



## **Selected Case Study of CABRI-Volga Project Deliverable D3 "Environmental Risk Management in Large River Basins: Overview of current practices in the EU and Russia"**

### **THE PO BASIN WATER BOARD, ITALY**

Centro Volta, Italy

#### **Introduction**

Among a variety of national authorities for river basins, the Po Basin Water Board (PBWB) in Italy is assessed by the experts as the most concerned about enhancing coordination between stakeholders in the river basin. In this context its particular focus is how to involve public in decision-making, i.e. in designing the planning and programming instruments applied by the agency. It has taken practical steps to involve both public and private individuals with varying interests in its activities, with the aim of:

- making optimum use of knowledge, experience and initiative of various stakeholders in order to improve the quality of planning in river basin management;
- obtaining consensus and mandate to operate and the public support in decision-making process;
- reducing conflict and misunderstanding and thus guarantee of effective and rapid action;
- achieving maximum transparency of decisions;
- promoting constructive dialogue via exchange of experience between parties involved in the decision-making process.

The overview below outlines the role, tasks and planning activities carried out by the PBWB. It describes regulatory procedures for designing/adopting the plans and programmes and lessons and the most important practical experiences of the Board related to the issue of participation and shared involvement in river basin management.

#### **The Po Basin Water Board: administrative bodies, roles, goals and instruments**

PBWB was established in 1989 by the Law no. 183/89 to enhance "protection of lands, water rehabilitation, the use and management of hydro resources for the rational economic and social development, and protection of related environment" (Art. 1) within the water basin of the River Po.<sup>1</sup>

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<sup>1</sup> The basin is defined in the law 183/89 as "the territory from which rainwater or snow and glacier melt flows on the surface, gathers in streams of water either directly or via tributaries...".



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### The River Po Basin

The River Po Basin is the largest water basin in Italy covering the area of more than 71,000 square kilometres, or about a quarter of the national territory. It includes about 3,200 council areas and six regions: Piedmont, the Aosta Valley, Lombardy, Veneto, Liguria, Emilia-Romagna and the Autonomous Province of Trent.

The Po is the largest Italian river both in terms of its length - 652 kilometres, and its flow volume - reaches its maximum of 10,300 cubic metres per second at Pontelagoscuro. Its source is at Monviso in Piedmont, and it is fed by 141 tributaries before flowing into the Adriatic Sea in the north of Ravenna through its delta of 380 square kilometres.

The basin has a population of about 16 million. The territory is unevenly populated: population density range from a maximum of approximately 1,500 inhabitants per square kilometre (the Lambro area) to 25 (the Trebbia sub-basin).

The Basin accounts for 40% of Italy's GDP. It is home to 37% of the country's industry, providing 46% of jobs, about 55% of livestock in only 5 provinces and 35% of the country's agricultural production. Electricity consumption accounts for 48% of the national total.

**Fig. 30: The River Po Basin**

### Structure

The PBWB has a mixed representation of both the state and the regions. It is formed from representatives of the ministries involved in activities for protection and development of natural resources in the Regions or Provinces situated in the Po Basin and also from regional representation.

The decision-making body of the Water Board is the Institutional Committee which is composed from several ministries, including the Ministries for the Environment and Protection of the Territory (President), Infrastructures and Transport, Cultural Heritage and Affairs, Agriculture and Forestry, the Interior (delegate for the Coordination of Civil Protection), as well as from the presidents of the Regional councils in the basin (Liguria, Piedmont, Aosta Valley, Lombardy, Emilia-Romagna, Veneto and Tuscany) and of the Autonomous Province of Trent, and the PBWB General Secretary<sup>2</sup> with a consultative vote.

### Goals

The major directions of environmental activities in the basin as defined by the Law no. 83/89 include:

- Hydro-geological protection and maintenance of the hydro-graphic network;
- Protection of water-bodies quality;
- Rationalisation of water use;
- Flood control;
- Regulation of land-use.

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<sup>2</sup> The General Secretary is responsible for the Water Board, represents the Institutional Committee and heads the Technical Committee, e.g. the body which advises and assists the Institutional Committee, and heads the technical-operative secretariat.



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Major operational means within PBWB planning, programming and implementation efforts are (art.3):

- Organisation, conservation and recovery of the lands and soils in the basin through intervention and control in the hydro-geological, hydraulic, hydraulic-forestry, hydraulic-agrarian, forestry-pastoral, forestation and reclamation and drainage fields;
- Protection and regulation of water-courses;
- Control of water extraction to prevent environmental disruption;
- Consolidation and reinforcement of riverbanks and unstable areas, as well as settlements and infrastructures to protect them against landslides, avalanches and other risks;
- Containment of soil subsidence and the upstream movement of seawater along rivers and into water-bodies;
- Coastline protection;
- Reclamation of surface and ground waters to stop their degradation and make them to conform with the EU and national legislation, ensuring their rational use for food production, leisure, recreational and tourist requirements;
- Rational use of surface and underground water resources;
- Regulation of the territory to safeguard and conserve state property and creation of river parks and protected areas;
- Integrated management of public services.

### **Instruments**

The main planning and programming instrument of the PBWB is the Hydro-graphic Basin Plan. It is used as a territorial plan for various sectors and defines the frames for regulatory regime for particular activities and plans/programmes for the use of the territory. Once approved, it provides directives which have immediately binding effect on both the public administration and organisations and private entities.

The Basin Plan is drawn up for sub-basins, or "transitional extracts" (Law 183/89, art. 17, para 6-ter). The extract or *transitional plans* are acts relating to particular sectors or parts of the entire river basin; such approach allows mobile and effective interventions in critical and urgent cases. A variety of other operational instruments are applied: while waiting for the Basin Plan to be approved, and in addition to the transitional plans, the PBWB can also use other legal instruments such as: *provisional and programmatic*



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*tables*<sup>3</sup> and *safeguard measures*<sup>4</sup>. The PBWB is able to operate according to the following transitional plans:

- Transitional plan for restoration of hydraulic structure (PS 45)
- Transitional plan for hydro-geological structure (PAI)
- Extraordinary plan for areas at high hydro-geological risks (PS267);
- Transitional plan for fluvial areas (PSFF), integrated into and acknowledged by the PAI;
- Transitional plan for the control of eutrophication (PSE).

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<sup>3</sup> The provisional and programmatic table sets the general strategic lines of the plan and specifies the actions required for their implementation. It identifies the critical points, means of intervention and outlines an initial estimate of the financing required (para.31 of Law 183/1989).

<sup>4</sup> The safeguard measures, defined in relation to the particularly urgent situations, are immediately binding and remain in effect until the Basin Plan is approved and, in any case, for a period of no more than three years (17 para 6-bis of Law 183/89).



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Combination of these planning instruments allows dynamic approach and ensures that the Basin Plan is not a static institution, but is flexible for updating by subsequent planning acts, each of which can be viewed as a fundamental element in the overall planning activity. In its turn, coordination of these structural elements of programmatic activities ensures the development of efficient inter-governmental network with all interested parties being involved in formulating the plan and putting it into effect.

### **Regulatory context**

To understand more clearly the implementation process and activities carried out by the PBWB it's useful to provide some overview of concrete regulatory procedures and mechanisms it applies in practice for coordination and stakeholders participation in decision-making. This regulatory framework had been under formation since the Law 183/89 has been enacted.

For example, this Law (Art.14) foresees an internal preparatory phase for the development of the Basin Plan by the PBWB Technical Committee and its adoption by the Institutional Committee. This internal phase is followed by a rather brief phase of *public consultations*: interested parties have a 45-days period within which they can provide their remarks and communicate them to the relevant Region of the basin. Regions are free to "declare themselves" and formulate their opinion on the project under consideration. In relation to comments from the private sector the rules provide the widest legitimacy for its participation in decision-making and linking it with its practices in the basin. Some experts assess this public consultation stage as a weak segment in the entire participatory chain. The problem is that Regions are not obliged to carry out an analytical evaluation of the comments received, the time period for comments is limited, and, finally, the entity being approached to make a review, usually, is the same one that participated in designing the project plan.

Once the Regions involved have expressed their views, the Institutional Committee adopts the Basin Plan, taking into consideration their opinion and comments. After the second approval of the Institutional Committee the Basin Plan is being passed to the national level (due to national significance of the Po River Basin) for further approval by the Prime Minister decree, with following deliberation by the Cabinet and proposal by the Minister for Public Works (art. 4, para. 1, item C.) and, it is finally published in the Official Gazette and in the Official Bulletins of the Regions.

In 2000, in order to enhance coordination between basin plans and territorial plans the Law 183/89 has been modified, and substituted by the Law 365/200; it sets specific rules for adoption of transitional project relating to hydro-geological risks. This law, in particular, foresees that "in order to adopt and activate transitional plans and the required coherence between the basin plan and territorial plans, the regions shall call a planning conference which is divided into provincial subsections, or other subdivisions agreed upon by the regions themselves, within which the provinces and council areas involved shall participate, together with the regions and PBWB representatives". This Conference then expresses a joint opinion about a project plan, with particular reference to its provincial and council-scale context (local hydro-geological and city-planning limitations are taken into consideration as well), while the Institutional Committee, in adopting the plan, takes into consideration the decisions reached by the Conference.

### **Public participation: Lessons learned**

It is remarkable that PBWB managed to actively involve public and private entities characterized by various interests. It ensured their participation in both environmental



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planning and decision-making, as well as in programmes implementation. For these three level stages, i.e. planning-programming-execution the aims, instruments and bodies/individuals to be involved are identified.

### **Advisory Committee**

The first important PBWB initiative undertaken to ensure coordination of interests, consensus and wider communication relating to plans design has been creation in 1994 of a consultative body - the Advisory Committee. It was formed for earlier consultations and to promoting and disseminating the knowledge about project plans for the basin and making comments and observations before projects are adopted by the Board.

Advisory Committee has a wide representation from various stakeholders in the Po Basin, including representatives of local authorities associations<sup>5</sup>, agricultural and industrial associations such as the Chambers of Commerce<sup>6</sup>, conservation organisations<sup>7</sup>, the natural parks<sup>8</sup>, cooperatives<sup>9</sup>, the reclamation and drainage consortiums and the Italian Electricity Board (ENEL).

The Committee participates in designing the main PBWB planning acts through consultations with multiple stakeholders; it also promotes meetings and conferences. It also has drawn up numerous documents and summarized opinions regarding the PBWB plans and main acts, provided assessments of different planning approaches to the river basin management. It is also involved in decision-making during natural disasters and other crisis situations in the basin. Since 1997, the Committee has examined and discussed the principal planning acts of the PBWB, and in particular, the Transitional Plan for Fluvial Areas (PSFF) and the Plan for hydro-geological structure (PAI). During the last few years, it has promoted a number of conferences and meetings with a broad stakeholders participation that were focusing on territorial maintenance of the basin<sup>10</sup>.

Over the years the Advisory Committee has taken on an important role, not only in formulation and registry of local interests, but also as a proposal-making organ of the Water Board itself, drawing attention to problems and possible sources of conflict in the planning processes. However, its informal nature with the lack of concrete regulations regarding its roles and tasks, has limited its potential and actions which are mainly defined by practice and informal agreements with the top levels of the management and coordination bodies. At the same time, the Committee's activities have significantly helped to enforce certain innovations in relation to participatory management in the river basins. In a course of project preparations the Committee interacts not only with PBWB internal organs, but also counteracts with external technical bodies, members of the national government and regional and local authorities which are responsible for putting the plans into effect, with various associations and other stakeholders.

### **Strategic Plan**

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<sup>5</sup> ANCI, UPI, UNCEM

<sup>6</sup> CONFAGRICOLTURA, CIA, COLDIRETTI, CONFINDUSTRIA, CONFAPI, COMUNITÀ PADANA DELLE CAMERE DI COMMERCIO, CISPTEL, trade unions (CGIL, CISL, UIL)

<sup>7</sup> WWF, LIPU, LEGAMBIENTE

<sup>8</sup> Ticino and Po, Orba Park

<sup>9</sup> National Cooperative League and the Confederation of Italian Cooperatives

<sup>10</sup> Seminar "Technical and legal problems for development of a maintenance plan for the Po Basin" (Parma, 31 May, 2000); conference "Internal Navigation Programmes and Planning for the Basin" (Parma, 18 September 2000); the "First Conference on Territorial Maintenance" (Turin, 9 March 2001).



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During recent years the PBWB has included into its priorities the development of Strategic Plan aimed at common strategies for enhancing security, maintenance and development of water-courses, the fluvial areas and the territory of the Po Valley. The crucial aspect of the strategic planning is the development by 2007 of the Pact for the Po River Basin. This document will define the institutional capacity by summarizing common goals and actions within the basin at *various levels* - regions, provinces, mountain communities, councils and council associations, etc. as well as by stakeholder groups representing major interests in the basin.

Such approach is a significant innovation in terms of procedure and substance as PBWB intends not to limit its scope by planning and programming activities, by adoption of directives or other regulations. It broadens its mandate to include implementation of plans and norms for basin maintenance and restoration. This plan is regarded by different levels of territorial authorities as an overall vision of development for the Po basin that can be discussed among stakeholders, amplified, improved and implemented.

The Strategic Plan consists of:

- 5 strategic directions, including establishment of basin governance, reducing risks associated with hydro-geological instability, enhancing the value of the territory and fluvial areas, control of the water management and support for local development;
- 19 strategic aims;
- 46 activities;
- 166 actions.

The major goal is to make the territorial systems work together through participatory and integrated approach that can offer:

- effective representation of territorial interests;
- greater and highly-qualified capacity for coordination and cooperation;
- strengthening and rationalizing of co-planning activities
- new role as a facilitator assisting and speeding up projects realization;
- transfer of tested good practices in river basin management, organisation, finance and project development.

#### **Priority projects for the basin management**

The SAFE project reflects the principle of maximum involvement in enforcement and keeping up to date the Basin Plan of major institutions from all local governments. It envisages a variety of operational actions to be carried out jointly by PBWB and local bodies, including:

- Support for the local authorities in carrying out actions aimed at reducing vulnerabilities and river ecosystems rehabilitation;



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- Identification of sample areas to conduct experiments with financing of strategic "pilot" projects for maintenance of high-risk areas;
- Issue of directives to reduce the vulnerability of settlements and infrastructures.

The first phase of the project ended in June 2003 and work groups were created with the task of drawing up guidelines to support local authorities. It was carried through updating the census of all infrastructures, buildings and businesses included in the Levels A and B<sup>11</sup> defined in the PAI.

In 2004, PBWB initiated the MIRAPO project (Monitoring-Investigation-Research-Analysis-Proposals-Orientation) aimed at increasing the awareness and security of inhabitants of the middle Po valley against the risk of floods and sustainable conservation of the fluvial areas. This project envisaged collection of information combined with regular communication with the locales in the basin. Information brochures about the flood risks were widely disseminated and this action contributed to building strong local consensus. The activity, which involved an environmental association and students was repeated in 2005 in other areas of the basin.

#### **Protocol of Understanding**

"The Protocol of understanding for the protection and improvement of the territory and promotion of security for the population of the Po Valley" was adopted in Mantua 27 May, 2005 between the PBWB and 13 provinces of the basin - Alessandria, Cremona, Cuneo, Ferrara, Lodi, Mantova, Parma, Pavia, Piacenza, Reggio Emilia, Rovigo, Turin and Vercelli. Its aims include:

- To define an action plan for protection and improvement of the territory and promotion of security for the population of the Po Valley;
- To jointly implement the goals of the Strategic Plan mentioned earlier.

The action plan is to integrate into one system all initiatives currently being undertaken by the signatories of the Protocol, stressing the positive cumulative effects and reducing areas of incompatibility between separate initiatives. Common actions will be defined bearing in mind local specifics of the territories as well as integrity of the Po River Basin. The objectives of this Protocol are:

- To support cooperation between various actors on the basis of the assumption that "none of them can pursue global strategies, but that each can hinder/assist the projects of others";
- To create opportunities for various actors to clearly define their objectives and thus assist for establishing coordination

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<sup>11</sup> The fluvial areas are so defined on the basis of hydraulic criteria with the aim of hydraulic defence of the territory.



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between multiple actors, including "weak elements" of this network, i.e. actors whose opinions are not so easily heard;

- To create an awareness about the fact that by forming alliances and partnerships, it is possible to increase the weight of decisions and control over scarce financial and technical resources.

### **RIVAdiPO Project**

The RIVAdiPO Project is the activity in which, more than in any other, authority has moved further from the planning level to approaching local contexts. It examines the territory of 3 different regions (Piedmont, Lombardy and Emilia Romagna) and 7 provinces (Alessandria, Piacenza and Parma, on the right bank; Pavia on both banks; Milan, Lodi and Cremona on the left bank). Its aim is to develop through the agreement with the Councils of the Middle Po Valley<sup>12</sup> a common strategy for economic, social and environmental amelioration and development of the Middle Po Valley with a major focus on sustainable local development and security of fluvial lands. It intends to coordinate economic use of resources with enhancing ecological characteristics in the area.

The work conducted in 2004 indicated a willingness to apply project to different many Council areas and identify their approaches. They were almost unanimous in approving the PBWB as a partner with whom to conduct joint projects for local development of the territory. Development strategy for the Middle Po Valley is expected to include specific actions and projects indicating the resources to be employed and actors to be involved. Selection criteria are to be proposed so as to guarantee that actions and projects are feasible and can in effect be carried out within a mid-term perspective. The sustainability of the actions proposed will have to be assessed from environmental, economic and social standpoint; it is also to be compatible with both the PBWB Strategic Plan and socio-economic and financial programming of the regions and provinces involved.

Actions aimed at improving the environment and the security of the territory are supposed to produce integrated package of interventions for making the Middle Po Valley an area of excellence in environmental terms. The following strategic objectives, in particular, will be taken into consideration:

- creating conditions for the maintenance and improvement of the quality of life;
- supporting the development of eco-compatible production activities.

### **Programme Agreements**

The review of PBWB initiatives that have either reached their conclusion or are currently underway finalises with the list of Programme Agreements on specific topics of the Po Basin management. These are interesting institutional arrangements for development of coordination and partnership agreements between various actors in the basin. They can be regarded as useful and flexible instruments, agreed upon and coordinated by various actors involved in the planning processes and constructed in line with the specific needs of the territories involved (see Annex).

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<sup>12</sup> Agreement for performance of activities aimed at the development and security of the communities of the Middle Po Valley