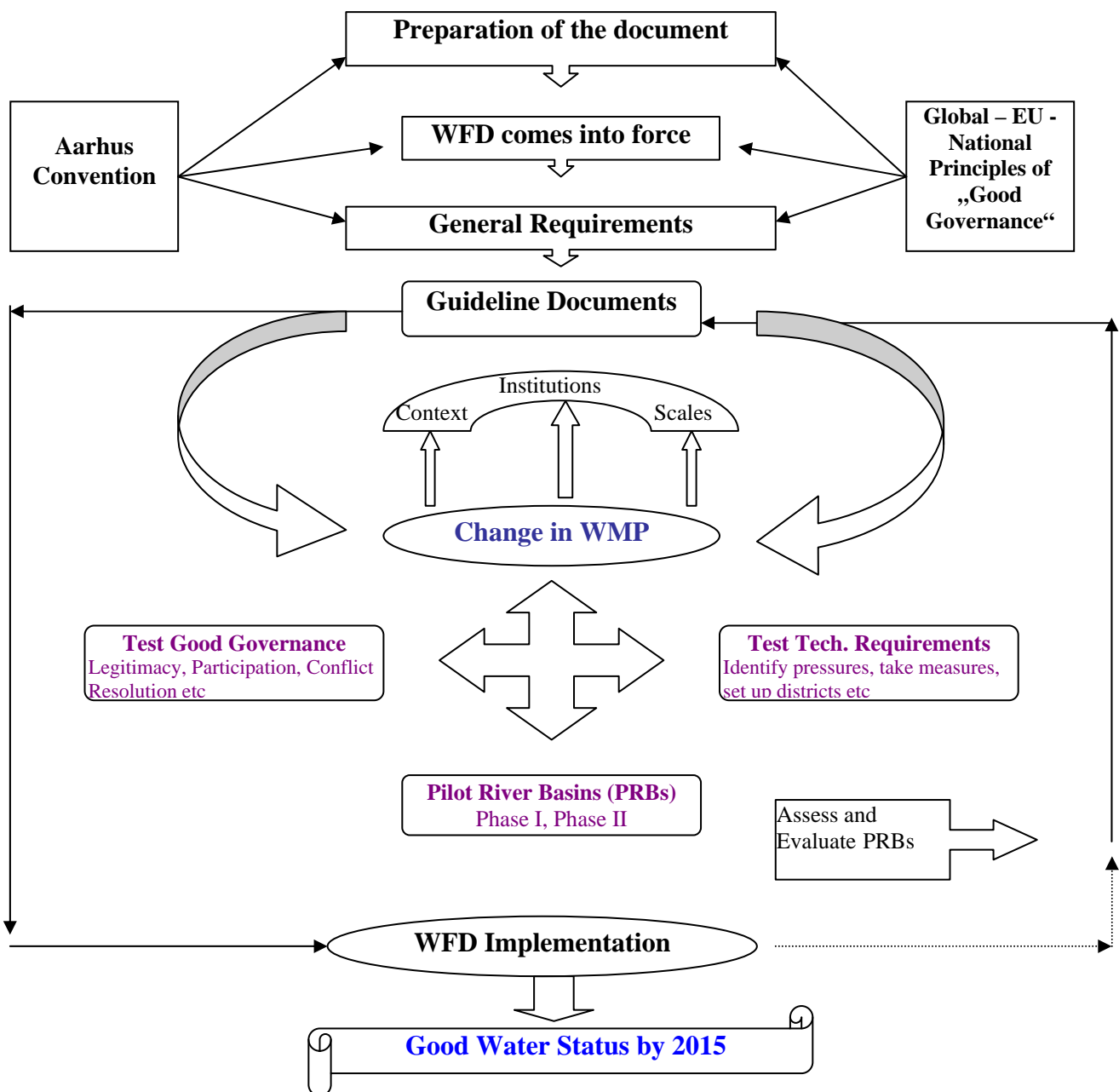
WFD, during the testing of the guidance documents provided and the PRB projects.

The WFD included the provision for a long “testing” process –often taking place in parallel with the implementation of the directive—aiming at the evaluation and modification of the guidance documents and the common implementation strategy (CIS). Moreover, this process was meant to offer considerable input to water management practices and plans, aiming to change the context and scales of existing water governance arrangements and create or modify new institutions. Through this carefully designed procedure, the directive would be tested in terms of meeting its “good” governance objectives (participation, legitimacy etc) and the technical requirements (monitoring, measures, setting up water districts etc). The RPB projects constituted the cornerstone of this long testing phase. However, this ambitious process fundamentally failed to address problems related to Member States' existing water governance arrangements and traditions, especially those regarding participation, inherited in the PRB projects. As such countries with inadequate participatory mechanisms and lack of relevant policy styles and traditions, inherited this to the implementation of PRBs. Figure 1, shows in a simplified graphical way the central role played by the PRB projects in the WFD implementation process. The supplementary Table 1 (see Annex) provides the key dates concerning the WFD implementation.

During the 2001/2002 Common Implementation Strategy of the WFD, a series of Guidance Documents concerning all major aspects of its implementation were developed². A European network of 15 Pilot River Basins (PRB) was established in order to test the guidelines

²http://circa.europa.eu/Public/irc/env/wfd/library?l=/framework_directive/guidance_documents

Figure 1: The WFD and the Key Role of PRBs



established in the documents. It was foreseen that such a network would contribute to the implementation of the WFD, leading in the development of long-term implementation policies and guidelines and coherent River Basin Management Plans.

The main objective of the first phase (2002-2004) was to test and report on coherence amongst the different Guidance Documents (GDs). The main deliverables of Phase I were the PRB Outcome Reports on the testing of WFD

Guidance Documents. In the second phase (2005-2006), PRB activities were embedded in each of the Working Groups designated under the CIS work program 2005-2006. The report of the Phase II activities included experiences shared by the Pilot River Basins on different aspects of WFD implementation, such as on reporting, on chemical pollution, on river basin management planning from a national but also international perspective, as well as on agriculture.

An evaluation mechanism for Public Participation (PP) was not developed during the first phase of PRB. However, World Wildlife Fund (WWF) which had engaged in the development of the WFD since its earlier definition stages and through its negotiation and adoption, evaluated PP in the PRBs (see for example WWF 2003a and b). According to their reports the results had clearly not been satisfactory.

It is particularly interesting that, according to WWF, only 2 of the 9 PRBs testing the PP guidance documents pursued stakeholder involvement from the outset of the process, although document specified the need for inclusion of the local communities as soon as possible. Moreover during Phase I a focal point of the PRBs was public participation despite the absence of an evaluation mechanism. The second phase on the other hand, did not concentrate on PP although the participant PRBs acknowledged its key importance to the preparation, implementation and success of RBMPs, but also identified some serious drawbacks, such as the fact that it is a time- and resource-consuming process (EC, 2008).

Another issue of particular interest is that in terms of information and active involvement, according to WWF only three countries' performance was rated good and 4-5 only fair, while in terms of encouraging active involvement only the UK performance was rated good, with two more cases being fair. Greece had very limited success concerning information and consultation and was an absolute failure on active involvement.

In a preliminary screening evaluation for all EU27 Member States (EC, 2007), the EU identified significant shortcomings with regard to art.14 on public participation, with some Member

States failing to properly transpose the obligation regarding public participation.

The above problems in various assessment documents clearly show that many PRBs failed to adequately address issues of public involvement in a way that moves further from a simple pro-forma participatory process. Within this context, the next section will focus on the experience of the Pinios³ PRB project in Thessaly region and water district, in Greece (see fig.2) that took place between 2003 and 2006, aiming to identify the reasons that led to this failure but also the mechanisms that could enhance community involvement in the future.



Fig. 2. Thessaly Water District
(Source: YPEHODE 2006).

4. THE PINIOS PILOT RIVER BASIN PROJECT

The overall aim of Pinios PRB (see figure 3) was to identify the technical and management problems that may arise in the WFD implementation and to develop pragmatic solutions. Other aims were to test the practicability and efficiency of the technical and supporting Guidance Documents on key aspects of the WFD before they are applied at national level in order

³ http://www.minenv.gr/pinios_river.html

to attain a concrete example of the application of these documents, and to inform interested parties on the implementation of the WFD by involving the stakeholders (including local and regional authorities) in the process from an early stage. The project highlighted some indicative problems for the Greek context, but, despite the difficulties encountered, the project was considered generally a success, as most targets had been successfully met and useful recommendations were made (Mahleras et al. 2007, PRB 2007, Galbiati et al. 2005, YPEHODE 2005).

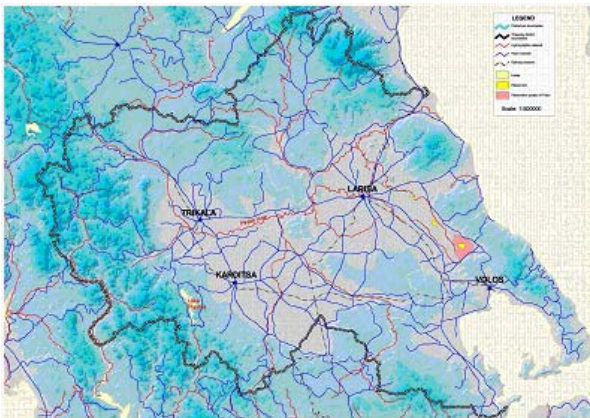


Fig. 3. Thessaly water region and Pinios River Basin. The main cities and Lake Karla (shown in pink above Volos) are marked on the map (Source: <http://www.minenv.gr/pinios/page5.html>)

Within the project, the perceptions, assessment and evaluation of participation are of particular interest. According to the initial document produced by the competent authority for the project, the Greek Ministry of the Environment (YPEHODE 2003), public consultation and participation by local stakeholders and NGOs were seen as key requirements for the successful implementation of the project. However, the Ministry later reconsidered its original position, stating that Public Participation may actually complicate negotiations, participatory processes could take a

lot of time and money and moreover, there's a lack of willingness to participate (YPEHODE 2005). This position could be explained given that few stakeholders and NGOs had been deeply involved in the project. Other regional authorities and stakeholders had also expressed their interest to participate but their role remained rather limited. Local authorities, including water utilities, had been only briefly introduced to the whole project and their awareness on the WFD's requirements or even general features remained limited (Zikos et al. 2005).

Unsurprisingly, NGOs and stakeholders consulted by the Ministry and later interviewed by the author stated that public participation is one of the key fields where a greater effort was necessary. Moreover, there was much concern about the poor involvement of local authorities as this may jeopardize the successful implementation of the WFD 'on the ground' (WWF 2003a). All criteria of PP in the Pinios PRB were evaluated as "poor" by the WWF (2003b) while participatory practices (distinguishing between information, public consultation and active involvement tools) were assessed as very limited or non-existent (De Stefano 2004). Even data collection proved a rather problematic issue since information was scattered and fragmented and in many cases information holders were unwilling to make it public (Mahleras et al. 2007). However those mostly indirect and rather general procedural problems of participation, encountered also in other PRBs in Europe, are barely reflected in the official assessment of the PRB's projects and in their recommendations for future action (PRB 2007, Galbiati et al. 2005). Instead, the approach to PRBs' assessment maintains a clear focus on the outcome evaluation of the project, made in a mechanistic way of "checking boxes" and positively evaluating most of the measures taken

and the measurable impacts on the system, the direct consequences.

According to Dietz and Stern (2008), an evaluation looking at causal links of any participatory process can only be made at the end of a process, as it does not influence policy and outputs directly or in a clear casual way. A post-evaluation would include outputs such as tangible actions and outcomes such as changes in attitudes, beliefs, knowledge and relationships of the participants (ibid.). Dietz and Stern (ibid.) further argue that it is much more feasible to evaluate such processes on the basis of immediate results, than to face the challenge of analyzing the entire causal chain, despite the obvious value of such an evaluation. Such an effort would require a substantial investment in research resources (ibid.).

The Pilot River Basins (PRB) projects and especially Pinions PRB, highlight the challenges that arise when the focus of the evaluation of an ambitious scheme is rather concentrated on measurable criteria (limits, technical and administrative issues etc) and consequences rather than on the process itself (Rauschmayer et al, 2009).

In the case that will be presented in the next section, the author addresses this gap by undertaking the laborious effort to look at the process, assess the outcomes and conduct a post-evaluation looking at the stakeholders' activities at different time periods.

5. THE GENESIS OF A PARTICIPATORY CULTURE

5.1 THE CASE STUDY AREA

The water sector in Greece, one of the most centralized countries in Europe, is characterized by the absolute dominance of hierarchy (Zikos & Bithas, 2006). The link between

water management at all different levels of governance is often disjointed, conflicting and strictly top-down (ibid.). A top-down policy making and implementation, combined with the absence of integrated long-term policies, illustrates in short the water sector as a whole (Getimis & Zikos, 2002). Decisions concerning the national planning are taken by the central governmental agencies, or, at the local level, by the responsible municipal authorities (ibid.). The local/regional social actors are excluded from the problem-solving process, something that according to Mayntz (1993) depicts a clear lack of dialogue and negotiation. Getimis and Zikos (op.cit.) argue that despite some recent attempts for a more inclusive decision-making process in the water sector, the broader idea of participation remains alien in the Greek context, while even the information flow towards the public is very often inadequate. As water policies have traditionally been shaped by the central government and ministries and, at a lower scale, by regional and local authorities, traditional forms of command and control approaches and hierarchical structures are still dominant at all levels and scales of decision-making concerning the water sector. In each respective scale there is usually one powerful principal actor (or a set of closely related actors), which becomes powerless at higher scales (Zikos et al, 2005). This power-play greatly hinders efforts to include more actors in the decision making process, as it is largely seen as a threat to the established status-quo. Even information flows are regarded as potential threats that may empower weak actors and gradually lead them to directly challenge the nominal authorities. This situation presents a major flaw: it assumes that all new actors entering the arena will be entangled in the pre-given highly conflicting power-play seeking to dominate. There is strong evidence though that

participation can on the contrary soften conflicts and lead to win-win situations (Mostert 2003). The author tested this assumption in the metropolitan area of Volos, employing the Water Framework Directive as an entry point.

The Municipality of Volos, one of the largest urban agglomerations in Greece, is located in the Prefecture of Magnesia, part of the Thessaly geographical/ administrative region and also water districtRegion, in central Greece. As part of the European project Intermediaries (2005), the author conducted preliminary research based on secondary sources (mainly previous studies and technical papers) which were followed by a series of extensive interviews with the dominant actors in the local water sector. Based on this information, the most considerable pressures on water resources were identified. The dominance of the municipal water utility and the total absence of dialogue between the different stakeholders in the water/wastewater sector were also apparent in Volos like in the vast majority of Greek cities. However, a steadily growing interest of new actors, such as private companies, non-governmental organizations and university institutions, to enter the water sector, was noted, thus influencing the existing monopolistic and strongly hierarchical structure. There was a hint that in the future these actors could play a more decisive role by making potential openings in the context of technological and institutional change. However, it was still difficult to identify and assess the impacts of the actors' practices on the environment, economy and technology, mainly due to their short-term presence, their current weak role, their lack of awareness of the existing opportunities to engage, and the absolute absence of participatory procedures that could enhance their role.

Water governance arrangements in the Municipality of Volos, were identified by the author as being responsible to a great extent for a series of deficits to solve the local water related problems. Such problems can be summarized in the inadequate water quantity and quality during the summer period, the pollution of the underground water reservoirs from the uncontrolled disposal of the industrial and agricultural wastes, and conflicts between neighbouring municipalities on water property rights. The obstacles, limiting any efforts to solve the above-mentioned problems mainly derived from the local water governance system itself. The municipal water utility (DEYAMV), the main competent authority for water related policy planning and implementation, had displayed in the past little interest even for the most basic actions to involve others in its domain. Even informing other key stakeholders like public administration institutes and municipal authorities in the region was highly problematic, highlighting the apparent lack of any further forms of interaction, like dialogue, negotiation, bargaining or even consultancy. Information flow from the utility to the general public was also limited and citizens' awareness level remained low. This long and well-established situation hampered sporadic honest attempts by DEYAMV to inform the public on urgent issues like severe droughts. The efficiency of such efforts greatly suffered because of the extreme lack of relevant knowledge and awareness of the citizens. In this picture civil society, local NGO's, University and citizens' organizations played a limited role. Any willingness to actively participate towards problem resolution was further hampered by weak links between the actors, lack of co-operation and collaborative action and, often, distrust or direct confrontation with DEYAMV in

the courtrooms. Legal action taken from the “weak” against the “powerful” was seen as the only meaningful way to protect individual interests.

Within this framework, characterised by strict top-down water management policies, hierarchical decision-making and absolute lack of participatory or even information mechanisms, a certain dynamic to seek new ways to solve problems, settle disputes and move forward was nevertheless hinted at. However such an effort expressed by individuals, could not take a certain coherent form and evolve into action. Realising this opportunity, the author attempted a novel active approach in this challenging context.

5.2 LEARNING TO PARTICIPATE

The idea of founding a horizontal social network of multi-level, water-related actors in the Municipality of Volos was born since the early implementation steps of the Intermediaries (2005) project, while preliminary research in the urban area of Volos was still underway. The research aim was to create those collective conditions necessary for active participation in the research process, bringing together actors that hadn't realized their position at the local level or their potential role in the implementation of the Water Framework Directive (WFD). That was an extremely important parameter from a political and scientific point of view, as the Pinios Pilot River Basin (PRB) Plan was taking place in the region (see Figure 3 above) and supposedly the participatory mechanisms required for the implementation of the WFD should have been already established. However, reports from WWF (2003a) on the PRB highlighted the general lack of public participation in Greece, regardless of the importance of the project implemented.

The initial idea was to establish an informal structure, which would act as an innovative organization with the goal of challenging, or at least supplementing, the traditional modes of water governance and, and that would enhance participation towards the implementation of the WFD. Another important aspect of the network was to set up an experimental pioneer forum to discuss and approach critical water management problems in a different, more participatory and innovative way, fostering social learning. The author, leading a team of researchers from the Panteion University of Athens, envisaged testing the hypothesis posed by Mostert (2003) that the most important effect of public participation is social learning (see also Dimadama and Zikos, 2010). Within this process, the role of the author could be characterized as “initiator”, “facilitator”, “bridge builder” and from a certain point onwards simply “observer”.

At the initial step all the organizations and institutional actors involved in the area's water sector had been identified. Fourteen key organizations with different competencies, responsibilities and degrees of power were identified and classified in five categories: Local Government, State actors, Private companies/entities, NGO's/ civil organizations and Universities/ research institutes (see Table 2 at the Annex). These particular actors were included in the process as they represent the local level of governance and had either adopted and implemented innovative water/ wastewater management practices, in a way acting as pioneers in the area, or presented unique skills and capacities.

The next step was an initial mapping of the water problems and the water governance structure,, based mainly on previous studies and personal contacts. This valuable information

constituted the background knowledge in order to launch a common dialogue procedure with the identified actors. It must be pointed out that the method of “snowballing” was employed to a certain extent from the beginning and more at a following stage. However for the scope of the paper we concentrate on those actors that took part in the network from the beginning to the very end.

The first stakeholders’ meeting took place in February 2004, with the participation of all the invited actors. This meeting opened a broad dialogue on the water/wastewater-related problems that take place in the area. There was also a futile attempt to open a discussion on the WFD but soon we noticed that none of the participants were aware of the directive or the PRB that was taking place in their region. Consequently the rather over-ambitious idea was immediately abandoned and we reformulated the problem according to the participants’ perceptions and capacities. During this step, we also realized the huge gap between the “manual” (i.a. European Commission 2003 and 2002; Wilcox, 1994) and the actual reality of participatory procedures. Under this perspective, we decided to preserve a completely neutral role, acknowledge our limited-knowledge concerning the real situation in the area and simply facilitate the process trying not to influence it but mostly observe it.

Being aware of the power-relations in the area and the traditional absolute dominance of governmental actors, the network kept a low profile as an entirely informal and voluntary participatory mechanism without posing any direct challenges to the dominant governance structures. DYPOM (from the Greek acronym standing for: Network of Water Resources of Magnesia Prefecture) was formally founded and a

series of similar voluntary and non-binding rules had been decided and included in the memorandum of the network. This “formal-informality” assisted the participants to open-up more comfortably, while the powerful actors did not feel that their position was threatened during the process. On the other hand participants felt that they had been somehow officially acknowledged as stakeholders and they had acquired a certain role. The fundamental operational principle of DYPOM that was unanimously accepted was the organization of regular meetings/workshops, where the members of the network would be planning, on a common basis, their common actions, further development and strategy. Additionally, DYPOM would evaluate the impacts of these actions.

Within this framework the network operated for nearly two years. In this period of time, the participants devoted much of their personal time and effort – always voluntarily – to contributing to the actions that were jointly planned, agreed and implemented (mainly focused on awareness-raising activities, training lectures in selected schools in the area, sustainable water management training seminars, and the organisation of a conference). They reached a consensus on most of the decisions that were taken. All the conflicts that emerged were solved by means of dialogue and negotiation. As time went on, the most active members of the network developed greater expectations and envisaged broadening the scope and the range of DYPOM to cover issues outside the metropolitan region of Volos (such as water for agriculture), not only in the prefecture but in the whole region as well. In parallel, they sought support from other European examples of water management issues in an attempt to improve their knowledge.

A lengthy discussion about the future of DYPOM was held after the end of the designated period of the network's operation. The core members of the network had shown a willingness to take on extra responsibilities in order not only to keep DYPOM alive but also to expand its scope. At this point it should be stressed out that the researchers had gained the trust of the participants as being "neutral and just facilitators of the process" as one of the members put it. As such, DYPOM members were unwilling to entrust this role to a local stakeholder believing that the neutrality would not be maintained and power-relations will come into play. Lack of funding did not allow the continuation of the researchers' travel to the area and despite some personal initiatives no solution was found. As a result and due to a series of similar obstacles unforeseen by the researchers the network was dissolved.

Meanwhile, the PRB plan in the area was concluded without much success in terms of participation (PRB, 2007) while the Greek Ministry of Spatial Planning, Environment and Public Works reformulated the desirability of public participation from "absolutely essential" (YPEHODE 2003) to a "difficult and complex task that may delay the implementation of the WFD" (YPEHODE 2005). Inspired by these contradictory statements and having experienced a success story in Volos, the author returned for a post-evaluation of this innovative bottom-up participatory exercise.

5.3 IMPACT AT LOCAL LEVEL AND UP-SCALING

Despite the poor performance in terms of participation at the PRB level, some important developments had taken place at the sub-regional level. Even more importantly the experience

acquired by the local stakeholders had been employed at the regional level.

The stakeholders have acquired new roles, enhanced their knowledge, re-formulated their targets and, most importantly, have indeed learned to work with others – not necessarily within a structured group. As such agencies of the local government have opened up and now are constantly looking for opportunities to collaborate with other local and regional stakeholders from various sectors. Some of them are now involved actively in issues directly linked to the implementation of the WFD and have had a considerable influence on changing the – initially completely unrealistic – plans to restore the dried out Lake Karla within the Pinios River Basin as a drinking water reservoir and instead use the water for irrigation. Local academics and researchers are now working closely with local stakeholders on various projects. Employees of the water utility are now being trained at the local university and, as has been pointed out, the exchange of knowledge and information is a two-way process. The utility acquires scientific knowledge and expertise while the university receives the practical and technical information it was lacking. In addition, university students pay regular visits to the water utility's installations, laying the foundation for even closer cooperation in the future. Conflicts from the past have been resolved almost entirely. The information flow established through DYPOM has led literally all NGOs to concentrate on urgent environmental or social issues in the area and not on water issues.

Private firms have moved towards the notion of "eco-preneurship", combining genuine environmental concerns with profit-oriented business. An ambitious plan for wastewater treatment was submitted to the municipal authority, while the company's water treatment

services are now used by the tourism industry of the area. Moreover, there is collaboration with the local university on water innovation issues. According to the interviews, the insights offered by the network greatly facilitated these activities. Finally, although it is difficult to measure, it seems that the wider society is responding to and interacting better on water-related issues. According to the participants interviewed, the citizens' awareness has increased, as has the accountability of the utility and public acceptance and legitimacy of water-related works often bringing public discontent in the past.

The bottom-up participatory process that took place, a concept completely alien to the region's social norms, influenced the perceptions of the members of the network to the point of altering their behaviour. The dominant local actors realised that through participation even institutionally weak stakeholders can influence a process. As a result, they now play a major role at the regional level, despite the fact that their institutional power is still practically non-existent. Moreover, the participants recognised that there is not one but many subjective realities in relation to water issues and that through discussion these realities can emerge to formulate a "reality-rich framework" in which all stakeholders with different interests and operating at different levels can work together constructively. Seen in this perspective, conflicts can be solved through negotiation and discussion, and judicial mechanisms are only measures of last resort. This realisation was expressed with the increasingly successful collaboration of stakeholders with neighbouring municipalities with regards to water and wastewater issues.

6. CONCLUSIONS

Exchange of knowledge, social and individual learning, behavioural changes, and even elements of power redistribution were identified in our case involving asymmetrical power relations (in the shadow of hierarchy). DYPOM, which was based on a horizontal structure, served partly to break down the strong barriers inherited by the Greek water governance regime between the dominant actor and the other local organisations.

Equally important was the experience acquired by the participants with regard to the difficulties, risks and opportunities involved in any participatory process. The constant interactions within the network contributed towards gaining a better understanding of the process of forming relationships between the participating organisations, given their different levels of formal and informal authority, responsibilities, objectives, and perspectives. Another important outcome of the process was the considerable difference experienced between the theory of participation and the WFD guiding documents and of organising a deliberative participatory process in reality.

Unfortunately, the actions that took place at local level had been separate from the broader Pinios PRB plan. As such a great opportunity to boost public involvement and participation within the WFD framework was wasted. However the "pilot within the pilot" case, showed that in cases where formal institutions are extremely weak regarding the support of participation, existing informal structures can be picked up, employed to initiate a process of learning and finally create the basis for the involvement of local communities through a process of learning how and why to participate. This realisation may support pursuing certain targets of the WFD in a purely bottom-up

way. What is needed from this perspective is the initiation and facilitation of the participatory process under a broader concept of learning, rather than the enforcement of top-down measures to fulfill certain technocratic requirements.

REFERENCES

Alcamo, J., J.M. Moreno, B. Nováky, M. Bindi, R. Corobov, R.J.N. Devoy, C. Giannakopoulos, E. Martin, J.E. Olesen, A. Shvidenko (2007). Europe. In M.L. Parry, O.F. Canziani, J.P. Palutikof, P.J. van der Linden and C.E. Hanson, (eds.), *Climate Change 2007: Impacts, Adaptation and Vulnerability. Contribution of Working Group II to the Fourth Assessment Report of the Intergovernmental Panel on Climate Change*, Cambridge University Press, Cambridge, UK, pp. 541-580.

De Stefano, L. (2004). *Public Participation in the Water Framework Directive Common Implementation Strategy Pilot River Basin testing exercise and in the implementation of the Water Framework Directive: An environmental NGO perspective*, WWF, May 2004.

Dietz, T., Stern, P.C. (eds.) (2008) *Public Participation in Environmental Assessment and Decision Making*. Washington, DC: The National Academies Press.

Dimadama, Z., Zikos, D. (2010). *Social Networks as Trojan Horses to Challenge the Dominance of Existing Hierarchies. Knowledge and Learning in the Water Governance of Volos, Greece*, Water Resources Management.

EEA (2007). *Climate change and water adaptation issues, European Environmental Agency Technical*

Report No.2/2007, Luxembourg: Office for Official Publications of the EU.

European Commission (2007). *'Towards Sustainable Water Management in the European Union', Communication From The Commission To The European Parliament And The Council, Commission Staff Working Document COM(2007) 128 final, [SEC(2007) 363], Brussels, 22.3.2007.*

European Commission (2003). *Public Participation in Relation to the Water Framework Directive, Guidance Document No 8*, Luxembourg: Office for Official Publications of the European Communities.

European Commission (2002). *Guidance on Public Participation in Relation to the Water Framework Directive: Active involvement, Consultation, and Public access to information*, Guidance Document on Public Participation, December 2002.

European Commission (2001). *European Governance: A White Paper*, Brussels, 5.7.2001.

European Commission (1998). *Proposal for a Water Framework Directive, amendment of 17/02/98; COM(98)76.*

European Commission (1997). *Proposal for a Water Framework Directive of 26/02/97; COM(97)49 (and amendment of of 26/11/97; COM(97)614).*

European Communities (2001). *Environment 2010: Our future our choice – The sixth Environment Action Programme of the European Community 2001-2010*, Brussels.

European Communities (2000). *Directive 2000/60/EC of the European Parliament and of*

the Council, Official Journal of the European Communities, L 327, 22.12.2000.

European Communities (1993). *Towards Sustainability. A European Community programme of policy and action in relation to the environment and sustainable development*, official journal of the European Communities, No. C 138, 17.5.1993.

Galbiati L., Somma F., Zaldivar J. M. (eds.) (2008). *Pilot River Basin Activity Report Phase II: 2005-2006 Water Framework Directive implementation pilot activities: Key challenges and recommendations from the Pilot River Basins*, Joint Research Centre and Institute of Environment and Sustainability, Luxembourg: Office for Official Publications of the European Communities.

Galbiati L., Zaldivar J. M., Somma F., Bouraoui F., Moren-Abat M. C., Bidoglio G. and D'Eugenio J. (eds.) (2005). *Pilot River Basin Outcome Report: Testing of the WFD Guidance Documents*, Joint Research Centre and the Directorate General Environment of the European Commission, Luxemburg.

Getimis P., Zikos D. (2002). *Participation of New Actors in the Water Resource Management and the Role of EYDAP*, in HYDRORAMA 2002, EYDAP: Athens, pp. 382-389.

Intermediaries (2005). *New Intermediary Services and the Transformation of Urban Water Supply and Wastewater Disposal Systems in Europe*, EVK1-CT-2002-00115, carried out in the 5th Framework Research and Technological Development Program of the Commission of the European Communities, coordinated by Timothy Moss, Institute for Regional Development and Structural Planning, Erkner, Germany.

Jordan A., Liefferink D. (eds.) (2004). *Environmental policy in Europe. The Europeanization of national environmental policy*. London/New York: Routledge.

Mahleras A., Kontogianni A., Skourtos M. (2007). *Pinios River Basin – Greece, Status Report of the EU funded project AquaMoney, Development and Testing of Practical Guidelines for the Assessment of Environmental and Resource Costs and Benefits in the WFD*, Contract no SSPI-022723, 15/4/2007.

Mayntz, R. (1993). *Governing Failures and the Problem of Governability: Some Comments on a Theoretical Paradigm*, in *Modern Governance: New Government–Society Interactions*, J. Kooiman (ed.), London: Sage.

Mostert E. (ed.) (2003). *Public Participation and the European Water Framework Directive: A framework for Analysis*, February 2003, RBA Centre, Delft University of Technology.

PRB (2007). *Pilot River Basin Activity Report phase II: 2005-2006 Water Framework Directive implementation pilot activities – key challenges and recommendations from the Pilot River Basins*, Report prepared by Pilot river basins, European Commission, DG Environment and the Joint Research Centre, 13 June, 2007.

Swyngedouw E., Page B., Kaika M. (2002). *'Sustainability and Policy Innovation in a Multi-Level Context: Crosscutting Issues in the Water Sector'*, in Getimis P., Heinelt H., Kafkalas G., Smith R., Swyngedouw E. (eds.) *Participatory Governance in Multi-Level Context: Concepts and Experience*, Leske & Budrich, Opladen, pp. 107-131.

Wilcox, D. (1994). *A Guide to Effective Participation*, Brighton: Delta Press.

WWF (2003a). *Summary of Water Framework Directive results*, June 2003 (updated in September 2003), accessible at <http://www.panda.org>.

WWF (2003b). *Results Overview for the Pinios River Basin (Greece)*, in *Critical Issues in water policy across Europe*, WWF, Nov. 2003.

YPEHODE (2006). *Report on the Pressures and Qualitative Characteristics of Water Bodies in the Water Districts of Greece and a Methodological Approach for Further Analysis*, Hellenic Ministry of Environment, Spatial Planning and Public Works.

YPEHODE (2005). *Pinios River Basin Pilot Project*, Hellenic Ministry of Environment, Spatial Planning and Public Works.

YPEHODE (2003). *Integrated Testing of Guidance Documents in Pilot River Basin Plans: Pinios River Basin-Greece*, Hellenic Ministry of Environment, Spatial Planning and Public Works.

Zikos, D., Markantonis, V., Getimis, P. (2005). *Informal Social Networks and Sustainable Management of Water Resources: The Case of Volos*. Proc. of 5th National Conference of EEDYP, Xanthi, pp. 465-472 (in Greek).

ANNEX

Table 1: Key Dates of the WFD

Year	Issue	Reference (Article)	Notes
12/2000	Directive entered into force	25	
2002	Pilot River Basins (PRB): First phase. Testing guidance documents		15 PRBs took part
12/2003	Transposition in national legislation	23	
	Identification of River Basin Districts and Authorities	3	
12/2004	End of the first phase of the PRBs		
	Characterisation of river basin: pressures, impacts and economic analysis	5	
2005	Pilot River Basins (PRB): Second phase. Input to common implementation strategy, key elements of WFD implementation, create networks		21 PRBs (5 not part of the final report)
12/2006	End of the second phase of the PRBs		
	Establishment of monitoring network	8	
	Start public consultation (at the latest), make available for comments a timetable and work programme for the production of the RB Management Plans	14	“Start public participation as soon as possible and do not wait until 2006” (EC, 2002)
	Time table and work programme for the production of the plan, including a statement of the consultation measures to be taken		
2007	For public information and consultation: overview of the most important water management issues		
12/2008	Present draft river basin management plan	13	
	Make the plan available to the public for	14	

	comments		
12/2009	Finalise river basin management plan including programme of measures	13	11
12/2010	Introduce pricing policies	9	
12/2012	Make operational programmes of measures	11	
12/2015	Meet environmental objectives First management cycle ends Evaluation and updating, derogations Second river basin management plan & first flood risk management plan.	4	
12/2021	Second management cycle ends	4	13
12/2027	Third management cycle ends, final deadline for meeting objectives	4	13

Table 2: The participants of the Network

Category	Role	Power ⁴
State, Local Government	Public state institution, located in Volos but functioning at regional level. Groundwater quality control, consultancy to farmers	Important, but only at regional level
	Non-profit private company, run by the municipality. Water management, protection, supply, treatment etc	Absolute dominance at local level
	Administration	Respected at local level but not focused on water
	Municipal enterprise focused on urban development and regional planning in the city and the broader area. Studies, construction and development of water works	Not significant
NGO/ Civil Organisation	Non-profit organization located in Volos and focusing on crucial environmental problems, mainly related to the pollution of the adjacent gulf by wastewater.	Insignificant, acting as pressure group
	Network of citizen groups and voluntary organization, not focused on environmental issues but on the empowerment of Volos' civil society and the weakening of the local state actors	Insignificant
	Local, sub-regional environmental NGO	Almost insignificant, some pressure, close ties with the Network below

⁴ Only the institutionally given power in the water sector was assessed, assuming that the informal power relations were too weak to influence considerably the dominant structures. Specific names of the participants are omitted though available at <http://www.uehr.panteion.gr/dypom/data/1.2.htm> (in Greek).

	Network of Ecological Organizations. Headquarters located in Volos. Has history of eco-activism and radical positions on environmental issues. Has recently been engaged in legal action against governmental actors.	Weak but often taken into account as direct confrontation usually ended up in a court room
University/ Research	Public institution, located in Volos but active in the greater area of Thessaly. Education and research.	Knowledge holder, Authority of "expertise"
	University non-profit research institution	Knowledge holder, Authority of "expertise"
Private Sector- market	Private commercial company, located in Volos, but providing services in the whole Thessaly Region	Insignificant
	Private company, based in Volos, but products and services are exported globally. Research and innovation especially on water treatment installations.	Insignificant
	Commercial company located in Volos but providing water sanitation products at sub-regional level.	Insignificant
	Private company/association based in Volos but operating at sub-regional level. Industrial and household wastewater transfer and disposal.	Insignificant but recognized importance