



5 حوار غرب المتوسط
5+ Dialogue de la Méditerranée Occidentale
Western Mediterranean Dialogue

ACTION PLAN FOR THE WATER STRATEGY in the WESTERN MEDITERRANEAN

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1_ABSTRACT

On 31st March 2015, during the first Ministerial Conference on the Water Strategy in the Western Mediterranean (5+5), the Water Strategy in the Western Mediterranean (WSWM), was adopted. The document has the objective of preventing conflicts, fostering development and contributing to ensure the human right to water and sanitation.

This Strategy, promoted by Spain and Algeria, is particularly significant in a region such as the Mediterranean, subject to the adverse effects of climate change and its impacts on population and on economic activities such as tourism, particularly in coastal areas. This Strategy will allow Mediterranean countries to defend a common stance on water management.

The approved Strategy is the result of the consensus of the 10 Mediterranean within the 5+5 Dialogue (France, Italy, Malta, Portugal and Spain on the northern part, and Argeria, Libya, Mauritania, Morocco and Tunisia on the southern part), as well as contributions from the European Commission, the Union for the Mediterranean (UFM) and the Union for the Arab Maghreb (UAM), and the rest of observers.

The present Action Plan will be submitted to the consideration and approval of a Ministerial meeting to be held during the UNFCCC COP22 (Marrakesh, Morocco, 7-18 November 2016).

This Action Plan has been developed on the basis of the projects and initiatives submitted by the countries involved, in order to address specific water challenges and help achieve solutions to problems of regional concern with a focus on sustainability. The Action Plan will be annexed to the Strategy. It will promote financing opportunities through well-targeted and sustainable projects according to the criteria established in the Strategy.

The elaboration of the present Action Plan has been possible thanks to the intense engagement of the 10 member countries and of the organisations and observers involved. It has been a very participative process resulting in the set up of the Action Plan itself. A total of 60 projects have been proposed. For the specific materialisation of these projects, 13 actions were defined which include all the presented projects in different groups according to their characteristics. The 13 actions are divided in two main groups, services and infrastructures. This division corresponds to the different features of the projects in regards to objectives, budget, financing and duration. As it could not be otherwise, these 13 actions cover and respond to most of the Strategy's priorities.

The services group consists of all the projects with the objective of developing analyses, studies, research, training, knowledge transfer and cooperation. The objective of all this is to guarantee the development and implementation of new water policies, whether regional or national, to allow the improvement of governance in regard to water resources management. This group encompasses most of the regional projects. A total of 54 presented projects are included within the 10 actions proposed below, which entail an approximate budget of 144 Million €.

Within the services group, the following actions are defined:

- Action 1. Monitoring, data management and supervision
- Action 2. Research
- Action 3. Training and capacity building
- Action 4. Experience exchange, dissemination and cooperation
- Action 5. Climate change adaptation
- Action 6. Infrastructure sustainability
- Action 7. Sustainable aquifer management
- Action 8. Fostering water reutilisation
- Action 9. Water quality improvement
- Action 10. Aquatic ecosystem preservation

The infrastructures group includes projects on construction, viability analyses, etc. Most of the projects covered have a national or local scope. A total of 6 proposed projects are included, which entail a total budget of approximately 279 Million €.

Within the infrastructures group, the following actions are defined:

- Action 11. Infrastructure projects in Libya
- Action 12. Infrastructure projects in Malta
- Action 13. Flood risk reduction in the Júcar River Basin, Spain

Regional projects or national projects that are easily replicable are more interesting according to the Strategy's criteria.

In order to secure a high degree of success in the development of the Action Plan it is a sine-qua-non condition to obtain the support of the main financial entities be they global, national or regional which may contribute to the development of the project. The search for financing and the implementation of the Action Plan will be the main goal of the follow-up Plan. The search for financing and the implementation of the Action Plan will be the main goal of the follow-up Plan. The funding issue will be addressed at a later stage immediately after the Ministerial endorsement.

In order to pave the way for a better implementation of the Action Plan, a number of activities will be carried out to present and disseminate the Action Plan. The dissemination of the Action Plan is considered of the utmost importance. Thus, a separate document will be created named Dissemination Plan.

The Action Plan will constitute a living document to be enriched by projects that may have either been already implemented, that are being implemented at the moment, or foreseen to be implemented in a short-medium term. As a living document, the implementation of projects included in the Action Plan should be monitored.

2_ACRONYMS

ACRONYM	NAME
AECID	Agencia Española de Cooperación Internacional para el Desarrollo
AFD	Agence Française de Développement
BAD	African Development Bank Group
BEI	European Investment Bank
BERD	European Bank for Reconstruction and Development
CENTA	Centre for new Water Technologies
CMI	Marseille Centre for Mediterranean Integration
DGRE	Direction Générale des Ressources en Eau (Tunisia)
DREAL	Agence de l'eau Rhône-Méditerranée-Corse
DZ	Algeria
EMWIS	Euro-Mediterranean Information System on know-how in the Water Sector
ES	Spain
EU	European Union
EU	European Union*
FPA2	Foundation Prince Albert II of Monaco
FR	France
GEF	Global Environment Fund
GWOPA	Global Water Operators' Partnerships Alliance
GWP-Med	Global Water Partnership Mediterranean
IAMZ-CIHEAM	Mediterranean Agronomic Institute of Zaragoza
IEA	Euro-mediterranean Water Institute
IME	Institut Méditerranéen de l'Eau
IPEMED	Institut de Prospective Économique du Monde Méditerranéen
IT	Italy
IUCN Med	Centre for Mediterranean Cooperation
KFW	KFW Group
LY	Libia
MA	Morocco
MARHP	MINISTERE DE L'AGRICULTUREdes ressources hydrauliques et de la pêche (Tunisia)
MedWet	The Mediterranean Wetlands Initiative
MENBO	Mediterranean Network of Basin Organisations
MIO ECSDE	Mediterranean Information Office for Environment, Culture and Sustainable Development
MR	Mauritania
MT	Malta
MWG 5+5	Ministerial Water Group of the 5+5 Dialogue
MWO	The Mediterranean Wetlands Observatory
NIF	Neighbour Investment Facility
OECD	The Organisation for Economic Co-operation and Development
OFID	OPEC Fund for International Development
OIEAU	International Office for Water
OPEC	Organization of the Petroleum Exporting Countries
PT	Portugal
RAED	Arab Network for Environment and Development
SEWCU	Sustainable Energy and Water Conservation Unit (Malta)
SIDA	Swedish International Development Cooperation Agency

ACRONYM	NAME
SWIM	Sustainable Water Integrated Management Program
TAIEX	Technical Assistance and Information Exchange instrument of the European Commission
TDG	Technical Drafting Group of the 5+5 Dialogue
TN	TUNISIA
UAM	The Union for the Arab Maghreg
UFM	The Union for the Mediterranean
UNDP	United Nations Development Program
UNECE	The United Nations Economic Commission for Europe
UNEP/MAP	Plan Bleu – Environment and Development in the Mediterranean
WB	World Bank
WFN	The Water Footprint Network
WS	Workshop
WSWM	Water Strategy in the Western Mediterranean
WWF MedPO	WWF Mediterranean Program Office

Table n° 1 : List of acronyms

3_BACKGROUND

On 31st March 2015, during the first Ministerial Conference on the Water Strategy in the Western Mediterranean (5+5), the Water Strategy in the Western Mediterranean (WSWM), was adopted. The document has the objective of preventing conflicts, fostering development and contributing to ensure the human right to water and sanitation.

This Strategy, promoted by Spain and Algeria, is particularly significant in a region such as the Mediterranean, subject to the adverse effects of climate change and its impacts on population and on economic activities such as tourism, particularly in coastal areas. This Strategy will allow Mediterranean countries to defend a common stance on water management.

The approved Strategy is the result of the consensus of the 10 Mediterranean within the 5+5 Dialogue (France, Italy, Malta, Portugal and Spain on the northern part, and Algeria, Libya, Mauritania, Morocco and Tunisia on the southern part), as well as contributions from the European Commission, the Union for the Mediterranean (UFM) and the Union for the Arab Maghreb (UAM), and the rest of observers.

The importance of achieving a closer and action-oriented cooperation among the Mediterranean riparian states is reflected in the development and implementation of several regional processes including in the efforts of consolidating the Union for the Mediterranean (UfM). Water and Environment form one of the six priority work areas of the UFM Secretariat. The UfM aims at making substantial contribution to de-polluting the Mediterranean Sea and promoting environmental sustainability.

In that context, the Euro-Mediterranean Ministerial Conference on Water (Dead Sea, Jordan, 22 December 2008) agreed to prepare a shared and long-term Strategy for Water in the

Mediterranean and approved guidelines for its elaboration. Despite the fact that there was general consensus from all the countries and experts involved on the technical contents, the references to the main geographical conflicts in the region made it impossible to adopt the Strategy.

For these reasons, the approval of the Water Strategy in the Western Mediterranean (WSWM) has strengthened the re-launching of the Strategy for Water in the Mediterranean that took place in 2016. Therefore, both processes must progress united, with common criteria and creating synergies. This will be possible thanks to the fact that the members of the 5+5 process belong to the Technical Drafting Group (TDG) of the UfM, so the coherence of both processes is guaranteed.

The Strategy is built around three main thematic blocks which underpin 13 priorities

These blocks and priorities that are encompassed into them are the following:

Block 1 : Enhancing Western Mediterranean country policies' convergence towards the general principles of a sustainable water policy

- Priority 1: Developing and starting up clearly defined legal frameworks
- Priority 2: Establishing governance adapted to integrated water management
- Priority 3: Implementing cost-recovery

Block 2 : Foster cooperation in relation to regional matters

- Priority 4: Capacity building
- Priority 5: Innovation development in the water sector.
- Priority 6: Water-energy-food nexus
- Priority 7: De-pollution of the Mediterranean
- Priority 8: Mobilising water-related innovative financing solutions for the application of the Strategy

Block 3 : Promoting water management improvement

- Priority 9: Climate change adaptation
- Priority 10: Increasing and mobilising the available resources
- Priority 11: Water use efficiency improvement
- Priority 12: Flood prevention
- Priority 13 : Protection of water quality and biodiversity

The idea of the WSWM as a modern document addressing water management issues and priority areas from a Mediterranean perspective, which must be supported with practical projects, was raised.

With the development of these priorities a contribution is made, inter alia, to the promotion of objective 6 “Ensure Access to water and sanitation for all” on sustainable development of the United Nations, approved in September 2015. Among the objectives to be reached it is worth mentioning that a universal and equitable access to drinking water is foreseen to be achieved for 2030 at an affordable price for all, as well as equitable access to adequate sanitation and hygiene services. In addition, it is intended to improve the quality of water, increase the efficient use of resources, put in place the integrated management of resources, protect and restore the ecosystems related to water, increase international cooperation, and reinforce the participation of local communities towards the improvement of water management and sanitation.

In order to implement the Strategy, the current Action Plan is developed which contains the projects and initiatives of the countries involved in order to address specific water challenges and help achieve solutions to problems of regional concern with a focus on sustainability.

4_SCOPE AND FOCUS

The Action Plan aims at the successful implementation of the Water Strategy in the Western Mediterranean (WSWM) adopted at the Ministerial Conference on water 5+5 held in Algiers in March 2015. The Action Plan, to be annexed to the WSWM, compiles the proposals submitted by the 5+5 members, regional organisations and observers.

The Action Plan details projects and initiatives with specific objectives, geographical scope, financing plans, foreseen indicators and schedule, allowing to visualise the most pragmatic part of the WSWM.

The Action Plan is the starting point within the Water Strategy dialogue to allow looking for funding to implement the actions included therein. Meetings with the financial institutions will be held in order to show them the Action Plan so that they can identify the most interesting projects to develop depending on their criteria and objectives. The search for financing and the implementation of projects will be the main goal of the Action Plan follow-up.

Moreover, the Action Plan serves as a diagnosis report of best practices and solutions that may be undertaken to address the water issues and work on the priorities reflected in the Strategy. Priority areas such as the use of conventional and non-conventional water resources, water scarcity, water quantity and quality-related aspects, environmental impacts, water protection, water governance, information systems, climate change effects, water-energy-food nexus, research and development opportunities, etc, were identified as areas of interest for practical projects.

The Action Plan should showcase replicable and cross-country-defined national best practices and solutions that imply innovative or technological advances or an outstanding sustainable way of

implementing the Strategy. In addition, it highlights the training actions and that on exchange of knowledge. It may also serve as a platform that helps to find partners and mobilise funds for projects.

The Action Plan will promote financing opportunities through well-targeted and sustainable projects according to the following criteria:

- Level of response and contribution to the Strategy's objectives.
- Level of compliance with and integration to ongoing and/or planned national or regional plans and framework programmes.
- Complementarities with other processes.
- Consistency with IWRM approaches and practices.
- Contribution to achieving water efficiency targets.
- Consistency with environmental protection objectives.
- Contribution to poverty reduction objectives, job creation and education of young people.
- Consideration of social, gender and cultural aspects.
- Level of secured co-financing.
- Economic and financial sustainability.
- Level of foreseen operational synergies, including those with competent stakeholders.
- Projected sustainability of outcomes after completion.
- Possibility of replication.
- Defined geographical scope, either national or regional, within the Western Mediterranean region.

As a result of the above-mentioned considerations, the followed procedure in order to elaborate the Action Plan is defined below together with the description of the Action Plan itself.

5_MANAGEMENT OF THE ACTION PLAN

5.1 Development

The elaboration of the present Action Plan has been possible thanks to the intense engagement of the 10 member countries and of the organisations and observers involved. It has been a very

participative process resulting in the set up of the Action Plan itself. A total of 60 projects have been proposed. The projects received from each participant are listed in Annex 1.

The process started in autumn 2014 where for the first time a form was circulated so that each member could incorporate the most significant and interesting projects to be executed. After the workshops, in particular those held in Madrid in September 2015 (4WS) and in Valencia in February 2016 (5WS), the definition of the projects was progressively fine tuned and the result is a consensus document that serves the objective of implementation of the Strategy.

The Action Plan elaboration was commissioned to the Technical Secretariat of the Ministerial Water Group of the 5+5 Dialogue (MWG 5+5), who received and managed all the information sent by the member countries, regional organisations and observers. This information consists of both the projects themselves presented by each participant and all the comments, observations, worries and suggestions received during the Workshops, and in the communication exchanges. With this information the Action Plan was drafted, with several modifications and additions during the process. The result is a consensus document that contains all the views received.

For the specific materialisation of the Action Plan, 13 actions were defined which include all the presented projects in different groups according to their characteristics.

In order to identify the most suitable and effective tools to address the challenges identified in the Strategy, it is important to highlight the objectives and features of the proposals as follows:

- Proposals should be existing success stories and experiences that have already worked in some countries, easy to replicate in other countries.
- Proposals should have the possibility of extrapolating national projects to the regional scale.
- Projects should foster training, capacity building, research and development programmes, national dialogues, awareness campaigns, etc.
- Proposals should mobilise financing opportunities to develop the Action Plan.

The 13 actions are divided in two main groups, the services group and the infrastructures group. This division corresponds to the different features of the projects in regards to objectives, budget, financing and duration.

The services group consists of all the projects with the objective of developing analyses, studies, research, training, knowledge transfer and cooperation. The objective of all this is to guarantee the development and implementation of new water policies, whether regional or national, to allow the improvement of governance in regard to water resources management. This group encompasses most of the regional projects and their budget is typically low.

The infrastructures group includes projects on construction, viability analyses, etc. Most of the projects covered have a national or local scope and their budget is higher than the above-mentioned “services group” projects.

Regional projects or national projects that are easily replicable are more interesting according to the Strategy's criteria.

Within the services group, the following Actions are defined:

- Action 1. Monitoring, data management and supervision
- Action 2. Research
- Action 3. Training and capacity building
- Action 4. Experience exchange, dissemination and cooperation
- Action 5. Climate change adaptation
- Action 6. Infrastructure sustainability
- Action 7. Sustainable aquifer management
- Action 8. Fostering water reutilisation
- Action 9. Water quality improvement
- Action 10. Aquatic ecosystem preservation

Within the infrastructures group, the following Actions are defined:

- Action 11. Infrastructure projects in Libya
- Action 12. Infrastructure projects in Malta
- Action 13. Flood risk reduction in the Júcar River Basin, Spain

As it could not be otherwise, these 13 actions cover and more or less respond to most of the Strategy's priorities, even though some should be further reinforced in future updates of the Action Plan. The following table (nº2 y nº3) shows each priority's development degree within the established Actions. Within each action, the main priorities of the Strategy covered by the projects that form the said action are highlighted in red. Collateral priorities developed by the projects are highlighted in yellow, since most of them respond to several priorities of the Strategy. This table illustrates the link between the WSWM and the Action Plan.

SERVICE ACTIONS														
		Priorities												
Action	Name	1	2	3	4	5	6	7	8	9	10	11	12	13
1	Monitoring, data management and supervision	X	X	X	X	X	X	X		X	X	X	X	X
2	Research	X	X		X	X	X			X	X	X	X	X
3	Training and capacity building	X	X	X	X	X	X	X	X	X	X	X	X	X
4	Experience exchange, dissemination and cooperation	X	X	X	X	X	X	X	X	X	X	X	X	X
5	Climate change adaptation		X	X	X	X	X			X	X	X	X	X
6	Infrastructure sustainability		X		X	X					X	X	X	X
7	Sustainable aquifer management		X	X	X	X	X	X	X	X	X	X		X
8	Fostering water reutilisation		X		X	X	X	X		X	X	X		X
9	Water quality improvement	X	X	X	X			X			X			X
10	Aquatic ecosystem preservation	X	X		X	X	X	X			X	X	X	X

Table nº 2 : Relationship between service actions and priorities developed

INFRASTRUCTURE ACTIONS														
		Priorities												
Action	Name	1	2	3	4	5	6	7	8	9	10	11	12	13
11	Infrastructure projects in Libya	X	X	X	X	X	X				X	X	X	X
12	Infrastructure projects in Malta							X			X			X
13	Flood risk reduction in the Júcar River Basin, Spain	X											X	

Table nº 3 : Relationship between infrastructure actions and priorities developed

Priority 7 is not developed in the first place, even though can be covered by several actions that improve water quality of discharge to the sea, therefore it will directly improve the water quality in the Mediterranean. Priority 8 is addressed by some projects, but very vaguely.

The implementation of the Action Plan consists of launching and implementing these 13 actions that compile and adopt the 60 projects sent by the 10 member states and by the regional organisations or observers, as well as the contributions received.

Broadly speaking, the total amount of the 60 proposed projects comes to some 423 million EUR, 144 million of which correspond to the 54 services projects proposed (even though 4 of these projects still do not have an assigned budget) and 279 million correspond to the 6 infrastructures projects (even though 1 of these projects still do not have an assigned budget). Approximately 40% of the presented projects have some kind of foreseen funding.

44% of the projects are in a status of “completed design” (CD), “in progress” (IP) or “completed” (C), whereas the remaining 56% have not started yet, are under preliminary status or their state of play is unknown.

All this information is detailed in the specific forms of each project shown in annex 2, where they are classified following the priorities established in the strategy; their objectives, geographical scope, representative indicators, budgets, funds and timelines, are analysed.

Annex 3 develops a quantitative analysis of these projects depending on some of their descriptive variables (geographical scope, priority and thematic block, etc.).

Next, each one of the actions is described.

5.2 Service Actions

A total of 54 presented projects are included within the 10 actions proposed below, which entail an approximate budget of 144 Million €.

Action 1. Monitoring, handling of data and supervision

One of the basic premises to achieve an adequate management of water is the knowledge of data, their analysis and updating, as well as their accessibility. This requires that water resources and uses are monitored, collected and stored in databases regularly updated and accessible to the managers.

On the one hand, water resources must be known both in quantitative (appraisals, reservoir levels, piezometric levels, etc.) and in qualitative terms. This requires measurement networks to monitor and supply the necessary data. On the other hand, water uses must also be measured i.e. consumption made by water users (population, environment, agriculture, industry, etc.).

In addition, adequate tools should be available to analyse and handle the data so that they can be reliably used for the management of resources. In the long term, it would be desirable for each

country to have National Water Systems that allow them to carry out an integral and transparent water management.

Equally, in order to manage the resources adequately and verify if the design established is respected in reality, it is also important to carry out supervisions of the works and constructions made; hence, any supervision and control task facilitates an adequate management of resources.

Within this action, which is fundamental for the development of all the others, the following 8 projects are encompassed whose features are shown below:

Project No	Title	Promoting country/ entity	Promoter	Geographical scope	Strategy block	Cost (EUR Million)	Term (months)
2	Central database for water resource in Libya	LY	Information and Documentation Centre (Ministry)	National	1	1	36
3	Monitoring the use of water resources in Morocco	MA	Moroccan delegate Ministry in charge of Water	Regional	1	4	72
4	Environmental Performance Review (EPR) of the Kingdom of Morocco	MA/UNECE ¹	PPA (Portuguese Water Partnership)	National	1		8
23	Use of innovative technologies and approaches for the monitoring of the water resources of Grombalia region	TN	Water research and technologies centre	National	2	1,025	48
38	Executive Information System for the governance and management of Water Resources in the Western Mediterranean	IT	MATTM	Regional Western Mediterranean Area	1	2	36
43	Water use monitoring of Irrigated agriculture in ES by earth observation WATER-EO	ES	University of Castilla La Mancha and Ministry	National	3	0,5	28
44	Studies and projects for the irrigation project of Gharb	MA ¹	COBA (PT)	Local	3		
45	Supervise irrigation works in Morocco	MA ¹	Aqualogus (PT)	Local	3		

Table nº 4 : Projects included in Action 1: Monitoring, handling of data and supervision

¹ Project proposed by Portugal

All the projects, except the one promoted by Italy, have a national scope and could be divided between those intending to monitor resources and those monitoring uses. These are projects proposed by southern countries except for Spain and Italy. With the project from Spain it is intended to control agriculture uses by applying Earth Observation, EO, and web based Geographic Information System, web GIS, technologies, with the aim to improve efficiencies. In turn, the project of Italy aims to gather all relevant data regarding river basin management planning in a single depository and bridge an information gap hindering effective management decisions. Three of the projects are developed in Morocco but have been proposed to the Action Plan by Portugal. These are projects that do not focus on monitoring but rather on the supervision of irrigation works, management of resources and integration of environmental and socioeconomic policies. Portuguese companies have participated in all the three projects be it as awarded companies or as having participated in their development.

Through the development of this action, the following priorities of the Strategy are mainly fostered among others:

Priority 2 “Establishing governance adapted to integrated water management”. Through the elaboration of the projects proposed, the first phase necessary for a correct management of water is achieved, as without the correct data from the start, management would be faulty.

Priority 5 “Innovation development in the water section”. This priority is mainly represented in the project proposed by Tunisia with which it is intended to develop innovative technologies in the monitoring of water resources.

As we find ourselves in a 5+5 process where communication and dissemination are fundamental, the successes and innovations achieved will be shared with the rest of the member countries, making the project a replicable one.

Priority 11 “Water use efficiency improvement”. Through the monitoring of water uses and in particular in the agriculture field, as intended in the proposed projects, the real consumption of this demand will be controlled. This will allow to improve the efficiency of water uses since, without the correct data from the start it is very difficult to achieve an adequate management of resources.

The total budget of this Action would be 8,525² Million €, distributed among the projects as shown in the following graph:

² Some data on the projects proposed by Portugal are still pending.

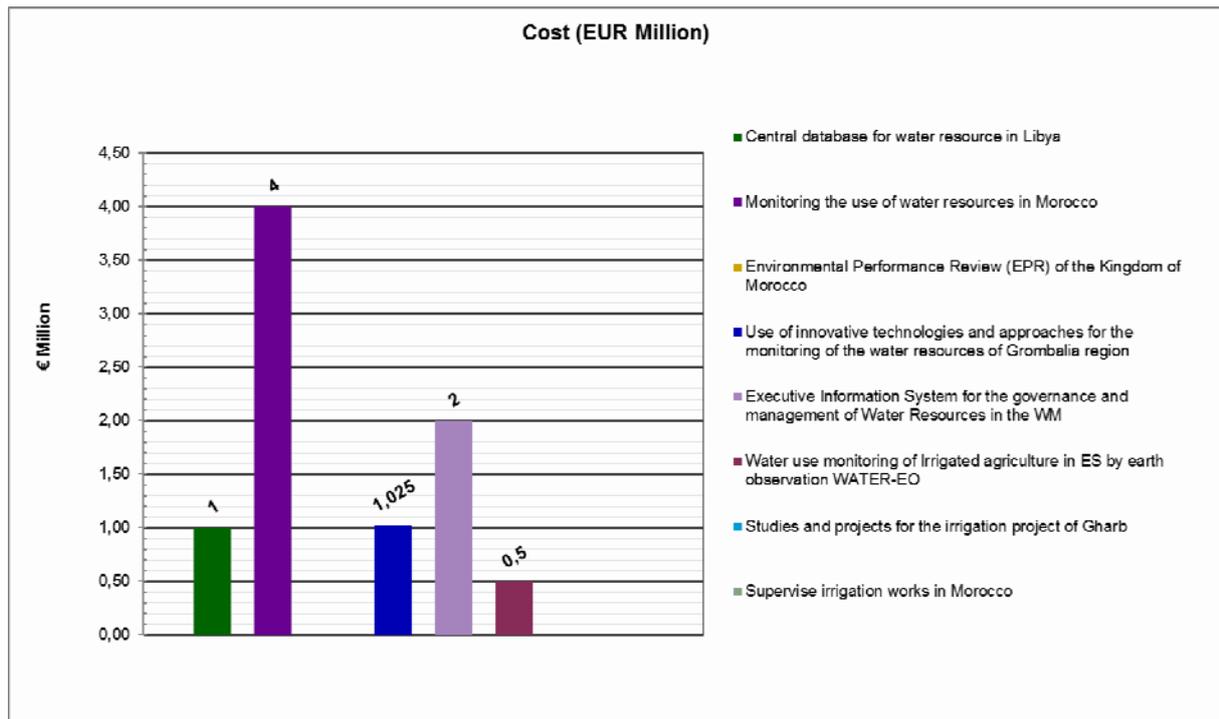


Figure 1 : Budgets for the projects included in Action 1: Monitoring, handling of data and supervision

The timeline for implementation is very varied and ranges from 8 to 72 months.

On a valued chronogram, this Action would look as follows:

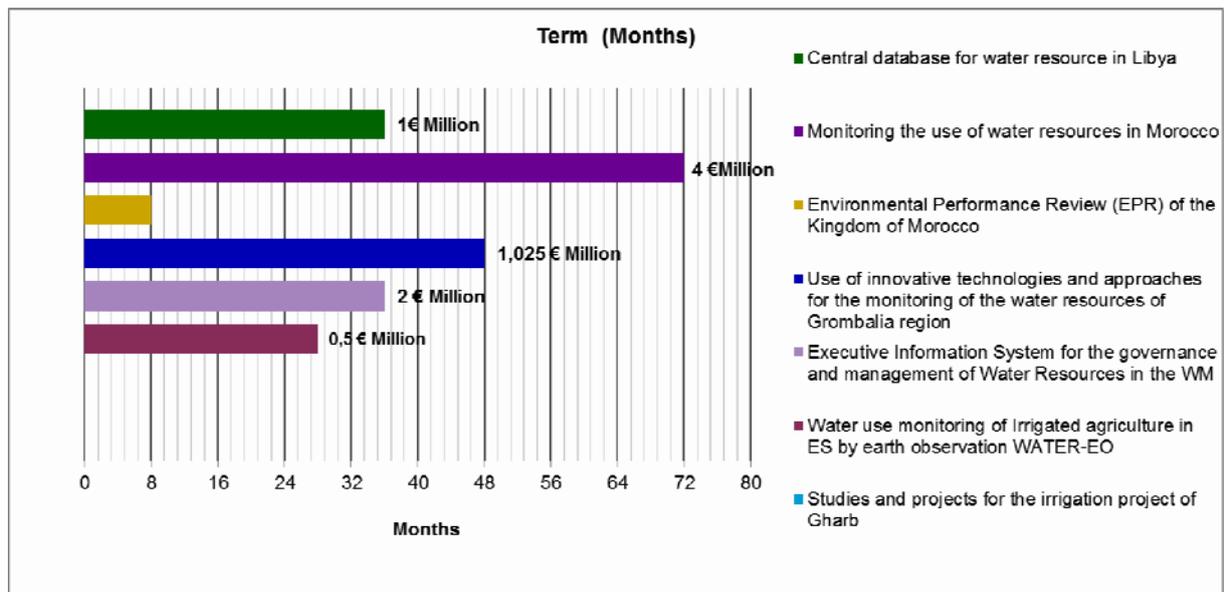


Figure 2 : Timeline for the implementation of the projects included in Action 1: Monitoring, handling of data and supervision

Action 2. Research

Before the training, capacity building of technicians and exchange of information, but after the monitoring and data collection, research and development works are needed, allowing to obtain new knowledge and its application to problem solving.

On the one hand, research in the water sector has been going on for a long time and a more adequate and sustainable management is increasingly being carried out. Yet, on the other hand new challenges and technologies appear which oblige to continue carrying out research in a number of fields.

Among the new themes to investigate, two of them appear in the projects presented by Tunisia and Morocco that are encompassed within this Action.

These new themes are the use of desalination through technologies aiming to reduce the costs and impacts of climate change as well as to rain harvesting in urban areas, with the dual purpose to increase available resources and to avoid flooding in urban areas.

Project No	Title	Promoting country/ entity	Promoter	Geographical scope	Strategy block	Cost (EUR Million)	Term (months)
24	Seawater desalination by using renewable energy	MA	Moroccan delegate Ministry in charge of Water	Regional	2	16,5	120
37	Water harvesting systems in urban areas	TN	Ministry of Agriculture	National (100 water harvesting systems)	3	10	60
53	A cross-cutting study on a dynamic analysis of the coherence between national policies and the Water Strategy in the Western Mediterranean	MENBO	Technical Secretariat of the MGW 5+5 (MENBO)	Regional	1	0,8	24

Table n° 5 : Projects included in Action 2: Research

Rain harvesting in urban areas is in line and responds to priority 10 of the Strategy as it promotes a source of water rarely used so far while, at the same time, attracting increasing interest as stated during the workshops held. This is a line to be developed in this first Action Plan where the project promoted by Tunisia could serve as a good basis for future proposals while conferring the extrapolation character of the process.

Regarding the project about desalination by using renewable energy, it is very important to deepen into the issue as desalination is an available resource that is not affected by temporal variability and that can help managing the demand of water. Most countries involved in the process, have a high level of experience in desalination; but the use of renewable resources that could save management costs, should be fostered. This project would develop priority 6 "Water-energy-food

nexus” since it would allow to increase the water available for human consumption or for agriculture at a more reasonable cost than using other types of energies.

In addition, a very interesting project has been included in this Action, about a cross-cutting study on a dynamic analysis of the coherence between national policies and the Water Strategy in the Western Mediterranean. This project will be promoted by the MENBO Secretariat and it will allow analysing the coherence between the policies of all the countries members of the 5+5 with the WSWM. As any research project, this Action requires long periods for implementation (between 24 and 120 months) and high budgets since they involve pilot projects that drive up the costs.

The total budget of this Action would be 27.3 Million €, distributed as follows:

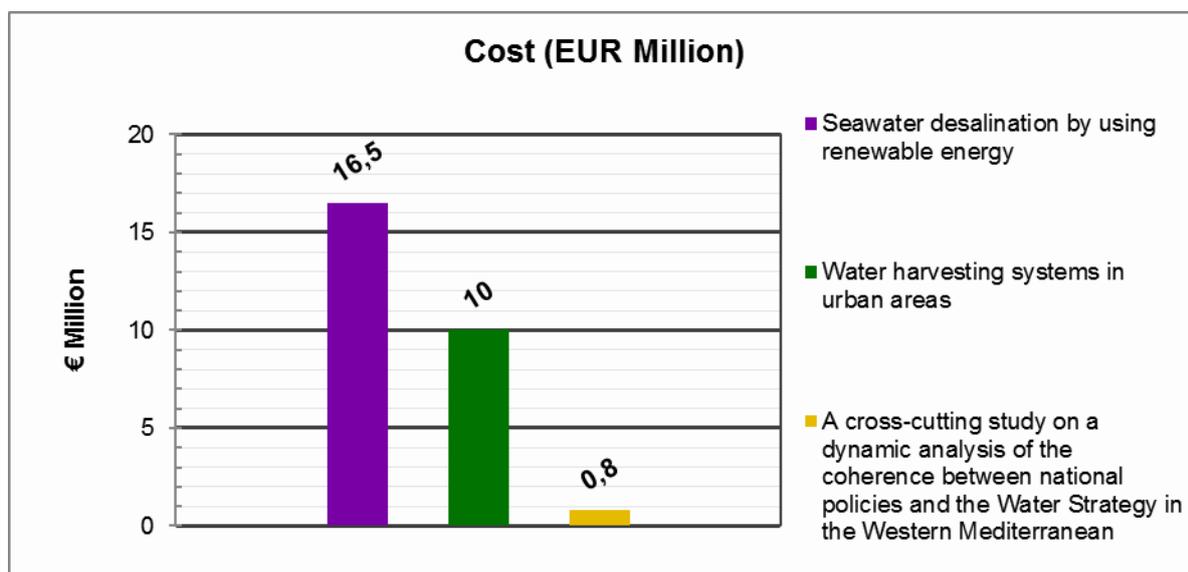


Figure 3 : Budgets for the projects included in Action 2: Research

On a valued chronogram, this Action would look as follows:

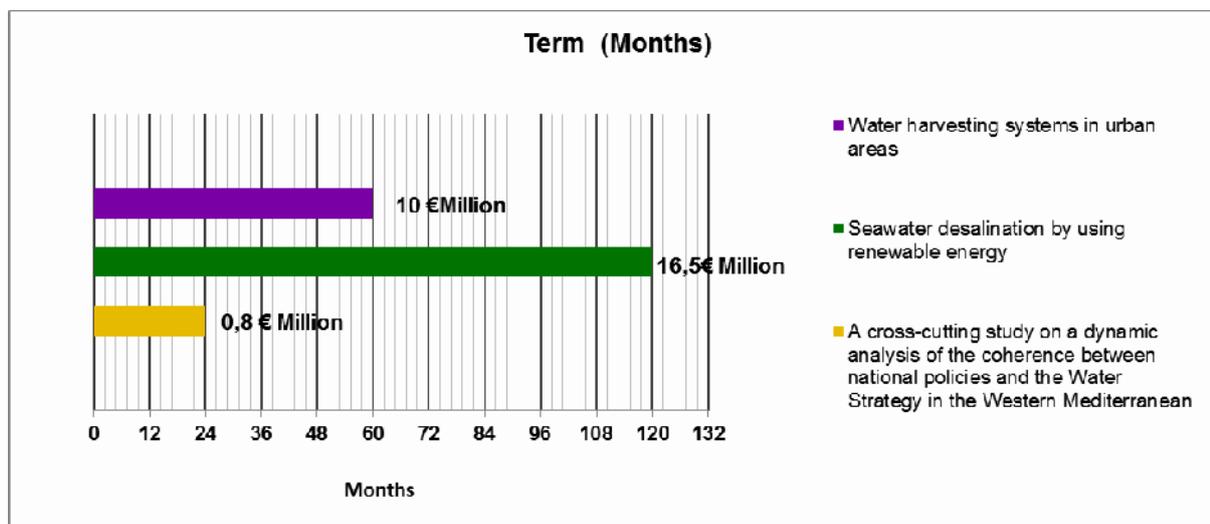


Figure 4 : Timelines for the implementation of the projects included in Action 2: Research

Action 3. Training and capacity building

In order to achieve a sustainable and integrated management of water, decision making should take into consideration every stand point while harmonising the satisfaction of demand with the environmental objectives and the social and territorial balances. To achieve that, the technicians responsible for the management should be capable and well trained in all aspects related to management according to the characteristics inherent to each country.

In this regard, it is important to make the most of one of the advantages of this process namely the participation of 10 countries and organisations with different degrees of experience in the key subjects. This fact allows us to have the support of the most experienced countries and technicians who can help with the training of technicians from less experienced countries that so require to help develop their policies.

Therefore, the following Action is elaborated with the objective of organising the training of the stakeholders involved in water management in the more demanded tasks and with less information. This Action is in line and responds fully to priority 4 “capacity building” whose aim is to improve the knowledge and training of technicians.

The projects included in this Action are the following:

Project	Title	Promoting country/ entity	Promoter	Geographical scope	Strategy block	Cost (EUR Million)	Term (months)
5	Renforcer la gouvernance du secteur de l'hydraulique en milieu rurale et semi urbain mauritanien	MR	Ministère de l'hydraulique et de l'Assainissement	National	1	1,2	36
16	Training and capacity building in governance and the water resources management	ES	IEA Foundation University of Murcia	Regional Mediterranean Basin	2	0,1	1
17	Renforcer les capacités des acteurs du secteur de l'eau en Mauritanie	MR	Ministère de l'hydraulique et de l'Assainissement	National	2	0,7	24
20	Renforcement des capacités de gouvernance des ressources en eau	DZ	Ministère Algérien des Ressources en Eau et de l'Environnement	Regional	2	0,3	24
30	REUSE- Professionalizing the water REUSE to tackle water issues in the western Mediterranean	FR	Ecofile	Regional Western Mediterranean countries (short time)	3	1,1	36
54	Training actions to support the implementation of projects that develop the priorities of the WSWM	IAMZ-CIHEAM	IAMZ-CIHEAM	Regional. Western Mediterranean	2	0,1	12

Table n° 6 : Project included in Action 3: Training and capacity building

Four of the six projects included are of a regional scope. As for the remaining two, although they have a national scope, they require the participation of technicians from other countries that take part in the training. The projects included in this Action are the most cost-effective while their consequences are very valuable.

Apart from the development of priority 4 mentioned above, in-depth attention is paid to priority 2 “Establishing governance adapted to integrated water management” since the training of water managers in different areas of action is reinforced, as for instance in rural areas in the same way as proposed in the project from Mauritania intending to enhance the capacity in management aspects, planning, quality control, role of the state, etc. In addition, priority 10 “Increasing and mobilising the available resources” is also developed through the project promoted by Ecofile (FR) on the professionalisation of water reuse in the Western Mediterranean. This project will also create synergies with the projects presented within Action 9 regarding the promotion of reuse.

Within this action, a project proposed and co-financed by the Mediterranean Agronomic Institute of Zaragoza (IAMZ-CIHEAM) is included; this project will intend to address the training needs that may arise during the implementation of the projects of the Action Plan, defining the necessary courses and adapting to the needs of the project. It is foreseen to organise two or three course per year.

The total budget of this Action is 3.5 Million €, distributed as follows:

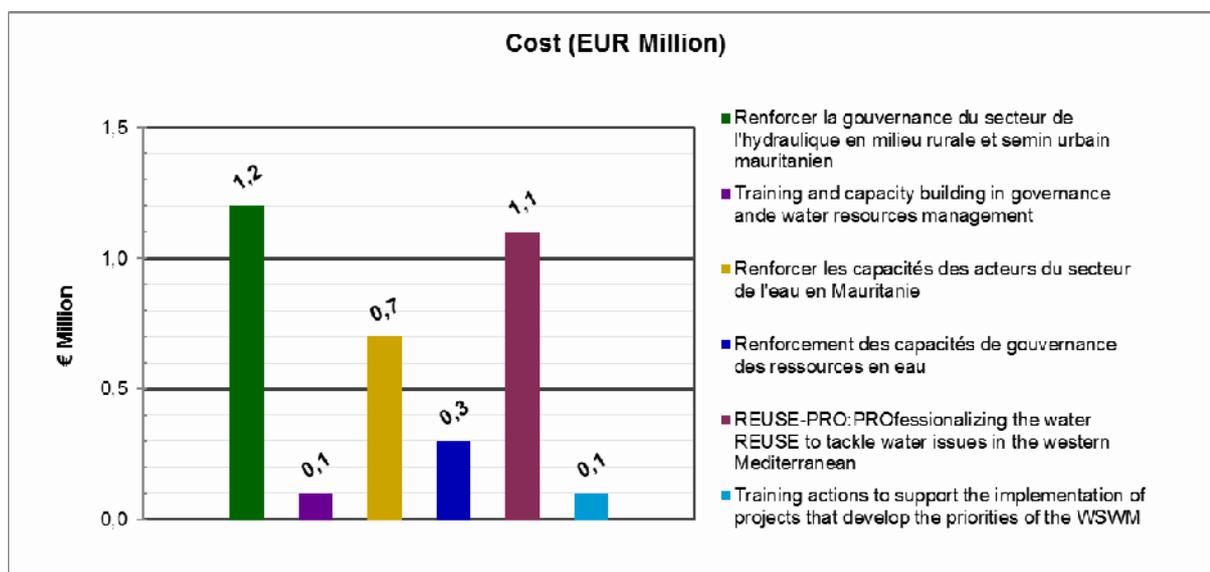


Figure 5 : Budgets for the projects included in Action 3: Training and capacity building

It can be said that the implementation periods are short, ranging from 1 month up to 36.

On a valued chronogram, this Action would look as follows:

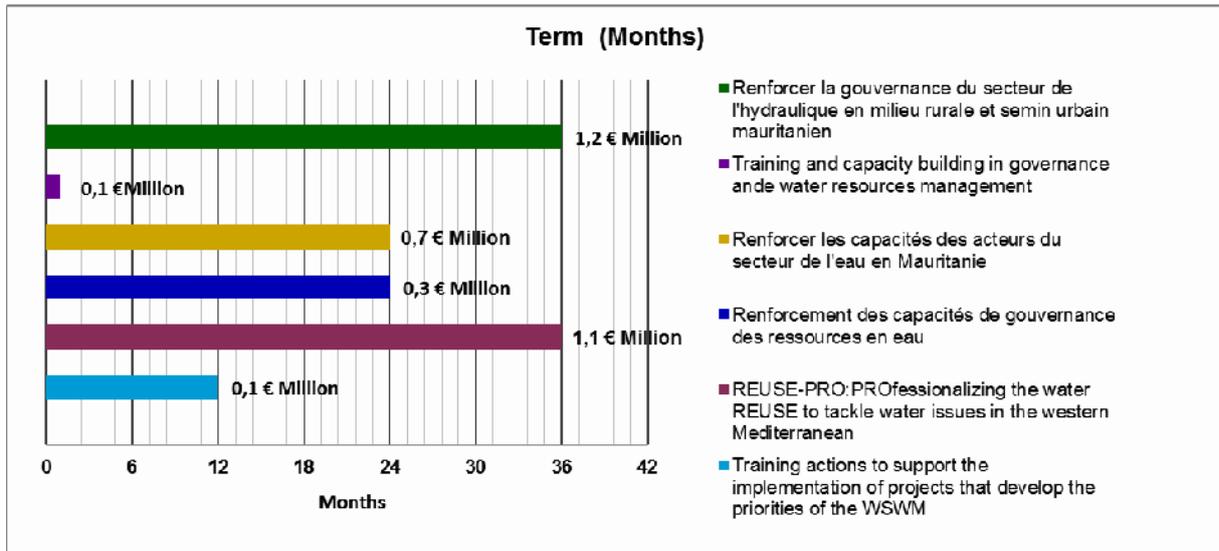


Figure 6 : Timelines for the implementation of the projects included in Action 3: Training and capacity building

Action 4. Experience exchange, dissemination and cooperation

Experience and information exchange between technicians from different countries and organisations, expert in water resources management, is an important pillar to improve management in each country. The results of research and capacity building developed by each one can be shared with other technicians, thus creating synergies and avoiding using human and economic resources to study topics already analysed elsewhere.

On the other hand, to achieve an integrated and sustainable water policy, cooperation and communication amongst those involved in the process, namely water managers and all the other stakeholders (civil society, operators, etc.), is necessary. In this sense, it is important to foster international cooperation, particularly amongst countries sharing resources, in order to harmonise water uses to benefit the countries involved, while protecting water resources.

This Action intends to foster experience exchange, knowledge dissemination and cooperation amongst stakeholders, as well as looking for synergies.

It includes the creation of common repositories where information can be exchanged on specific topics in order to make available the details on progress already made by other members and to avoid duplicities.

To achieve these objectives it is necessary to disseminate information, and in this sense, the 5+5 process is the ideal forum. This Action Plan also has a Dissemination Plan where all the relevant information on the different proposed actions will be updated.

The projects included in this Action are the following:

Project N°.	Title	Promoting country/ entity	Promoter	Geographical scope	Strategy block	Cost (EUR Million)	Term (months)
7	Water Convention: global framework for transboundary water cooperation	UNECE	UNECE, Global Water Partnership Mediterranean, UfM	Regional Western Mediterranean region (and beyond)	1	0,9	24
8	Innovative hydro-economic modelling as leverage to reduce pressure on water stressed basins in the Western Mediterranean	IT	Ministero dell'ambiente	Regional (2-3 pilot areas)	1	1,2 (estimated)	36
9	Governance & financing for the Mediterranean Water Sector	GWP-Med+OECD	GWP-Med+OECD	Regional Mediterranean region with focus on Albania, Egypt, Jordan, Lebanon, Morocco, Palestine, and Tunisia	1	1,34	36
10	Full application of FCR principle and PPP	IT	Ministero dell'ambiente	National (7 River basin districts)	1	2	72
11	Sustainable Water Integrated Management (SWIM) Programme – phase II	EU	EU	Regional Morocco, Algeria, Tunisia, Libya, Egypt, Palestine, Jordan, Israel, Lebanon, Syria(?)	2	15	48
12	Mediterranean Water Knowledge Platform	IOW / IME	IOW / IME	Regional Regional project with national implementations (4 south Med countries, 2 of them in the Western area, Morocco and Tunisia)	2	5	24
13	5+5 Water Operators' Partnership Platform	GWOPA	GWOPA	Regional 5+5 countries	2	2,5	36

Project N°.	Title	Promoting country/ entity	Promoter	Geographical scope	Strategy block	Cost (EUR Million)	Term (months)
14	BlueGreen- Networking civil society in the Mediterranean Region	IME/IUCN/ MIO-ECSDE/ RAED / WWF	IME/IUCN/ MIO-ECSDE/ RAED / WWF	Regional project with national implementations; 3 of the target countries are from the western Mediterranean (Algeria, Morocco, Tunisia)	2	1,98	36
15	Establishment of a Water Scarcity and Drought assessment platform	MT	SEWCU	National	2	0,15	36
34	A new approach for multi-stakeholder engagement: the Water Living Lab network	PT	ISA-ULisbon (PT), CENTA (ES) and OIEAU (F) association	Regional. All Mediterranean countries, from north and south	2	4	24
35	Towards sustainable intensification in agriculture	PT	University of Lisbon/ School of Agriculture (ISA)	Regional. All Mediterranean countries	2	5	24
46	National Water Conservation Campaign	MT	SEWCU	National	3	10	48
57	Integrated Water Resources Management and Governance in Morocco	EU/MA	EU/MA	National	2	1,15	24
58	Governance and water resources integrated management in Algeria	EU/ALG	EU/ALG	National	2	1	24
59	Implementation and Management of Innovative Funding Mechanisms to ensure access to water and sanitation in the Mediterranean	IPEMED	IPEMED (Institut de Prospective Économique du Monde Méditerranéen)	Regional	2	0,1	12

Table n° 7 : Projects included in Action 4: Experience exchange, dissemination and cooperation

This Action encompasses almost all the projects proposed by regional organisations and the priorities developed would be numerous since it is a cross-cutting Action in regard to all the topics.

On the one hand, the Mediterranean Water Institute and the International Office for Water propose to create a water platform to exchange data, knowledge, experiences, etc. (*Project 12.*

Mediterranean Water Knowledge Platform). This platform would make all the information available and would allow evaluating the best practices on identified topics, as well as carrying out a follow-up of the policies and projects developed in each country. The project budget is 16 Million € for the whole Mediterranean divided into two phases, 10 million € for the first phase (24 months) and 6 million € for the second phase (24 months). From this budget, approximately 50% correspond to 5+5 countries. Therefore, this first Action Plan includes a 24 month project (1st phase) and a budget of 5 million €.

This platform could be the common repository for exchange information on all the projects. EMWIS has also offered to host all the 5+5 project information in its website.

The project proposed by Portugal is also developed in the same line (*Project 34. A new approach for multi-stakeholder engagement: the Water Living Lab network*) and proposes the creation of a Water Living Lab network in order to integrate the research and innovation processes within a public-private-people partnership. Portugal also proposes a project (*Project 35 Towards sustainable intensification in agriculture*), aiming at providing innovative experiences in the field of sustainable intensification regarding water resources, management, and fertilizer consumption in agriculture.

On the other hand, the SWIM Project (*Project 11. Sustainable Water Integrated Management (SWIM) Programme – phase II*) promoted by the EU could contribute to the development of the proposed projects by including them in the available funds, thus offering support mechanisms to the countries in order to improve water governability. Moreover, the results of the pilot projects could provide experience for the rest of the countries to test new approaches and technologies that can be replicated elsewhere. It is a project with a high budget of 15 million € for 48 months, but its geographical scope is wider than the 5+5. Another reason for its high budget is that it includes pilot projects.

As mentioned above, cooperation between countries sharing resources (transboundary cooperation) is very important to guarantee an integrated basin management. In this sense, there is a project promoted by UNECE (*Project 7. Water Convention: global framework for transboundary water cooperation*) that works on this subject trying to create mechanisms to strengthen international cooperation and creating an intergovernmental support platform.

An important topic on which there should be more information exchange and consensus is the economic issues in respect of water management. It should be more present in future updates of the Action Plan. This first Plan covers the views offered, which focus on the implementation of the cost-recovery principle for water services and the “polluter pays” principle. There is a regional project promoted by GWP-Med and OECD (*Project 9. Governance & financing for the Mediterranean Water Sector*) that could meet these expectations, and an Italian project to be implemented in 7 river basins (*Project 10. Full application of FCR principle and PPP*). These projects could be the embryo for future projects to be included in the next updates of the Plan, therefore one of the results of the regional project by GWP-Med and OECD should be to identify the needs to cover on these issues in the Western Mediterranean scope. Reinforcing the previous

issues and extending the knowledge on economic issues, appears *Project 59 “Implementation and Management of Innovative Funding Mechanisms to ensure access to water and sanitation in the Mediterranean”*, which aims at deepening into the financing mechanisms of water and at achieving a sustainable system of cost recovery. This project is the only one developing priority 8 “Mobilising water-related innovative financing solutions for the application of the Strategy” of the Strategy, but in future updates of the plan, more emphasis should be given to this priority that has had little interest so far.

Last, another interesting subject for the members is the information exchange and dissemination on water scarcity and droughts. Three national projects that deal with this topic are included: *Project 8. Innovative hydro-economic modelling as leverage to reduce pressure on water stressed basins in the Western Mediterranean (IT)*, *Project 15. Establishment of a Water Scarcity and Drought assessment platform (MT)* and *Project 46. National Water Conservation Campaign (MT)*.

The total budget of this Action would be 51,32 Million €, distributed as follows:

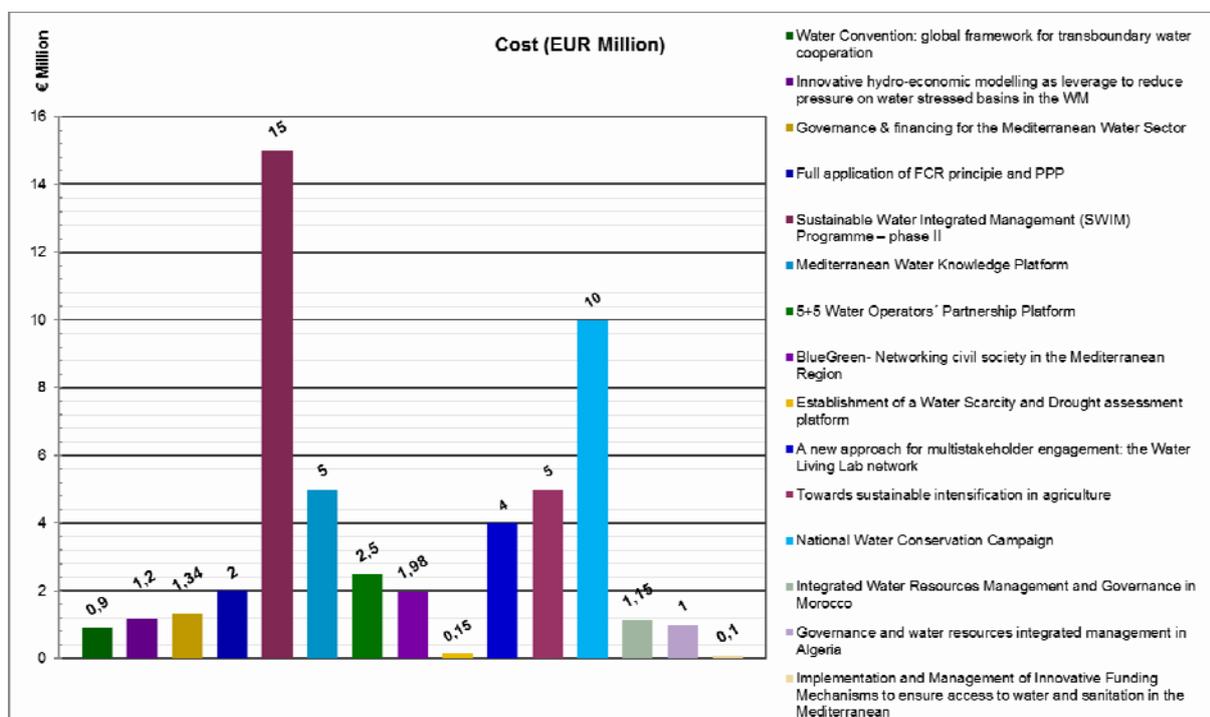


Figure 7 : Budgets for the projects included in Action 4: Experience exchange, dissemination and cooperation

The timelines for implementation are very varied, ranging from 12 to 72 months.

On a valued chronogram, this Action would look as follows:

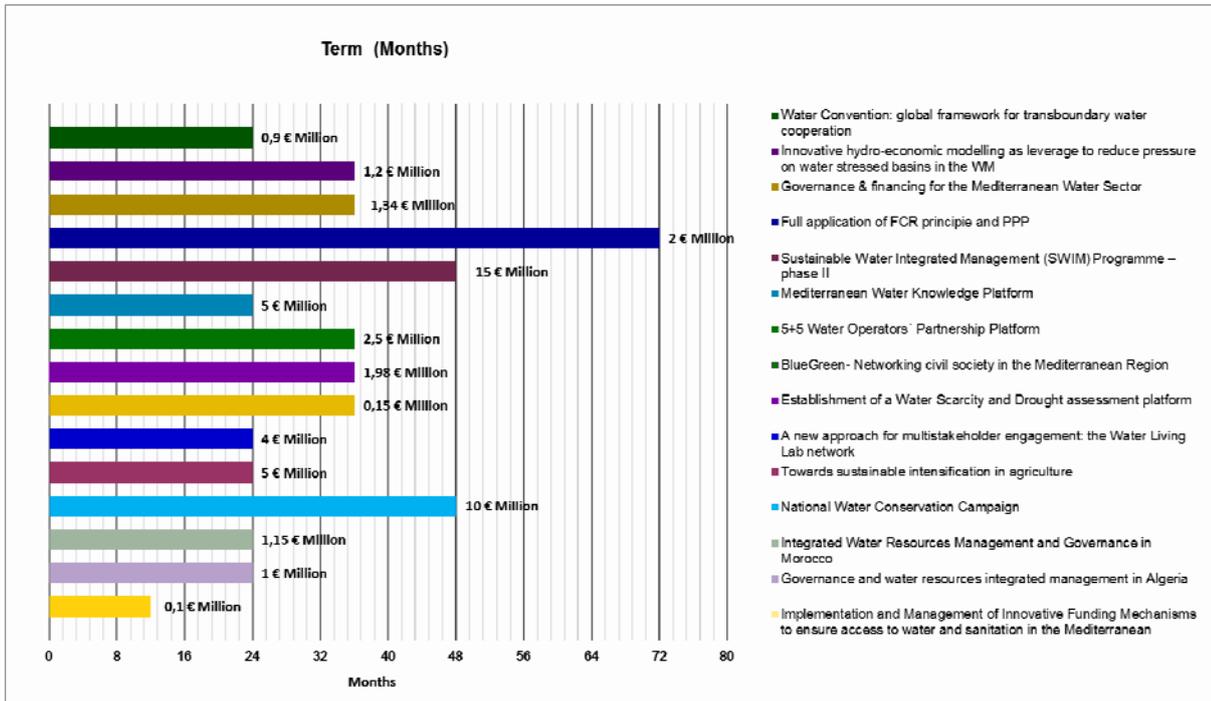


Figure 8 : Timeline for the implementation of the projects included in Action 4: Experience exchange, dissemination and cooperation

Action 5. Climate change

Impacts of climate change on the Mediterranean region, and particularly on vulnerable countries, have been identified as a major climate change hotspot and challenge. The impacts produced by climate change can be aggravated when occurring in regions that already present low water resources levels and frequent droughts, and, hence, imbalances between water demands and available resources. The Western Mediterranean is very vulnerable to climate changes due to the high spatial and temporal irregularity of water resources, the elevated degree of water use and linked socio-economic impacts, in addition to its location in an area projected to have temperature increases and precipitation decreases.

The Action aims at analysing climate change effects in the Western Mediterranean and developing adaptation measures, thus covering priority 9 “Climate change adaption” of the Strategy, which focuses on the same objectives.

In order to address this priority, there are two regional projects, leaded by Algeria and MENBO, whose objective is to analyse climate change consequences and adaptation in the Western Mediterranean. The results and results from these projects could be contrasted with those obtained in a similar project leaded by France in the Mediterranean basin of Rhône, whose objective is to define actions according to the area vulnerability, obtained from maps.

Moreover, a new view is stated in this Action Plan on climate change and mitigation actions in urban areas, which could be addressed with the development of the project promoted by Italy that

focuses on urban drainage systems. This topic is less popular than the previous one, but very important. Also, even though the project has a national scope, it can easily be extrapolated.

The mentioned projects and their main characteristics are the following:

Project N°.	Title	Promoting country/ entity	Promoter	Geographical scope	Strategy block	Cost (EUR Million)	Term (months)
25	Hydrological consequences of climate change in W.MED.	MENBO	MENBO	Regional Basins of various countries flowing into the Mediterranean (France, Spain, Morocco, Algeria)	3	1,8	24
26	Plan bassin d'adaptation au changement climatique Rhône-Méditerranée	FR	"DREAL Agence de l'eau Rhône-Méditerranée-Corse	National	3	0,4	72
27	Adaptation aux conséquences des changements climatiques	DZ	Ministère Algérien des Ressources en Eau et de l'Environnement	Regional (Les pays Méditerranéens)	3	3	36
28	Climate change mitigation Action in urban areas in the Western Mediterranean	IT	Ministero dell'ambiente	Regional	3	5	72

Table n° 8 : Projets included in Action 5: Climate change

The total budget of this Action is 10,2 Million €, distributed as follows:

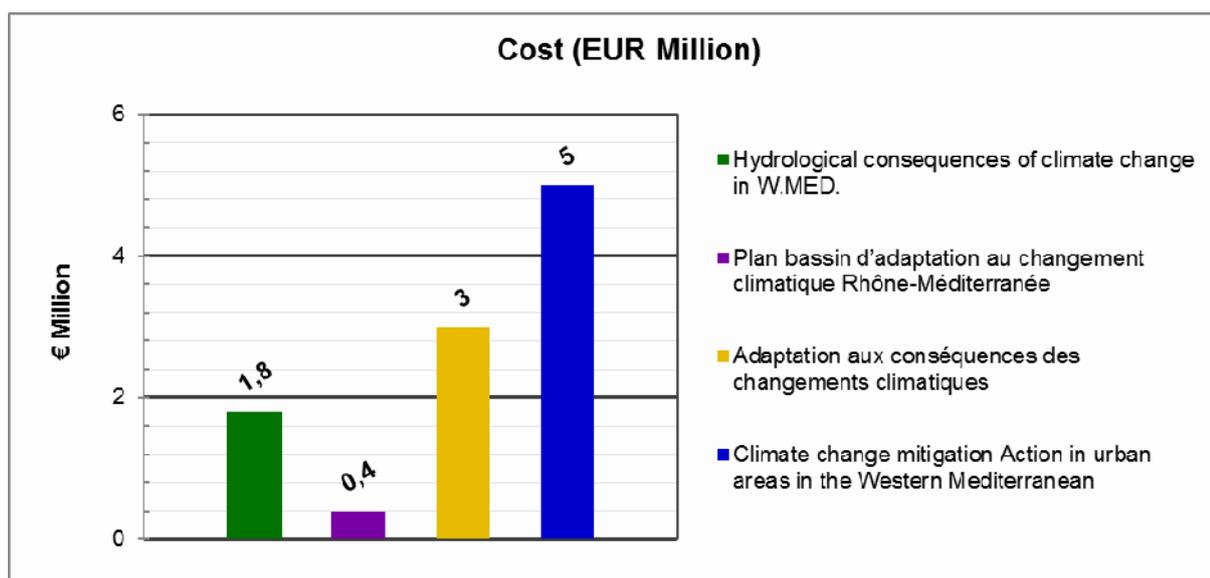


Figure 9 : Budgets for the projects included in Action 5: Climate change

The timelines for implementation are very varied, ranging from 24 to 72 months.

On a valued chronogram, this Action would look as follows:

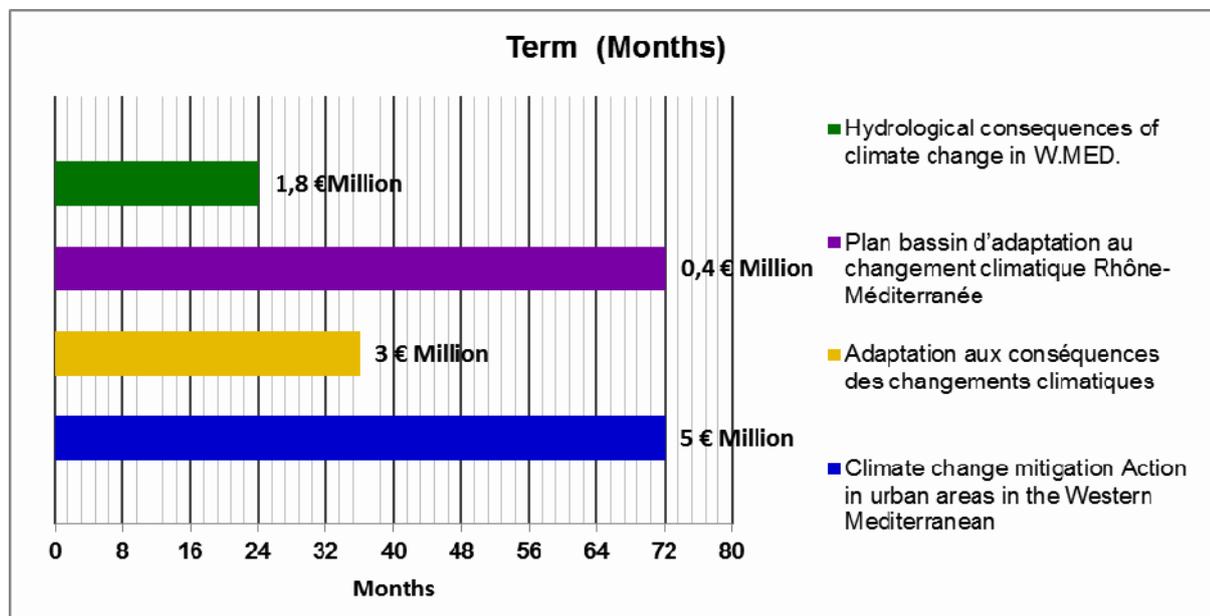


Figure 10 : Timeline for the implementation of the projects included in Action 5: Climate change

Action 6. Infrastructure sustainability

When designing a project of any infrastructure, not only technical aspects for its construction and functioning must be considered, but also environmental, social and economic aspects that might condition or improve the design. Moreover, it is necessary to bear in mind all the phases of the infrastructure's life (construction, functioning, maintenance and demolition or abandonment) and evaluate each one of them. For this reason, the variables to consider in the design of any infrastructure must be wider than usual and require special attention.

The projects included in this Action respond mainly to three priorities of the Strategy, priority 10 "Increasing and mobilising the available resources", priority 11 "Water use efficiency improvement" and priority 4 "Capacity building", since an appropriate and sustainable design of the infrastructures means the mobilisation and increase of available resources as well as an increase of the uses efficiency, as it accounts for all aspects related to the usable life of the infrastructure.

Even though within this action any type of infrastructure can be included, dams present the most relevance and interest. In fact, dams were the main topic of a thematic session of Workshop 5 held in Valencia. It is a very interesting subject and very popular in the southern countries, not only in regards to construction but also in relation with solving the problems associated to dams (sedimentation, floods, etc.). Dam sediment elimination has been mentioned by Tunisia during the workshops, and supported by other countries that need information on previous experiences from

other countries to face these problems. Even though the project has a national scope, it can be easily extrapolated to other scopes.

The northern Mediterranean countries have vast experience in this respect and many well-known technicians could assist and support technicians from interested countries.

Most of the presented projects belong to the infrastructures group, but there are three projects that have had much interest during the workshops, and it might be interesting to develop them within the services group.

Project N°.	Title	Promoting country/ entity	Promoter	Geographical scope	Strategy block	Cost (EUR Million)	Term (months)
19	Sustainability (environmental, economic and social) of dams in the Western Mediterranean	ES	Spain	Regional	2	0.8	24
40	Dévasement du Barrage El Kébir	TN	Ministry of Agriculture	Local	3	0.815	48
39	Création d'un Barrage sur Oued El Htab et création d'un projet de développement intégré dans son Bassin Versant	TN	Ministry of Agriculture	National (center ouest)	3	0.5	24

Table n° 9 : Projets included in Ation 6: Infrastructure sustainability

The total budget of this action is 2.11 Million €, distributed as follows:

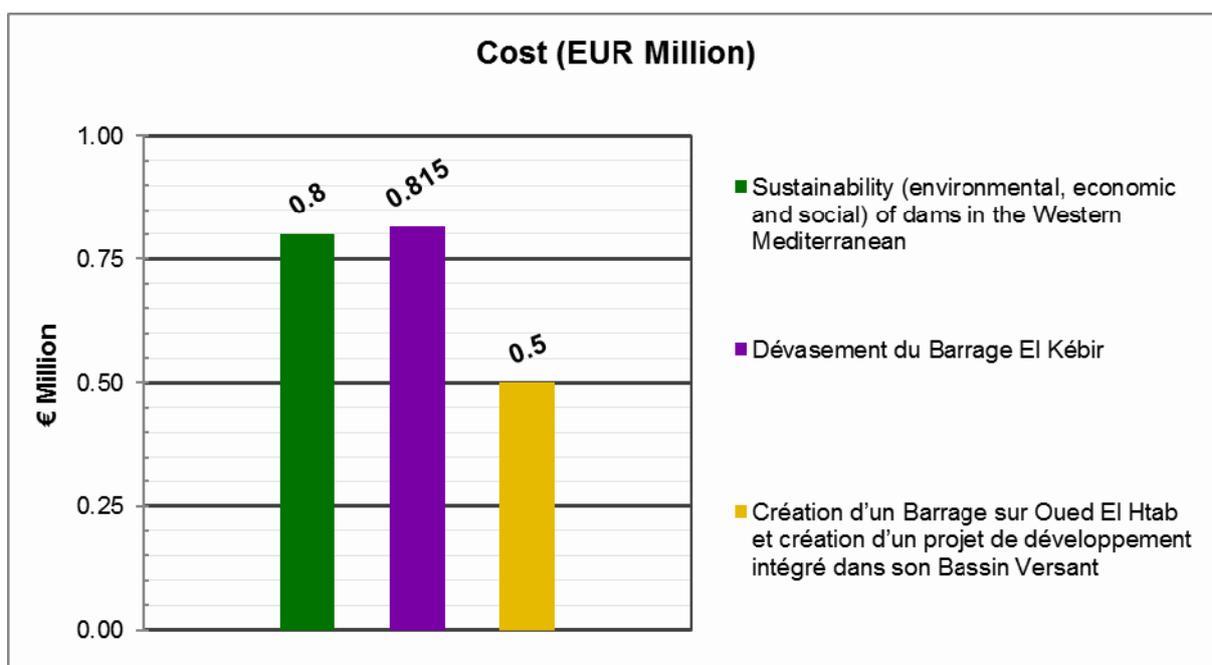


Figure 11 : Budgets for the projects included in Action 6: Infrastructure sustainability

The timelines for implementation range from 24 to 48 months.

On a valued chronogram, this Action would look as follows:

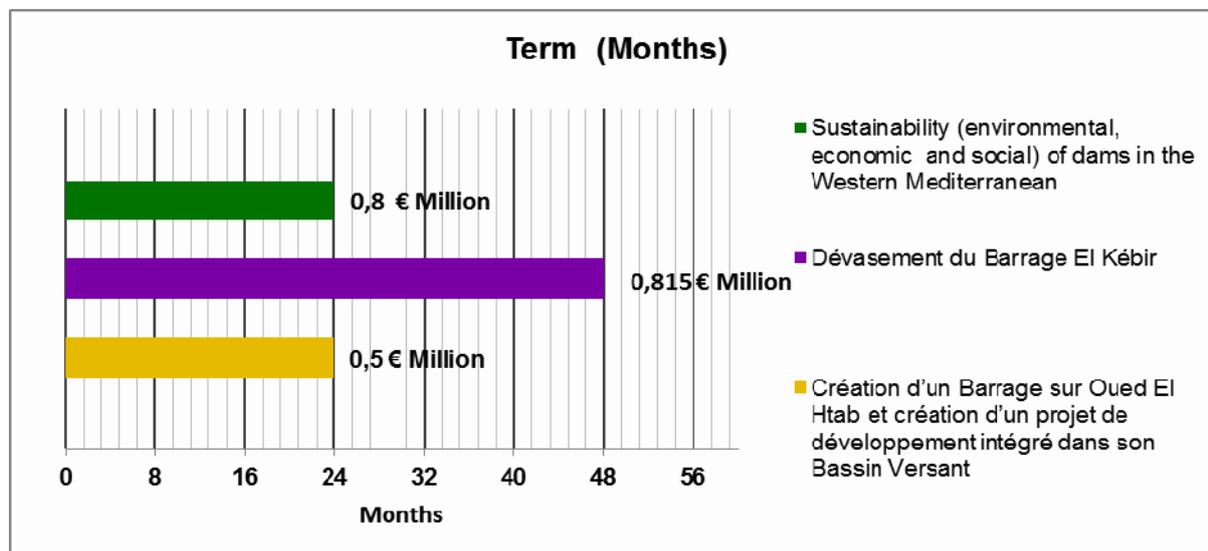


Figure 12 : Timeline for the implementation of the projects included in Action 6: Infrastructure sustainability

Action 7. Sustainable aquifer management

Groundwater is a very important resource with great advantages in respect of surface water, but it is difficult to manage. Further attention on the key aspects of their management is one of the objectives of the Action Plan, as stated by several members, especially in regards to aquifer recharge to obtain an increase of available resources and sustainable management, in order to avoid the frequent overexploitation of aquifers.

Projects included in this Action focus mainly on four priorities of the Strategy, priority 2 “Establishing governance adapted to integrated water management”, priority 5 “Innovation development in the water sector”, priority 10 “Increasing and mobilising the available resources” and priority 11 “Protection of water quality and biodiversity”. With the sustainable management of aquifers an increase of available resources and an improvement of water quality can be achieved, but it is necessary to find solutions that are environmentally sustainable, technically viable and socially desirable. All innovation applied to aquifer management will contribute to improving the water sector.

The projects included in this Action are the following:

Project N°.	Title	Promoting country/ entity	Promoter	Geographical scope	Strategy block	Cost (EUR Million)	Term (months)
6	Sustainable aquifer management of the high Guadiana	ES	Spain	Local	1	10	72

Project N°.	Title	Promoting country/ entity	Promoter	Geographical scope	Strategy block	Cost (EUR Million)	Term (months)
22	Managed Aquifer Recharge Schemes	MT	SEWCU WSC	National	2	5	48
41	Recharge artificielle de la nappe d'El Fahs par les eaux usées traitées	TN	MARHP : Direction Générale des Ressources en Eau "DGRE"	National (Nord de la Tunisie)	3	0,8	24
42	Recharge artificielle de la nappe d'oued Essmar_Mednine par les eaux usées traitées	TN	MARHP : Direction Générale des Ressources en Eau "DGRE"	National (Sud-Est de la Tunisie)	3	0,9	24

Table n° 10 : Projects included in Action 7: Sustainable aquifer management

Most of them address the artificial recharge of aquifers, where it is indispensable to reach a balance between the water abstractions and the recharge capacity of the aquifer. Also, the possibility of salinisation of aquifers must be considered due to excessive pumping. All projects have a national scope and could be pilot projects to be extrapolated elsewhere.

The total budget of this Action is 16,7 Million €, distributed as follows:

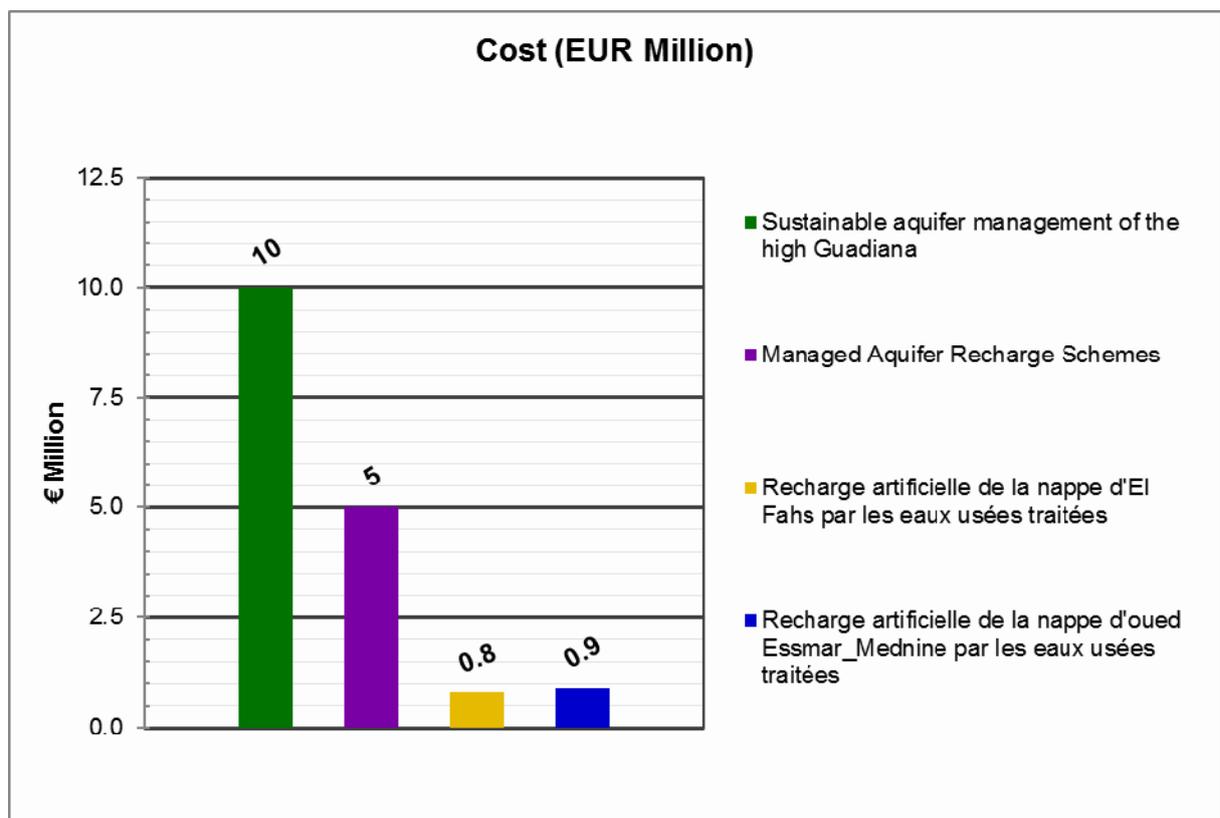


Figure 13 : Budgets for the projects included in Action 7: Sustainable aquifer management

The timelines for implementation are very variable, ranging from 24 to 72 months.

On a valued chronogram, this Action would look as follows:

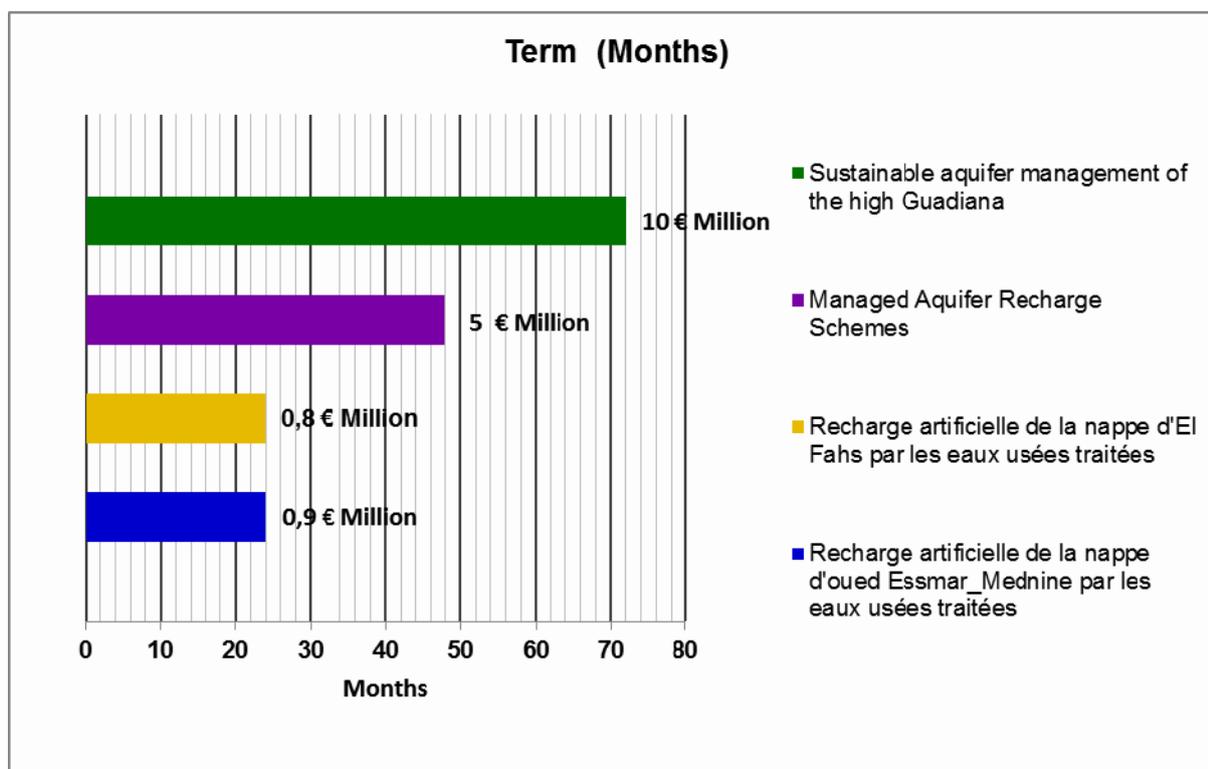


Figure 14 : Timeline for the implementation of the projects included in Action 7: Sustainable aquifer management

Action 8. Promoting re-use

Besides conventional resources, the commitment to make use of non-conventional resources (reuse and desalination) should be encouraged, all the more in countries presenting the characteristics of the Mediterranean basin where water is a precious and scarce resource.

From the analysis of the projects received by the member countries and observers, it can be concluded that reuse is a theme that arises great interest.

Therefore, the Plan puts forward the following Action in the field of the improvement of wastewater in order to subsequently reuse it for a variety of purposes, while previously evaluating the possibilities and the eventual risks of treating and using wastewater and meeting the standards of quality established in the legislation.

The projects included in this Action are the following:

Project	Title	Promoting country/ entity	Promoter	Geographical scope	Strategy block	Cost (EUR Million)	Term (months)
18	Comparative analysis reuse in the Western Mediterranean	ES	Spain	Regional Western Mediterranean	2	0,5	24

Project	Title	Promoting country/ entity	Promoter	Geographical scope	Strategy block	Cost (EUR Million)	Term (months)
21	Réutilisation des eaux usées épurées et développement de son utilisation	DZ	Ministère Algérien des Ressources en Eau et de l'Environnement	National	2	0,6	24
29	Decentralized treated waste water improvement for irrigation	TN	Ministry of Agriculture	National Centre and south areas inside the country (20 pilot projects)	3	3	60
31	Promoting the treated wastewater reuse as a means of coping with climate change	MA	Moroccan delegate Ministry in charge of Water	Regional	3	2,3	120
55	Floating islands pilot-project of Colibri in Morocco	MA ³	Global Colibri (PT)	Local (Morocco)	3		

Table n° 11 : Projects included in Action 8: Promoting re-use

All the proposed projects are national, except for the Project proposed by Spain that has a regional scope. Through this Project, the situation of reuse in each of the member countries would be analysed, to obtain the state of the art of the different reuse techniques including their advantages and disadvantages; the results could serve as a basis to address the 4 projects included with a national scope, each of them having a specific objective.

Besides, these projects are closely related to project 30 included in Action 3 “Training and Capacity Building” where actions geared to the professionalization of the sector through the development of capacities and exchange of information, will be carried out.

The Project “Promoting the treated wastewater reuse as a means of coping with climate change” proposed by Morocco has a budget of 22.3 Million €, of which 20 are allocated to pilot projects.

The objectives to achieve with these projects respond to priority 4 “capacity building”, priority 10 “Increasing and mobilising the available resources” and priority 13 “Protection of water quality and biodiversity”. On the one hand, these projects improve the quality of water and therefore also that of the associated ecosystems, increasing biodiversity. On the other hand, they increase the availability of resources while being able to respond to increases of the demand and facing the reduction of resources due to climate change.

The total budget of this Action is 6,4 Million € (in the absence of the budget of the Project proposed by Portugal), distributed as follows:

³ Project proposed by Portugal.

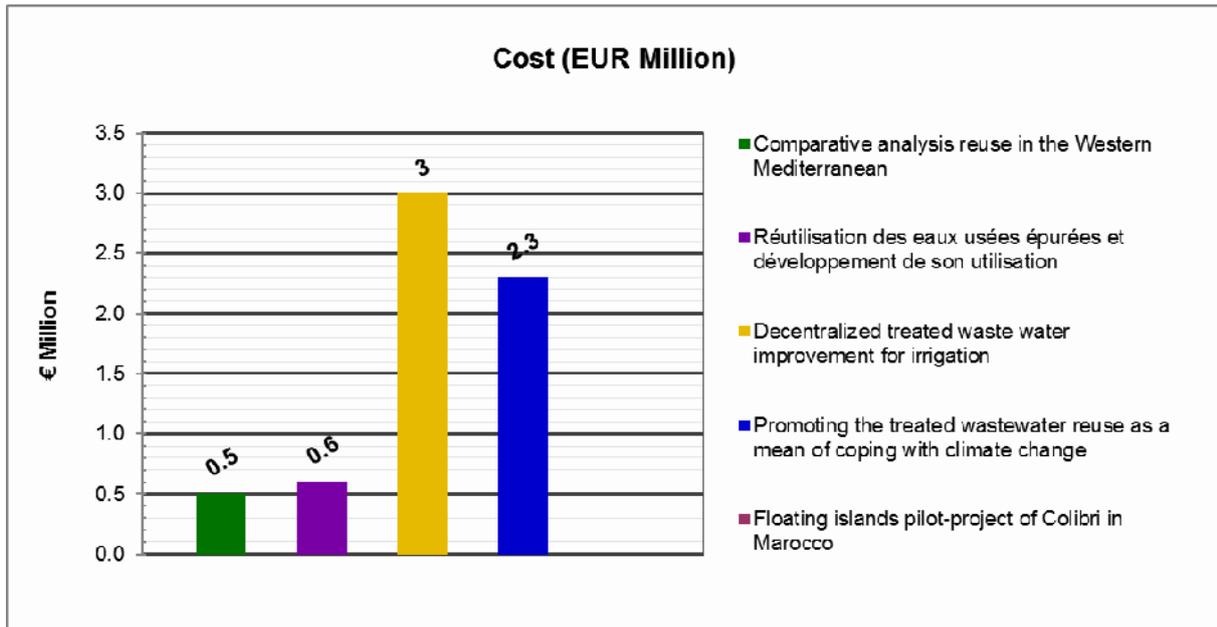


Figure 15 : Budgets for the projects included in Action 8: Promoting re-use

The timelines for implementation are very variable, ranging from 24 months to 120.

On a valued chronogram, this Action would look as follows:

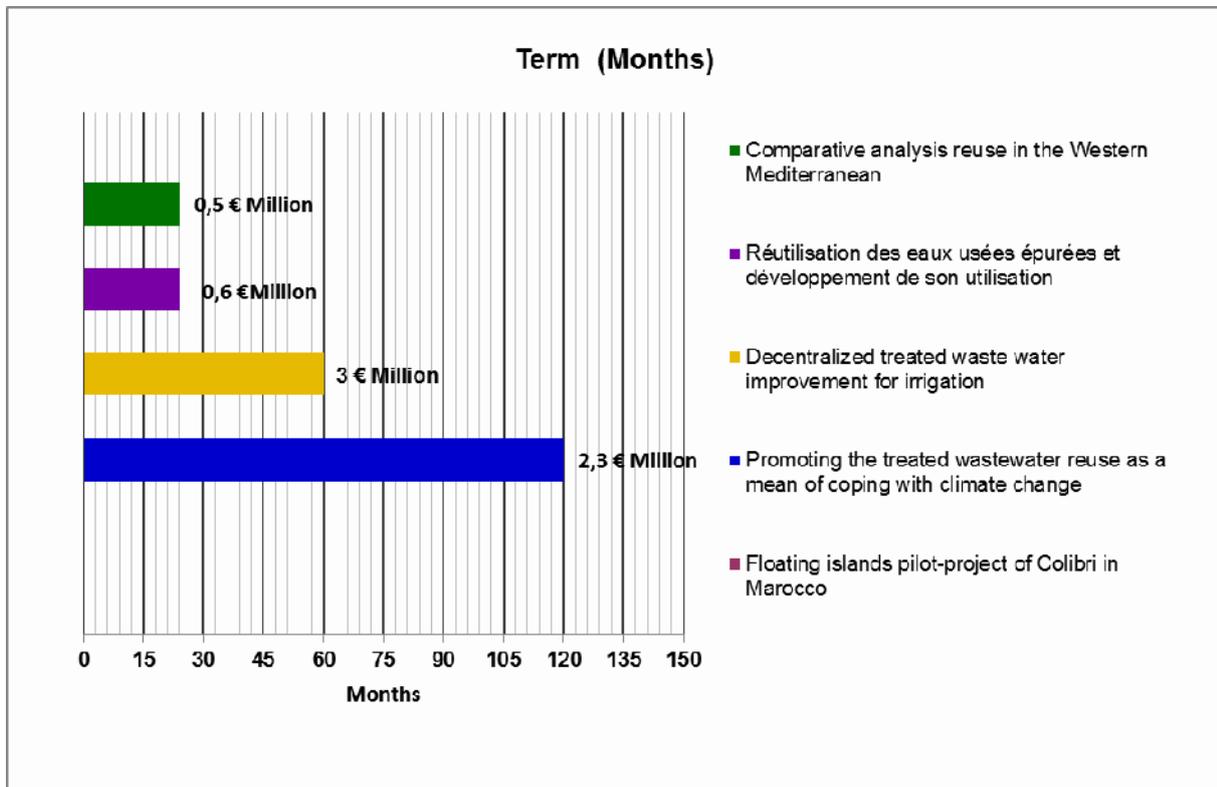


Figure 16 : Timeline for the implementation of the projects included in Action 8: Promoting re-use

Action 9. Improvement of the quality of water

Sources of pollution are numerous all over the Mediterranean region. A number of measures need to be applied in order to achieve, in the medium term, a good status for all waters based on a comprehensive monitoring system for water quality and quantity and for ecosystems and biodiversity. These measures would include reducing and preventing water pollution, expanding the scope of water protection and avoiding overexploitation of water resources. In addition, the use of fertilisers and pesticides should be limited to appropriate and recommended levels.

The Action Plan addresses the quality of waters from different points of view namely the improvement of the quality of drinking water, of sanitation systems, and of groundwater. The most important is that related to the quality of wastewater since various countries have shown an interest through national projects. These projects have been included in the previous Action.

As regards the quality of drinking water, sanitation systems and groundwater, these are the three existing projects:

Project	Title	Promoting country/ entity	Promoter	Geographical scope	Strategy block	Cost (EUR Million)	Term (months)
49	Promoting sanitation systems in rural areas	MA	Moroccan delegate Ministry in charge of Water	Regional	3	4	120
50	Minimise pollution effect of the oil disposal swamps to the groundwater aquifer	LY	Ministry of Water Resources	Local (North east of oil field of Libya)	3	5	24
52	Improve the quality of drinking water in Mauritania	MR	Ministère de l'hydraulique et de l'Assainissement	National	3	0,8	36

Table n° 12 : Projects included in Action 9: Improvement of the quality of water

All projects directly develop priority 13 “Protection of water quality and biodiversity”, each of them focusing on a specific aspect but sharing the common objective of improving the quality of water and therefore improving their associated ecosystems and protecting biodiversity. These are national projects demanded by southern countries. Northern countries could support technically those from the south on issues where they have more experience.

The total budget of this Action is 9.8 Million €, distributed as follows:

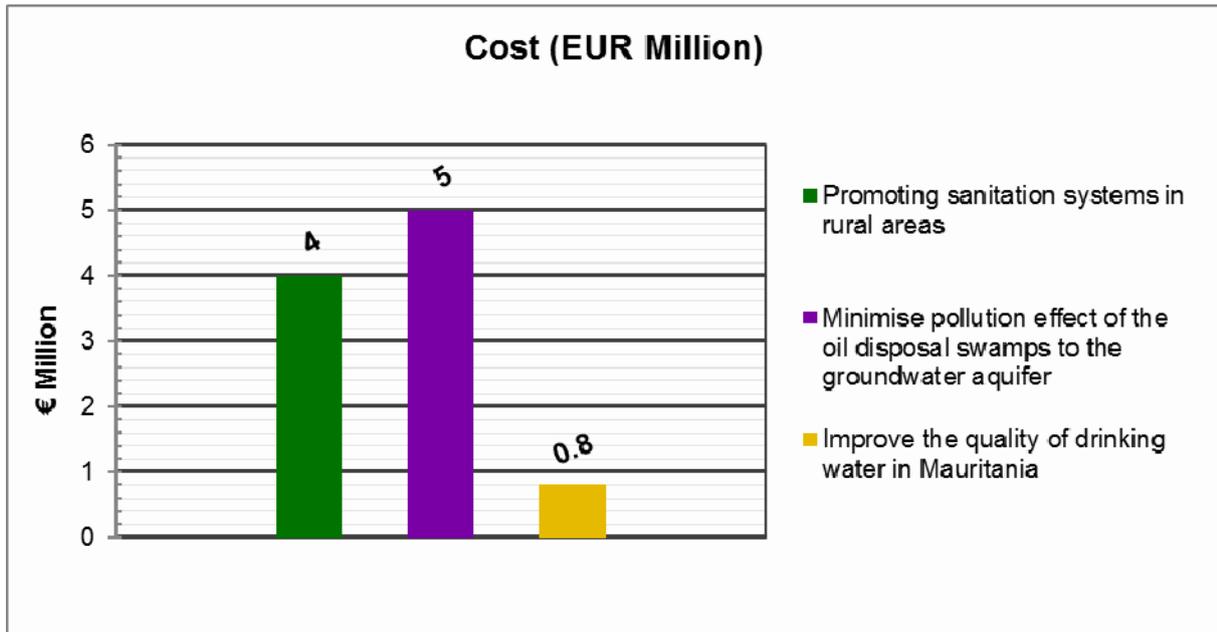


Figure 17 : Budgets for the projects included in Action 9: Improvement of the quality of water

The timelines for implementation are very varied, ranging from 24 months to 120.

On a valued chronogram, this Action would look as follows:

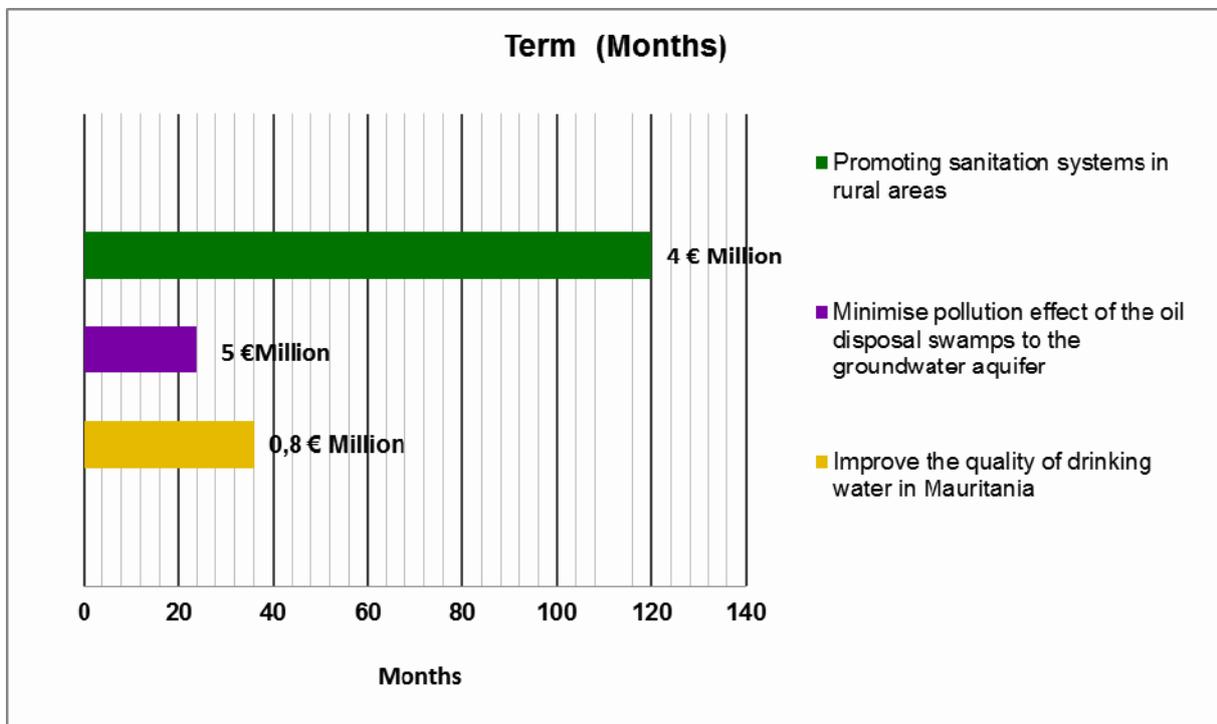


Figure 18 : Timeline for the implementation of the projects included in Action 9: Improvement of the quality of water

Action 10. Preservation of aquatic ecosystems

Throughout the process of elaboration of the Plan, a high interest in aquatic ecosystems and in particular on wetlands, arose among some of the members. As a result of such interest, this Action is proposed to be developed regarding the management and quality of wetlands in the Mediterranean.

Wetlands are essential due to the numerous benefits or to the ecosystem-related services that they bring to mankind, from the supply of fresh water, food, biodiversity to flood control, groundwater recharge and climate change mitigation. Therefore, through the Action Plan, special emphasis will be given to improve wetlands quality and management.

Within this Action, we find two projects presented by the countries; one project promoted by Spain aiming to achieve a good ecological status in the wetland of the Albufera of Valencia, and another promoted by Morocco, related to legislative aspects essential to the achievement of the goals.

Project	Title	Promoting country/ entity	Promoter	Geographical scope	Strategy block	Cost (EUR Million)	Term (months)
1	Implementation of a new law for the protection of aquatic areas	MA	Moroccan delegate Ministry in charge of Water	National	1	4,5	120
48	Special Plan for achieving the ecological potential of the RAMSAR wetland of the Albufera Lake.	ES	Spain	Local (lake of the Albufera)	3	0,72	24
56	Assessing and managing pressures on water and wetlands in the Mediterranean through the Water Footprint indicators	Medwet/MW O/WFN/EM WIS/UNEP	Medwet/MWO/WF N/EMWIS/UNEP	Regional	3	3,6	36

Table nº 13 : Projects included in Action 10: Preservation of aquatic ecosystems

The main priorities covered by these projects are priority 1 “Governance development and/or consolidation” with the development of new legislation, and priority 13 “Protection of water quality and biodiversity” promoting biodiversity of ecosystems.

The total budget of this Action is 8,82 Million €, distributed as follows:

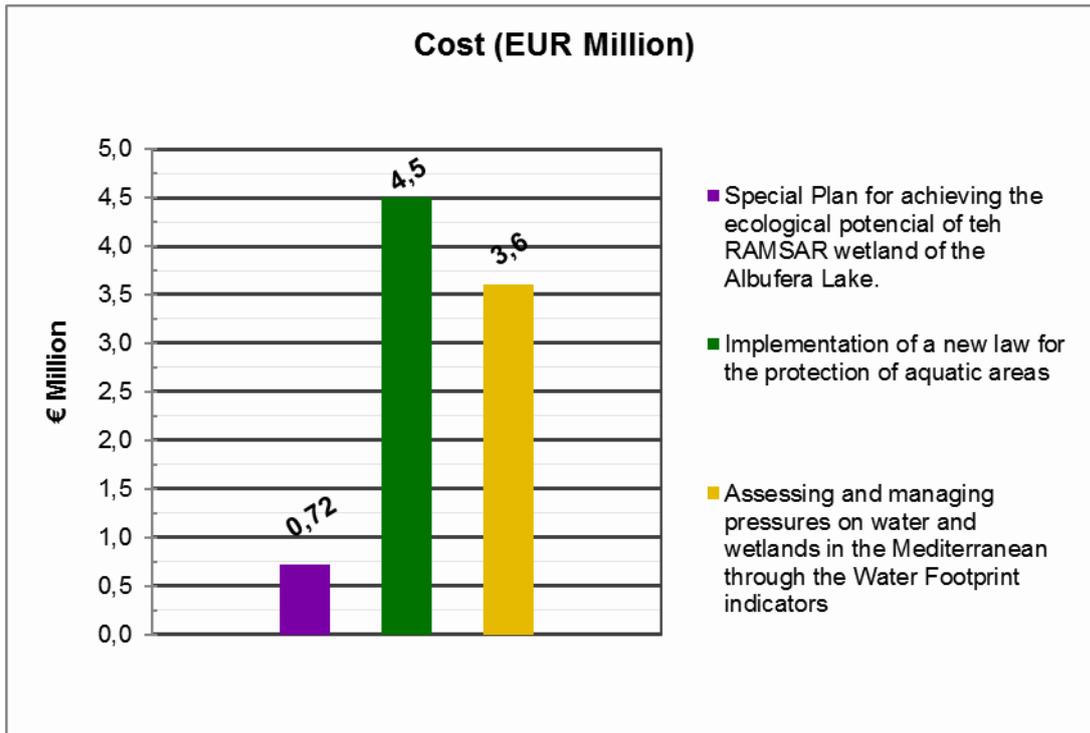


Figure 19 : Budgets for the projects included in Action 10: Preservation of aquatic ecosystems

The timelines for implementation periods are very varied, ranging from 24 months to 120.

On a valued chronogram, this Action would look as follows:

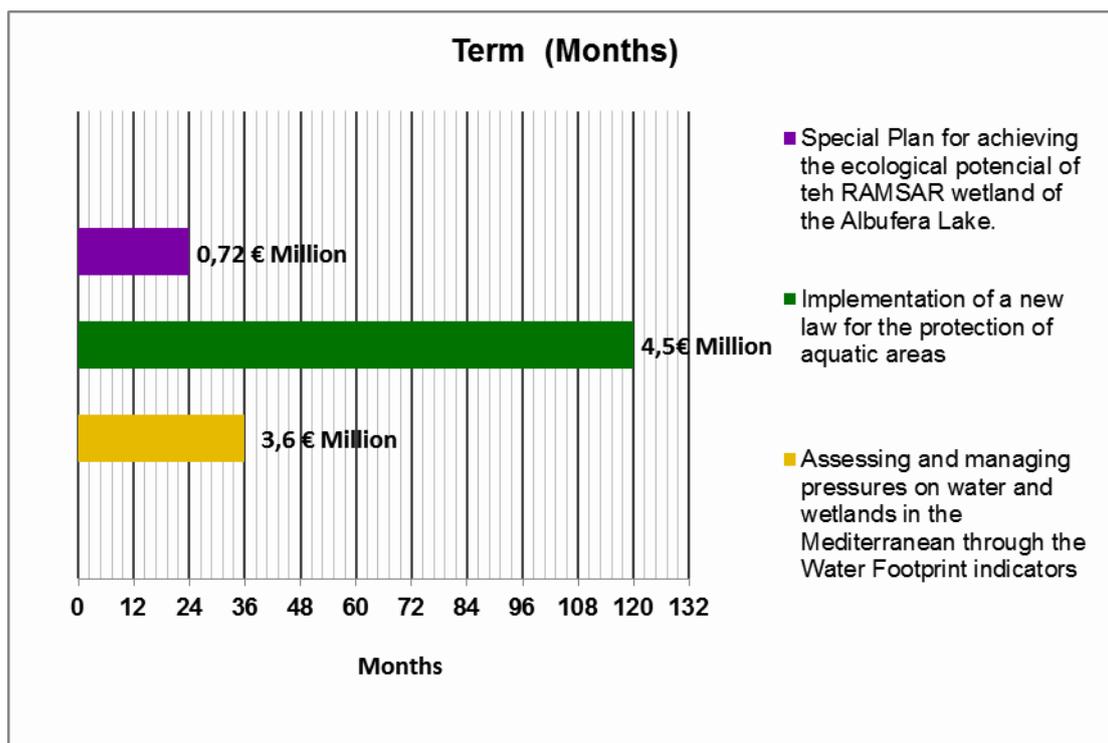


Figure 20 : Timeline for the implementation of the projects included in Action 10: Preservation of aquatic ecosystems

5.3 Infrastructure actions

Within the Actions promoted below, a total of 6 proposed projects are included, which entail a total budget of approximately 280 Million €.

Action 11. Infrastructure projects in Libya

The infrastructure projects in Libya present 4 different types: construction of dams, recharge of aquifers, desalination plants and water treatment plants, all of them aiming at increasing available resources. The first three types mainly address priority 10 “Increasing and mobilising the available resources”, and the fourth one addresses priority 13 “Protection of water quality and biodiversity” and also priority 7 “De-pollution of the Mediterranean” since it is developed in coastal cities and the water discharged into the sea would have a better quality.

Project	Title	Promoting country/ entity	Promoter	Geographical scope	Strategy block	Cost (EUR Million)	Term (months)
33	Artificial discharge to the groundwater aquifers	LY	Ministry of Water Resources	Local North west area of Libya (1 pilot project)	3	10	36
36	Construction of dams	LY	Ministry of Water Resources	National (seven dams)	3	115	48

Project	Title	Promoting country/ entity	Promoter	Geographical scope	Strategy block	Cost (EUR Million)	Term (months)
51	Water Sewage Treatment Project (Phase I)	LY	Ministry of Water Resources and wastewater company	Local Along the Libyan coast nearby the cities, northern coast of the country	3	12	60
60	Desalination plants to improve domestic water supply	LY	The General Desalination Company Ministry of Water Resources	National Along the Libyan Coast nearby the Cities, Northern coast of the country	3		72

Table n° 14 : Projects included in Action 11: Infrastructure projects in Libya

The total budget of this Action is 137 Million €, distributed as follows:

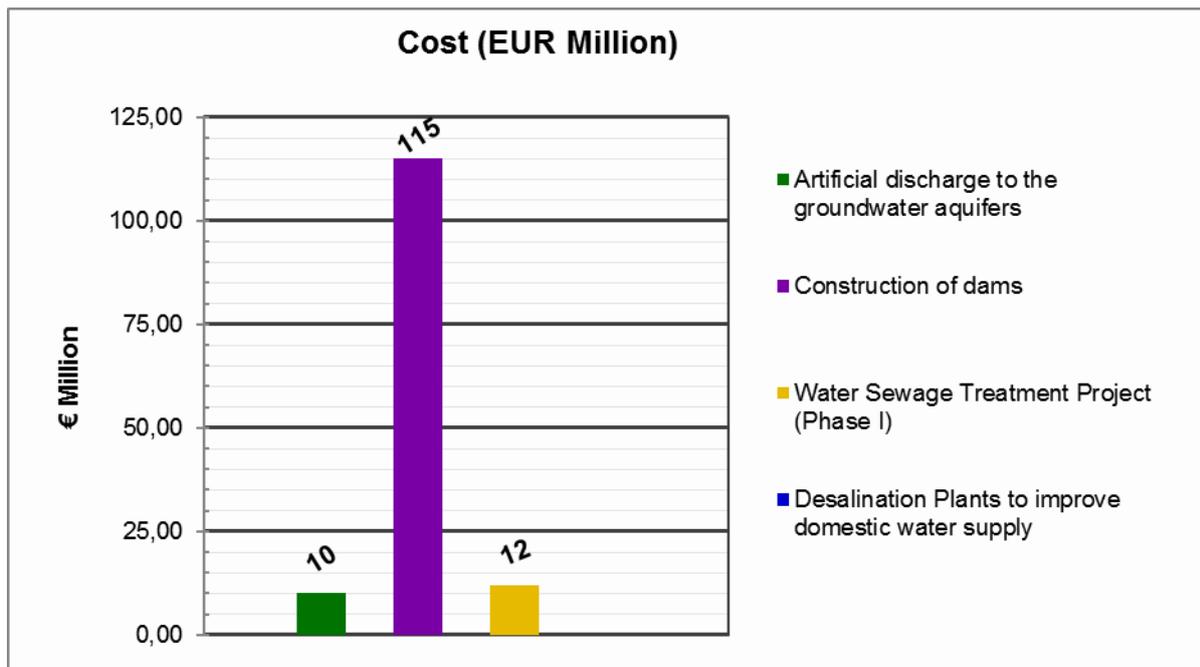


Figure 21 : Budgets for the projects included in Action 11: Infrastructure projects in Libya

The timelines for implementation are very varied ranging from 36 months to 72.

On a valued chronogram, this Action would look as follows:

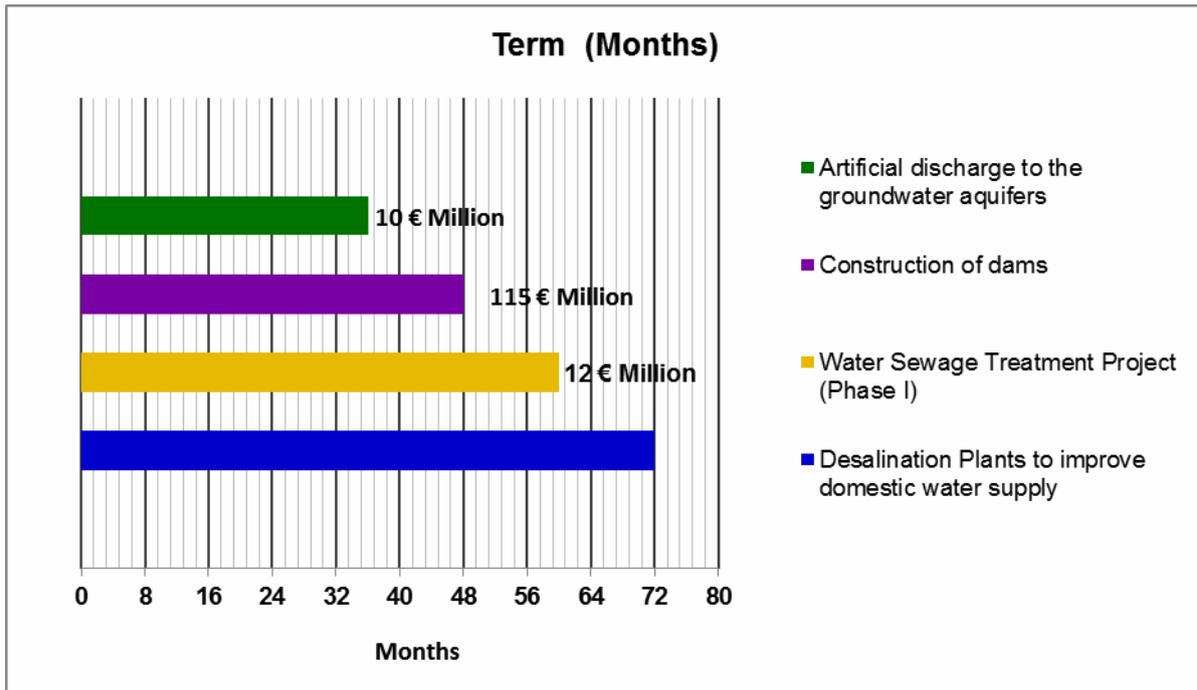


Figure 22 : Timeline for the implementation of the projects included in Action 11: Infrastructure projects in Libya

Action 12. Infrastructure projects in Malta

With the aim of increasing resources availability in Malta, the purpose is to achieve a production and distribution of 7 Million m³ of highly polished treated effluent. To this end, the following project is proposed, which would develop priority 10 “Increasing and mobilising the available resources”

Project	Title	Promoting country/ entity	Promoter	Geographical scope	Strategy block	Cost (EUR Million)	Term (months)
32	Production and distribution of highly polished treated effluent	MT	WSC	National	3	22	36

Table n° 15 : Projects included in Action 12: Infrastructure projects in Malta

This project entails the development of three polishing plants situated in the islands’ three wastewater treatment plants which will enable the treatment (polishing) of effluent to high quality levels which will enable its safe reuse. Furthermore, the project envisages the development of a dedicated distribution network to enable the availability of the highly polished effluent at the point of use.

The total budget of this Action is 22 Million €, with an implementation timeline of 36 months.

On a valued chronogram, this Action would look as follows:

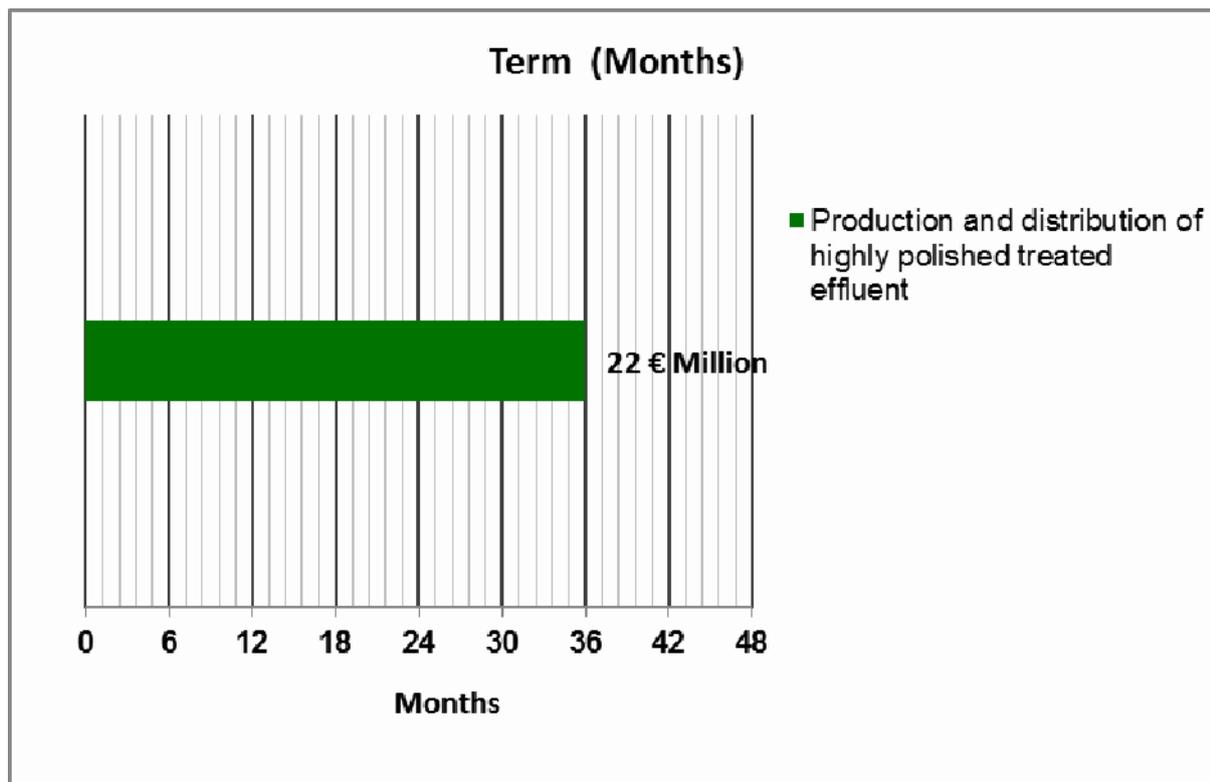


Figure 23 : Timeline for the implementation of the projects included in Action 12: Infrastructure projects in Malta

Action 13. Reduction of flood risk in the Júcar River Basin, Spain.

The rivers of the Western Mediterranean are characterised by an extreme flow regime causing strong river floods, provoking overflowing of channels, floods throughout their course, and causing significant damage to the fields and populated areas they reach. A great number of measures could reduce the flood risk. These measures are classified into structural and non structural measures.

In the Júcar Basin, the existing Global Plan against the flood risk aims at minimising the damages caused by floods that periodically affect the Júcar River banks. In this Action, measures of the Plan related to green infrastructure are included (refurbishment and adaptations of riverbanks, green corridors) in order to reduce the flood risk by carrying out integrated and sustainable actions that make compatible the protection against flooding with the recovery and improvement of inland waterways preserving their function as a backbone corridor of the territory. With this project, priority 12 ("Flood prevention") is covered.

Project	Title	Promoting country/ entity	Promoter	Geographical scope	Strategy block	Cost (EUR Million)	Term (months)
47	Actions of the Global Plan for flood risk in the Júcar river	ES	Spain	Local Jucar river	3	120	48

Table nº 16 : Projects included in Action 13: Reduction of flood risk in the Júcar River Basin, Spain

The total budget of this Action is 120 Million €, with a timeline for implementation of 48 months.

On a valued chronogram, this Action would look as follows:

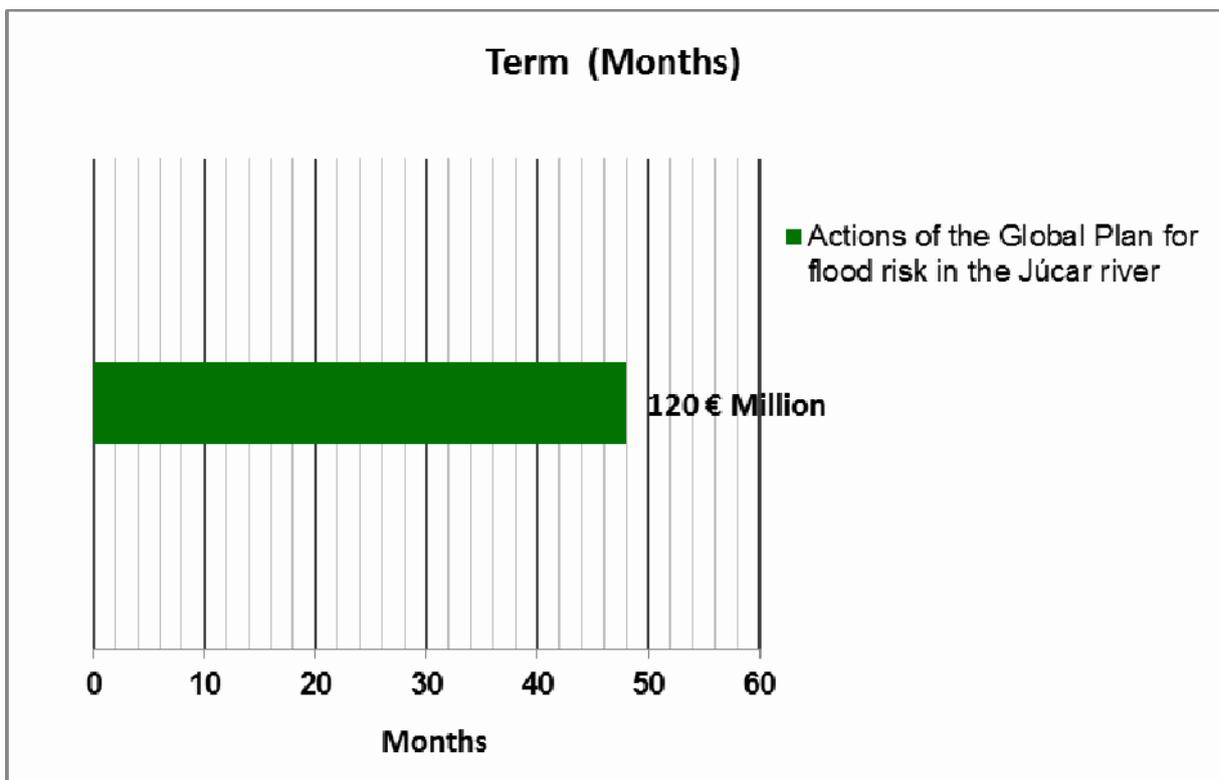


Figure 24 : Timeline for the implementation of the projects included in Action 13: Reduction of flood risk in the Júcar River Basin, Spain

5.4 Donors

In order to secure a high degree of success in the development of the Action Plan it is a condition sine-qua-non to obtain the support of the main financial entities be they worldwide, national or regional which may contribute to the development of the Project. The search for financing and the implementation of the Action Plan will be the main goal of the follow-up Plan. The funding issue will be addressed at a later stage immediately after the Ministerial endorsement.

Each entity has a specific profile and scope of application. Therefore, it is necessary to make them aware of the project by implementing the relevant actions that enable them to analyse which of the projects fits best their criteria and priorities.

That is why the financial entities will be systematically invited to the technical meetings that will be organised throughout the process of the Action Plan, where they will be required to indicate their suggestions and preferences and be able to hear the needs of each country or organisation.

This Action Plan will be the starting point to hold tailor-made meetings organised with the financial entities addressing any particular theme. All these actions are detailed in the dissemination Plan of the Action Plan. Participation requests will be duly addressed by all means.

A list of the said entities, identified as possibly interested, is set out below. This list could be subject to modifications and expansions.

INSTITUTION	Acronym	Country
Agencia Española de Cooperación Internacional para el Desarrollo	AECID	Spain
Agence Française de Développement	AFD	France
African Development Bank Group	BAD	Tunisia
European Bank for Reconstruction and Development	BERD	England
European Investment Bank	BEI	Luxembourg
European Union*	EU	Belgium
Foundation Prince Albert II of Monaco	FPA2	Monaco
Global Environment Fund	GEF	USA
KFW Group	KFW	Germany
Marseille Centre for Mediterranean Integration	CMI	France
OPEC Fund for International Development	OFID	Austria
Swedish International Development Cooperation Agency	SIDA	Sweden
World Bank	WB	USA

* Developed below

Table nº 17 : Potential donors

The European Union has several mechanisms in regard to financing and cooperation with the Mediterranean. Each one is characterized by specific objectives and features. During the elaboration process of this Plan, there has been close contact with the European Commission in

order to adapt the Action Plan to the suggestions made. Nevertheless, a high level meeting with the responsible representatives will be necessary in order to present the approved Action Plan and analyse the existing financing possibilities.

The following are the main existing cooperation tools:

- Within the H2020 initiative:
 - MeHSIP-PPIF aims to support the Horizon 2020 Investments for Pollution Reduction and Prevention component.
 - Capacity Building/Mediterranean Environment Program (€5 million for 2009-2012) aims to support the implementation of the Horizon 2020 Initiative Capacity Building component through capacity building and awareness raising activities, and to promote integration/mainstreaming of environment issues into other sector policies. A new phase with €4 million EU support will be launched in 2015 and will be merged with SWIM support mechanism
 - Shared Environment Information System (SEIS) was created to support the Horizon 2020 Initiative Monitoring and Review component in order to monitor the success of the Horizon 2020 Initiative and the state of the Mediterranean Sea.
- Within the neighborhood projects:
 - SWITCH-Med is an EU funded Program whose aim is to assist 10 countries of the southern Mediterranean to develop and implement policies to SWITCH to sustainable pattern of consumption and production (SCP) promoting it among consumers, small and medium-sized enterprises and Mediterranean policy makers
 - SWIM (Sustainable Water Integrated Management) with €20.6 million of EU support for 2010-2014 is a Regional Technical Assistance Programme launched by the European Commission to contribute to the extensive dissemination and effective implementation of sustainable water management policies and practices in the Southern Mediterranean Region.
 - Marine Protected Areas: the EU is supporting the creation of a network of Marine Protected Areas through the project "Development of a Mediterranean Marine and Coastal Protected Areas Network.
 - NGOs Project - 'Strengthening Environmental Governance by Building the Capacity of Non-Governmental Organizations' is a project funded by the European Union, implemented by the United Nations Development Program (UNDP). The project aims to promote sustainable development and improve environmental management in target countries.

Additionally, there are other financing sources such as:

- TaieX is the Technical Assistance and Information Exchange instrument of the European Commission. TAIEX supports public administrations with regard to the approximation, application and enforcement of EU legislation as well as facilitating the sharing of EU best practices. http://ec.europa.eu/enlargement/tenders/taieX/index_en.htm.
- Association Agreement Programs with countries from the region. These agreements are currently financing a twinning with Morocco and will finance another with Algeria. Both these projects are included in the Action Plan.
- Neighbour Investment Facility (NIF):
http://ec.europa.eu/enlargement/neighbourhood/neighbourhood-wide/neighbourhood-investment-facility/index_en.htm Applicable to Egypt, Jordan, Lebanon, Morocco, Palestine*, Tunisia as well as regional south-wide projects.

5.5 Dissemination

In order to pave the way for a better implementation of the Action Plan, a number of activities will be carried out to present and disseminate the Action Plan. In addition, these activities will facilitate mobilisation of funds for project proposals in the Action Plan.

The dissemination of the Action Plan is considered of the utmost importance. Thus, a separate document will be created named Dissemination Plan, which will include all the information related thereto.

This will be an annual Plan in which the procedures to be developed in order to carry out an appropriate dissemination of the Action Plan, will be defined. It will include the meetings to be held be they technical or that with the donors. It will also include the events with the Mediterranean and specific workshops deemed to be of interest. The particular way of intervention in each of them will be specified.

A list of web platforms where the information can be accessed will be elaborated. In addition, the creation and update of the web of the Water Strategy in the Western Mediterranean will be addressed.

5.6 Monitoring and updating Action Plan

The Action Plan is a living document to be enriched by projects that may have either been already implemented, that are being implemented at the moment, or foreseen to be implemented in a short-medium term.

As a living document, the implementation of projects included in the Action Plan should be monitored. This monitoring will be an ongoing process which can start as soon as projects are

included in the first draft. It should continue along the drafting process of the Action Plan, and after its endorsement by Ministers.

In the course of this monitoring, the following actions will be developed:

1. Period of reception / modification of new project proposals.
2. Processing of new proposals, evaluation and classification. Updating the Action Plan.

Moreover, the Plan may be consistently enhanced with new projects that share a regional dimension, because they may be executed by several countries or because their innovative advances are worth replicating regionally. Progress made on the implementation of the Action Plan should therefore be reviewed consistently and periodically.

In the successive versions of the Action Plan, the possibility of prioritizing projects using objective criteria would be considered while allowing determining the appropriateness of developing certain projects prior to others. Those criteria of prioritisation will be subject to the consensus of all members and will be in compliance with the goals of the Strategy.

The tasks related to the monitoring of the development of the Action Plan correspond to the Ministerial Group on Water of the 5+5 (MGW) Dialogue, which will be assisted by a Technical Working Group (WG) composed of the representations of the administrations of the member countries and with the logistic, technical and administrative support of the Technical Secretariat (TS) operated by the Mediterranean Network of Basin Organisations (MENBO).

These tasks focus on supervising the development of the projects underway and on the assessment of the progress made in the implementation of the Plan. In addition, new working lines and projects will be identified to be included in the Plan, as well as any measure necessary to achieve the objectives of the Strategy and a revision of its priorities.

The specific development of these tasks and the functions of the abovementioned groups (MWG 5+5, WG, TS) are detailed in the separate document "Rules of Procedure".

Annex

■ ANNEX 1: LIST OF RECEIVED PROJECTS CLASSIFIED BY PROMOTER

A total of 60 projects have been received. In the following table the projects presented are shown according to the promoter:

COUNTRY/ORGANISATION⁴	NUMBER OF PROJECTS
LIBYA (LY)	6
TUNISIA (TN)	7
MOROCCO (MA)	5
MAURITANIA (MR)	3
ALGERIA (DZ)	3
PORTUGAL (PT)	6⁵
FRANCE (FR)	2
MALTA (MT)	4
ITALY (IT)	4
SPAIN (ES)	7
<u>International Office for Water (OIEAU)</u> <u>Institut Méditerranéen de l'Eau (IME)</u>	1
<u>European Union (EU)</u>	3
<u>Global Water Operators' Partnerships Alliance (GWOPA)</u>	1
<u>The United Nations Economic Commission for Europe (UNECE)</u>	1

⁴ The projects have been assigned to countries only where countries are the sole promoters. There are projects promoted by regional organisations which are also promoted by countries but these have been assigned to the regional organizations.

⁵ Portugal has presented an interesting compilation of projects in a number of the countries within the scope of 5+5 which are part of its strategy for the sector of water supply, sanitation and efficient use of water. These projects have already been assigned to Portuguese companies; yet, in the uncertainty about their compliance with the proposed criteria of the Strategy, for the time being it has been decided not to take them into account in the subsequent analysis, although they are indeed included in the annex of the description of the projects.

COUNTRY/ORGANISATION ⁴	NUMBER OF PROJECTS
<u>IME</u> <u>Centre for Mediterranean Cooperation)</u> <u>(IUCN Med)</u> <u>MIO ECSDE (Mediterranean Information</u> <u>Office for Environment, Culture and</u> <u>Sustainable Development)</u> <u>RAED (Arab Network for Environment</u> <u>and Development)</u> <u>WWF Mediterranean Program Office</u> <u>(WWF MedPO)</u>	1
<u>Global Water Partnership Mediterranean</u> <u>(GWP-Med)</u> <u>The Organisation for Economic Co-</u> <u>operation and Development (OECD)</u>	1
<u>Mediterranean Network of Basin</u> <u>Organisations (MENBO)</u>	2
<u>The Mediterranean Wetlands Initiative</u> <u>(MedWet)</u> <u>The Mediterranean Wetlands</u> <u>Observatory (MWO)</u> <u>The Water Footprint Network (WFN)</u> <u>Plan Bleu – Environment and</u> <u>Development in the Mediterranean</u> <u>(UNEP/MAP)</u> <u>Euro-Mediterranean Information System</u> <u>on know-how in the Water Sector</u> <u>(EMWIS)</u>	1
<u>Mediterranean Agronomic Institute of</u> <u>Zaragoza (IAMZ-CIHEAM)</u>	1
<u>Institut de Prospective Économique du</u> <u>Monde Méditerranéen (IPEMED)</u>	1
TOTAL	60

The project proposals received by each promoter are indicated below:

1. LIBYA

Presents 6 projects:

- Central database for water resource in Libya.
- Pollution effect of the oil disposal swamps to the groundwater aquifer.
- Water Sewage Treatment Project (Phase I)
- Artificial Discharge to the groundwater aquifers.
- Construction of Dams.
- Desalination Plants to improve domestic water supply

2. TUNISIA

Presents 7 projects:

- Decentralized treated waste water (improvement of irrigation treated wastewater quality).
- Water harvesting systems in urban areas.
- Use of innovative technologies and approaches for the monitoring of the water resources of Grombalia region.
- Création d'un Barrage sur Oued El Htab et création d'un projet de développement intégré dans son Bassin Versant.
- Dévasement du Barrage El Kébir
- Recharge artificielle de la nappe d'El Fahs par les eaux usées traitées
- Recharge artificielle de la nappe d'oued Essmar_Mednine par les eaux usées traitées

3. MOROCCO

Presents 5 projects:

- Monitoring the use of water resources in Morocco
- Promoting sanitation systems in rural areas
- Promoting the treated wastewater reuse as a mean of coping with climate change
- Seawater desalination by using renewable energy
- Implementation of a new law for the protection of aquatic areas

Morocco is also a promoter of the Project financed together with the EU "Integrated Water Resources Management and Governance in Morocco"

4. MAURITANIA

Presents 3 projects:

- Enhance the capacities of actors of the water sector in Mauritania

- Enhance the governance of the hydrological sector in rural and semi-urban areas in Mauritania
- Improve the quality of drinking water in Mauritania

5. ALGERIA

Presents 3 projects:

- Renforcement des capacités de gouvernance des ressources en eau
- Réutilisation des eaux usées épurées et développement de son utilisation
- Adaptation aux conséquences des changements climatiques

Algeria is also a promoter of the Project financed together with the EU « Governance and integrated water resources management in Algeria »

6. PORTUGAL

Presents 6 projects:

- A new approach for multi-stakeholder engagement: the Water Living Lab network
- Towards sustainable intensification in agriculture
- Environmental Performance Review (EPR) of the Kingdom of Morocco
- Studies and projects for the irrigation project of Gharb
- Supervising of irrigation works in Morocco
- Floating islands pilot-project of Colibri in Morocco

7. FRANCE

Presents 2 projects:

- Professionalizing the water REUSE to tackle water issues in the western Mediterranean. Ecofile
- Plan bassin d'adaptation au changement climatique Rhone-Méditerranée.

France is also the promoter of the Project “Mediterranean Water Knowledge Platform” that has been presented by the *Institut Méditerranéen de l'Eau* (IME), the Euro-Mediterranean Information System on the Know-how in the Water Sector (EMWIS), the International Office for Water in France (OIEau) and the Mediterranean Network of Basin Organisations (MENBO).

France also proposes, as a Technical Secretariat of the Medwet, to develop a project on the management and quality of wetlands “Assessing and managing pressures on water and wetlands in the Mediterranean through the Water Footprint indicators”.

8. MALTA

Presents 4 projects:

- Production and distribution of highly polished treated effluent
- Managed Aquifer Recharge Schemes
- National Water Conservation Campaign
- Establishment of a Water Scarcity and Drought assessment platform

9. ITALY

Presents 4 projects:

- Climate change mitigation Action in urban areas in the Western Mediterranean
- Full application of FCR (full cost recovery) principle and PPP (polluter pays principles)
- Innovative hydro-economic modelling as leverage to reduce pressure on water stressed basins in the Western Mediterranean
- Executive Information System for the governance and management of Water Resources in the Western Mediterranean

10. SPAIN

Presents 7 projects:

- Special Plan for achieving the ecological potential of the RAMSAR wetland of the Albufera Lake
- Comparative analysis of water reuse in the Western Mediterranean.
- Actions of the Global Plan for flood risk in the Júcar river.
- Actions for the sustainable aquifer management in High Guadiana.
- Sustainability (environmental, economic and social) of dams in the Westerns Mediterranean
- Water use monitoring of irrigated agriculture in ES by earth observation WATER-EO (the University of Castilla La Mancha is also promoter of this project)
- Training and capacity building in governance and water resources management. IEA Foundation, University of Murcia, Government of Murcia

Spain also participates in the following two projects presented by regional organisations:

- “Mediterranean Water Knowledge Platform” presented by the International Office for Water (OIEAU) and the *Institut Méditerranéen de l’Eau* (IME)
- “Hydrological consequences of climate change in W.MED” presented by MENBO

11. OTHERS

International Office for Water and IME: Mediterranean water knowledge Platform.

European Union: Sustainable water integrated management (SWIM) program-phase II.

European Union/MA: Integrated Water Resources Management and Governance in Morocco.

European Union/ALG: Governance and integrated water resources management in Algeria.

GWOPA: 5+5 Water Operators' partnership platform.

UNECE: Water Convention: global framework for transboundary water cooperation.

IME-IUCN Med, MIO ECSDE, RAED, WWF MedPO: BlueGreen Med-CS.

GWP-Med-OECD: Governance and financing for the Mediterranean Water Sector.

MENBO: Hydrological consequences of climate change in W.MED.

A cross-cutting study on a dynamic analysis of the coherence between national policies and the Water Strategy in the Western Mediterranean

Medwet/MWO/WFN/EMWIS/UNEP: Assessing and managing pressures on water and wetlands in the Mediterranean through the Water Footprint indicators

IAMZ-CIHEAM: Training actions to support the implementation of projects that develop the priorities of the Water Strategy for the Western Mediterranean

IPEMED: Implementation and Management of Innovative Funding Mechanisms to ensure access to water and sanitation in the Mediterranean

A summary of all the projects and their main features is included in the annex 2.

■ ANNEX 2: PROJECTS' SHEETS

Below, we describe the meaning of each of the fields that compose the tables:

Project No: Number assigned to the project

Title: title of the project

Promoting country/entity: country or entity promoting the project

Promoter: Organisation/ministry/entity promoting the Project

Description: describes the current situation and identifies the needs to be tackled by the project

Main objectives: describes the main objectives to attain by the development of the project and the means to implement them

Geographical scope: indicates the geographic area where the project is developed. The options are the following:

- Local (if it affects only one place within a country)
- National (if it affects an entire country or most parts of it)
- Regional (if it affects more than one country of the Western Mediterranean)

Blocks: Blocks within the Strategy to which the project belongs

- Block 1: General principles sustainable policy
- Block 2: Regional cooperation
- Block 3: Water management improvement

Main priority: main priority of the Strategy developed by the project. . The priorities are:

- Priority 1: Developing and starting up clearly defined legal frameworks
- Priority 2: Establishing governance adapted to integrated water management
- Priority 3: Implementing cost-recovery
- Priority 4: Capacity building
- Priority 5: Innovation development in the water sector.
- Priority 6: Water-energy-food nexus
- Priority 7: De-pollution of the Mediterranean
- Priority 8: Mobilising water-related innovative financing solutions for the application of the Strategy

- Priority 9: Climate change adaptation
- Priority 10: Increasing and mobilising the available resources
- Priority 11: Water use efficiency improvement
- Priority 12: Flood prevention
- Priority 13: Protection of water quality and biodiversity

Related priorities: priorities of the Strategy that the project develops in a collateral way

Cost (EUR Million): budget to carry out the project

Foreseen funding: funds allocated to the project. It indicates whether the project has any fund allocated or not. Among the funds, the following can be found:

- CF: Cohesion fund
- ERDF: European Regional Development Fund
- EAFRD: European Agricultural Fund for Rural Development

Project status: state of play of the project at the moment of the drafting of the Action Plan

- NI: Not initialized
- PS: Under preliminary studies/activities
- CD: Completed design
- IP: In progress
- C: Completed

Indicator: monitoring indicator of the project. It represents the means to measure the result of the project

Term (months): Implementation period of the project

Project No	Title	
1	Implementation of a new law for the protection of aquatic areas	
Promoting country / entity		Promoter
MA		Moroccan delegate Ministry in charge of Water
Description		
Over the last centuries, Morocco has known considerable evolution economically and demographically which has put pressure on the use of water resources, with a risk of reduction due to Climate Change effects. This has pushed Morocco to strengthen its legislative texts in order to protect aquatic areas from pollution and excess of use. The text of law 36-15, being prepared by the government in this sense, contains guidelines to achieve this goal.		
Main objectives		
Ensuring a good functioning of aquatic areas and preserving the ecosystem Protection from pollution sources		
Geographical scope		
National		
Blocks	Main priority	Related priorities
1	1	7, 13
Cost (EUR Million)	Foreseen funding (1)	
4,5	Moroccan government with the support of regional and international organizations	
Project status (2)	Indicator	Term (months)
IP	hm ³ of aquatic areas saved	120

(1) CF Cohesion Funds
ERDF European Regional Development Funds
EAFRD European Agricultural Fund for Rural Development

(2) NI Not initialized
PS Under preliminary studies/activities
CD Completed design
IP In progress
C Completed

Project No	Title	
2	Central database for water resource in Libya	
Promoting country / entity		Promoter
LY		Information and Documentation Center (Ministry)
Description		
Create and built up a central database and electronic documents for water resources with new technology. The project will include equipments, software and training.		
Main objectives		
<p>Collection and preservation of data, information, and documents relating to the work of the water sector and in accordance with the technical methods; the data will be compiled, categorized and updated continuously, entered into the computer database of the administrative system and made accessible to those authorized to use them .</p> <p>Building databases using scientific methods and methodologies to achieve the highest possible level of quality and accuracy of the data and work, linking the various administrative units of the water sector to be connected to the national system of information and documentation.</p> <p>Developing mechanisms and a systematic process to ensure the quality of data and information.</p> <p>Development of practical mechanisms for continuous update of data and confirmation of quality.</p> <p>Developing and processing units and offices of the Information and Documentation approaching of the water sector and prepare the human elements necessary to carry out the functions of information and their employees and increase their efficiency.</p>		
Geographical scope		
National		
Block	Main priority	Related priorities
1	2	1,4,11
Cost (EUR Million)	Foreseen funding (1)	
1 (stage I)	NO	
Project status (2)	Indicator	Term (months)
PS	Access rates, recovery, funding, availability m ³ of water	36

(1) CF Cohesion Funds
ERDF European Regional Development Funds
EAFRD European Agricultural Fund for Rural Development

(2) NI Not initialized
PS Under preliminary studies/activities
CD Completed design
IP In progress
C Completed

Project No	Title	
3	Monitoring the use of water resources in Morocco	
Promoting country / entity		Promoter
MA		Moroccan delegate Ministry in charge of Water
Description		
<p>Water resources in Morocco are relatively low and the situation is likely to be worsened due to Climate Change's impacts. This is why a monitoring of available potential is too important for a country like Morocco since it allows updated information on the use; it enhances a rational utilization of the resource and gives us the ability to intervene as early as possible. Consequently, this project aims at controlling wisely our resources and promoting techniques facilitating that.</p>		
Main objectives		
<p>Obtaining Information about the available water resources</p> <p>Preserving water resources from excess of use and controlling the various demands</p>		
Geographical scope		
Regional		
Blocks	Main priority	Related priorities
1	2	1,7,11
Cost (EUR Million)	Foreseen funding (1)	
4	Moroccan government with the support of regional and international organizations	
Project status (2)	Indicator	Term (months)
NI	Number of projects (monitoring systems)	72

(1) CF Cohesion Funds
ERDF European Regional Development Funds
EAFRD European Agricultural Fund for Rural Development

(2) NI Not initialized
PS Under preliminary studies/activities
CD Completed design
IP In progress
C Completed

Project No	Title		
4	Environmental Performance Review (EPR) of the Kingdom of Morocco		
Promoting country / entity		Promoter	
MA/UNECE		PPA (Portuguese Water Partnership)	
Description			
<p>The Portuguese Water Partnership (PPA) took part in this mission of the UNECE to Morocco, being represented by Professor Antonio Guerreiro Brito, a Board Member of PPA and other representatives of Moinhos Ambiente, one of the members of PPA. The mission of the Portuguese team, which took place in November 2012, confirmed the high level of commitment of the parties involved in matters concerning water resources, water services and the environment.</p>			
Main objectives			
<p>This review had as main motivation to enhance the integration of environmental and socio-economic policies, but also to promote cooperation among the international community in this field in countries not covered by OECD reports.</p>			
Geographical scope			
National			
Blocks		Main priority	Related priorities
1		2	4
Cost (EUR Million)	Foreseen funding (1)		
N.A.	N.A.		
Project status (2)	Indicator		Term (months)
C	UNECE EPR report published (link)		8

(1) CF Cohesion Funds
ERDF European Regional Development Funds
EAFRD European Agricultural Fund for Rural Development

(2) NI Not initialized
PS Under preliminary studies/activities
CD Completed design
IP In progress
C Completed

Project No	Title	
5	Reinforce the governance of the Hydraulic sector in rural and semi-urban areas in Mauritania.	
Promoting country / entity		Promoter
MR		Ministère de l'hydraulique et de l'Assainissement
Description		
The governance of the drinking water sector in Mauritania needs certain improvements on several fronts: The role of the project manager of MHA, the budgetary planning, rules and regulations, national strategy, the management of the water service, the communication, surface waters.		
Main objectives		
Improving the governance of the sector of drinking water in rural and semi-urban areas aiming at a better satisfaction of public needs.		
Geographical scope		
National		
Blocks	Main priority	Related priorities
1	2	3,4,8
Cost (EUR Million)	Foreseen funding (1)	
1,2	NO	
Project status (2)	Indicator	Term (months)
PS	Access rates, recovery, funding, availability	36

(1) CF Cohesion Funds
ERDF European Regional Development Funds
EAFRD European Agricultural Fund for Rural Development

(2) NI Not initialized
PS Under preliminary studies/activities
CD Completed design
IP In progress
C Completed

Project No	Title	
6	Sustainable aquifer management of the high Guadiana	
Promoting country / entity		Promoter
ES		Spain
Description		
<p>In la Mancha region a very important decline in groundwater levels was produced, the disconnection of aquifers from surface wetlands and rivers, finally affecting ancient wetlands. In recent years a remarkable recovery of aquifers has taken place due to a rational extraction of groundwater and a very favourable weather situation, so we are close to achieving the good quantitative status for groundwater bodies and associated surface ecosystems according to the Water Framework Directive</p>		
Main objectives		
<p>Stabilising groundwater levels. Sustainable aquifer management Recovering wetlands associated to the aquifer Improving groundwater bodies' quality</p>		
Geographical scope		
Local		
Blocks	Main priority	Related priorities
1	2	10,11,13
Cost (EUR Million)	Foreseen funding (1)	
10		
Project status (2)	Indicator	Term (months)
PS		72

(1) CF Cohesion Funds
ERDF European Regional Development Funds
EAFRD European Agricultural Fund for Rural Development

(2) NI Not initialized
PS Under preliminary studies/activities
CD Completed design
IP In progress
C Completed

Project No	Title	
7	Water Convention: global framework for transboundary water cooperation	
Promoting country / entity		Promoter
UNECE		UNECE, Global Water Partnership Mediterranean, UfM
Description		
<p>The Water Convention serves as a mechanism to strengthen international cooperation and national measures for the ecologically sound management and protection of transboundary surface waters and groundwaters. Furthermore, it provides an intergovernmental platform for the day-to-day development and advancement of transboundary water cooperation. The promotion of accession to and implementation of the Water Convention in the Western Mediterranean region can support improved water governance at the national level and encourage improved cooperation on sustainable use of transboundary water resources. The participation of Western-Mediterranean countries in the Convention's intergovernmental framework offers an additional platform for broad dialogue on transboundary water issues.</p>		
Main objectives		
<p>The Water Convention's work program encompasses a variety of activities at different levels (multilateral, transboundary or basin, national) of both a technical and a political nature, and many of them correspond with the priority themes of the Strategy (water-food-energy-ecosystems, climate change, transboundary agreements).</p>		
Geographical scope		
Regional. Western Mediterranean region (and beyond)		
Blocks	Main priority	Related priorities
1	2	1,4,5,6
Cost (EUR Million)	Foreseen funding (1)	
0.9	0.55 EUR million already secured through SIDA project (2016-2018) Gap to be covered through additional funding by other donor countries	
Project status (2)	Indicator	Term (months)
Existing permanent framework		24

(1) CF Cohesion Funds
ERDF European Regional Development Funds
EAFRD European Agricultural Fund for Rural Development

(2) NI Not initialized
PS Under preliminary studies/activities
CD Completed design
IP In progress
C Completed

Project No	Title		
8	Innovative hydro-economic modelling as leverage to reduce pressure on water stressed basins in the Western Mediterranean		
Promoting country / entity		Promoter	
IT		Ministero dell'ambiente	
Description			
The balance between water demand and availability has reached a critical level in many Mediterranean areas due to water scarcity and droughts phenomena. Balancing the triple bottom line-environmental, social and economic- is a difficult exercise when it comes to managing water resources in stressed basin where uses compete.			
Main objectives			
The action focuses on establishing levers for quantity management, based on adequate knowledge of interactions among uses and drivers, and relevant indicators. The project will design, develop, apply and evaluate a model to foster alignment among competing uses to reduced allocation issues.			
Geographical scope			
Regional			
Blocks		Main priority	Related priorities
1		2	3,4
Cost (EUR Million)	Foreseen funding (1)		
1.2 estimated			
Project status (2)	Indicator		Term (months)
NI	2-3 pilot areas		36

(1) CF Cohesion Funds
ERDF European Regional Development Funds
EAFRD European Agricultural Fund for Rural Development

(2) NI Not initialized
PS Under preliminary studies/activities
CD Completed design
IP In progress
C Completed

Project No	Title	
9	Governance & financing for the Mediterranean Water Sector	
Promoting country / entity		Promoter
GWP-Med+OECD		GWP-Med+OECD
Description		
<p>The massive financial gap for the sector to meet the SDG-related needs of developing countries puts the issue of water governance in the spotlight, as good governance is interlinked to sustainable financing, creating the enabling environment for much-needed investments.</p>		
Main objectives		
<p>The Project aims to build consensus and PPP capacity across responsible authorities of Mediterranean countries and support consultation with private sector and relevant stakeholders. As such, it targets:</p> <p>Different levels of government and public authorities, by strengthening their capacity for preparing, regulating, and monitoring PPP projects</p> <p>Private partners and utilities, by clarifying respective responsibilities and better supporting the management of expectations</p> <p>Other Stakeholders including Civil Society and water users, by helping them make their voices and concerns better heard</p>		
Geographical scope		
Regional. Mediterranean region with focus on Albania, Egypt, Jordan, Lebanon, Morocco, Palestine, and Tunisia		
Blocks	Main priority	Related priorities
1	3	1,2,4,6,8,10,11
Cost (EUR Million)	Foreseen funding (1)	
1,34	1.28 already secured through co-financing	
Project status (2)	Indicator	Term (months)
IP	100 stakeholders per country	36

(1) CF Cohesion Funds
ERDF European Regional Development Funds
EAFRD European Agricultural Fund for Rural Development

(2) NI Not initialized
PS Under preliminary studies/activities
CD Completed design
IP In progress
C Completed

Project No	Title		
10	Full application of FCR principle and PPP		
Promoting country / entity		Promoter	
IT		Ministero dell'ambiente	
Description			
Improvements in the implementation of economic analysis in compliance with the requirements of the WFD are necessary despite the progress already made. Comparative cost-effectiveness analysis of ongoing or planned measures to reach WFD environmental objectives. In-depth analysis of the different typology of cost (service, investment or financial cost) and the degree of implementation of FCR for each water use sector. Evaluation of the different sectors' impact on water bodies' status and consequent estimate of the degree of application of the PPP.			
Main objectives			
Cost benefit analysis of the investments in public water supply and wastewater collection and treatment services in the context of the environment objectives set by the WFD. Assessment of the degree of implementation of Full Cost Recovery and Polluter Pays Principles by collecting data on existing investments and estimating costs of additional needed infrastructures/actions			
Geographical scope			
National (7 River basin districts)			
Block	Main priority	Related priorities	
1	3	13	
Cost (EUR Million)	Foreseen funding (1)		
2			
Project status (2)	Indicator		Term (months)
IP	7 River basin districts		72

(1) CF Cohesion Funds
ERDF European Regional Development Funds
EAFRD European Agricultural Fund for Rural Development

(2) NI Not initialized
PS Under preliminary studies/activities
CD Completed design
IP In progress
C Completed

Project No	Title		
11	Sustainable Water Integrated Management (SWIM) Program – phase II		
Promoting country / entity		Promoter	
EU		EU	
Description			
<p>The project will combine:</p> <p>a Supporting Mechanism to support partner countries in improving water governance, regional peer-to-peer dialogue, promotion of success stories...</p> <p>a set of demonstration projects to test innovative approaches or replicate successful ones on water co-operation, river basin management, water demand management, the water/energy/food security nexus, broad stakeholder participation and open access to data.</p>			
Main objectives			
To strengthen integrated water resource management in target countries, with a special focus on water co-operation (including specific actions for shared water resources in the Maghreb), river basin management, water demand management, the water / energy / food security nexus, broad stakeholder participation and open access to data.			
Geographical scope			
Regional. Morocco, Algeria, Tunisia, Libya, Egypt, Palestine, Jordan, Israel, Lebanon, Syria (cooperation currently suspended)			
Blocks	Main priority	Related priorities	
2	4	1,2,5,6,10,11,13	
Cost (EUR Million)	Foreseen funding (1)		
15	European Union		
Project status (2)	Indicator		Term (months)
CD			48

(1) CF Cohesion Funds
ERDF European Regional Development Funds
EAFRD European Agricultural Fund for Rural Development

(2) NI Not initialized
PS Under preliminary studies/activities
CD Completed design
IP In progress
C Completed

Project No	Title	
12	Mediterranean Water Knowledge Platform	
Promoting country / entity		Promoter
IOW / IME		IOW / IME
Description		
To improve water governance in the Mediterranean region as a whole		
Main objectives		
<p>Provide a common basis for the development of National Water Information Systems (NWIS) in countries from the Southern Mediterranean region. Furthermore, the project will deliver an assessment of water resources management and use (drafting of a White Paper) by collecting and exploiting data in the pilot countries and two additional European countries. The results, to be expanded from pilot countries to the other States member of the 5+5, would provide the factual basis on which the Western Mediterranean Strategy for Water could be based and monitored.</p> <p>Define which data, information and expertise are needed to plan integrated water resources management (IWRM) and to reinforce water regulation, ensuring data availability and ownership at local and national levels. The information provided by the project will allow for an evaluation of best practices, joint management of transboundary resources and follow-up on regional or sub-regional projects and policies in the Mediterranean region, on a voluntary basis.</p>		
Geographical scope		
Regional. Regional project with national implementations (4 south Med countries, 2 of them in the Western area, Morocco and Tunisia)		
Blocks	Main priority	Related priorities
2	4	1,2,5,9
Cost (EUR Million)	Foreseen funding (1)	
16 (in two phases (10+6)) 50% correspond to the scope of 5+5	Some parts have been achieved	
Project status (2)	Indicator	Term (months)
IP		24+24

(1) CF Cohesion Funds
ERDF European Regional Development Funds
EAFRD European Agricultural Fund for Rural Development

(2) NI Not initialized
PS Under preliminary studies/activities
CD Completed design
IP In progress
C Completed

Project No	Title		
13	5+5 Water Operators' Partnership Platform		
Promoting country / entity		Promoter	
GWOPA		GWOPA	
Description			
<p>Water Operators' Partnerships (WOPs) are peer-support arrangements between two or more water and/or sanitation operators, carried out on a non-profit basis with the objective of strengthening their capacity. WOPs work by harnessing the skills, know-how, and goodwill within a strong 'mentor' to sustainably build the capacity of another utility – the 'mentee' – that needs assistance. Through such mentorship, WOPs progressively strengthen and empower the mentee operator at management, as well as financial and technical levels to implement changes that will lead to better service. WOPs aim to strengthen the resident technical and operational capacity of recipient water operator staff to be able to make improvements, suited to local needs, and in-line with local realities that can be sustained over the long term.</p>			
Main objectives			
<p>Replicate the WOPs model of capacity building and thus enhancing water resource management through the creation of a 12 new partnerships between water and sanitation operators in the 5+5 Member States, while in parallel establishing a 5+5 WOPs platform in order to support more broadly water operators throughout the Western Mediterranean.</p>			
Geographical scope			
Regional. 5+5 countries			
Blocks		Main priority	Related priorities
2		4	1,2,3,5,10,11
Cost (EUR Million)	Foreseen funding (1)		
2,5	GWOPA, UfM, DEVCO, SIDA's regional MENA		
Project status (2)	Indicator		Term (months)
NI			36

(1) CF Cohesion Funds
ERDF European Regional Development Funds
EAFRD European Agricultural Fund for Rural Development

(2) NI Not initialized
PS Under preliminary studies/activities
CD Completed design
IP In progress
C Completed

Project No	Title	
14	BlueGreen- Networking civil society in the Mediterranean Region	
Promoting country / entity		Promoter
IME/IUCN/ MIO-ECSDE/ RAED / WWF		IME/IUCN/ MIO-ECSDE/ RAED / WWF
Description		
<p>The project aims to respond to specific demands of the national authorities in the field of water and environment. The thematic priorities identified are: wetlands, water demand management/water use efficiency, trans-boundary water resources management and environment education and awareness.</p>		
Main objectives		
<p>Reinforcing the participation and cooperation of southern CSOs through an integrated and interactive capacity building program able to pool technical and organizational expertise and tools in the field of water and environment alongside lessons learned and resources;</p> <p>Strengthening existing dialogue, and promote new collaboration opportunities, between civil society, public authorities and other relevant stakeholders through concrete actions and innovative participation mechanisms.</p>		
Geographical scope		
<p>Regional</p> <p>Regional project with national implementations; 3 of the target countries are from the western Mediterranean (Algeria, Morocco, Tunisia)</p>		
Blocks	Main priority	Related priorities
2	4	1,2,11,13
Cost (EUR Million)	Foreseen funding (1)	
1,98	Project promoters and others	
Project status (2)	Indicator	Term (months)
CD		36

(1) CF Cohesion Funds
ERDF European Regional Development Funds
EAFRD European Agricultural Fund for Rural Development

(2) NI Not initialized
PS Under preliminary studies/activities
CD Completed design
IP In progress
C Completed

Project No	Title		
15	Establishment of a Water Scarcity and Drought assessment platform		
Promoting country / entity		Promoter	
MT		Sustainable Energy and Water Conservation Unit (SEWCU)	
Description			
This project entails the development of a web based platform to provide information on the occurrence water scarcity and drought in Malta. The platform will therefore include information on the semi-arid climatic characteristics of the Maltese islands and their impact on water availability, the presentation of regularly updated drought indicators through the application of established WS & D indices to the local scenario, and an assessment of drought relativity compared to other EU Member States.			
Main objectives			
Web based informative platform			
Geographical scope			
National			
Blocks	Main priority	Related priorities	
2	4	1,2,9	
Cost (EUR Million)	Foreseen funding (1)		
0,15	National Life		
Project status (2)	Indicator		Term (months)
CD	1 web-platform		36

(1) CF Cohesion Funds
ERDF European Regional Development Funds
EAFRD European Agricultural Fund for Rural Development

(2) NI Not initialized
PS Under preliminary studies/activities
CD Completed design
IP In progress
C Completed

Project No	Title	
16	Training and capacity building in governance and water resources management	
Promoting country / entity		Promoter
ES		IEA Foundation University of Murcia (Spain)
Description		
<p>Five Courses Program on Governance and Water Resources Management for the Mediterranean Water Scarcity Areas</p> <p>1. Course on Desalination: Technological, Environmental, Legal and Economic Aspects.</p> <p>2. Course on Sustainable Groundwater Management: a Practical Approach.</p> <p>3. Course on Reclaimed Water Use: Current Issues and Future Challenges.</p> <p>4. Course on Good Water Governance and Integrated Water Management (IWRM): Case Studies and Good Practices.</p> <p>5. Course on Managing Multiple Sources of Water for Agriculture: A Practical Approach Using the Natural Laboratory of Campo de Cartagena (Murcia, Spain).</p>		
Main objectives		
Water Management improvement in water stressed and dry regions by training and capacity building on the field		
Geographical scope		
Regional. Mediterranean Basin		
Blocks	Main priority	Related priorities
2	4	2,9,10,11
Cost (EUR Million)	Foreseen funding (1)	
0,1	Regional government of Murcia and Segura River Basin Authority	
Project status (2)	Indicator	Term (months)
CD	100 people attending the 5 courses	1

(1) CF Cohesion Funds
ERDF European Regional Development Funds
EAFRD European Agricultural Fund for Rural Development

(2) NI Not initialized
PS Under preliminary studies/activities
CD Completed design
IP In progress
C Completed

Project No	Title		
17	Reinforce the capacity of the actors of the water sector in Mauritania		
Promoting country / entity		Promoter	
MR		Ministère de l'hydraulique et de l'Assainissement	
Description			
<p>In Mauritania the needs as regards the reinforcement of the capacities are significant. The reinforcement needs refer to: public structures, private structures, Communes.</p> <p>The training themes focus on the following subjects:</p> <p>Project management: role of the State, delegation of management, public procurement, quality control, planning, budgeting.</p> <p>Economy : calculation of costs, pricing,</p> <p>Techniques : dimensioning, technical choices, quality of equipments,</p> <p>Communication : annual review, agreement of actors</p> <p>Working tools : office software, database, reporting,</p>			
Main objectives			
Reinforce the competences and the means of the main actors in the sector.			
Geographical scope			
National			
Blocks	Main priority	Related priorities	
2	4	2	
Cost (EUR Million)	Foreseen funding (1)		
0,7	NO		
Project status (2)	Indicator		Term (months)
PS	Number of agents trained, of agreements, guides		24

(1) CF Cohesion Funds
ERDF European Regional Development Funds
EAFRD European Agricultural Fund for Rural Development

(2) NI Not initialized
PS Under preliminary studies/activities
CD Completed design
IP In progress
C Completed

Project No	Title	
18	Comparative analysis reuse in the Western Mediterranean	
Promoting country / entity		Promoter
ES		Spain
Description		
<p>The reuse of water is a conventional resource increasingly used and required that allows the intensification and mobilization of the available resources. A plethora of options and infrastructures tender viable the use of reused water (construction of infrastructures, adaptation of treatment centers, decanting pools, tertiary treatments, etc.). With the goal to create synergies and work together it is proposed to carry out a study on the reuse of water in the Western Mediterranean countries.</p>		
Main objectives		
<p>For each of the countries of the 5+5 the following elements will be analysed:</p> <ul style="list-style-type: none"> - Existing legislation. - Compilation and analysis of techniques employed. - Comparative analysis of reuse in each country - Foster research, development and technological innovation of regeneration systems - Information and awareness-raising of the benefits of reuse. 		
Geographical scope		
Regional. Western Mediterranean		
Blocks	Main priority	Related priorities
3	4	2,10
Cost (EUR Million)	Foreseen funding (1)	
0,5		
Project status (2)	Indicator	Term (months)
PS		24

(1) CF Cohesion Funds
ERDF European Regional Development Funds
EAFRD European Agricultural Fund for Rural Development

(2) NI Not initialized
PS Under preliminary studies/activities
CD Completed design
IP In progress
C Completed

Project No	Title		
19	Sustainability (environmental, economic and social) of dams in the Western Mediterranean		
Promoting country / entity		Promoter	
ES		Spain	
Description			
<p>Spain has a long tradition in the construction and use of dams. This hydraulic infrastructure is necessary in places suffering from a scarcity of resources and where the variability of precipitation does not meet the demands. Hydraulic infrastructures require high financial resources and have a long lifespan and must be planned in a sustainable way. The projects on dams require environmental, economic and social sustainability</p>			
Main objectives			
<p>Focusing and expanding on the design, construction and use of dams from environmental, economic and social point of view.</p> <p>Carrying out a comparative analysis between pioneering countries and support those countries that need more knowledge and information.</p> <ul style="list-style-type: none"> - Environmental sustainability: dams are considered water bodies that need to reach the environmental goals of good status and avoid provoking negative impacts on other water bodies (river continuity, ecological flows...) - Economic sustainability: investments with high in the long and medium term, important resources for maintenance and substitution, etc. Seek public-private financing mechanisms. Tariffs, royalties, taxes - Social sustainability: positive impacts (flood control, satisfaction of demands, leisure...) and negative (displacement, territory...). Public involvement is important, dissemination, transparency and education. 			
Geographical scope			
Regional			
Blocks	Main priority	Related priorities	
2	4	5,9,10,12,13	
Cost (EUR Million)	Foreseen funding (1)		
0,8	NO		
Project status (2)	Indicator		Term (months)
PS			24

(1) CF Cohesion Funds
ERDF European Regional Development Funds
EAFRD European Agricultural Fund for Rural Development

(2) NI Not initialized
PS Under preliminary studies/activities
CD Completed design
IP In progress
C Completed

Project No	Title	
20	Renforcement des capacités de gouvernance des ressources en eau	
Promoting country / entity		Promoter
DZ		Ministère Algérien des Ressources en Eau et de l'Environnement
Description		
<p>Depuis un certain temps, la pression démographique, le développement des besoins a des fins d'irrigation et de l'agriculture intensive. conjugué avec l'exploitation non contrôlée et au gré des usagers ont mis cette ressource en danger. Aussi les impacts négatifs des changements climatiques sur la disponibilité de la ressource pourraient encore accroître les disparités régionales.</p> <ul style="list-style-type: none"> - Les propositions visent à limiter les impacts d'une exploitation excessive des ressources et le devenir des eaux constitue l'un des axes majeurs de la réflexion sur la gouvernance et la gestion durable de la ressource en eau. - La gestion durable des eaux souterraines sur le plan qualitatif et quantitatif. Les seules vraies méthodes durables de gestion de la qualité des eaux souterraines sont celles qui sont basées sur le concept de prévention. - Gouvernance de l'eau, vision et approche d'une gestion intégrée 		
Main objectives		
Mise en place et élaboration des repères et indicateurs pour une approche d'une meilleure gouvernance de l'eau		
Geographical scope		
Regional		
Blocks	Main priority	Related priorities
	4	2,10,11
Cost (EUR Million)	Foreseen funding (1)	
0,3		
Project status (2)	Indicator	Term (months)
		24

(1) CF Cohesion Funds
ERDF European Regional Development Funds
EAFRD European Agricultural Fund for Rural Development

(2) NI Not initialized
PS Under preliminary studies/activities
CD Completed design
IP In progress
C Completed

Project No	Title		
21	Réutilisation des eaux usées épurées et développement de son utilisation		
Promoting country / entity		Promoter	
DZ		Ministère Algérien des Ressources en Eau et de l'Environnement	
Description			
<p>Le défi majeur pour le futur consiste à garantir une sécurité alimentaire pour nourrir toute la population d'une manière plus ou moins acceptable. Les besoins en eau pour l'agriculture sont de plus en plus croissants et la sécurité alimentaire passe inévitablement par une disponibilité de l'eau nécessaire à la production agricole. D'autant plus que l'Algérie risque une pénurie croissante des ressources hydriques, aujourd'hui, on tente une gestion plus rationnelle de la ressource, des techniques modernes d'irrigation plus sophistiquées plus efficaces sont mises en oeuvre pour permettre de répondre à ces besoins en eaux.</p> <p>Le recours à l'utilisation des eaux non conventionnelles à des fins agricoles constitue aujourd'hui l'un des plus importants axes de la stratégie du secteur des ressources en eau en Algérie</p>			
Main objectives			
<ul style="list-style-type: none"> - Analyse de techniques utilisées - Développement des nouvelles méthodes et valorisation des EUE - Étude et enrichissement de la réglementation régissant la réutilisation - vulgarisation de la réutilisation des EUE 			
Geographical scope			
National			
Blocks	Main priority	Related priorities	
	4	2,10	
Cost (EUR Million)	Foreseen funding (1)		
0,6			
Project status (2)	Indicator		Term (months)
			24

(1) CF Cohesion Funds
ERDF European Regional Development Funds
EAFRD European Agricultural Fund for Rural Development

(2) NI Not initialized
PS Under preliminary studies/activities
CD Completed design
IP In progress
C Completed

Project No	Title	
22	Managed Aquifer Recharge Schemes	
Promoting country / entity		Promoter
MT		Sustainable Energy and Water Conservation Unit (SEWCU) and Water Services Corporation (WSC)
Description		
This project will see the development of Managed Aquifer Recharge (MAR) schemes for aquifer protection (sea-water intrusion management) and/or groundwater storage purposes. The source water will be derived from both rainwater runoff and highly polished treated effluent produced during periods of low demand.		
Main objectives		
Development of two MAR schemes		
Geographical scope		
National		
Blocks	Main priority	Related priorities
2	5	4,10,13
Cost (EUR Million)	Foreseen funding (1)	
5	CF. Life	
Project status (2)	Indicator	Term (months)
CD	2 million m ³ of recharge water annually	48

(1) CF Cohesion Funds
ERDF European Regional Development Funds
EAFRD European Agricultural Fund for Rural Development

(2) NI Not initialized
PS Under preliminary studies/activities
CD Completed design
IP In progress
C Completed

Project No	Title		
23	Use of innovative technologies and approaches for the monitoring of the water resources of Grombalia region		
Promoting country / entity		Promoter	
TN		Water research and technologies centre	
Description			
Currently, the monitoring network is limited (in quantitative and in qualitative terms) and with low frequency. It is needed to improve monitoring, computer technology and the design of monitoring sensors			
Main objectives			
To develop spatial-temporal data accessible to all actors through the web. It is required to make measurements, web applications, determine the impact in the quality and quantity and create of coordinating instruments among authorities to guarantee continuity and sustainability			
Geographical scope			
National			
Blocks	Main priority	Related priorities	
2	5	2,4,11,12,13	
Cost (EUR Million)	Foreseen funding (1)		
1,025	NO		
Project status (2)	Indicator		Term (months)
PS			48

(1) CF Cohesion Funds
ERDF European Regional Development Funds
EAFRD European Agricultural Fund for Rural Development

(2) NI Not initialized
PS Under preliminary studies/activities
CD Completed design
IP In progress
C Completed

Project No	Title	
24	Seawater desalination by using renewable energy	
Promoting country / entity		Promoter
MA		Moroccan delegate Ministry in charge of Water
Description		
Morocco has begun the sea water desalination for several years in the southern regions in order to ensure the drinking water supply in these areas characterized with the scarcity of conventional water resources. Currently, and with the new water policy adopted by Morocco, a major program of sea water desalination for different uses (drinking water, tourism, industry, irrigation) is provided. Considering the national strategy for the renewable energy development, some new seawater desalination projects can be realized by using renewable energy.		
Main objectives		
Developing new water resources to respond to the increasing demand by using renewable and clean energy to ensure sustainable development for Morocco		
Geographical scope		
Regional		
Blocks	Main priority	Related priorities
2	6	5,10
Cost (EUR Million)	Foreseen funding (1)	
16,5	Moroccan government with the support of regional and international organizations	
Project status (2)	Indicator	Term (months)
	Number of projects	120

(1) CF Cohesion Funds
ERDF European Regional Development Funds
EAFRD European Agricultural Fund for Rural Development

(2) NI Not initialized
PS Under preliminary studies/activities
CD Completed design
IP In progress
C Completed

Project No	Title	
25	Hydrological consequences of climate change in W.MED.	
Promoting country / entity		Promoter
MENBO		MENBO
Description		
Analysis in several basins with different climate features of the relations between the different components of precipitation, effects of modifications of soil, changing of climate variables and water resources, climate change, etc		
Main objectives		
<p>Identifying possible anthropogenic modifications of the precipitations regime, its causes and verifying if the observed tendencies can be extrapolated to other Mediterranean basins.</p> <p>Assessing the effects on the water cycle due to the modifications of the precipitations regime.</p> <p>Developing protocols for the implementation of the effects studied on hydrological planning.</p> <p>Proposing adaptation or correction measures to deal with the changes in the precipitations regime when possible and its repercussions on hydrological planning.</p>		
Geographical scope		
Regional. Basins of various Mediterranean countries (France, Spain, Morocco, Algeria)		
Blocks	Main priority	Related priorities
3	9	2,4,5,6,12,13
Cost (EUR Million)	Foreseen funding (1)	
1,8		
Project status (2)	Indicator	Term (months)
PS	4 countries	24

(1) CF Cohesion Funds
ERDF European Regional Development Funds
EAFRD European Agricultural Fund for Rural Development

(2) NI Not initialized
PS Under preliminary studies/activities
CD Completed design
IP In progress
C Completed

Project No	Title	
26	Basin Plan of adaptation to climate change Rhône-Méditerranée	
Promoting country / entity		Promoter
FR		Agence de l'eau Rhône-Méditerranée-Corse Direction régionale de l'environnement, de l'aménagement et du développement durable (DREAL)
Description		
<p>The strategy builds on three main axes: retain water in soils, fight against water wastage and support biodiversity.</p> <p>The plan has defined the map of vulnerabilities of the basin. It shows that all territories are vulnerable although in an uneven fashion. These maps carry the interest to show the most concerned territories that demand most adaptation measures be it as regards availability of water, the drying of soils, eutrophication, threat to biodiversity or loss of snow.</p>		
Main objectives		
Proposal of an adaptation strategy for water at the basin level of Rhône-Méditerranée and of 48 measures allowing for the reduction of the identified vulnerabilities		
Geographical scope		
National (Basin Rhône-Méditerranée)		
Blocks	Main priority	Related priorities
3	9	2,3,4,10,11,13
Cost (EUR Million)	Foreseen funding (1)	
0,4	Intervention programme of the water agency, by applying the system of polluter pays	
Project status (2)	Indicator	Term (months)
IP	<ul style="list-style-type: none"> - Obtain 65% of efficiency on the totality of water networks intended for domestic consumption by 2020, and of 85% by 2030 - Replace 80% of agricultural levies in low water periods by 2050 combining water savings and mobilizing resources - Compensate 150% of the sealing in urban zones by the creation of infiltration devices and of reduction of runoff - Restore flood plains on 20% of the linear waterways by 2050 	72

(1) CF Cohesion Funds
ERDF European Regional Development Funds
EAFRD European Agricultural Fund for Rural Development

(2) NI Not initialized
PS Under preliminary studies/activities
CD Completed design
IP In progress
C Completed

Project No	Title		
27	Adaptation to the effects of climate change		
Promoting country / entity		Promoter	
DZ		Algerian Ministry of Water Resources and Environment	
Description			
<p>Among the confirmed consequences of climate change that scientists have demonstrated, the hydrological cycle is affected in all its aspects, modification of precipitation regimes, of runoff, floods, increase of the sea level, desertification process, etc.</p> <p>Generally, the disparities in water resources distribution will be increased; the drying cycles will become more frequent in our already arid regions. Water resources will be threatened and affected in a number of regions, with impacts in all fields of development (access to water, food security, health, etc.), whereas risks of catastrophs related to water will increase. The effects of those changes will be first felt by the most vulnerable.</p>			
Main objectives			
<ul style="list-style-type: none"> - Identification of the consequences related to climate change - Assess the impacts - Define the behaviours to retain for each segment, in particular water - Identify the adaptation and the mitigation measures of the impacts 			
Geographical scope			
Regional. Méditerranéan countries			
Blocks	Main priority	Related priorities	
3	9	2,4,5,12,13	
Cost (EUR Million)	Foreseen funding (1)		
3			
Project status (2)	Indicator		Term (months)
			38

(1) CF Cohesion Funds
ERDF European Regional Development Funds
EAFRD European Agricultural Fund for Rural Development

(2) NI Not initialized
PS Under preliminary studies/activities
CD Completed design
IP In progress
C Completed

Project No	Title		
28	Climate change mitigation Action in urban areas in the Western Mediterranean		
Promoting country / entity		Promoter	
IT		Ministry of Environment	
Description			
<p>In recent years the Mediterranean area has been experiencing an increase of frequent, intense, short duration meteorological events (extreme events like floods and droughts). The impact of this type of phenomena in urban areas apart from increasing risk for people and assets is raising significant concerns as regards to water quality because of resulting diffuse and concentrated pollution that can hinder the achievement of environmental objectives both for surface and groundwater bodies. An accurate analysis of the issue requires an in-depth assessment of the hydraulic efficiency of existing urban drainage systems taking into consideration climate change and the evaluation of the environmental performance of existing urban collection systems.</p>			
Main objectives			
<p>Urban drainage systems and climate change: assessment of the impact of the effects of the variation of hydrological forcers on the hydraulic performance of sewage systems, on the minor river network in urban areas and on the achievement of environmental objectives</p>			
Geographical scope			
Regional			
Blocks	Main priority	Related priorities	
3	9	2,4,11,12,13	
Cost (EUR Million)	Foreseen funding (1)		
5			
Project status (2)	Indicator		Term (months)
PS	20 urban areas		72

(1) CF Cohesion Funds
ERDF European Regional Development Funds
EAFRD European Agricultural Fund for Rural Development

(2) NI Not initialized
PS Under preliminary studies/activities
CD Completed design
IP In progress
C Completed

Project No	Title		
29	Decentralized treated waste water improvement for irrigation		
Promoting country / entity		Promoter	
TN		Ministry of Agriculture	
Description			
Tunisia is a country with very limited hydrological resources and it needs to increase them. Among the possible actions, different methods of waste water treatment are being studied with the aim to improve the quality and to increase non-conventional resources. With this aim, 20 pilot projects will be carried out in order to analyse the best means to improve the quality and increase non-conventional hydrological resources in view of using them in agriculture. These two pilot projects will be disseminated throughout the center and the south of the country.			
Main objectives			
Improvement of treated waste water quality to develop irrigation areas. 20 pilot projects developing a pattern will be developed where different solutions will be investigated and implemented, followed by monitoring and evaluation.			
Geographical scope			
National. Centre and south areas inside the country (20 pilot projects)			
Blocks	Main priority	Related priorities	
3	10	2,4,5,11,13	
Cost (EUR Million)	Foreseen funding (1)		
3	NO		
Project status (2)	Indicator		Term (months)
NI	hm ³ , km ² wetland, number stations settled		60

(1) CF Cohesion Funds
ERDF European Regional Development Funds
EAFRD European Agricultural Fund for Rural Development

(2) NI Not initialized
PS Under preliminary studies/activities
CD Completed design
IP In progress
C Completed

Project No	Title	
30	REUSE-PRO: PROfessionalizing the water REUSE to tackle water issues in the western Mediterranean	
Promoting country / entity		Promoter
FR		Consortium Ecofile (France)
Description		
<p>This project aims at developing capacity building for wastewater reuse as a main lever to tackle water crisis in Mediterranean area. A framework for implementation of certified and sustainable projects. Two levels of decision and implementation (at national and regional scale for decision makers, and at local and project for local stakeholders)</p>		
Main objectives		
<p>Objectives in the Western Mediterranean:</p> <p>To secure the whole reuse process from the initial stage to a reliable and sustainable application</p> <p>To secure the water reuse chain from the WW production to the final product and the consumer by assessing and managing the sanitary risk</p> <p>To encourage and upgrade further development of new projects to meet the challenge of water stress</p> <p>To create a 5+5 common dynamic in TWWR, and share experiences</p> <p>Objectives at the European level</p> <p>Giving framework and integrated knowledge to help the development of water reuse in Europe while it is consistent with other wider European program.</p> <p>The outputs of PRO-Reuse will contribute to decision makers awareness</p>		
Geographical scope		
<p>Regional. Western Mediterranean countries (short time)</p> <p>Europe and Mediterranean (medium term)</p>		
Blocks	Main priority	Related priorities
3	10	1,2,3,4,5,7,9,11,13
Cost (EUR Million)	Foreseen funding (1)	
1,1	0,8	
Project status (2)	Indicator	Term (months)
CD	% treated water reused (m ³ /year), new water reuse applications...	36

(1) CF Cohesion Funds
ERDF European Regional Development Funds
EAFRD European Agricultural Fund for Rural Development

(2) NI Not initialized
PS Under preliminary studies/activities
CD Completed design
IP In progress
C Completed

Project No	Title	
31	Promoting the treated wastewater reuse as a mean of coping with climate change	
Promoting country / entity		Promoter
MA		Moroccan delegate Ministry in charge of Water
Description		
<p>To consolidate past successes and to succeed in the challenges especially increasing demand from existing water resources in different sectors, Morocco has developed a new water policy that considers promoting the treated wastewater reuse, as a very important action. Indeed, Delegate Ministry in charge of Water prepares a national wastewater reuse program for different user sectors including irrigation and watering of golf courses and green space. This program aims to reuse 325 Mm³ in 2030.</p>		
Main objectives		
<ul style="list-style-type: none"> - Developing a new water resource to respond to the increasing demand - Preservation and protection of water resources and ecosystems - Reducing pollution 		
Geographical scope		
Regional		
Blocks	Main priority	Related priorities
3	10	7,9,13
Cost (EUR Million)	Foreseen funding (1)	
22,3 (including 20 Million for pilot projects)	Moroccan government with the support of regional and international organizations	
Project status (2)	Indicator	Term (months)
IP	hm ³ of treated wastewater reused	120

(1) CF Cohesion Funds
ERDF European Regional Development Funds
EAFRD European Agricultural Fund for Rural Development

(2) NI Not initialized
PS Under preliminary studies/activities
CD Completed design
IP In progress
C Completed

Project No	Title	
32	Production and distribution of highly polished treated effluent	
Promoting country / entity		Promoter
MT		Water Services Corporation (WSC)
Description		
<p>This project entails the development of three polishing plants situated in the islands' three wastewater treatment plants which will enable the treatment (polishing) of effluent to high quality levels which will enable its safe reuse. Furthermore the project envisages the development of a dedicated distribution network to enable the availability of the highly polished effluent at the point of use.</p>		
Main objectives		
Production (and distribution) of 7 million m ³ of highly polished treated effluent		
Geographical scope		
National		
Blocks	Main priority	Related priorities
3	10	7,13
Cost (EUR Million)	Foreseen funding (1)	
22	CF,ERDF,EAFRD	
Project status (2)	Indicator	Term (months)
IP	7 million m ³ of polished water produced	36

(1) CF Cohesion Funds
ERDF European Regional Development Funds
EAFRD European Agricultural Fund for Rural Development

(2) NI Not initialized
PS Under preliminary studies/activities
CD Completed design
IP In progress
C Completed

Project No	Title		
33	Artificial discharge to the groundwater aquifers		
Promoting country / entity		Promoter	
LY		Ministry of Water Resources	
Description			
Study, Construct and operate system to feed up the groundwater aquifer near storage water dam.			
Main objectives			
<p>Re-activate and increase the water storage the ground water aquifer.</p> <p>Use the available water stored in the dame reservoir.</p> <p>Protect the stored water in the reservoir from pollution.</p> <p>Make additional water resource to minimizing the groundwater stresses.</p> <p>Make water available to domestic and agriculture uses.</p>			
Geographical scope			
Local. North west area of Libya (1 pilot project)			
Blocks	Main priority	Related priorities	
3	10	1,2,3,4	
Cost (EUR Million)	Foreseen funding (1)		
10	According to national funding		
Project status (2)	Indicator		Term (months)
PS			36

(1) CF Cohesion Funds
ERDF European Regional Development Funds
EAFRD European Agricultural Fund for Rural Development

(2) NI Not initialized
PS Under preliminary studies/activities
CD Completed design
IP In progress
C Completed

Project N°	Title	
34	A new approach for multi-stakeholder engagement: the Water Living Lab network	
Promoting country / entity		Promoter
PT – ES - FR		ISA-ULisbon (PT), CENTA (ES) and OIEAU (F) association
Description		
<p>An open living lab is a user-centre open ecosystem operating in a territorial context (e.g. city, agglomeration, region), integrating concurrent research and innovation processes within a public-private-people partnership. The concept is based on a systematic approach integrating innovation and demonstration processes. These are carry out through the co-creation, exploration, experimentation and evaluation of innovative ideas, scenarios, concepts and related technological in real life use cases. Such use cases involve user communities, not only as observed subjects but also as a source of creation. This approach is focused in all elements of the product life-cycle, from design up to recycling.</p>		
Main objectives		
<p>The main project objectives are the following:</p> <ul style="list-style-type: none"> – To promote a network of Mediterranean Water Living Labs focused on rainwater management, water/wastewater treatment and reuse/valorisation. – To encourage training and personal exchange among the Water Living Labs. – To foster communication with the international network of open living labs 		
Geographical scope		
All Mediterranean countries, from north and south		
Blocks	Main priority	Related priorities
2	5	2, 6, 11
Cost (EUR Million)	Foreseen funding (1)	
4 millions EUR	Interreg and regional funding programmes (ERDF)	
Project status (2)	Indicator	Term (months)
CD in Portugal, Spain and France and PS regarding other countries	Number of Water Living Labs (number)	24

(1) CF Cohesion Funds
ERDF European Regional Development Funds
EAFRD European Agricultural Fund for Rural Development

(2) NI Not initialized
PS Under preliminary studies/activities
CD Completed design
IP In progress
C Completed

Project N°	Title	
35	Towards sustainable intensification in agriculture	
Promoting country / entity		Promoter
PT		University of Lisbon/ School of Agriculture (ISA)
Description		
<p>Sustainable intensification is the main current perspective regarding water resources management and fertilizer consumption in agriculture. This approach involves simultaneously increasing farm output and competitiveness, whilst protecting the rural communities and the environment. Appropriate and efficient use of inputs, smarter approaches to business planning and the adoption of innovations and new technologies all contribute to increasing productivity whilst protecting valuable natural resources. The project aims at providing innovative demonstration experiences and giving support along the food life cycle - from farmers to agro-companies – in order to achieve the mission “to produce more with less”.</p>		
Main objectives		
<p>The main aim is to test and demonstrate a range of farm management practices that have the potential to improve the economic, environmental or social performance of farming systems. In that regard, the project goal are:</p> <ul style="list-style-type: none"> • To encourage the use of precision systems for water applications in agriculture, including data monitoring and control, remote sensing • To promote the use of decision support and assessment tools in order to monitor sustainable water use and fertilizer consumption (N, P) in agriculture and agro-food industries <p>To develop improved methods and indicators that farmers and advisers can use to measure economic, environmental and social performance of farms or farming systems.</p>		
Geographical scope		
All Mediterranean countries		
Blocks	Main priority	Related priorities
2	6	3, 4, 5, 6
Cost (EUR Million)	Foreseen funding (1)	
5 millions EUR		
Project status (2)	Indicator	Term (months)
CD	Water and fertilizer consumption per mass of food production (volume/mass and mass/mass) Number of demonstration projects	24

(1) CF Cohesion Funds
ERDF European Regional Development Funds
EAFRD European Agricultural Fund for Rural Development

(2) NI Not initialized
PS Under preliminary studies/activities
CD Completed design
IP In progress
C Completed

Project No	Title		
36	Construction of dams		
Promoting country / entity		Promoter	
LY		Ministry of Water Resources	
Description			
Construct, operate and maintenance of seven main/ check dams.			
Main objectives			
Storing the runoff water at the downstream of the bodies inland or collected runoff surface water prior to outlet to the sea.			
Protecting the cities and villages from flooding.			
Protecting the soil from erosion.			
Making additional water resources to minimise groundwater stress.			
Making water available to domestic and agricultural uses.			
Geographical scope			
National (seven dams)			
Blocks	Main priority	Related priorities	
3	10	2,4,12	
Cost (EUR Million)	Foreseen funding (1)		
115	According to national funding		
Project status (2)	Indicator		Term (months)
IP	7 Dams. Capacity: 66 Million m ³ .		48

(1) CF Cohesion Funds
ERDF European Regional Development Funds
EAFRD European Agricultural Fund for Rural Development

(2) NI Not initialized
PS Under preliminary studies/activities
CD Completed design
IP In progress
C Completed

Project No	Title		
37	Water harvesting systems in urban areas		
Promoting country / entity		Promoter	
TN		Ministry of Agriculture	
Description			
Project aiming at storing in an alternative manner rainfall at rainy periods in urban areas			
Main objectives			
Studies and research will be carried out in order to develop viable models in Tunisia and export them to the Mediterranean region. Construction of 100 systems of rain harvesting.			
Geographical scope			
National (100 water harvesting systems)			
Blocks	Main priority	Related priorities	
3	10	1,2,4,12	
Cost (EUR Million)	Foreseen funding (1)		
10	NO		
Project status (2)	Indicator		Term (months)
PS	number of units		60

(1) CF Cohesion Funds
ERDF European Regional Development Funds
EAFRD European Agricultural Fund for Rural Development

(2) NI Not initialized
PS Under preliminary studies/activities
CD Completed design
IP In progress
C Completed

Project N°	Title	
38	Executive Information System for the governance and management of Water Resources in the Western Mediterranean	
Promoting country / entity		Promoter
IT		MATTM
Description		
<p>Executive information System called “Control Dashboard” to gather all relevant data regarding river basin management planning in a single depository and bridge an information gap hindering effective management decisions. The objectives of the information system are to:</p> <ul style="list-style-type: none"> – gather and homogenize scattered data overcome planning and implementation challenges foster stakeholder engagement at different levels and planning stages; – present the data in standard reporting formats; – identify and present cause-effect mechanisms between drivers, pressures and water bodies’ environmental status in a clear and transparent – take account of water balances and quantitative aspects in water bodies’ management – evaluate the efficiency and effectiveness of planned measures – include in the decision making process the outputs of innovative pilot water balance an water accounting experiences regarding selection of the most appropriate measures to face water scarcity and drought conditions; – present the mechanisms that all develop a strategic vision planning and management of water resources <p>The “Control Dashboard” is a web-based, user-fed and exportable information system. It is an efficient management tool which summarizes information and data in a water body dedicated sheet which present all information necessary to manage water resources for efficient decision making Managing water resources through this executive information system saves costs and allows the visualization of the situation at water body level for efficient decision making.</p>		
Main objectives		
Manage water resources from a quantitative and qualitative point of view taking into consideration climate change forcers		
Geographical scope		
Regional Western Mediterranean Area		
Blocks	Main priority	Related priorities
1	2	9, 12, 13
Cost (EUR Million)	Foreseen funding (1)	
2		

(1) CF Cohesion Funds
ERDF European Regional Development Funds
EAFRD European Agricultural Fund for Rural Development

(2) NI Not initialized
PS Under preliminary studies/activities
CD Completed design
IP In progress
C Completed

Project status (2)	Indicator	Term (months)
CD	Quantitative and qualitative water resources efficient management	36

Project No	Title	
39	Building a dam on Oued El Htab and elaboration of a project of integrated development in its watershed	
Promoting country / entity		Promoter
TN		Ministry of Agriculture
Description		
This is mainly about a construction project of a dam and the integral development of a basin. The intention is to recharge the aquifer, protect resources from pollution, minimize erosion, enhance the development of the region, etc.		
Main objectives		
Construction of a dam in Oued El htab and development of a project for the integrated development of the basin.		
Geographical scope		
National (center oust)		
Blocks	Main priority	Related priorities
3	10	2,4,12,13
Cost (EUR Million)	Foreseen funding (1)	
0,5		
Project status (2)	Indicator	Term (months)
		24

(1) CF Cohesion Funds
ERDF European Regional Development Funds
EAFRD European Agricultural Fund for Rural Development

(2) NI Not initialized
PS Under preliminary studies/activities
CD Completed design
IP In progress
C Completed

Project N°	Title		
40	Sediment elimination of the dam El Kébir		
Promoting country / entity		Promoter	
TN		Ministry of Agriculture	
Description			
The Kebir dam has sedimentation and supplies a large number of communities and important cities with drinking water. The aim is to achieve the storage capacity of the infrastructure and to adapt it so it is safe in the event of floods.			
Main objectives			
Sediment elimination in the Kebir dam			
Geographical scope			
Local			
Blocks	Main priority	Related priorities	
3	10	2,4,11,12,13	
Cost (EUR Million)	Foreseen funding (1)		
0,815			
Project status (2)	Indicator		Term (months)
	Number of inhabitants supplied by the dam		48

(1) CF Cohesion Funds
ERDF European Regional Development Funds
EAFRD European Agricultural Fund for Rural Development

(2) NI Not initialized
PS Under preliminary studies/activities
CD Completed design
IP In progress
C Completed

Project N°	Title		
41	Artificial recharge of the groundwater table d'El Fahs by treated wastewater		
Promoting country / entity		Promoter	
TN		MARHP : General Directorate of Water Resources "DGRE"	
Description			
The artificial recharge of the aquifer d'El Fahs from treated wastewater in the tertiary stage by means of a complementary treatment by sand filter and an UV reactor			
Main objectives			
Preservation of the resource and improvement of the quality of groundwater which is overexploited.			
Geographical scope			
National (North of Tunisia)			
Blocks	Main priority	Related priorities	
3	10	2,4,5,6,7,8,9,13	
Cost (EUR Million)	Foreseen funding (1)		
0,8			
Project status (2)	Indicator		Term (months)
PS	A recharge volume of 1 072 000 m ³ /an will be injected into the groundwater		24

(1) CF Cohesion Funds
ERDF European Regional Development Funds
EAFRD European Agricultural Fund for Rural Development

(2) NI Not initialized
PS Under preliminary studies/activities
CD Completed design
IP In progress
C Completed

Project N°	Title		
42	Artificial recharge of the groundwater table d'oued Essmar_Mednine by treated wastewater		
Promoting country / entity		Promoter	
TN		MARHP : General Directorate of Water Resources "DGRE"	
Description			
The artificial recharge of the aquifer oued Essmar from treated wastewater in the tertiary stage by means of a complementary treatment by sand filter and an UV reactor			
Main objectives			
Preservation of the resource and improvement of the quality of groundwater which is overexploited.			
Geographical scope			
National (South-east of Tunisia)			
Blocks	Main priority	Related priorities	
3	10	2,3,4,5,6,8,9,13	
Cost (EUR Million)	Foreseen funding (1)		
0,9			
Project status (2)	Indicator		Term (months)
PS	A recharge volume of 1 159 000 m ³ /an will be injected into the groundwater table		24

(1) CF Cohesion Funds
ERDF European Regional Development Funds
EAFRD European Agricultural Fund for Rural Development

(2) NI Not initialized
PS Under preliminary studies/activities
CD Completed design
IP In progress
C Completed

Project N°	Title		
43	Water use monitoring of Irrigated agriculture in ES by earth observation WATER-EO		
Promoting country / entity		Promoter	
ES		University of Castilla La Mancha and Ministry of Agriculture, Food and Environment	
Description			
To improve the efficiency of water use in agriculture across scales ranging from farm to irrigation schemes or aquifer on to river-basin and on to the whole country, by applying Earth Observation, EO, and web based Geographic Information System, web GIS, technologies.			
Main objectives			
<p>The development and operational implementation of remote sensing techniques for sustainable management of water use in irrigation using for this time series of satellite images at high spatial resolution and GIS tools of information via web, covering the whole peninsular area of Spain.</p> <p>Improving mapping of irrigated areas, to identify annually irrigated areas by the time sequence of multispectral images.</p> <p>Water accounting - water consumption and irrigation water requirements</p> <p>Make available to users all the information obtained, such as satellite imagery, maps of irrigated areas, water consumption and irrigation water requirements at right scales and irrigation needs.</p>			
Geographical scope			
National			
Blocks	Main priority	Related priorities	
3	11	2,4,5,6,9	
Cost (EUR Million)	Foreseen funding (1)		
0,5			
Project status (2)	Indicator	Term (months)	
PS	3,5 millions ha	28	

(1) CF Cohesion Funds
ERDF European Regional Development Funds
EAFRD European Agricultural Fund for Rural Development

(2) NI Not initialized
PS Under preliminary studies/activities
CD Completed design
IP In progress
C Completed

Project N°	Title	
44	Studies and projects for the irrigation project of Gharb	
Promoting country / entity		Promoter
MA		COBA (PT)
Description		
<p>COBA is developing in partnership with the Moroccan CID - Conseil Ingenierie et Developpement, studies and projects for the irrigation project of Gharb. The region of Gharb corresponds to the largest and most important irrigated perimeter of Morocco, totalling 114,000 hectares equipped.</p> <p>The company is currently completing the conversion studies of sprinkler irrigation of an area of about 20 hectares and was recently awarded the study of gravity irrigation of conversion to an area of approximately 11,000 hectares.</p>		
Main objectives		
<p>Reduce the water deficit for irrigation,</p> <p>Diagnosis of the existing situation, an environmental impact assessment, development of improvement alternatives, a feasibility study, preliminary and detailed designs and tender documents for the irrigation system</p>		
Geographical scope		
Local		
Blocks	Main priority	Related priorities
3	11	10
Cost (EUR Million)	Foreseen funding (1)	
Project status (2)	Indicator	Term (months)
IP	Conversion to an area of approximately 11,000 hectares.	

(1) CF Cohesion Funds
ERDF European Regional Development Funds
EAFRD European Agricultural Fund for Rural Development

(2) NI Not initialized
PS Under preliminary studies/activities
CD Completed design
IP In progress
C Completed

Project N°	Title		
45	Supervise irrigation works in Morocco		
Promoting country / entity		Promoter	
MA		Aqualogus (PT)	
Description			
<p>It was awarded to Aqualogus the supervision of the irrigation works for the area of Dar Khrofa, located in the region of Larache, in Morocco.</p> <p>The ongoing works cover an area of about 25,000 hectares of agricultural land and consist in building a pipeline link to the dam of Dar Khrofa, regulation chamber downstream from the dam flows, pre-filtration station and hydraulic circuit adduction to an extent greater than 70 kilometres in large ducts.</p> <p>The project for the execution of this work was also prepared by Aqualogus, which also provides their technical support.</p>			
Main objectives			
The project will contribute to the protection of lands downstream of the dam from floods, as well as to the increase of regulated surface water			
Geographical scope			
Local			
Blocks	Main priority	Related priorities	
3	11	10, 12	
Cost (EUR Million)	Foreseen funding (1)		
Project status (2)	Indicator	Term (months)	
IP	Irrigation of 25,000 hectares of agricultural land		

(1) CF Cohesion Funds
ERDF European Regional Development Funds
EAFRD European Agricultural Fund for Rural Development

(2) NI Not initialized
PS Under preliminary studies/activities
CD Completed design
IP In progress
C Completed

Project N°	Title		
46	National Water Conservation Campaign		
Promoting country / entity		Promoter	
MT		Sustainable Energy and Water Conservation Unit (SEWCU)	
Description			
The National Water Conservation Campaign aims to increase the awareness on the scarcity of water resources in the Maltese islands and thus the need for optimising the conservation and efficient use of this resource. This will be achieved through a coordinated campaign which will utilise a range of innovative measures aiming to directly and indirectly address all water users. The campaign will target all the water using sectors with specific focus on the domestic, commercial and touristic sectors.			
Main objectives			
Increased awareness on water conservation and achievement of an actual reduction in the national water demand.			
Geographical scope			
National			
Blocks	Main priority	Related priorities	
3	11	4,5	
Cost (EUR Million)	Foreseen funding (1)		
10	CF		
Project status (2)	Indicator		Term (months)
CD	250.000 people reach the campaign		48

(1) CF Cohesion Funds
ERDF European Regional Development Funds
EAFRD European Agricultural Fund for Rural Development

(2) NI Not initialized
PS Under preliminary studies/activities
CD Completed design
IP In progress
C Completed

Project N°	Title		
47	Actions of the Global Plan for flood risk in the Júcar river		
Promoting country / entity		Promoter	
ES		Spain	
Description			
<p>The Jucar river shows a clearly Mediterranean behaviour characterised by a great disproportion between the ordinary and extraordinary flows and by an extreme regime of flow rates with important floods causing secular overflows which flood the banks and cause damage in the close-by areas, especially in the regions of the Ribera Alta and Ribera Baixa in the Valencia Region.</p> <p>The Jucar Global Plan that contemplates flood risk intends to minimize the damage caused by floodwaters to which the area is periodically exposed. Floods present very serious problems, especially in the Ribera del Jucar since the area is not only densely populated but also features an outstanding industrial and agricultural development. In addition, there are natural areas of great environmental value</p>			
Main objectives			
<p>The Plan actions, therefore, must necessarily account for the socio-environmental issues as well as the defence against flood risk, all those arisen during the public participation process.</p> <p>The Plan introduces innovative aspects in hydraulic engineering with the aim of achieving an integral and sustainable action to make the protection against flood risk congenial with the recovery of the River area, and its main function, namely, to become the backbone corridor for the entire area</p>			
Geographical scope			
Local. Jucar river			
Blocks	Main priority	Related priorities	
3	12	1	
Cost (EUR Million)	Foreseen funding (1)		
120			
Project status (2)	Indicator	Term (months)	
PS	24.000 ha protected surface	48	

(1) CF Cohesion Funds
ERDF European Regional Development Funds
EAFRD European Agricultural Fund for Rural Development

(2) NI Not initialized
PS Under preliminary studies/activities
CD Completed design
IP In progress
C Completed

Project Nº	Title		
48	Special Plan for achieving the ecological potential of the RAMSAR wetland of the Albufera Lake.		
Promoting country / entity		Promoter	
ES		Spain	
Description			
<p>The achievement of good ecological potential in L'Albufera of Valencia is one of the main environmental objectives for the water bodies of the Júcar river basin district and this status must be achieved by 2027. With the current information it has not been possible to establish an ecological potential that is, on the one hand realistic with the current situation, and on the other hand complying with all the requirements from the Planning Instruction.</p> <p>It is thus necessary to carry out during a first phase "specific studies to determine the ecological potential in L'Albufera of Valencia", for definition purposes and, during a second phase, developing those measures necessary to achieve the objectives set for the Lake.</p>			
Main objectives			
<p>To achieve a good ecological potential reversing the current eutrophic situation.</p> <p>To guarantee the sustainable maintenance of the ecosystem's functionality and structure. This must be done by providing appropriate habitat conditions to meet the needs of the different biological communities in these aquatic ecosystems and the associated land ecosystems, through preserving the necessary ecological processes in order to complete their biological cycles</p>			
Geographical scope			
Local (L'Albufera lake)			
Blocks	Main priority	Related priorities	
3	13	7	
Cost (EUR Million)	Foreseen funding (1)		
0,72 (first phase)			
Project status (2)	Indicator		Term (months)
IP	24 km ²		24

(1) CF Cohesion Funds
ERDF European Regional Development Funds
EAFRD European Agricultural Fund for Rural Development

(2) NI Not initialized
PS Under preliminary studies/activities
CD Completed design
IP In progress
C Completed

Project N°	Title	
49	Promoting sanitation systems in rural areas	
Promoting country / entity		Promoter
MA		Moroccan delegate Ministry in charge of Water
Description		
<p>Rural areas in Morocco constitute an important component in term of population concerned. Indeed, over 15 Millions of inhabitants live in the countryside. However, only 40% of them are equipped with a system of sanitation (the rate of connection to the sewer system doesn't exceed 10%). Thus, the Moroccan Kingdom has established National Program of Rural sanitation (known by PNAR) so as to improve the situation of this population and protect the environment and public health as well.</p>		
Main objectives		
<p>Protection of the public health and improving the standard of living of the rural population</p> <p>Preservation and protection of water resources and ecosystems</p> <p>Reducing pollution</p>		
Geographical scope		
Regional		
Blocks	Main priority	Related priorities
3	13	7
Cost (EUR Million)	Foreseen funding (1)	
4	Moroccan government with the support of regional and international organizations	
Project status (2)	Indicator	Term (months)
IP	Rate of connection to the sewer system	120

(1) CF Cohesion Funds
ERDF European Regional Development Funds
EAFRD European Agricultural Fund for Rural Development

(2) NI Not initialized
PS Under preliminary studies/activities
CD Completed design
IP In progress
C Completed

Project N°	Title	
50	Minimise pollution effect of the oil disposal swamps to the groundwater aquifer	
Promoting country / entity		Promoter
LY		Ministry of Water Resources
Description		
Study of the effect of pollution on the groundwater surface aquifers in order to find the best solution to re-use the outcome contaminated water disposed from the oil wells during the oil production stage		
Main objectives		
<ol style="list-style-type: none"> 1. Eliminating the pollution to the surface aquifers due to oil production. 2. Treating and Re-using the disposed oil water during oil production stage. 3. Making additional water resources to minimizing the groundwater stresses. 4. Making water available to industrial and agriculture uses. 5. Cleaning environmental impact in the project area. 6. Establishing inspection and monitoring mechanisms with an emphasis on effective law compliance and enforcement system. 7. Improving knowledge, exchanging experiences and training. 		
Geographical scope		
Local (North east of oil field of Libya)		
Blocks	Main priority	Related priorities
3	13	1,2,3,4,10
Cost (EUR Million)	Foreseen funding (1)	
5	According to national funding	
Project status (2)	Indicator	Term (months)
PS		24

(1) CF Cohesion Funds
ERDF European Regional Development Funds
EAFRD European Agricultural Fund for Rural Development

(2) NI Not initialized
PS Under preliminary studies/activities
CD Completed design
IP In progress
C Completed

Project N°	Title	
51	Water Sewage Treatment Project (Phase I)	
Promoting country / entity		Promoter
LY		Ministry of Water Resources and wastewater company
Description		
Construction and Rehabilitation of (10) ten sewage treatment plants placed in the Cities along the Libyan Coast, the capacity varying from 3,000 m ³ /day to 120,000 m ³ /day.		
Main objectives		
Improvement of treated wastewater quality to develop irrigation area and protect the sea from the disposed wastewater.		
Geographical scope		
Local (Along the Libyan coast nearby the cities, northern coast of the country)		
Blocks	Main priority	Related priorities
3	13	1,2,3,4,10,11
Cost (EUR Million)	Foreseen funding (1)	
12	Waiting for funding from the government	
Project status (2)	Indicator	Term (months)
PS	10 sewage plants	60

(1) CF Cohesion Funds
ERDF European Regional Development Funds
EAFRD European Agricultural Fund for Rural Development

(2) NI Not initialized
PS Under preliminary studies/activities
CD Completed design
IP In progress
C Completed

Project N°	Title	
52	Improvement the quality of drinking water in Mauritania	
Promoting country / entity		Promoter
MR		Ministere de l'hydraulique et de l'Assainissement
Description		
<p>The quality of drinking water in Mauritania is not always mastered.</p> <p>In urban areas, water is chlorinated in large cities and the follow-up of the quality of water and the rate of chloride is ensured by the SNDE.</p> <p>There is no chlorination in rural areas, except for a few stations of surface water treatment.</p>		
Main objectives		
Improving the quality of drinking water supplied in urban and rural areas.		
Geographical scope		
National		
Blocks	Main priority	Related priorities
3	13	4,10
Cost (EUR Million)	Foreseen funding (1)	
0,8	NO	
Project status (2)	Indicator	Term (months)
PS	Access rate to treated water, number of networks, analyses, training	36

(1) CF Cohesion Funds
ERDF European Regional Development Funds
EAFRD European Agricultural Fund for Rural Development

(2) NI Not initialized
PS Under preliminary studies/activities
CD Completed design
IP In progress
C Completed

Project N°	Title	
53	A cross-cutting study on a dynamic analysis of the coherence between national policies and the WSWM	
Promoting country / entity		Promoter
MENBO		Technical Secretariat of the MGW 5+5 (MENBO)
Description		
<p>According to its singularities, needs and legislative background, each country has a different legislative framework regarding water issues. The European member countries of the 5+5 converge on the application of the Water Framework Directive which harmonises their respective legislative frameworks. Yet, this is not the case in the Maghreb countries.</p> <p>Thus, it would be appropriate to analyse the coherence between the different country policies and what is proposed in the Water Strategy in the Western Mediterranean so that there are no incompatibilities between the two. To do so, it is proposed to carry out a dynamic analysis of such coherence, to be carried out by MENBO.</p> <p>The methodology will involve obtaining the appropriate records on each country's legislation. If this information is not available in the relevant databases, direct contact with 5+5 country representatives and EC directorates will be established in order to retrieve the necessary data.</p>		
Main objectives		
<p>Dynamic analysis of the coherence between national policies and the Water Strategy in the Western Mediterranean</p> <p>For each of the countries of the 5+5 the following elements will be analysed:</p> <ul style="list-style-type: none"> – Compilation of the existing legislative framework on water issues in each country – Analysis of the implications and features of each legislative framework – Comparison with what is proposed in the Water Strategy for the Western Mediterranean – Analysis of the coherence between the two of them – Report on conclusions 		
Geographical scope		
Regional. Western Mediterranean		
Blocks	Main priority	Related priorities
1	2	1, 9, 10, 11, 12, 13
Cost (EUR Million)	Foreseen funding (1)	
0,8	NO	

(1) CF Cohesion Funds
ERDF European Regional Development Funds
EAFRD European Agricultural Fund for Rural Development

(2) NI Not initialized
PS Under preliminary studies/activities
CD Completed design
IP In progress
C Completed

Project status (2)	Indicator	Term (months)
NI		24

Project Nº	Title	
54	Training actions to support the implementation of projects that develop the priorities of the WSWM	
Promoting country / entity		Promoter
IAMZ-CIHEAM		IAMZ-CIHEAM
Description		
<p>An adequate training of the technicians responsible for taking decisions on issues related to water management as well as of other persons involved in the process, is fundamental towards achieving a good management of the resource. In order to achieve a correct development of many of the projects presented in the Action Plan, a previous training on the subject would be needed. Each country will require training on different issues according to the different needs and the implementation of the proposed projects.</p>		
Main objectives		
<p>With this project, the Mediterranean Agronomic Institute of Zaragoza (IAMZ), as an institute of the CIHEAM, intends to attend to the training needs of the 5+5 countries which are necessary to achieve the correct development of their projects in the Action Plan. The mission of the CIHEAM is to develop and foster the cooperation between the Mediterranean countries through the training and cooperative research in the field of the agro-alimentary and environmental systems, including fishing and aquaculture.</p> <p>To do so, the IAMZ-CIHEAM proposes the organisation of two or three training courses annually, with the best specialists on the subject and including a program tailored to the features of the projects. The applied methodology has been developed by the IAMZ-CIHEAM over the last 30 years and represents the guarantee to success. The courses will offer duly qualified professors, simultaneous translation in English, Spanish and French, material and adequate didactic means for the development of the course, as well as exchange of information and experience among the attendees. The courses have an international and practical character, allowing to find solutions to the problems raised and increasing knowledge.</p> <p>The courses will be of a week long duration and could address any theme both within the agro-alimentary and environmental sectors. They will be focused on civil servants and on any other technicians from organisations, research centres and companies which could be interested.</p> <p>The courses can be carried out in collaboration with numerous national and international institutions from the Mediterranean region</p>		
Geographical scope		
Regional. Western Mediterranean		

(1) CF Cohesion Funds
ERDF European Regional Development Funds
EAFRD European Agricultural Fund for Rural Development

(2) NI Not initialized
PS Under preliminary studies/activities
CD Completed design
IP In progress
C Completed

Blocks	Main priority	Related priorities
2	4	2,3,5,6,7,9,10,11,12,13
Cost (EUR Million)	Foreseen funding (1)	
0,1	YES, CIHEAM (one third of the budget)	
Project status (2)	Indicator	Term (months)
NI	Two-three courses per year of one week's duration	12

(1) CF Cohesion Funds
ERDF European Regional Development Funds
EAFRD European Agricultural Fund for Rural Development

(2) NI Not initialized
PS Under preliminary studies/activities
CD Completed design
IP In progress
C Completed

Project N°	Title	
55	Floating islands pilot-project of Colibri in Morocco	
Promoting country / entity		Promoter
MA		Global Colibri (PT)
Description		
<p>It was requested to Global Colibri the presentation of a pilot solution for wastewater treatment for about 100 inhabitants, to be installed in Aït Benhaddou - Morocco.</p> <p>According to the company "floating islands have several advantages in treating waste water: adaptability to already built solutions, no sludge without clogging beds and without the respective transportation costs and deposition, no emission of unpleasant odours, low cost energy or even zero, low cost of installation and equipment, low maintenance, low operating cost, possibility of water reuse, high lifetime without intervention, and running over time and ability to withstand varying flow".</p> <p>The demonstration effect and potential for the scale-up of this solution in Morocco and neighbouring countries is judged as very significant.</p>		
Main objectives		
Improving water quality		
Geographical scope		
Local (Morocco)		
Blocks	Main priority	Related priorities
3	13	5,6,10
Cost (EUR Million)	Foreseen funding (1)	
	NO	
Project status (2)	Indicator	Term (months)
IP	Pilot solution for wastewater treatment for 100 inhabitants	

(1) CF Cohesion Funds
ERDF European Regional Development Funds
EAFRD European Agricultural Fund for Rural Development

(2) NI Not initialized
PS Under preliminary studies/activities
CD Completed design
IP In progress
C Completed

Project N°	Title	
56	Assessing and managing pressures on water and wetlands in the Mediterranean through the Water Footprint indicators	
Promoting country / entity	Promoter	
Medwet/MWO/WFN/EMWIS/UNEP	The Mediterranean Wetlands Initiative The Mediterranean Wetlands Observatory The Water Footprint Network Plan Bleu – Environment and Development in the Mediterranean Euro-Mediterranean Information System on know-how in the Water Sector	
Description		
<p>To assess the pressures on water and wetlands in the Mediterranean and propose measures for sustainable water management planning through the WF indicators, with two main complementary components :</p> <p>Component A. Publish a complete and updated Mediterranean Water Footprint Outlook :</p> <p>i) complete and upgrade the WF through bridging the existing data gaps; ii) update the relevant WF indicators for more recent time periods, and assess trends; and iii) assess the future WF changes (e.g., to 2030/ 2050), under different socio-economic and climate change scenarios.</p> <p>Component B. Apply the WF Assessment using relevant indicators to 10 major river basins, one in each of the countries involved in the 5+5 Dialogue, in partnership with the relevant River Basin Authorities, to assist water managers in:</p> <p>i) measuring the WF indicators for different time periods in their specific basin, and evaluating/assessing trends; ii) assessing future trends (e.g., to 2030/ 2050) under different socio-economic and climate change scenarios; iii) testing local improvements of some WF indicators, especially water quality, in pilot basins with reliable field data for validation/calibration; iv) assisting decision-making in water resources management at basin level by: v) making recommendations for incorporating these results into the appropriate national or local frameworks, e.g., National Hydrological Plans; Master Water Management Plans, etc.</p>		
Main objectives		
Geographical scope		
Regional		
Blocks	Main priority	Related priorities
3	13	2,4,5,6,9
Cost (EUR Million)	Foreseen funding (1)	
3,6	NO	

(1) CF Cohesion Funds
ERDF European Regional Development Funds
EAFRD European Agricultural Fund for Rural Development

(2) NI Not initialized
PS Under preliminary studies/activities
CD Completed design
IP In progress
C Completed

Project status (2)	Indicator	Term (months)
NI		36

Project N°	Title		
57	Integrated Water Resources Management and Governance in Morocco		
Promoting country / entity		Promoter	
EU/MA		EU/MA	
Description			
Main objectives			
To support Morocco in the reinforcement of institutional, organizational and technical capacity in regard to water governance and integrated water resources management. The consortium is formed by France, Romania and Spain.			
Geographical scope			
National			
Blocks	Main priority	Related priorities	
2	4	1,2	
Cost (EUR Million)	Foreseen funding (1)		
1,15	RÉUSSIR LE STATUT AVANCÉ		
Project status (2)	Indicator	Term (months)	
IP		24	

(1) CF Cohesion Funds
ERDF European Regional Development Funds
EAFRD European Agricultural Fund for Rural Development

(2) NI Not initialized
PS Under preliminary studies/activities
CD Completed design
IP In progress
C Completed

Project N°	Title		
58	Governance and water resources integrated management in Algeria		
Promoting country / entity		Promoter	
EU/ALG		EU/ALG WRIMA (AGIRE), Water Resources Integrated Management Agency	
Description			
<ul style="list-style-type: none"> •The managerial and organizational capacity for the monitoring and coordination of water policies are strengthened. •The operational management, planning and monitoring in the sector of water at local, regional and national level are improved. •The information system of WRIM and WBA is consolidated and contributes to the development of WIS of NOESD /MWRE. 			
Main objectives			
<p>Contributing to a better consideration of the issues of resource preserving and water demand management in an integrated approach.</p> <p>To strengthen the institutional, organisational and technical capacities in terms of governance and water resources integrated management of WRIMA (AGIRE).</p>			
Geographical scope			
National			
Blocks	Main priority	Related priorities	
2	4	1,2	
Cost (EUR Million)	Foreseen funding (1)		
1	European Union		
Project status (2)	Indicator		Term (months)
NI			24

(1) CF Cohesion Funds
ERDF European Regional Development Funds
EAFRD European Agricultural Fund for Rural Development

(2) NI Not initialized
PS Under preliminary studies/activities
CD Completed design
IP In progress
C Completed

Project N°	Title	
59	Implementation and Management of Innovative Funding Mechanisms to ensure access to water and sanitation in the Mediterranean	
Promoting country / entity		Promoter
IPEMED		IPEMED (Institut de Prospective Economique du Monde Méditerranéen)
Description		
<p>Southern and Eastern Mediterranean Countries (SEMCs) which are already facing structural water scarcity will continue to face significant and increasing challenges as a result of climate change. Especially access to safe water and sanitation (now included in SDG 6) are still boiling issues in SEMCs despite some positive but contrasting results obtained these last decades. And yet, SEMCs' ambitions depicted in their INDCs to implement adaptation actions in the water sector strongly rely on international support. In order to cover one part of the financing deficit and allow a better allocation of financial resources, a strategy must be developed around two actions: The implementation of an efficient policy of "sustainable costs recovery" and the definition of innovating "perennial, predictable and additional" financing. Beyond generating extra financial resources, the interest of international solidarity contributions lies in their capacity to modify the behaviour of some economic actors. Innovating funding mechanisms, especially those on maritime navigation and tourism, are also a real opportunity to encourage a strong and urgent commitment of all the region's stakeholders. The "5+5 Dialogue" may be the project leader and an excellent catalyst for the promotion of such an approach that corresponds with the priority themes of the Water Strategy.</p>		
Main objectives		
<p>– In the short term: Defining IFMs that could technically and economically be implemented in the medium term. Among the types of solidarity contributions proposed in IPEMED 2014 report, identifying the more appropriate for a regional application, as for instance, the micro-tax on cruises in the Mediterranean. After this short period of co-research with all the region's stakeholders, the aim of this project is to assist political decision-makers who make up the "5+5 Dialogue on Water" to undertake this exemplary initiative;</p> <p>– In the medium term: Implementing and Managing these IFMs. Insofar as the funds can be used to finance some parts of the Action Plan for the Water Strategy in the Western Mediterranean, the management of these IFMs requires the implementation of a transparent and interdisciplinary governance, gathering the signatory States, the civil society, etc.</p>		
Geographical scope		
Regional		
Blocks	Main priority	Related priorities
2	8	2, 3, 4, 5, 7, 9, 10, 11, 13
Cost (EUR Million)	Foreseen funding (1)	
0,1		

(1) CF Cohesion Funds
ERDF European Regional Development Funds
EAFRD European Agricultural Fund for Rural Development

(2) NI Not initialized
PS Under preliminary studies/activities
CD Completed design
IP In progress
C Completed

Project status (2)	Indicator	Term (months)
PS	Number of the region's stakeholders involved in the project	12

Project N°	Title	
60	Desalination Plants to improve domestic water supply	
Promoting country / entity	Promoter	
LY	The General Desalination Company / Under the Ministry of Water Resources	
Description		
Construction of eleven (11) desalination Plants in eleven places toward the Cities along the Libyan coast. The expected design capacity per plant ranging between 50 to 400 m ³ /day.		
Main objectives		
To produce portable water from sea water for domestic and municipal purposes		
Geographical scope		
National. Along the Libyan Coast nearby the Cities, Northern coast of the country		
Blocks	Main priority	Related priorities
3	10	1,2, 3, 4, 5, 6, 13
Cost (EUR Million)	Foreseen funding (1)	
To be offered by investors company	Refer the item cost	
Project status (2)	Indicator	Term (months)
PS	Make available portable water and to minimise the stresses on groundwater sources	60-84

(1) CF Cohesion Funds
ERDF European Regional Development Funds
EAFRD European Agricultural Fund for Rural Development

(2) NI Not initialized
PS Under preliminary studies/activities
CD Completed design
IP In progress
C Completed

■ ANNEX 3: ANALYSIS OF THE PROJECTS

A total of 60 projects have been received. The following features of each of them have been described:

- Title
- Promoting country/entity
- Description and main objectives
- Geographical scope
- Concordance with the priority themes of the Strategy
- Budget and foreseen funding
- Current status
- Indicators
- Duration

With the aim to address the specific challenges of water in the Western Mediterranean, the Strategy defines 13 priorities comprised in three main blocks. The order of the 13 priority issues does not respond to a higher importance of some over others, but to the grouping of the issues into three thematic blocks, from more general principles to more specific interest in water management in the Western Mediterranean.

The three thematic blocks have been defined starting by the cross-cutting subjects and widely accepted basic orientations on water management. The second block describes the regional interest issues adapted to the specific context of the Western Mediterranean, and the third block focuses on more technical objectives for promoting water management improvement.

The three thematic blocks are aimed at:

Block 1: Enhancing Western Mediterranean country policies' convergence towards the general principles of a sustainable water policy.

Block 2: Fostering cooperation on regional interest matters.

Block 3: Promoting water management improvement.

The projects presented are encompassed within these blocks in the following manner.

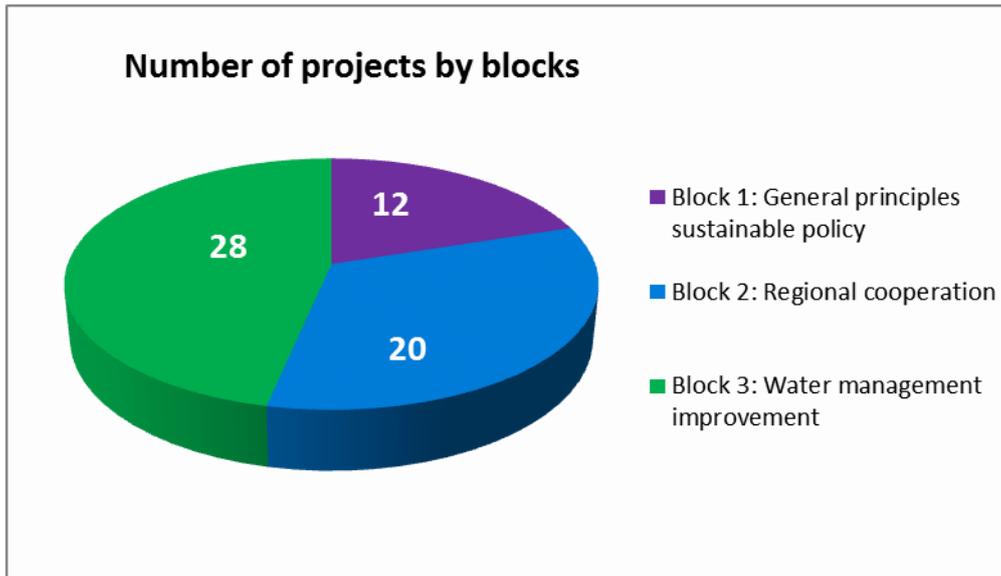


Figure 25 : Number of projects by blocks

As can be observed, almost 50% of the projects presented are included in the third block related to specific projects focusing on the improvement of resource management.

Taking a closer look at each block, the main priorities that have been developed can be observed. The Strategy defines the following 13 priorities classified according to the block they belong to:

Block 1: Enhancing Western Mediterranean country policies' convergence towards the general principles of a sustainable water policy.

Priority 1: Developing and starting up clearly defined legal frameworks

Priority 2: Establishing governance adapted to integrated water management

Priority 3: Implementing cost-recovery

Block 2: Foster cooperation in relation to regional matters.

Priority 4: Capacity building

Priority 5: Innovation development in the water sector.

Priority 6: Water-energy-food nexus

Priority 7: De-pollution of the Mediterranean

Priority 8: Mobilising water-related innovative financing solutions for the application of the Strategy

Block 3: Promoting water management improvement

Priority 9: Climate change adaptation

Priority 10: Increasing and mobilising the available resources

Priority 11: Water use efficiency improvement

Priority 12: Flood prevention

Priority 13: Protection of water quality and biodiversity

Although every project could be included in various categories, the classification has been made based on the priority that better corresponds to the objectives of the project. Following this classification, the number of projects within each category is shown below:

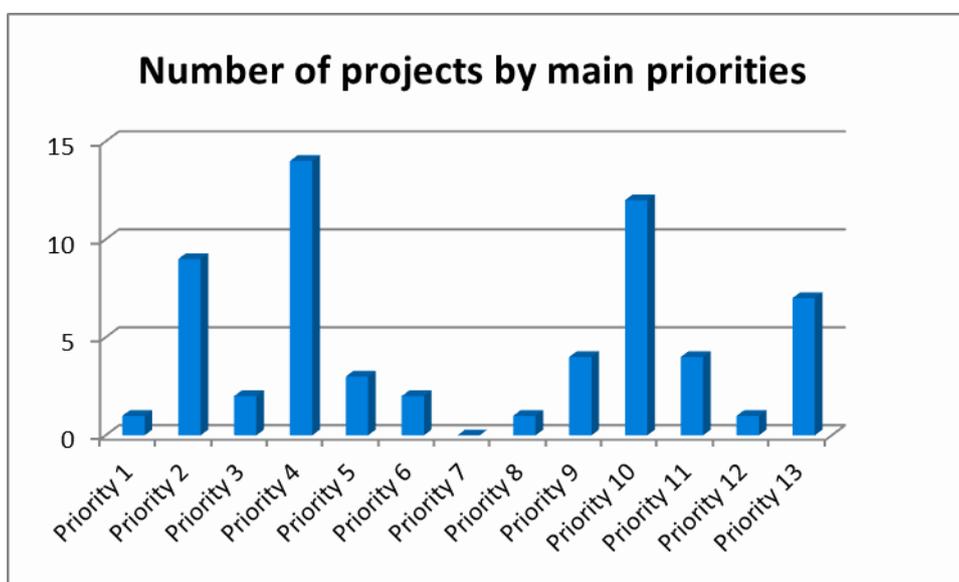


Figure 26 : Number of projects by main priorities

The most often addressed priorities are number 4 (Capacity building) with 14 projects presented, followed by number 10 (Increasing and mobilising the available resources) with 12 projects. This reflects the need to exchange experiences, common work and improvement of knowledge among the member states. The other priority reflects the need to an increase of water resources in countries constantly growing and suffering from scarcity of resources, characteristic of the Mediterranean region and particularly of southern countries

As shown below, projects whose main priority is number 10 are mostly developed in the Maghreb countries.

Followed by these two priorities, are priorities number 2 “Establishing governance adapted to integrated water management”, number 13 “Protection of water quality and biodiversity”, number 9 “Climate change adaptation” and number 11 “Water use efficiency improvement”, with 9, 7, 4 and 4

projects, respectively. This fact reflects the importance of the governance issues, quality of water and biodiversity, climate change and, as well as the need to improve the sustainable use of water.

Below, we set out the projects presented for each of the most prominent priorities mentioned above:

The projects whose main priority is number 4 “capacity building” are:

1. Sustainable Water Integrated Management (SWIM) Program – phase II (European Commission)
2. Mediterranean Water Knowledge Platform (IOW-IME)
3. 5+5 Water Operators’ Partnership Platform (GWOPA)
4. BlueGreen- Networking civil society in the Mediterranean Region (IME/IUCN/ MIO-ECSDE/ RAED / WWF)
5. Establishment of a Water Scarcity and Drought assessment platform (Malta)
6. Training and capacity building in governance and water resources management (Spain, IEA)
7. Enhance the capacities of actors of the water sector in Mauritania (Mauritania)
8. Comparative analysis reuse in the Western Mediterranean(Spain)
9. Sustainability (environmental, economic and social) of dams in the Western Mediterranean (Spain).
10. Renforcement des capacités de gouvernance des ressources en eau (Algeria)
11. Réutilisation des eaux usées épurées et développement de son utilisation (Algeria)
12. Training actions to support the implementation of projects that develop the priorities of the Water Strategy for the Western Mediterranean (IAMZ-CIHEAM).
13. Integrated Water Resources Management and Governance in Morocco (EU/MA)
14. Governance and water resources integrated management in Algeria (EU/ALG)

The majority of projects promoted by regional organisations or observers belong to category number 4 focusing on knowledge exchange and experiences among various countries of the 5+5.

The projects whose main priority is number 10 “Increasing and mobilising the available resources” are:

1. Decentralized treated waste water improvement for irrigation (Tunisia)

2. REUSE-PRO: Professionalizing the water REUSE to tackle water issues in the western Mediterranean (France, Ecofile)
3. Promoting the treated wastewater reuse as a means of coping with climate change (Morocco)
4. Production and distribution of highly polished treated effluent (Malta)
5. Artificial discharge to the groundwater aquifers (Libya)
6. Construction of dams (Libya)
7. Water harvesting systems in urban areas (Tunisia)
8. Création d'un Barrage sur Oued El Htab et création d'un projet de développement intégré dans son Bassin Versant (Tunisia)
9. Dévasement du Barrage El Kébir (Tunisia)
10. Recharge artificielle de la nappe d'El Fahs par les eaux usées traitées (Tunisia)
11. Recharge artificielle de la nappe d'oued Essmar Mednine par les eaux usées traitées (Tunisia)
12. Desalination plants to improve domestic water supply (Libya)

The following most developed priority in the projects is number 2 “Establishing governance adapted to integrated water management”, within which 9 projects based on water governance and on integrated water management are included. The projects are the following:

1. Central database for water resource in Libya (Libya)
2. Monitoring the use of water resources in Morocco (Morocco)
3. Environmental Performance Review (EPR) of the Kingdom of Morocco
4. Enhance the governance of the hydraulic sector in rural and semi-urban areas in Mauritania (Mauritania)
5. Sustainable aquifer management of the high Guadiana (Spain)
6. Water Convention: global framework for trans-boundary water cooperation (UNECE)
7. Innovative hydro-economic modelling as leverage to reduce pressure on water stressed basins in the Western Mediterranean (Italy)
8. Executive Information System for the governance and management of Water Resources in the Western Mediterranean (Italy)

9. A cross-cutting study on a dynamic analysis of the coherence between national policies and the Water Strategy in the Western Mediterranean (Technical Secretariat of the MGW 5+5, MENBO)

As it has been mentioned above, projects that relate to the protection of the quality of water and to biodiversity are also well represented (priority number 13). Within this category, the following 7 projects developed in the southern countries, except for the Wetland of the Albufera and Medwet project, are included. These projects could also be extrapolated to any wetland of the Western Mediterranean.

1. Special Plan for achieving the ecological potential of the RAMSAR wetland of the Albufera Lake (Spain)
2. Promoting sanitation systems in rural areas (Morocco)
3. Minimise pollution effect of the oil disposal swamps to the groundwater aquifer (Libya)
4. Water Sewage Treatment Project (Phase I) (Libya)
5. Improve the quality of drinking water in Mauritania (Mauritania)
6. Floating islands pilot-project of Colibri in Morocco (Morocco/Global Colibri PT)
7. Assessing and managing pressures on water and wetlands in the Mediterranean through the Water Footprint indicators (Medwet)

Followed by priority 13 appears priority 11 “Water use efficiency improvement” with 4 projects which cover the improvement of irrigation efficiency, the decrease of leaks in the network and public awareness campaigns. These projects are the following:

1. Water use monitoring of Irrigated agriculture in ES by earth observation WATER-EO (Spain)
2. Studies and projects for the irrigation project of Gharb (Morocco/Aquealogus PT)
3. Supervise irrigation works in Morocco (Morocco/Coba PT)
4. National Water Conservation Campaign (Malta)

And priority 9 “Climate change adaptation” with 4 projects:

1. Hydrological consequences of climate change in W.MED. (MENBO)
2. Plan bassin d’adaptation au changement climatique Rhône-Méditerranée (France)
3. Adaptation aux conséquences des changements climatiques (Algeria)

4. Climate change mitigation Action in urban areas in the Western Mediterranean (Italy)

None of the 60 projects has number 7 as its main priority “De-pollution of the Mediterranean”. Nevertheless, many of the projects do contribute to the reduction of pollution of the Mediterranean as for example all those related to sanitation, water treatment and improvement of water quality.

Regarding the following projects although priority number 7 has not been considered as the main priority, they still contribute significantly to fulfill this priority. As a result, this is a priority that deserves special attention:

- Implementation of a new law for the protection of aquatic areas (Morocco)
- Monitoring the use of water resources in Morocco (Morocco)
- REUSE-PRO: PROfessionalizing the water REUSE to tackle water issues in the western Mediterranean (Spain)
- Promoting the treated wastewater reuse as a mean of coping with climate change (Morocco)
- Production and distribution of highly polished treated effluent (Malta)
- Recharge artificielle de la nappe d'El Fahs par les eaux usées traitées (Tunisia)
- Special Plan for achieving the ecological potential of the RAMSAR wetland of the Albufera Lake (Spain)
- Promoting sanitation systems in rural areas (Morocco)
- Training actions to support the implementation of projects that develop the priorities of the Water Strategy for the Western Mediterranean (IAMZ-CIHEAM)
- Implementation and Management of Innovative Funding Mechanisms to ensure access to water and sanitation in the Mediterranean (IPEMED)

Each of the remaining priorities has less than four projects.

Priority 1: Developing and starting up clearly defined legal frameworks

- Implementation of a new law for the protection of aquatic areas (Morocco)

Priority 3: Implementing cost-recovery

- Governance & financing for the Mediterranean Water Sector (GWP-Med+OECD)
- Full application of FCR principle and PPP (Italy)

Priority 5: Innovation development in the water sector

- Managed Aquifer Recharge Schemes (Malta)
- Use of innovative technologies and approaches for the monitoring of the water resources of Grombalia region (Tunisia)
- A new approach for multi-stakeholder engagement: the Water Living Lab network (Portugal)

Priority 6: Water-energy-food nexus

- Seawater desalination by using renewable energy (Morocco)
- Towards sustainable intensification in agriculture (Portugal)

Priority 8: Mobilising water-related innovative financing solutions for the application of the Strategy

- Implementation and Management of Innovative Funding Mechanisms to ensure access to water and sanitation in the Mediterranean (IPEMED)

Priority 12: Flood prevention

- Actions of the Global Plan for flood risk in the Júcar river (Spain)

As it has been mentioned above, the projects are not only related with one priority. Rather, if we analyse all the priorities involved, the number of projects affecting each priority can be observed.

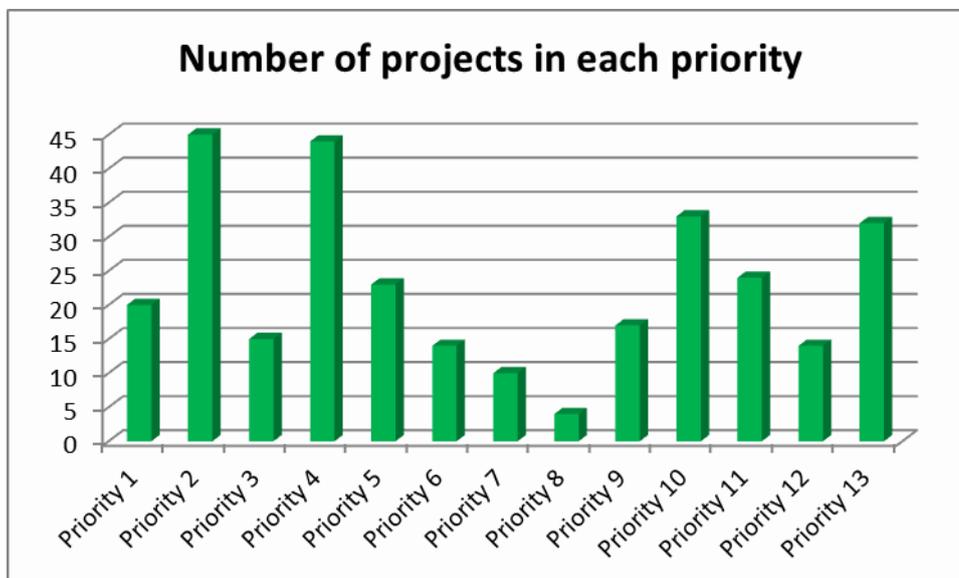


Figure 27 : Number of projects in each priority

According to this analysis the most developed priorities are priorities 4, 2, 10, and 13. And the least developed priority is number 8 “Mobilising water-related innovative financing solutions for the application of the Strategy”.

Moreover, one of the assessing criteria that define the Strategy is the geographical scope where the project would be developed. This is an important aspect as the objective of the 5+5 is the co-operation between its member states, the common work and the mutual support to face the shared water challenges. The added value of most of the projects is their possibility to be extrapolated to other parts of the Western Mediterranean.

According to their scope of application, the projects have been classified in three tiers: local, national and regional (where more than one country of the 5+5 is involved). According to this classification, the number of projects within each of the tiers is the following:

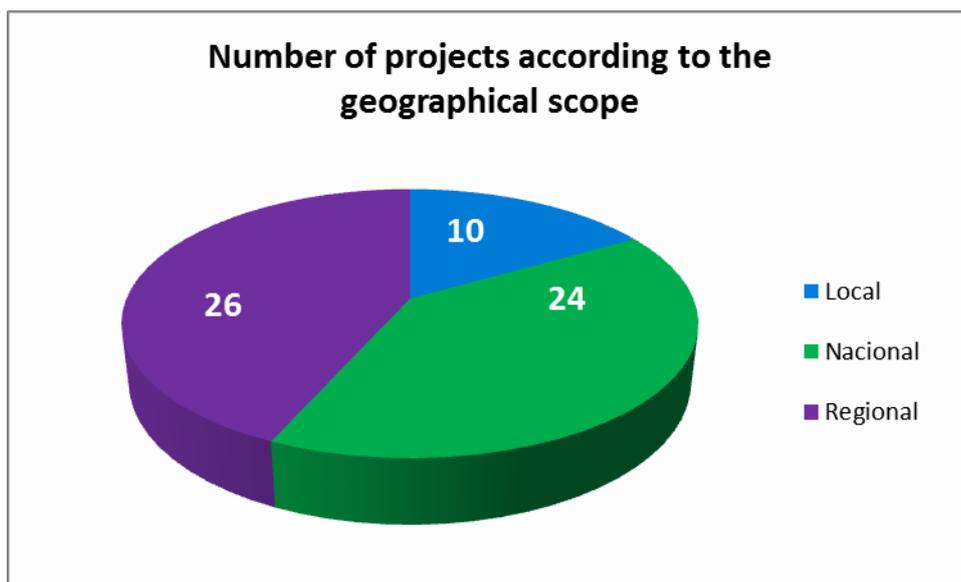


Figure 28 : Number of projects according to the geographical scope

The majority of the projects presented are not being developed at present although some of them belong to the second phase of others already completed as for example the SWIM (Sustainable Water Integrated Management Program) of the European Commission.

There are other projects that are already underway as for example the project promoted by the GWP-Med and the OECE (Governance and Financing for the Mediterranean Water Sector), the project presented by Spain (Special Plan for achieving the ecological potential of the RAMSAR wetland of the Albufera Lake), by Morocco (Promoting sanitation systems in rural areas, Implementation of a new law for the protection of aquatic areas) and by Malta (Production and distribution of highly polished treated effluent).

The rest of the projects have not yet started and are at different stages of preparation.

Regarding the budget of the projects the difference between them considerable and includes projects from 100.000€ to over 120€ millions. In addition, for the majority of projects financing has not been approved yet although many of them indicate possible subsidies and financing covered by the objectives of the Project.

In relation to the timeline for their implementation, there is a high degree of heterogeneity between the different projects as that ranges from some months to over 10 years.