

**Value of the  
EU Water Framework  
Directive concepts  
for the  
MEDA Partner Countries**

Synthesis Note and  
preliminary conclusions of the  
study

---

Draft version

---

June 2005



Office  
International  
de l'Eau



## Table of content

<b>I</b>	<b>Overall Background:</b> .....	<b>3</b>
I.1	Objectives of the study .....	3
I.2	EMWIS current state of affairs in the relevant sector .....	3
I.3	The Water Framework Directive .....	3
I.4	Related programmes and activities: .....	4
<b>II</b>	<b>Identification of ‘a priori’ concepts of interest for the MPC</b> .....	<b>6</b>
II.1	District and characterisation .....	6
II.2	Environmental objectives and Water Ecological Status.....	6
II.3	Monitoring networks and programmes .....	6
II.4	Economic analysis and water prices.....	7
II.5	Setting up a Programme of measures (actions) .....	7
II.6	-Public participation .....	7
II.7	River Basin Management Plan .....	8
<b>III</b>	<b>Assessment of interests related to the identified concepts, overall results from the survey carried on 10 Mediterranean Partners Countries</b> .....	<b>9</b>
III.1	Answers to the questionnaires .....	9
III.2	Legislative background and overall level of awareness of Water Framework Directive .....	10
III.3	Assessment of level of interest on topics included in the WFD, .....	12
III.3.a	The District and its characterization.....	12
III.3.b	Environmental objectives and Water Ecological Status.....	13
III.3.c	Monitoring networks and programmes. ....	14
III.3.d	Economic analysis and water prices.....	15
III.3.e	Setting up a Programme of measures (actions) .....	16
III.3.f	Public participation.....	17
III.3.g	River Basin Management Planning .....	18
III.4	Priority of actions on the different topics and additional matters of interests.....	19
<b>IV</b>	<b>Conclusions and recommendations for follow-up activities by EMWIS</b> .....	<b>21</b>

## **I Overall Background:**

### ***1.1 Objectives of the study***

The overall objectives of the thematic studies planned under the EMWIS Phase II are:

- to provide synthesis covering all the Mediterranean Partner Countries on subjects of interest to the Euro-Med water community
- to initiate new content for EMWIS (to be published on the Internet)
- to organise a workshop or a presentation during an EMWIS conference

The objective of this contract was to identify the concepts defined in the EU WFD of interest for the MPC, notably by proposal of 'a priori' concepts of interest for the MPC and Individual MPC interest analysis for the implementation of the selected concepts.

### ***1.2 EMWIS current state of affairs in the relevant sector***

During its first phase (1999-2002), EMWIS focused on providing access to existing electronic information resources. In parallel, end-users have expressed the need for thematic synthesis covering the Euro-Med area. Therefore, it has been decided to undertake about 6 thematic studies during the second phase (2003-2006).

At their Malta meeting in May 2004, the EMWIS Steering Committee members decided to start working on four themes, with the aim to get significant results on at least 2 of them for the meeting of the Euro-Med Water Directors in early 2005. The four themes selected are:

- Use of non-conventional water resources (theme of the Turin Action Plan)
- Irrigation water management (theme of the Turin Action Plan)
- Integrated management of local drinking water supply, sanitation and sewage (theme of the Turin Action Plan)
- EU Water Framework Directive and the Mediterranean Partner Countries: identification of interest and transfers of success cases of the WFD implementation in EU countries to the MPC

### ***1.3 The Water Framework Directive***

The Water Framework Directive (also known as the WFD or Directive 2000/60/EC) is a legislative framework to ensure sustainable water use throughout Europe by protecting and improving the quality of all water resources such as rivers, lakes, groundwater, transitional and coastal water within the European Union. The EU Water Framework Directive is the result of several years of consultations between the EU Member States on a common integrated water management policy. The Framework Directive approach is to:

- Protect all waters: rivers, lakes, coastal waters, and ground waters.
- Set ambitious objectives to ensure that all waters meet good status by 2015.
- Set up a system of management within river basins that recognises that water systems do not stop at political borders.
- Support Cross border co-operation between countries and all involved parties.
- Ensure active participation of all stakeholders, including NGOs and local communities, in water management activities.

- Ensure reduction and control of pollution from all sources like agriculture, industrial activity, and urban areas, etc.
- Establish water pricing policies and ensure that the polluter pays.

Much progress has been made in water protection in Europe, in individual Member States. After 25 years of European water legislation, this demand is expressed, not only by the scientific community and other experts, but to an ever increasing extent by citizens and environmental organisations.

In order to ease and to ensure the co-ordination in implementing the WFD in relevant countries, by developing a common understanding, a Common Implementation Strategy (CIS) has been designed. Within the strategy, European experts and working groups were established and a huge work programme was launched in May/June 2001. In a first phase, the main outputs of the working groups are practical guidance documents which shall assist in the implementation process. More than 500 experts from EU Member States, Candidate Countries, stakeholders, environmental NGOs, EU institutions and EU research projects are actively involved in the CIS activities. At the same time, a network of Pilot River Basins has been created in order to promote practical and integrated testing of WFD implementation.

The Directive encourages other countries to benefit from its advantages. The Water Framework Directive is a political process initiated by the 25 EU countries for the benefit of all Europe's citizens and waters. But the approach, the guidance documents or the pilot experiments are also of interest for the other countries.

Within the framework of the European Neighbourhood policy, EU neighbour countries might be interested in achieving convergence with EU standards and particularly water legislation. As the Water framework Directive is the central piece of water legislation, Mediterranean countries could be interested in better understanding it or in learning from its implementation. Sharing of experience with Partner Countries on Pilot river basin has been initiated with the Joint Process "Water Framework Directive / EU Water Initiative".

#### ***1.4 Related programmes and activities:***

The current trends in the EU policy are confirming the interest of this study. Indeed, in the framework of the Neighbourhood policy with association agreements for the MEDA countries and twinning programs, it is important:

- to know the possible side effects of the EU Directives on countries who signed an association agreement
- and to identify, potential themes for twinning programs

At the same time, there is a strong mobilization around the WFD in all the EU countries, with already some results of implementation experiences.

At the 2002 World Summit for Sustainable Development in Johannesburg (WSSD), the **EU launched a Water Initiative (EUWI)** designed to contribute to the achievement of the Millennium Development Goals (MDGs) and WSSD targets for drinking water and sanitation, within the context of an integrated approach to water resources management. The EUWI is conceived as a catalyst and a foundation on which future action can be built to contribute to meeting the water and sanitation MDGs.

The **Mediterranean Component of the EU Water Initiative** is providing a framework for potential follow-up activities on the Mediterranean Dimension of the Pilot River Basins.



EUWI.

Workshops on Mediterranean Pilot River Basins and the Med EUWI component were jointly organised (Italy, European Commission and Greece), and held in Brindisi on 22-23 September 2004. They were aimed at (i) outlining a process for sharing practices and experiences and (ii) co-ordinating on-going and future IWRM related activities in the region in the framework of the Med component of the

Within these workshops a **Med Joint Process** “Water Framework Directive / EU Water Initiative”; was drawn up with the Med Pilot River Basins and non EU partners. During the Med EUWI session, held back-to-back, the specific objectives of the Med EUWI Activity Plan related to IWRM activities were presented and synergies between the Med Joint Process and on-going projects or planned actions were discussed.

EU Member States are leading the EU Water Initiative but also implementing the WFD. The Joint process is a tool for combining EU and non-EU expertise and means under the umbrella of the EUWI to facilitate the implementation of sound water policies.

- Using, where appropriate, the policy principles and the tools already developed in the EU could **facilitate the development of sound water management practices in non-EU countries** which is a prerequisite for sustainable drinking water and sanitation projects, and therefore, a contribution to the achievement of the MDGs.
- On the other hand, using, where appropriate, non EU experiences in water management could **facilitate the implementation of the WFD** in EU countries by proposing -on specific issues -new solutions or other ways of working.

At present state of progress of activities, three working groups were created within the Joint process:

- **Water Scarcity**, linked with the EU drafting group; led by France and supported by the COM (DGENV)
- **Groundwater Management**, linked with EU Groundwater WG; led by Med PRB (Greece) and supported by the COM (DGENV)

The first 2 ones are populated with EU PRB and non EU partners (RBO and governments representatives); they both will provide a Med contribution in the final documents.

- **Linking rural development and Agriculture with water management**, driven by JRC and led by Portugal

## II Identification of ‘a priori’ concepts of interest for the MPC

One preliminary step of this study was to identify the main concepts included in the Water Framework Directive and to highlight them considering the Mediterranean waters background. The pre-selected topics are presented hereafter with brief definitions of the notions.

### II.1 *District and characterisation*

The WFD defines the district as a terrestrial or marine area composed by one or more hydrographical catchments and the associated underground and coastal waters. This district is identified as a management unit. For each EU district, an initial characterisation, one monitoring programme, one management plan including one programme of measures must be released.

The WFD imposes as a first step to produce a presentation report on the **characteristics of the *river basin district***, which shall include the following elements:

- delimitation of water bodies, including identification of artificial water bodies and provisional identification of heavily modified water bodies;
- analysis of usage (technical and economic data), pressures and their impact on environments, and identification of *water use*;
- analysis of pricing practices and the recovery of the costs of services;
- definition of the baseline scenario;
- identification of water bodies or groups of bodies at risk of not achieving the objectives set by the Directive for 2015.

### II.2 *Environmental objectives and Water Ecological Status*

Environmental objectives are set to achieve **good surface water and groundwater status** in the Districts. This means avoiding their deterioration and maintaining the good status of water when it has already been attained.

These objectives are translated respectively into:

- ⇒ **good chemical and ecological** water status in the case of surface water,
- ⇒ **good ecological potential and good chemical status** in the case of artificial and heavily modified water bodies,
- ⇒ **good quantitative and chemical groundwater status**,

and these should be achieved at the latest 15 years after the date the water framework directive came into force for EU countries.

### II.3 *Monitoring networks and programmes*

Consequently to the notion of environmental objectives, an adapted monitoring network and methods of status definition shall be elaborated for monitoring surface water, groundwater status and protected areas in each river basin district within six years. Monitoring will be carried out in accordance with Annex V to the water framework directive. It must cover:

- ⇒ the ecological and chemical status of surface waters,
- ⇒ the chemical and quantitative status of groundwaters,
- ⇒ the relevant parameters pursuant to the corresponding Community legislation on protected areas.

## **II.4 Economic analysis and water prices**

The need for careful and sound use of water resources faced with a continuously increasing demand is the main reason for introducing the principle of cost recovery for water use into the directive. EU Member States shall extend the use of this principle and could include it in the water price. For this purpose, the water price could integrate environmental and resource costs **and the costs for water services**. However, the Member States will be authorised to widely adapt the “appropriate contribution” of the different economic sectors to the existing economic, social, climatic etc. conditions, and at the same time placing an accent on transparency using for example incentive pricing.

An **economic analysis** shall be carried out for each river basin district to report on the measures taken for the application of this “**cost-recovery**” principle and of the “**cost-efficiency**” principle. It means, in defining the most efficient combination at the lowest cost possible for the necessary measures, taking into account the long-term changes in water availability and demand.

## **II.5 Setting up a Programme of measures (actions)**

The Programme of measures is a document at district scale, which includes the **actions** (measures) **designed to progressively achieve environmental objectives**.

Those measures are concrete actions, with related timetables and financial assessment. They can be regulatory financial or contractual measures. The **Programme of Measures** (PoMs) produced should be targeted at significant pressures that are currently poorly controlled, either representing a risk to the environment, or presently causing an impact. This could be one or more of a wide range of pressures including pollution and physical pressures.

The **basic measures** are the minimal dispositions that should to be respected, starting by the implementation of European Community and national regulations. The Article 11 and the Annexe VI of the WFD text are detailing a list of basic measures.

The **supplementary measures** are all additional actions taken to reach the environmental objectives of the WFD. The annexe VI gives a non-exhaustive list of measures which can be juridical, economical, administrative...

## **II.6 -Public participation**

In formal terms, the WFD calls for three public consultations to be conducted in EU countries::

- the first before the end of 2006, at the latest, on the schedule for river basin management plan development works;
- the second before the end of 2007 on identification of the main problems;
- the third before the end of 2008 on the draft Management Plan.

Independently of this schedule, the Directive calls for public access to the studies used for working out the documents submitted for consultation: "... it is necessary to provide relevant information of planned measures [to the public] and to report on progress with their implementation with a view to the involvement of the general public before final decisions on the necessary measures are adopted." (Point 46 of the recital of the directive).

Finally, the Directive also requires an active involvement of all interested parties (i.e. stakeholders, NGOs...)

## **II.7 River Basin Management Plan**

A management plan shall be produced for each river basin district. It may be supplemented by more detailed programmes and management plans to deal with parts of the river basin district or with specific issues.

As regards to transboundary districts, each EU Member State treats its portion of the basin as any interior district but it is asked to maintain a coordination with the neighbouring states concerned.

Each management plan shall contain the information detailed in the water framework directive (Annex VII), it concerns:

- ⇒ general description of the characteristics of the river basin district,
- ⇒ identification and mapping of protected areas,
- ⇒ monitoring networks and results of the monitoring programmes,
- ⇒ summary of significant pressures and impact of human activity,
- ⇒ list of the environmental objectives,
- ⇒ summary of the economic analysis of water use,
- ⇒ summary of the programmes of measures,
- ⇒ sub-basin district programmes,
- ⇒ summary of the public information and consultation measures,
- ⇒ list of competent authorities.

Management plans shall be reviewed every six years.



### **III Assessment of interests related to the identified concepts, overall results from the survey carried on 10 Mediterranean Partners Countries.**

As required by the Terms of References of this study, and taking in account the capacities of the study in terms of time and finances allocated, it was decided to carry the individual analysis of interest of MPC through sending a specific questionnaire to MPCs.

This questionnaire aimed at providing elements of information and especially:

1. To investigate on legislative background and overall level of awareness of Water Framework Directive
2. To evaluate level of interest on topics included in the WFD,
3. To define priority of actions to carry on the different topics and to identify additional matters of interests.

It was build after studying other examples of surveys carried on various subjects of WFD aiming at Member States or NGOs. (JOUAN et al., 2001); (WWF and EEB, 2005); (WWF, 2003).

It was decided to address the questionnaire directly to Water Directors of concerned countries and to broad its diffusion to the Mediterranean Network of Basin Organisation. Even if the primary targets of the survey were the MPC, the questionnaire was also sent to few countries of Balkan area.

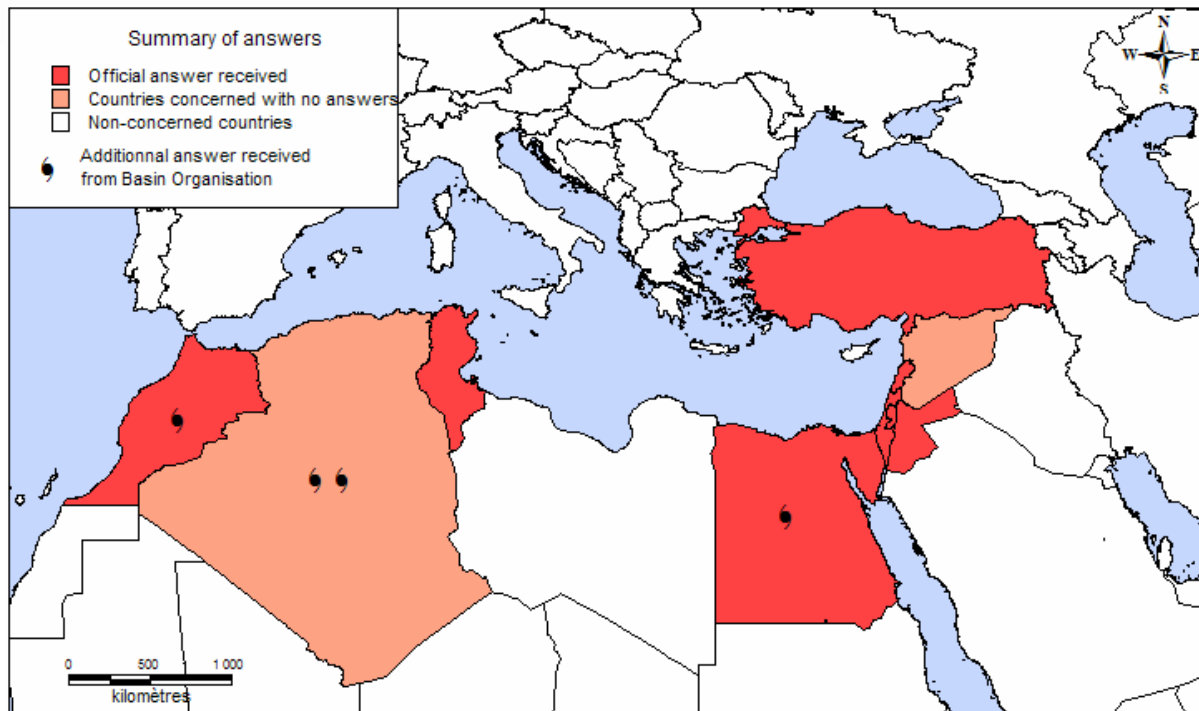
In complement of the questionnaire, an information brochure on WFD, released by European Commission and a glossary of main terms and notions were sent.

#### ***III.1 Answers to the questionnaires***

8 MPC countries returned the questionnaire (Egypt, Israel, Jordan, Leban, Morocco, Palestinian authority, Turkey and Tunisia). In one case, the questionnaire was partly filled, only illustrating a high interest on financial support but with no additional answers or explanations related to the identified topics of interest (Egypt). This fragmentary information was used whenever it was possible.

In addition, 4 Basin organisations have completed and returned the form via the Mediterranean Network of Basin Organizations (MENBO).

No answer was received from the additional countries of Balkan area.



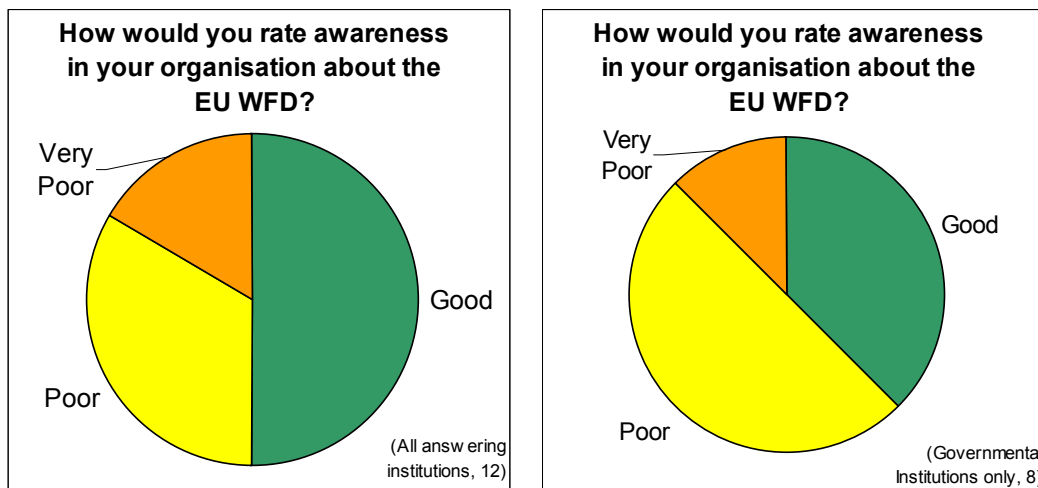
The outcomes of the questionnaire will be reported following these topics:

1. Legislative background and overall level of awareness of Water Framework Directive
2. Level of interest on topics included in the WFD,
3. Priority of actions to carry on the different topics and to identify additional matters of interests

### **III.2 Legislative background and overall level of awareness of Water Framework Directive**

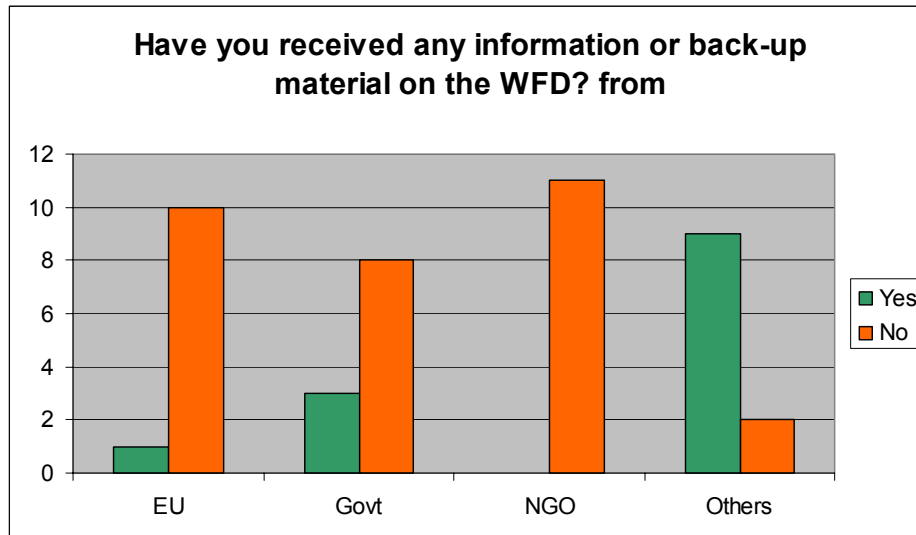
The first part of the questionnaires dealt with the notion of legislative background and with the assessment of the level of awareness on WFD.

All countries and basin organisations declared that their countries have a national regulation aiming at water resources protection or water management.



**Figure 1: Awareness of organisations about WFD.**

Considering all the received answers, half of organisations are judging their awareness as good. However, the level of awareness seems to be less important, considering only the governmental institutions. In addition, the level of awareness is probably mixed within the personnel of those organisations, some accustomed to European or Mediterranean concerns in water management may be quite well aware about the WFD, when most of the staff is not.



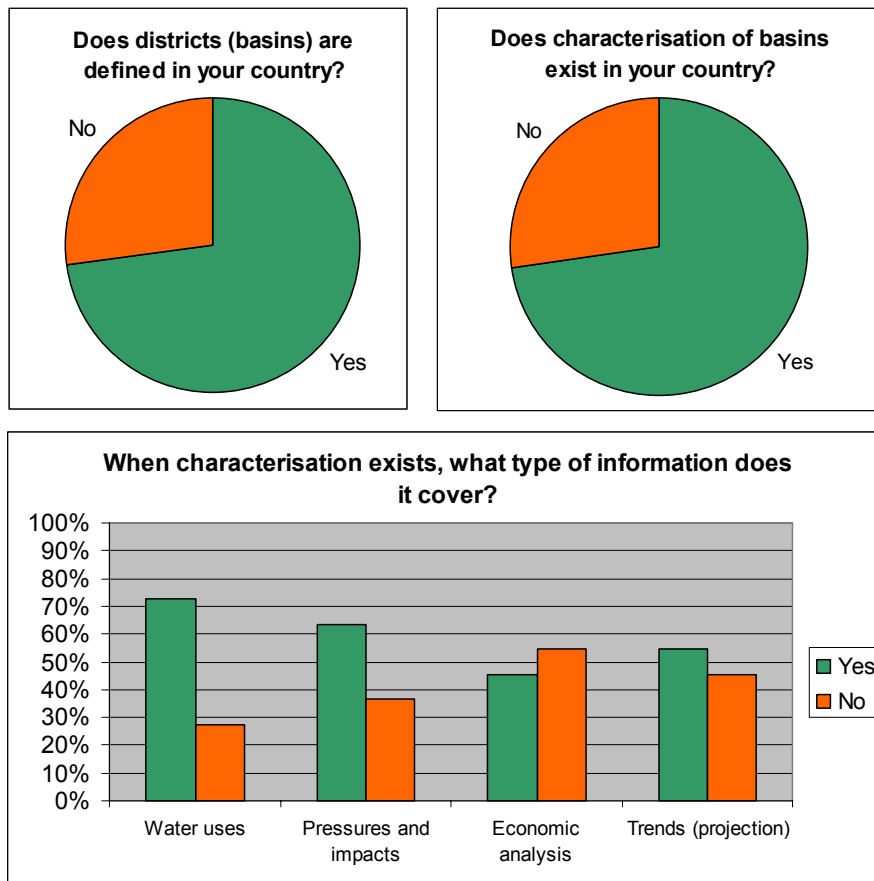
**Figure 2: Information sources.**

It seems that only few organisations received directly information on the implementation of WFD by European Commission, governmental institutions or NGOs. The detailed answers concerning other sources of information quoted individual research through the internet (Europa, EMWIS and OIEau websites) and also participation to meetings, seminars or conferences. 7 of 11 repliers have assisted to a conference or seminar related to WFD. However, some of those participants still judge their level of awareness as poor or very poor.

### III.3 Assessment of level of interest on topics included in the WFD,

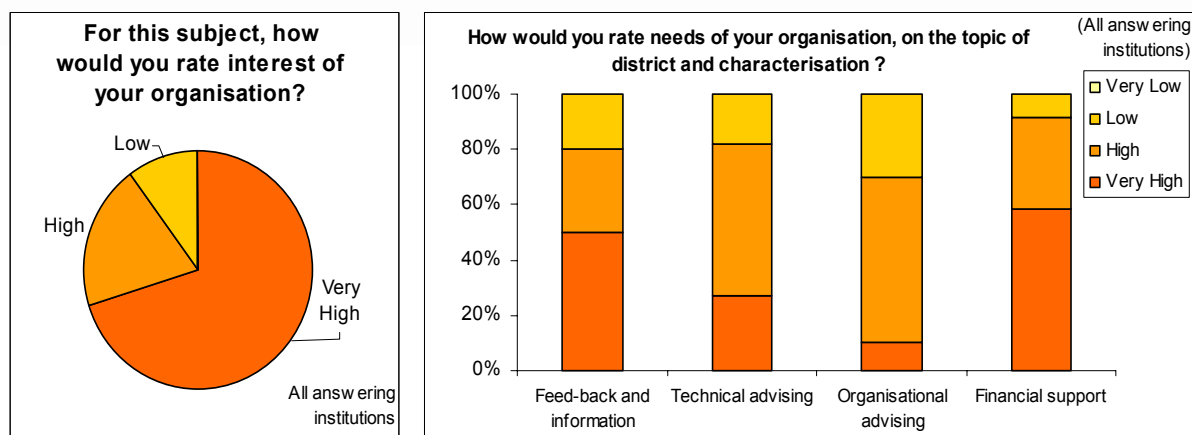
This second part of the questionnaire dealt with assessment of the level of interest on each topic identified in the first step of the study.

#### III.3.a The District and its characterization.



**Figure 3: State of works on districts and characterisation.**

An important part of replying institutions have the notion of river basins implemented in their countries (except Lebanon, Turkey, and one basin organisation in Egypt). And generally when such basin delineation exists, so does characterisation of basins. Of course this notion of characterisation of districts is not fully complying with the WFD Art. 5 requirements, but most often information on water uses and pressures exist anyhow. It should be noted that the notion of initial characterisation exists in WFD but more generally is an important preliminary step in Integrated River Basin Management.

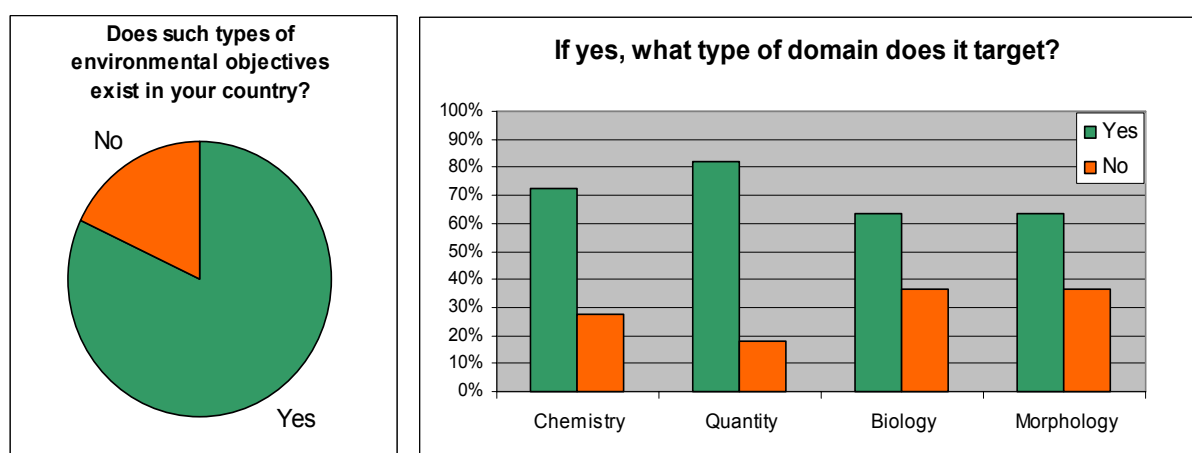


**Figure 4: Level of interest and type of needs concerning district characterisation**

The general level of interest is very strong on this point, probably because of the importance of this notion on water management. The related needs are focused on financial support but also technical advising and also financial support.

In additional remarks, it was proposed for example to launch a pilot project for a threatened basin in order to apply the WFD and produce a standard report on the characterization.

### III.3.b Environmental objectives and Water Ecological Status.

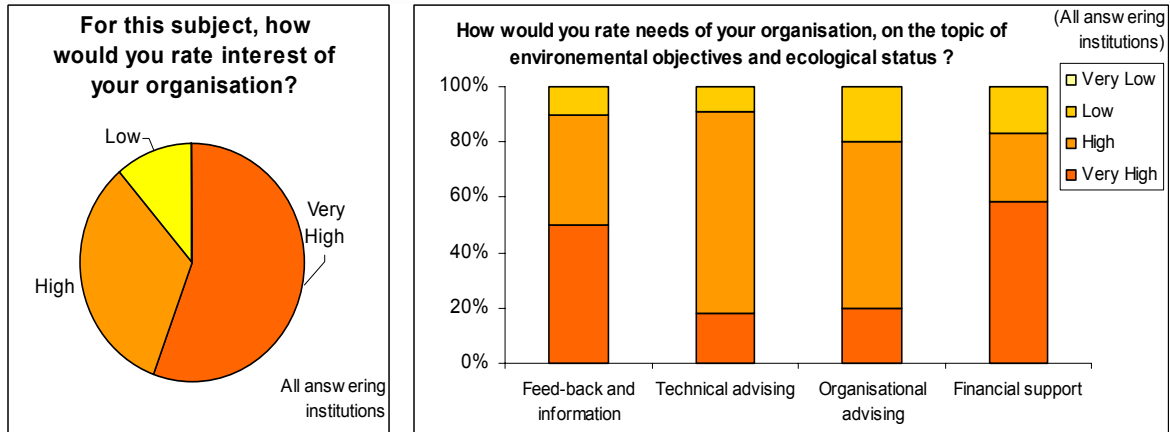


**Figure 5: State of the art on environmental objectives and water status**

It seems that delivering environmental objectives, at least from a sectorial approach is currently used in water management within the MPC. In this study, only 2 basin organisations replied that they don't deliver environmental objectives.

The objectives on quantity and quality are the most often used. It is clear that the hydrological background of the region most often imposes strong policy on quantity because of scarcity and waterlessness. Consequently, the biological and morphological aspects seem to be less important, however more than a half of repliers which delivered environmental objectives are defining objectives for biology and morphology.

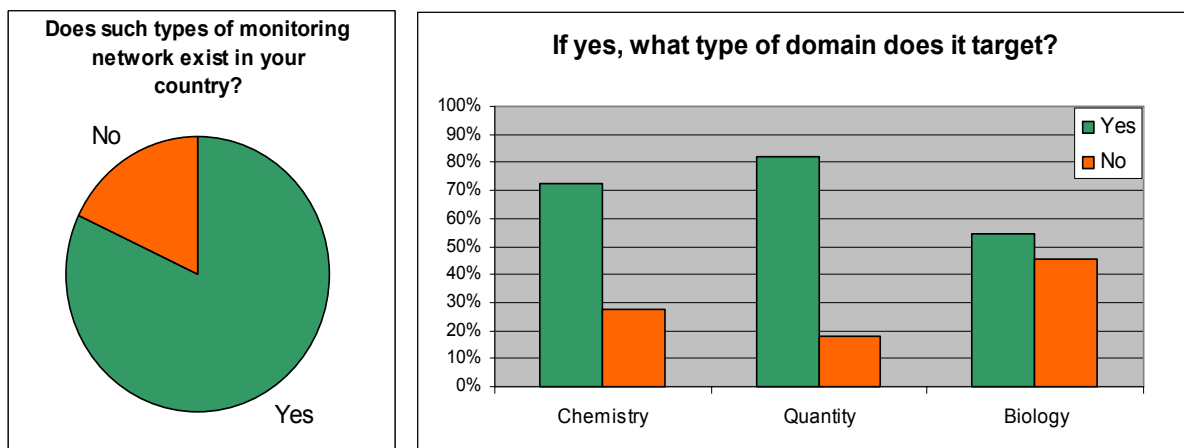
However, additional remarks helped to underline the fact that those objectives are often punctual and target essentially areas of specific concerns (exploitation of dams, Major water withdraws...) or endangered catchments.



**Figure 6: Level of interest and type of needs concerning environmental objectives and ecological status**

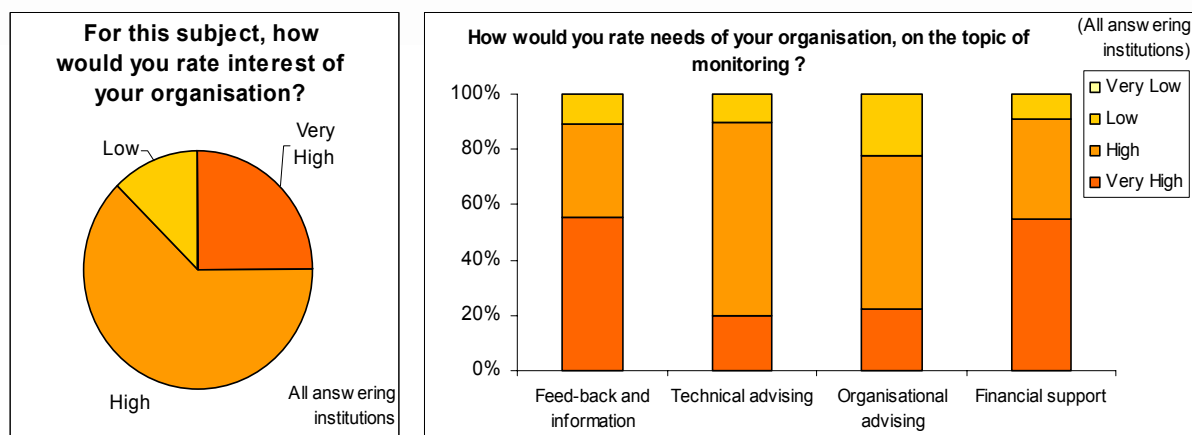
The general level of interest is strong on this point too. The needs are expressed notably in terms of information supply and financial support.

### III.3.c Monitoring networks and programmes.



**Figure 7: State of the art on monitoring**

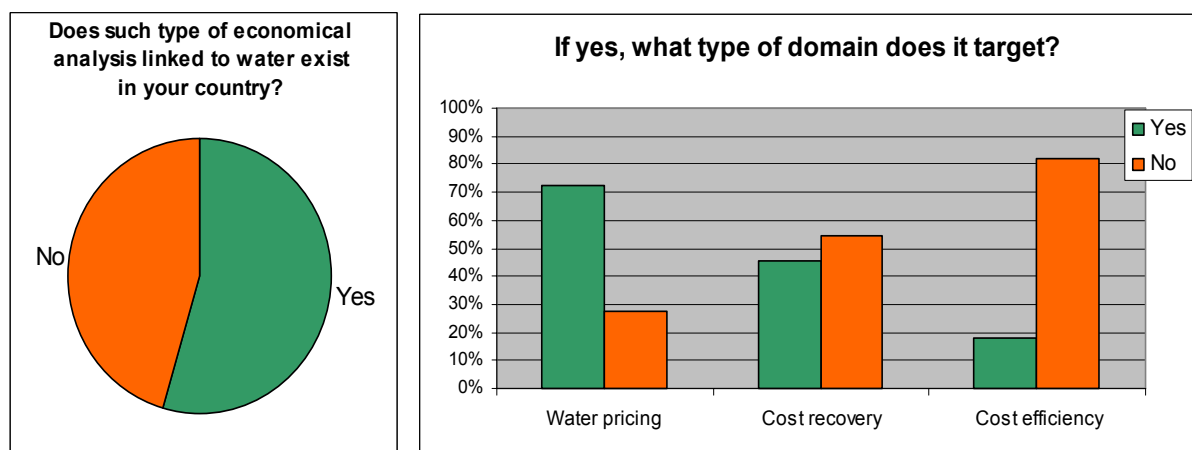
First of all, the level of implementation of monitoring networks is important. The quantitative and qualitative aspects are the most followed and monitoring biology is done in half of the institutions which carried monitoring programmes. The individual remarks on this point show that even if such monitoring networks exist, they sometimes are judged insufficiently dense. For quality and quantity, the networks are most often focusing water supply (drills, wells...) or water uses and the ecological quality of natural streams are less concerned.



**Figure 8: Level of interest and type of needs concerning monitoring**

Once again the priority needs are mostly expressed in terms of information supply and financial support, even if other needs are judged important. It is true that the monitoring networks imply strong financial resources, for the most part in terms of equipment, trained field staff and operational costs.

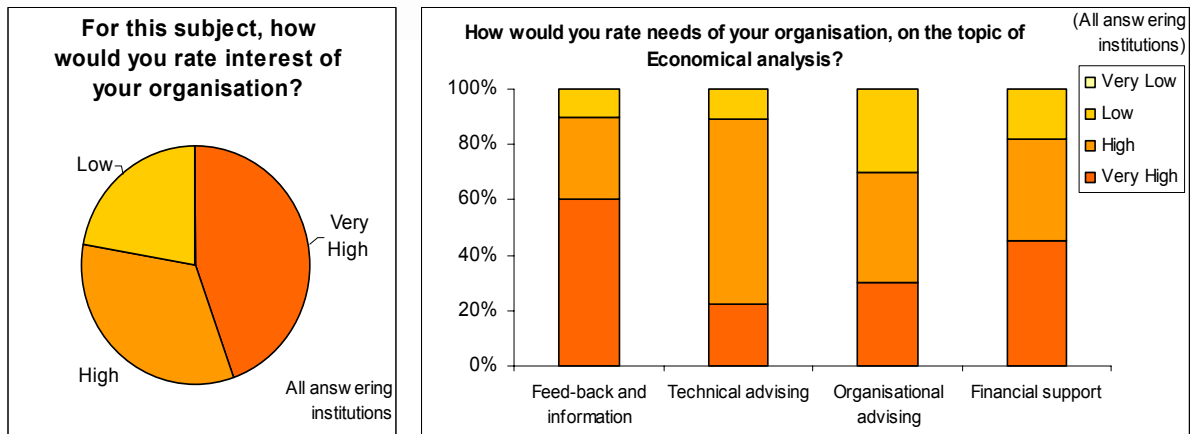
### III.3.d Economic analysis and water prices



**Figure 9: State of the art on economical analysis and water prices**

For this subject of financial tools of economic analysis and water prices, there is less repliers which considered that those tools are used in water management in their country or basin organisation. If the water pricing is the most used, the cost recovery principle and further more, cost effectiveness analysis are less concerned. One should note that the cost recovery principle is strongly linked with water pricing, so the notion is probably not well integrated by the water management authorities.

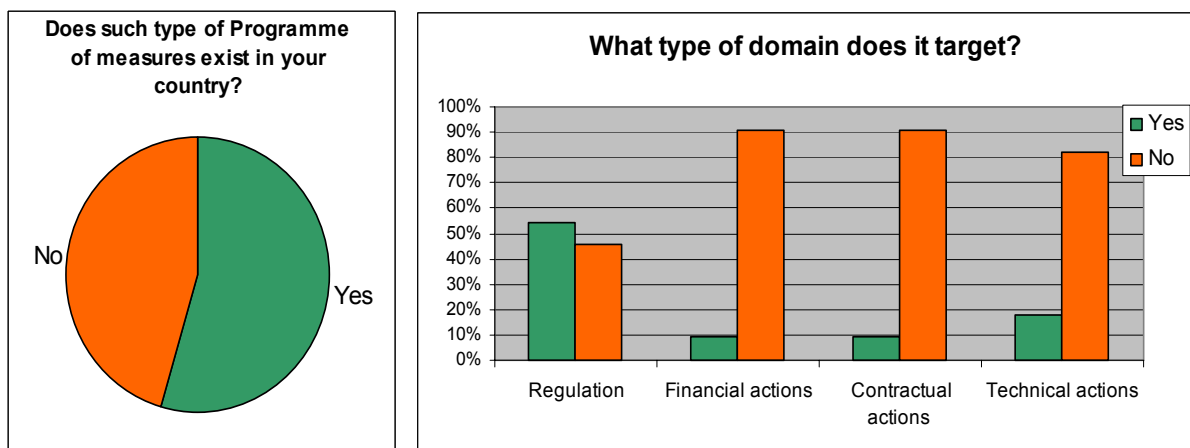
The analysis of individual remarks confirms deep use of water pricing, but the economical analysis at wide basin scale seems not being undertaken in many countries. One basin organisation in Egypt quotes its present trial for implementing the cost recovery notion.



**Figure 10: Level of interest and type of needs concerning economic analysis.**

Even if the level of interest is still high, it is though less important than for the prior topics. There is still a strong demand in terms of information feedback, financial support and technical advising.

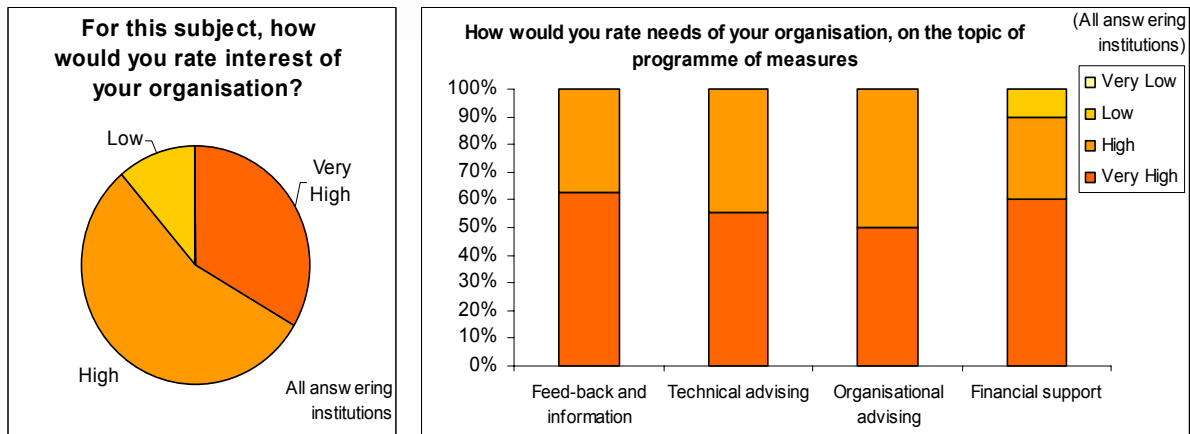
### III.3.e Setting up a Programme of measures (actions)



**Figure 11: State of the art on the programme of measures.**

More than half of repliers answered positively to the existence of programme of measures in their countries. However the results are clearly showing the preponderance of the regulation in those actions. It is particularly clear that the measures of river basin management planning aren't as various as proposed in the WFD; the actions in terms of contracts, financing and technical aren't used.



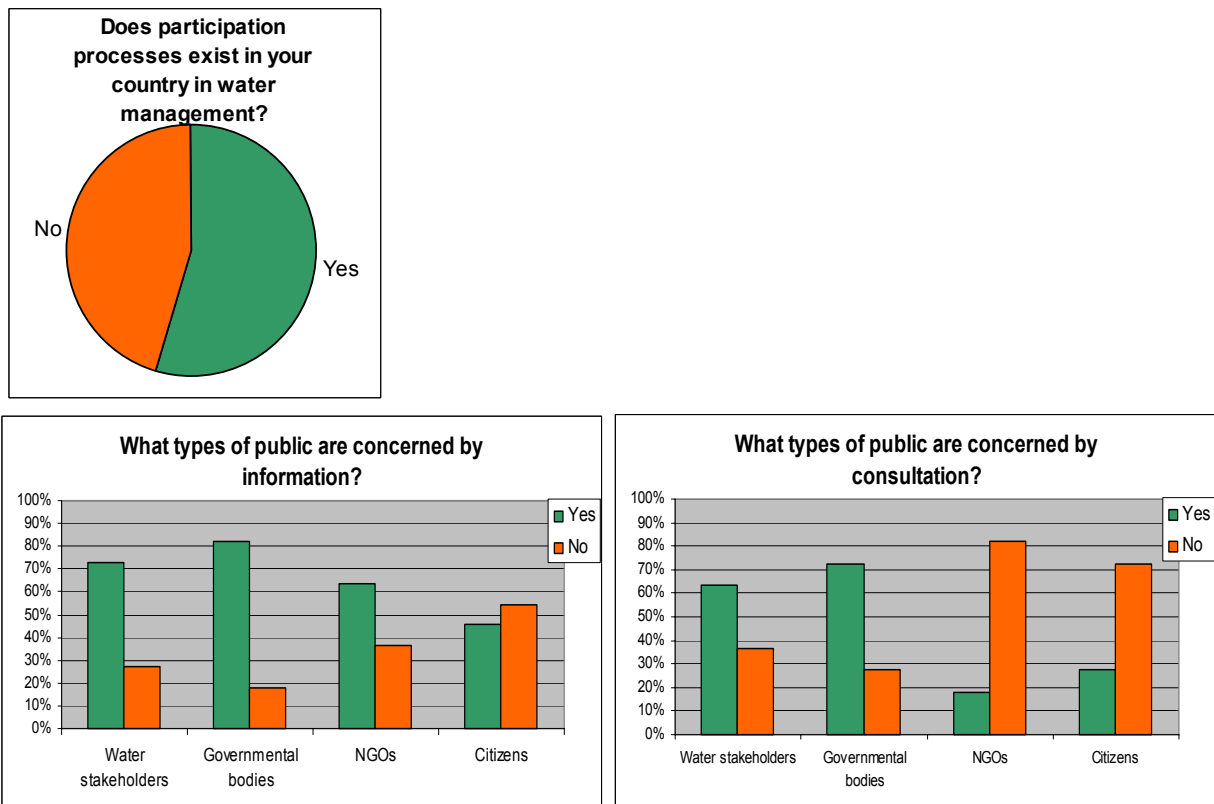


**Figure 12: Level of interest and type of needs concerning programme of measures.**

Despite the previous information on the lack of programme of actions, the level of interest is very high. It's fitting well with the perception of real interest and real efforts carried up to now in MPCs to acquire better knowledge on the basins and to define management objectives. However, the operational phase of programming measures always seems more difficult, of course to finance but even to define; using the various types of tools available (financial, contractual, technical...)

Unfortunately, no additional comments were delivered on this topic, this could have been helpful for the understanding of the complete needs.

### III.3.f Public participation



**Figure 13: State of the art on public participation**

Public participation processes exists in half of the countries or organisations which have replied to the questionnaire but two main points have to be distinguished; the notions of information and participation. First, the information on water issues is principally addressed to governmental bodies, water stakeholders and NGOs and sometimes to citizens. Concerning the participation to decisions in water management, only stakeholders and governmental bodies are involved, and in most of the case the citizens and NGOs aren't consulted.

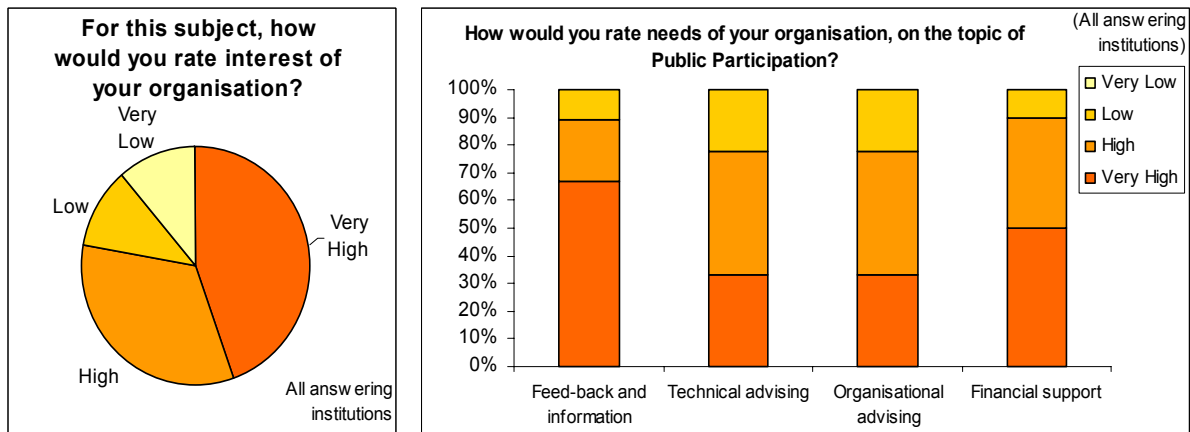


Figure 14: Level of interest and type of needs concerning public participation

Even if the overall level of interest is judged high, it should be noted that this level is less important than any other topic. The public participation isn't a priority concern. There is principally a need for feed-back of information on the activities carried in this field within the implementation of the WFD.

### III.3.g River Basin Management Planning

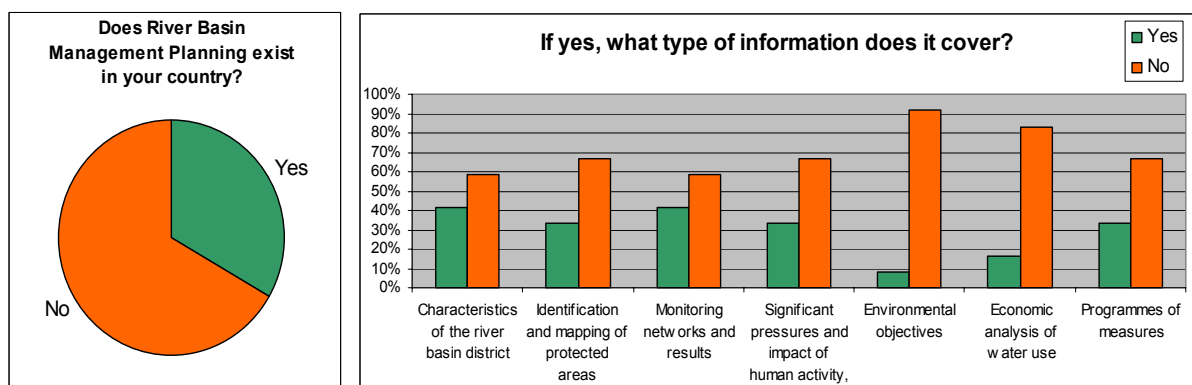
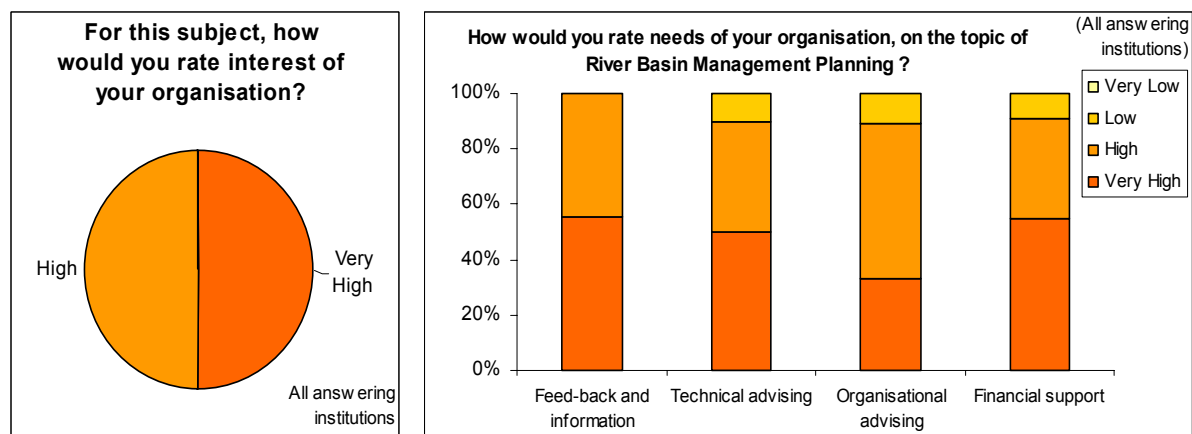


Figure 15: State of the art on River Basin Management Planning

This topic came as an umbrella to others topics, and it is clear that for most answerers of the questionnaire, the river basin management plans doesn't exist as a whole process in their countries or institutions. And even when it is the case, the various topics included by the River Basin Management Plans (as defined in the WFD) are not often implemented. Those answers seem quite surprising, in comparison with the preceding answers.

One important conclusion seems to be the present preponderance of sectorial approach. For example, the survey has shown that strong efforts are devoted to the monitoring activities in most of the countries. However, those monitoring activities are not

included in a complete vision of river basin planning; they're devoted to specific concerns. More generally, in the European context, this sectorial approach in water policies was also the most common in Member States, before the release of the Water Framework Directive which main objective was to impulse a new dimension of integrated management to water policies.



**Figure 14: Level of interest and type of needs concerning public participation**

Despite the low level of implementation of river basin management plans shown in the previous figure, the level of interest is really high. The information feedback is once again the most expected.

### **III.4 Priority of actions on the different topics and additional matters of interests.**

At the end of the questionnaire, it was asked to the repliers to rank the pre-identified topics following their level of interests, by giving them a note. Summing all those notes helped in defining a global rank of topics of priority interest. The following tables present priorities defined by all repliers and priorities defined only by national institutions.

Table 1: Ranking the priority of interest (all repliers; national and basin organisations)

Rank of interest	Topic within WFD
1	Characterisation of basins
2	Monitoring programmes
3	Programme of measures
4	Environmental objectives and water Ecological Status
5	River Basin Management Plan
6	Economic analysis and water prices
7	Public participation

Table 2: Ranking the priority of interest (Only governmental answers)

Rank of interest	Topic within WFD
1	Characterisation of basins
2	Monitoring programmes
3	Environmental objectives and water Ecological Status
4	Programme of measures
5	Economic analysis and water prices
6	River Basin Management Plan
7	Public participation

First, there isn't many differences between results taking or not in account the answers from Basin Organisations. The levels of interest expressed within the study are most often very close.

The two **first concepts of interest are the characterisation of basins and the monitoring activities** in both cases. This underlines strong willingness and needs in terms of acquiring a better knowledge on river basins within MPC and basin organisations, but probably current lacks (technical, organisational and financial) concerning those two points.

**A second set of priorities could be expressed; the notions of defining (environmental) objectives and programme of measures (actions).** Here the ranks are slightly different but they remain closer (3<sup>rd</sup> and 4<sup>th</sup> positions). It should be noted that Basin organisations are primary selecting the importance of the programme of measures when the governmental organisations prioritise the definition of objectives. Anyway, those notions are concerning operational decisions for management, as a result of the previous topics on knowledge of the basins.

The other topics are judged less immediately important. One could judge surprising the fact that integrated river management plan is not a top ranking topic. But this notion is probably perceive as the ultimate goal or at least as a frame, and probably seen also as too general regarding others specific tasks to be carried for building that plan.

Public participation is not judged as a priority at all, but specific answers on that topic showed that the level of interest, at least on experience feedback is not so low.

Finally it should be noted here that **additional remarks at the end of questionnaire, clearly underlined the preponderance of the quantitative aspects, linked to the natural hydrological conditions and to the weakness of the balance between water resources and demands**, in South Mediterranean countries.

## IV Conclusions and recommendations for follow-up activities by EMWIS

This survey shows a **lack of awareness on WFD** by MPC, but also a **strong interest on the follow up of its implementation** in EU Member States.

Even if not all of the pre-identified topics are implemented or used in those countries the related level of interest is really important in most of the cases.

Looking more in detail the different levels of interest, one could judge surprising the fact that integrated river management plan is not a defined priority. But this notion is the ultimate goals, probably seen as too general regarding others specific tasks to be carried for building that plan and expressed by the Directive anyhow.

The two **first concepts of interest are the characterisation of basins and the monitoring activities**. This underlines strong willingness and needs in terms of acquiring a better knowledge on river basins within MPC. That preliminary step is crucial before ongoing the works of planning.

Now in the EU, the production of the Article 5 report of the WFD, concerning the initial characterisation of districts has been covered by most of the Members States. The next steps are the definition of monitoring programmes and programme of measures.

In the same time, efforts have been carried out, in order to extend the cooperation between Member States and Mediterranean countries on water issues, notably through the MED Joint Process and its technical working groups but also more generally through the EU neighbouring policy (twinning agreements...).

This timeline and overall background are fitting well with the needs expressed by the MPC within this study and the following recommendations could be made at this stage:

1. **To diffuse first feed-back information on the characterisation of districts** carried under Art.5 of WFD (methodologies, results, differences between countries) using brochures, seminars and information systems. **The EMWIS website could be a portal for information spreading**, as its status and operational system are aiming at this objective.
2. **To deepen the analysis of MPC needs on the two top priority subjects: basin characterisation and monitoring**. One should note the current study carried by members of the Working Group 2B of CIS, that targets the assessment of results of the Art.5 (Characterisation) within EU Member States. This survey presents detailed questions that could be adapted to the Mediterranean context in order to detail the needs of the MPCs. EMWIS could then propose a specific activity to carry out this detailed analysis.
3. **To encourage and improve participation of technical experts from MPC to activities of the Common Implementation Strategy or other WFD activities**, as it is the case for the Working groups developed under MED Joint Process. The numerous exchanges between experts from various Member States have yet shown the interests in terms of common understanding and capacity building. Once again in this case the **EMWIS could provide support in organisational or technical aspects** (electronic collaboration tools, joint organisation of seminars, involvement of local experts, ...). It could also be useful that a representative(s) of EMWIS network will attend to the forth coming EURO-INBO meeting that will be held in Namur in September 2005. The objectives of this participation could be to receive information feedback on WFD implementation but also to expose the detailed interests of Mediterranean countries.

4. **To propose EMWIS National Focal Points** to act not only as relay of information from international to national levels (top-down approach), but also **to receive individual national concerns or questions (Bottom-up approach)**, to consolidate and spread them in order to give provide guidance for future cooperation with the EU. At the same time EMWIS National Focal Points can help in finding contacts, case studies, technical information and even identifying opportunities for cooperation or funding.
5. **To promote twinning agreements, pilot projects or working groups** on specific identified topics between governmental institutions or basin organisations, for example by using opportunities from the EU neighbourhood policy or the TWINBASINS<sup>xn</sup> programme. **The EMWIS could then provide operational and/or information support** to ease the different processes and to ensure links between water actors.

It is clear **that EMWIS could provide an important support** to the extension of activities of cooperation within the region, and notably in liaison with the background of WFD. We must keep in mind that as the MPC are not directly concerned by the implementation of the EU WFD, they need a different type of access to the WFD information, with for instance Q-A related to their needs, case studies in regions outside EU, opportunities to launch limited/adapted implementation of some WFD concepts in pilot sites. EMWIS has already started this process with the current study: translating the WFD leaflet and brochure in Arabic and publishing online a synthesis on the WFD.

The increasing demand of MPCs and willingness of cooperation from EU, pave the way for a continuation of EMWIS current activities, following its role of information and knowledge exchange tool on water management among the Euro-Mediterranean Partnership countries. Nevertheless, following a middle terms prospective, some specific questions will have to be discussed, such as; how to support efficiently the diffusion of information on WFD to MPCs (specific websites, information systems)?, what type of technical support in cooperation could provide the EMWIS and notably the NFPs ? ...

## Short Bibliography

JOUAN Hervé, MACKEY Paddy, MC GRATH Ruth, 2001; *Irish NGOs and The Water Framework Directive –VOICE* , 41 p.

MARGAT Jean et TREYER Sebastien, 2004, *L'eau des Méditerranéens : situation et perspectives*, MAP Technical Report Series, n°158, PNUE. PAM. Plan Bleu.

WWF and EEB, 2005, *Making the Water Framework Directive work, the quality of national transposition and implementation of the water framework directive at the end of 2004*, 42 p.

WWF, 2003, *WWF's Water and Wetland Index, Summary of Water Framework Directive results*, 17p.

## Annex 1: GLOSSARY WFD:

**Note:** a certain number of terms listed below (\*) are defined directly in article 2 of the WFD.

**Artificial Water Body\*:** A distinct volume of surface water manmade.

**Environmental quality standard\*:** The concentration of a particular pollutant or group of pollutants in water, sediment or biota which should not be exceeded in order to protect human health and the environment.

**Good ecological potential\*:** the status of a heavily modified or artificial water body, classified in accordance with the relevant provisions of Annex V.

### Good status\*:

- Good surface water chemical status\*: the chemical status required to meet the environmental objectives for surface waters established in Article 4(1)(a), that is the chemical status achieved by a body of surface water in which concentrations of pollutants do not exceed the environmental quality standards established in Annex IX and under Article 16(7), and under other relevant EU legislation setting environmental quality standards.
- Good surface water status\*: the status achieved by a surface water body when both its ecological status and its chemical status are at least "good"
- Good ecological status\*: status of a body of surface water, classified in accordance with WFD standards (cf. annex V of the WFD).
- Good groundwater chemical status\*: the chemical status of a body of groundwater, which meets all the conditions set out in table 2.3.2 of Annex V.
- Good groundwater status\*: the status achieved by a groundwater body when both its quantitative status and its chemical status are at least "good"
- Good quantitative status: the status defined in table 2.1.2 of Annex V.

**Groundwater\*:** all water which is below the surface of the ground in the saturation zone and in direct contact with the ground or subsoil.

**Hazardous substances\*:** means substances or groups of substances that are toxic, persistent and liable to bio-accumulate, and other substances or groups of substances which give rise to an equivalent level of concern.

**Heavily Modified Water Body\*:** A distinct volume of surface water which, as a result of physical alterations by human activity, is substantially modified.

**Impacts:** Effects of pressures on the status of surface water and groundwater.

**Management Plan:** Adopted at the level of each district by the end of 2009, the Management Plan lists the selected water quality and quantity objectives for 2015. It defines the provisions and action priorities (for measures, as defined in the Directive - see "Programme of measures") to be implemented to achieve the assigned objectives.

**Pressures:** Physical expression of human activities that could change the status of the environment in space and time (discharge, abstraction, environmental changes, etc...).

**Priority substances.** Substances identified in accordance with Article 16(2) and listed in Annex X. Among these substances there are priority hazardous substances, which means substances identified in accordance with Article 16(3) and (6) for which measures have to be taken in accordance with Article 16(1) and (8).



**Programme of measures:** Applicable by the end of 2009, the **programme of measures** defines, for each district, the measures to be implemented to achieve the objectives defined for 2015 by the Management Plan. The programme of measures is actually a part of the management plan.

**River basin district\*:** The area of land and sea, made up of one or more river basins, together with the associated groundwater and coastal waters, identified by the WFD as the main unit for the management of river basins.

**River basin\*:** Any area of land from which all surface run-off flows, through a network of streams, rivers and possibly lakes, to the sea through a single river mouth, estuary or delta.

**Water body:** Distinct and significant volume of water. For example, for surface water: a lake, a reservoir, a river or part of a river, a stream or part of a stream. For groundwater: a distinct volume of water within one or more aquifers.