

Projects for the Mediterranean region

Overview of IPEMED proposals: water

Disclaimer

The Institut de Prospective Economique du Monde méditerranéen (institute of economic forecasting for the greater Mediterranean – IPEMED) is a trans-Mediterranean association established under French law. IPEMED is an independent body that acts on a North-South parity basis in all its bodies; its goal is to foster integration between the North and South shores of the Mediterranean by economic means.

This document draws on proposals formulated by IPEMED's networks of experts, business leaders and public officials from both shores of the Mediterranean. The aim is to elaborate high visibility, structure-giving projects that will have a real impact on populations by mobilizing civil society stakeholders North and South, with a particular focus on enterprise.

The goal of this document is to provide material for joint proposals in the priority area of water. It is hoped that convergence between the projects will be achieved at the G-Med summit in July 2008. This document should be read in the context of the comments, criticisms and improvements suggested by those with a stake in the economic development of the Mediterranean region.

CHALLENGES

The Mediterranean region's requirements in terms of access to water and sanitation facilities are monumental, and the cost of capacity building in this domain will be equally monumental. Some 20 million inhabitants of the Southern countries have no access to clean water, and 35 million have no access to sanitation. The water shortage problem in the region is already acute enough, and is set to be exacerbated by the effects of global warming which will hit the Mediterranean particularly badly: 45 million people are affected by water shortages in the region today; by 2025, that figure is expected to rise to 63 million. The challenge over the next twenty years will be to provide the Southern countries with the facilities they need both to access and treat water, and to ensure the upkeep of existing facilities:

- Access to clean water: (i) creation of new production and distribution infrastructure; (ii) improvement of distribution system efficiency; (iii) development of new sources of clean water: desalination and related energy solutions (nuclear in particular), water transfer projects and major infrastructure projects with symbolic value, starting with the project to link the Mediterranean (or Red Sea) and the Dead Sea, etc.;
- Sanitation: the creation of new infrastructure for collecting and treating waste water, development of infrastructure for recycling waste water, etc.

It is of particular importance to give strategic priority to the management of demand. Efficient water management and sound local and national governance are necessary pre-requisites for the success of new water policies and infrastructure investments.

The various stakeholders have different expectations and different contributions to make. For the Northern countries, these include protection of their investments and contracts in the South. For the Southern countries, the needs centre around training, advice and technical assistance aimed at ensuring effective and sustainable management of water services. Good governance and sound water management in the Southern countries will foster private investment and international subsidies, such as are offered by the European Union in the framework of the Horizon 2020 programme (a planned financial instrument composed of loans and subsidies, a regional donors' conference, and identification of priority activities).

The pilot projects to be implemented by the Union for the Mediterranean are designed to meet the needs of North and South alike, encapsulated as follows: rules of governance (administrative, legal, financial, technical) that, although not identical, will be similar enough and shared in a way that will be conducive to genuine rather than mere formalistic cooperation.

The following is required for the region as a whole:

- Set up a political framework with a view to spearheading action at the highest level. A political framework needs to be created so as to ensure that the numerous quality assessments carried out since the Barcelona Convention was signed in 1976 are escalated to the operational phase. The key players here will be environment ministries alongside ministries responsible for economic development and social issues. The sheer scale of the required investment will mean that all stakeholders will need to be mobilized to the task.
- Improve water governance and management and implement effective management principles at all levels of the decision-making process.
- Create a Mediterranean centre for water expertise to act as a data observatory, carry out assessments, and define strategies to be implemented by all stakeholders.
- Create conditions conducive to a stable partnership between public authorities and public and private operators, experience pooling, and decentralized cooperation.

SUMMARY OF PROPOSALS

1. Strategic objectives

A political framework to escalate water issues to the highest level that would mobilize all relevant ministries (environment, social development, economic development, spatial planning).

Priorisation of demand management as opposed to supply-driven policy, with a view to reducing leakage losses and ensuring more efficient management.

The implementation of good governance and effective management principles at all levels of the decision-making process.

2. Creating the tools for a Mediterranean-wide water policy

The proposed **Mediterranean Water Agency** would be set up by the Northern and Southern countries on a parity basis as a forum for high level discussions aimed at creating the basis for a Mediterranean-wide water policy. The Agency could be established on the basis of a strengthened Mediterranean Sustainable Development Commission.

The proposed **Mediterranean Centre for Water Expertise** would be linked directly or indirectly to the Agency and would act as a reference point for countries and other stakeholders alike. It would operate under the auspices of Blue Plan or EMWIS, for example, and would draw on existing bodies to create a regional information and documentation centre, a water data observatory, and a research and expertise centre. It would also provide training and advisory services and facilitate experience pooling between public authorities and stakeholders in the domain of water.

3. Priority programmes

Speed up the implementation of programmes aimed at achieving universal access to drinking water and sanitation so as to meet the Millennium Development Goals.

Launch a major programme for conservation-based water management in the Mediterranean with a view to curtailing demand by a quarter by 2025 (the Blue Plan target).

Launch a programme of operations aimed at depolluting the Mediterranean. A rough estimate of the cost of depolluting the Southern countries alone comes to 35 billion Euros.

Develop new sources of water such as desalination and water transfers (**build infrastructure to link the Mediterranean or the Red Sea to the Dead Sea**) with a view to increasing the water resources of populations experiencing acute shortages and populations threatened by global warming.

METHOD

Existing expertise centres:

- UNEP-MAP, Blue Plan, Mediterranean Water Institute, EMWIS, International Office for Water (OIEau), etc., to be coordinated by the Mediterranean Water Agency and the Mediterranean Centre for Water Expertise.
- CIHEAM for agricultural water.

FINANCING

Financing could be secured via the Mediterranean Bank that IPeMed proposes for creation.

Failing that, other sources of financing could include EU and EIB programmes as well as bilateral and multilateral organizations. Initiatives such as Horizon 2020, that aim to pool public and private financing, would be another promising source of financing; the first conference of Horizon 2020 donors was organized by the European Commission and the EIB on 12-13 March 2008.

A pilot regional investment operation could be launched with the environment at its core. The public and private sector would be invited to invest in the operation, which would be financed by bonds issued and underwritten by the States involved.

1. Place water at the top of the political agenda

Topics such as energy and agriculture are high on the political agenda of the Mediterranean countries, but water has failed to receive due political attention. For a host of reasons, water merits being escalated to the highest political level: the key role of water in all aspects of economic and social development; the threat of shortages of this vulnerable, intensively exploited resource, which is further endangered by the consequences of global warming; the fact that all sectors of the economy are in competition for this resource; and the potential for water-related conflict in the region.

Mobilizing political decision-makers will require:

- (i) *A clear and unambiguous consensus* on the impact of global warming and the scale and nature of the water problem in the Mediterranean region;
- (ii) *A shift in the frame of reference from a purely environmental context* to encompass other issues such as public health (water-borne diseases caused by lack of access to clean water and sanitation), social risks (poverty in under-privileged urban areas where water services are lacking), and, on the upside, economic potential (the potential for property value appreciation when clean water and sanitation services are made available, national development leveraged through the rational expansion of water infrastructure), and the potential for increasing tourism (by cleaning up beaches and reducing local competition and conflict related to access to water). In other words, the water problem needs to be tackled from a political, social and economic angle as well as the traditional economic angle;
- (iii) *The proposal of joint action and tools in the Mediterranean region*, taking care however to avoid suggesting that national bodies should be bypassed in the search for a solution.

2. Prioritize demand-driven policy over its supply-driven counterpart

In the area of water, priority has hitherto been focused on building new infrastructure. There are a number of reasons for this: operationally and politically speaking, building new infrastructure is, in a sense, the easy option. Building infrastructure is extremely costly, and, all too often, there is too little focus on improving infrastructure management and maintenance. This means that the cost of running the infrastructure becomes inordinately high. At the same time, sound policies rooted in demand management would lead to massive reductions in water losses and give added impetus to territorial development. Demand-driven policy would aim to (i) reduce losses and allocate the resource between different types of use, (ii) increase the added value from the quantities of water allocated to different types of use via more rational use of the resource, and (iii) meet economic and social needs at a reduced cost. The Blue Plan states that if measures were taken to reduce leaks in delivery networks and to promote more economic use of the resource, the entire region could reduce demand by a quarter by 2025. In money terms, that translates into cost savings of 11 billion Euros a year.

There would be two further advantages to according strategic priority to demand management:

- Efforts to reduce leaks in delivery networks yield fast and tangible results. This is in contrast to major infrastructure programmes and structural projects, which take years to come on line. This kind of visible progress would instill a renewed sense of trust in the populations of the Mediterranean countries.
- The focus would be shifted to efficient management, which is at the crux of the water problem in the region.

3. Enhance water management governance at all levels of the decision-making process

In the Mediterranean countries, water management is all too often entrusted to under-resourced administrations, enterprises, and water supply boards. To make matters worse, decisions tend to be made without any coordination between ministries, reservoir administrations and water supply boards, and there is a generalized lack of mechanisms for apportioning the resource rationally. This lack of coordination and information sharing is deeply harmful, both financially and environmentally.

The following avenues could be explored with a view to improving water management governance:

- At the central government level:

The aim would be to (i) involve all sectors concerned (agriculture, spatial planning, industry, tourism, etc.), (ii) clearly segregate roles and responsibilities and define a legislative framework for water management, particularly as regards mobilizing the private sector and PPPs. A water policy enforcement authority (or "water police") would need to be created and endowed with adequate resources so as to enforce compliance with water legislation.

- At the local government level:

Local authorities responsible for water management should be mobilized, or at the very least consulted and treated as partners if decentralization to the local level were to be judged premature. Local contexts are key considerations in clean water distribution and sanitation. The vicious circle whereby responsibility tends not to be delegated to local authorities on the grounds that they lack the requisite capacity and skills needs to be gradually broken.

As local authorities take on an increasing role, support should be made available in the form of new types of partnerships between local authorities in the Northern countries and their counterparts in the South and East Mediterranean. Such partnerships could take the form of North-South and South-South cooperation agreements and twinning arrangements between sub-sovereign institutions and public service bodies with a view to encouraging the pooling of information, expertise, experience and best practices.

- At the operational level: improve water service management

The task of improving water supply performance (clean water supply and management of irrigated land) will require the development of skills in the technical and financial spheres (implementation and management capacity). This can be achieved through training and experience sharing programmes, and via the implementation of quality standards and targets aimed at ensuring a guaranteed level of service. Public authorities need to fix service quality targets and rules for operators to whom responsibility for managing and operating water supply services has been delegated. To this end, operators must be made accountable to public authorities in terms of results and the means used to achieve them.

Several principles need to be adhered to at the various levels of the decision-making process to ensure effective water service management:

- The adoption of sustainable and interwoven tariff policies

Tariff policy is an instrument of economic and financial management of water supply services. It is also a tool for fostering solidarity between users and territories (cross-subsidization). A sound tariff policy is a way of promoting responsible consumption among users. Affordability issues for the most under-privileged could be resolved via cross subsidies and targeted assistance. These should be reserved for those in real need so as to avoid undue subsidies to those who do not need them. Generally speaking, subsidies should target actual consumption rather than connection to the mains supply, as most users are already connected. For those who lack such a connection, appropriate subsidies should be made available.

The misguided notion that water should be free and the widespread practice of under-charging for water need to be uprooted: both are synonymous with wastage and unsustainability, as inadequate maintenance rapidly makes for a fast deteriorating service. Tariffs need to be fixed at a level that at the very least covers maintenance and operating costs. Striking this balance is crucial to ensuring sustainability. As performance improves, system renewal costs could be partially or wholly covered from tariff income. The principle of "water paying for water" as enshrined in the Algerian

Water Code, for instance, could serve as a management benchmark and negotiating principle for PPP contracts.

- A contract-based approach (public/public and public/private)

A contract based approach is an excellent way of setting clear objectives and terms of reference and creating monitoring, control and assessment tools backed up by incentives and sanctions. It is a powerful way of getting parties to move in the right direction and cooperate. The conclusion of contracts following a tender and negotiation process is now the norm as regards relations between public authorities and private operators. Similar mechanisms are needed for public operators too, even where no tender is arranged, so as to ensure clear segregation of responsibilities between the operator and the public authority. Moreover, the mere possibility of the sector being opened up to competition can act as a powerful incentive to a public operator to improve performance.

- Integrated management of demand and resources

Most, if not all, Mediterranean countries, are faced with a number of challenges at once: how to manage their limited water resources in a sustainable manner, how to provide access to clean water and sanitation to populations that lack such access, and how to encourage water saving behaviour in consumers?

These challenges call for policies focused on managing demand and policies aimed at integrated management of catchments. The implementation of these management principles was identified as the first area of priority action of the Mediterranean Strategy for Sustainable Development adopted in 2005 by the Mediterranean countries and the European Union.

- Fostering a "customer-oriented" culture

Public enterprises charged with supplying and managing water tend to have little focus on customer service; this often translates into a poor level of service quality. The task of fostering a customer-oriented culture requires (i) greater attentiveness to the needs and expectations of customers, (ii) the creation of marketing functions, (iii) better management transparency, and (iv) the implementation of contracts specifying quality objectives to enable comparison and competition with other cities and sectors.

- Development of skills

The skills required for effective management of water resources are as much technical, economic, legal, administrative and financial as they are managerial or commercial. Different skill sets are required for different functions:

- Infrastructure project management, elaboration of policies and performance of assessments, the setting of realistic objectives, evaluation of results, capacity to elaborate investment projects and study proposals, to organize tenders, and to negotiate with and supervise the operator;
- The capacity to operate the service as professionally as possible and to manage human resources and industrial processes and procedures.

Where internal skills are lacking or insufficient, it is important to develop training programmes and to bring in outside help in the form of consultants, experts and recognized professionals. NGOs and international organizations are another important source of external assistance.

- Adapting to climate change

Water management policies need to be adapted to take account of global warming. There is an urgent need to evaluate the hydrological consequences of global warming based on various scenarios, and to measure its impact on the different types of water consumption. This will require further investment into research on climate change and its impact on fresh water availability, and will ultimately require adaptation in all sectors that consume water.

1. Create a Mediterranean Water Agency by upgrading the MCSD

Lay the groundwork for a Mediterranean-wide policy on water

The countries that surround the international public asset that is the Mediterranean are facing the same challenges as regards water; this factor alone justifies the creation of a common policy on water for the region. The implementation of a programme to depollute and preserve the Mediterranean and the cross-border management of water resources and water transfers will require a joint effort to more clearly define common needs and goals. Regional cooperation is a necessary prerequisite for sustainable and equitable management and sharing of water resources, with a view to avoiding the water-related conflicts that threaten to come to a head in the 21st century.

The Southern countries, meanwhile, have a vested interest in pooling their efforts so as to meet the conditions for receiving aid from the North. The challenges here include integrating principles of good governance into water management, implementing strategies aimed at improving the efficiency of water transport and distribution, and adhering to the principle of a balance in water tariff setting. A joint effort to meet those challenges would facilitate the deployment of public aid (in the "output based aid" framework increasingly used by the World Bank and the French Development Agency) and would encourage private investment in the sector.

PROPOSAL: *Lay the groundwork for the creation of a Mediterranean Water Agency (MWA) by raising the political profile of the MCSD*

The creation of an independent body to facilitate regular high-level meetings between governments and other stakeholders (local authorities, public and private operators, users) from the North and South of the Mediterranean would speed up political decision-making aimed at improving water management and elaborating a common water policy in the region. The goal would be (i) to reaffirm the essential role of water in economic and human development and its unique role in the overall framework of sustainable development, and (ii) to facilitate the technical coordination of the various water-related cooperation programmes and initiatives. It would also be a way of better organizing, and possibly grouping, the various operators and other stakeholders. So as to avoid adding to the confusion that already exists in the sector, the Agency would act in accordance with the "one-window" approach to coordinate policies and projects, and would have a high profile among political decision makers.

The Mediterranean Water Agency could ultimately be endowed with arbitration powers, to be exercised in the event of conflict over cross-border water resources, for instance.

Method

The Mediterranean Water Agency could initially be set up on the basis of the Mediterranean Commission for Sustainable Development (MCSD), which is a forum for dialogue that issues strategic recommendations for its contracting parties (Mediterranean countries and the European Union) on the major challenges of sustainable development. The MCSD is a highly respected body, but its role is as yet consultative only: it needs to be given a higher level of political governance and its competencies need to be expanded.

2. Create a Mediterranean Centre for Water Expertise (MCWE)

Existing bodies: mission redundancy and programmes often in competition

There are more than thirty different institutions in existence today with a remit for water-related issues. Their policies are compartmentalized, their objectives are often contradictory, and their programmes lack coordination. The resulting confusion is hampering the implementation of initiatives and undermining their outcomes. The creation of a Mediterranean Centre for Water Expertise as a reference tool for the Mediterranean Water Agency would draw together and considerably strengthen the existing institutions and initiatives.

PROPOSAL: Create a Mediterranean Centre for Water Expertise by coordinating existing international organisations

The Centre would have the following functions:

- That of a *regional information and documentation centre* that would centralize existing studies on water and make them available to all interested parties.
- That of a *water observatory* that would collate water-related data. The challenge here will be to persuade States to work together on the creation of common standards in the area of documentation and statistics.
- That of an *expertise and research centre*: inspiration would be taken from the Asian Development Bank's Asian Water Development Outlook (AWDO) with a view to setting up a "Med Water Hub" under the auspices of the CCME. The expertise and research centre would provide data and material to feed into the reflections on the formulation of a Mediterranean water policy.
- That of a *training institute*: a Mediterranean-wide network of training centres for water professionals that would be financed by operators. Training needs encompass both initial training and ongoing training; management executives and employees (with a view to achieving balanced management of services, organizing human resources and meeting users' needs); and the maintenance and operational engineers and technicians needed to run water treatment plants and collection and distribution networks and to supervise operator teams, and to run infrastructure equipment at design capacity and prevent premature degradation of equipment. The network of training centres could act as a vehicle for implementing a regional programme of training based on shared instruments (coordinated streaming of training courses, training kit, etc.) and the pooling of experience.
- That of *advisory services and experience pooling forum*: symposia and colloquies could be organized on a regular basis to disseminate good practices and exemplary success stories. This would lend visibility to actions undertaken in the framework of decentralized cooperation between local authorities from North and South, and to South-South partnerships. Self-assessment procedures (diagnostic procedures) and mutual or third-party assessment procedures would be formulated on the basis of benchmarks defined jointly by the stakeholders within the Mediterranean Water Agency so as to foster awareness raising and persuade public authorities to commit to change.

The Centre could be set up on the basis of EMWIS or Blue Plan, which would be endowed with better resources and added political legitimacy. Each of the Centre's instruments would be based on a lead institution, as follows:

- The Mediterranean information and documentation centre could be based on a strengthened EMWIS.
- The Mediterranean Water Observatory could be based on the Blue Plan, which already has the requisite expertise.
- Mediterranean-wide network of training centres for water professionals could be based on the International Office for Water (OIEau), which has broad experience in professional training at all levels. The International Office for Water has an international network of professional training centres, and will be hosting a conference in November 2008 on the theme of its international network. A Mediterranean-specific network could be created within the international network.
- The experience pooling function could be based on a flexible body whose role would be to draw together the activities of the Mediterranean Water Institute, EMWIS, and UNEP/MAP.

1. Give new impetus to programmes aimed at securing access for all to clean water and sanitation, implement depollution programmes aimed at cleaning up the Mediterranean

The nature of the requirements is known, but quantified data are lacking

For the countries of the South, it is a matter of social and environmental urgency to endow themselves with the infrastructure and installations needed to ensure access for all to clean water and sanitation. It is a matter of equal urgency for them to build the capacity to manage and maintain that infrastructure.

The nature of the requirements in terms of securing access to clean water and sanitation is common knowledge. But there is a dearth of quantified data on infrastructure costs, institutional costs, and the potential cost of failure to meet the challenge. The financing provided by donors (EIB, World Bank, bilateral cooperation agreements, and public development assistance) is inadequate in the face of what is at stake. There is potential for complementing public financing with private financing, both in infrastructure development (PPPs, farming out contracts, concessions) and in management.

According to initial estimates, providing universal access to sufficient quantities of clean water (120 litres/person/day) will cost around **15 billion Euros** for the entire Mediterranean region (North, South, East) through to 2015. Providing universal access to **sanitation** will cost an estimated **35 billion Euros** through to 2015.

PROPOSAL: *Speed up the implementation of programmes aimed at securing access for all to clean water and sanitation*

The challenge here will be to implement major programmes in each country aimed at securing access to clean water and sanitation for the greatest possible number of people. For the countries of the South, the success of these programmes will depend on:

- Adequate financial and technical resources;
- Technical assistance, transfer of knowledge, and training and advice in the state-of-the-art and sustainable management of water and sanitation services.

Method

- Reaffirm the commitment of States to achieve the MDGs;
- Diagnose the needs of each country and then define a national programme aimed at sourcing and delivering clean water and a separate programme of sanitation; have the programmes validated by each State;
- Organize a donors conference to coordinate donor activities and to rally the private sector too, for example by broadening the scope of the Horizon 2020 initiative.
- The issue of how these projects will be financed is the subject of a separate IPEMed proposal concerning the creation of a Mediterranean Bank. The Mediterranean Bank would bring together the public and private sectors. Another related IPEMed proposal concerns the improvement of the technical and legislative framework governing investment in the region with a view to fostering private sector participation.

PROPOSAL: *Structure-giving programmes aimed at developing new resources*

In some countries of the South and East Mediterranean, and in some regions of the Northern countries, renewable sources of water are either no longer sufficient, or soon to be no longer sufficient to cover demand. Hence the need to look at non-conventional sources: reutilization of treated waste water, desalination of brackish water, desalination of sea water, construction of water transfer infrastructure (a link between the Mediterranean and the Dead Sea, for instance).

A joint programme of research and experimentation on production techniques, particularly those that use renewable energy, could be implemented with a view to fostering the development of such new sources of water.

A regional **technology hub** could be created to conduct research into desalination.

PROPOSAL: *Depolluting the Mediterranean (Horizon 2020 initiative)*

[source: Antoine-Tristan Mocilnikar]

At the 10th Euro-Mediterranean Summit in 2005, Ministers of the environment launched the Horizon 2020 initiative with the aim of depolluting the Mediterranean by 2020. A timetable of actions for the initial phase of Horizon 2020 through to 2013 was adopted during the 3rd Euro-Mediterranean Ministerial Conference on the environment held at Cairo on 20 November, 2006. The key goal of the initiative is to tackle industrial emissions, urban waste and urban waste water. The initiative is designed to improve the outlook for the tourism sector, to stem the decline in fish stocks, and to provide high quality clean water to millions of citizens in the region.

A study commissioned by the European Commission and financed by the EIB identified 43 so-called "hot-spot" projects. The results of the study were the subject of an initial set of discussions organized by the European Commission and the EIB on 12-13 March, 2008. The discussions involved the regional action centres of the Barcelona Convention's Euro-Mediterranean Partnership (EMP), as well as donors, European countries, South and East Mediterranean countries, and NGOs. A decision was made to create a "core group" to be chaired by the donors and open to all concerned parties (States, EMP regional action centres, NGOs), with a view to placing the countries that surround the Mediterranean on an equal footing in terms of governance. The "core group" is tasked with drawing up a list of key projects, shortlisting around ten priority projects, and measuring the economic, financial, environmental and social sustainability of the projects.

Method

This initiative needs to be bolstered as a flagship approach to rallying States, donors, the private sector and civil society to the task of financing water-related projects. The Mediterranean Water Agency and the Mediterranean Centre for Water Expertise could contribute to this endeavour.

2. Improve water efficiency

High potential for reducing demand for water

[source: Blue Plan]

Demand for water in the Mediterranean countries is expected to rise by 50km³ by 2025 to reach 330km³/annum. This level of demand will be very difficult to reconcile with the quantities of available renewable water resources.

In some cities of the South, losses and wastage account for 50% of total demand for water; this figure reaches more than 70% in agricultural irrigation. In distribution networks, losses stemming from transport, leakage and poor utilization of water are estimated to be in excess of 120km³/annum. There is major potential for much more effective utilization of water downstream too, particularly in agriculture (effective irrigation techniques, change in crops, etc.).

PROPOSAL: *Launch a major plan for water conservation in the Mediterranean*

The plan's objective would be to **reduce overall demand for water by a quarter by 2025**. The 25% target is taken from the report entitled "*A sustainable future for the Mediterranean: The Blue Plan's environment and development outlook*" (2005), which estimates total potential savings at 70km³ out of a total demand among all Mediterranean countries at 290km³ in 2000, and 85km³/annum out of a total water demand of 330km³/annum in 2025. Measures could be rapidly undertaken by the countries concerned to reduce losses from leakage in clean water and irrigation water systems, to recycle 50% of industrial water, and to launch policies aimed at the conservation-based management of water.

PROPOSAL: *Priority benchmarks for the assessment of water conservation efforts*

Network efficiency could be used as a watertight benchmark for measuring compliance with aid conditions, along the lines of the approach sometimes used by the World Bank. Country-specific guidelines could be elaborated on the basis of assessments carried out using the network efficiency benchmark. The benchmark assessments could also be used by the donors and development agencies and the States concerned to devise joint strategies.

A number of water efficiency benchmarks could be used to track individual country efforts to conserve water by managing demand and reducing transport-related losses for each form of water usage: clean water for human consumption, irrigation and other mainly industrial uses.

Method

- Encourage States to adopt demand management principles and practices with a view to tackling wastage.
- Launch a Mediterranean-wide programme for the revamping and modernization of urban and agricultural water supply installations and infrastructure and for the development of water recycling in industry, country by country. The Blue Plan proposes the following objectives:
 - o Clean water in urban and rural settlements: reduce distribution losses to 15% and leaks at the faucet to 10%;
 - o Irrigation: reduce transport and distribution losses to 10% and raise plot irrigation efficiency to 80%;
 - o Industry: aim for 50% recycling.
- Improvements in network efficiency measured using the priority benchmarks could be used as a pre-condition for the financing of clean water delivery networks, irrigation networks, and sanitation infrastructure.