

National report on
Monitoring progress and promotion of water demand management policies
TUNISIA

Overview and conclusion

1. In Tunisia the exploitation of conventional water resources will reach a limit in the relatively near future. The country could of course protect itself against water shortages that have become structural ones by developing more and more unconventional supply methods, such as the reusing of treated waste water, the developing of salt water, desalting of briny or marine water or the importing of « virtual » water to satisfy the country's food needs (importation of cereals especially), but this option would be far more costly in the medium and long term and could be difficult to justify from a safety and financial point of view, when almost all of the water demand is assigned to the economic sectors (irrigation, industry, tourism). Besides this, environmental demand will continue to grow in the future, which will heighten the trend towards water shortage.

That is why Tunisia is being called upon to tackle a new stage in the development of its water resources more vigorously. While continuing to develop its policy for the mobilising of available water resources, the country has been induced to give up a strategy essentially based on supply that it had followed for a long time in favour of another approach based on demand management and the adopting of a system of integrated planning that would integrate all the water consumer sectors. This would require the implementing of deep-rooted technical, economic and institutional reforms.

The challenge for the future will probably be for the country to improve its ability to preserve and develop its low resources, rather than to create new resources.

2. With the prospect of future and perhaps imminent shortages, and of a reduction in conventional resources, several important technical questions will be raised in the framework of an evolving strategy, starting with the setting up of the capacity necessary to provide the planning and coordination of the water resources for all the sectors concerned - agriculture, drinking water, tourism, industry, draining and recycling of waste water, and so on - and this globally and over the long term. This management should also integrate the economic and environmental prospects, as well as the prospects for sustainable regional development. Other important aspects concern the necessity to improve the functioning of the water facilities and to manage adapted technologies in order to use existing resources as well as possible, including taking measures aimed at maintaining water quality and at finding solutions for the problems of sedimentation of reservoirs, strengthening of the control of surface water, and especially of groundwater that risks great overexploiting bringing with it serious social and economic consequences, and an extension of environmental planning in order to protect the ecosystems.
3. Independently of technical considerations, the adopting of a strategy based on demand will mean readapting the institutional and control instruments for the water sector, especially changing the water regulations in order to take into account shortage risks and the growing value of the resource, strengthening decentralisation and the autonomy of the institutions to ensure their own viability over the long term, identifying the areas in which the participation of the private sector and of users could be a pledge for more efficiency, revising of the terms of public funding for the water sector and assessing of the water structures and tariffing rates for the various uses. It is just as important to inform consumers and make them aware of the economic value of water and of the risk of future shortage. This implies strengthening joint management of resources and extending awareness-raising about agricultural activities.

4. The substantial economy that has to be made in the future should come from all the water use sectors, but mainly from irrigation which monopolises 80% of the available resources.

Apart from improvement in technical efficiency for water used for irrigation, the extension of surface areas for development in the years to come should be examined from a long term macro-economic point of view and according to the possibilities for the recycling of treated waste water and the using of salt water. This also implies that the cost price of water used for the irrigation of crops, compared to the market price for these products should be assessed. The requirements of self-sufficiency in food on the one hand, and Mediterranean competition for these products, on the other hand, call for a long term view of the agricultural policy for irrigation.

Moreover, this rational water management should be extended to all of the rainfed agriculture (green water), which recovers the largest share of the natural water resources and ensures about 70% in value of the total agricultural production. This wider view of the problem of agricultural water that goes beyond the classical notion of mobilisable resources in great quantity (or blue water) offers many possibilities and is the most adapted to the Mediterranean situation.

Sustained agricultural production on land that is not irrigated demands optimal use of the physical environment of each land-crop-climate ecosystem. In rainy areas, the measures of primary importance are those for the conserving of water and land resources and for the improving of agricultural activities likely to control run-off and water recovery. To that should be added a selection of high yield crops that tolerate drought and that are able to make good use of the groundwater reserves.

5. Safety measures should be planned for water, a sensitive but vital commodity. These should include the protection of works against natural or provoked disasters, measures to protect supplies for the vital areas of the country in case of danger, and general planning of nationwide, regional and local operations that take into account the various hazards that could lead to water shortage. Indeed, social and economic progress induces changes that make water much more fragile.

Finally, Tunisia enjoys relative autonomy for its water resources compared to its neighbours. Major conflicts do not seem likely for the apportioning of reduced shared resources such as those of the Medjerda basin or the resources in the Sahara. Nevertheless, strengthening of this safety measure by close trans-border cooperation via possible transfers of resources that benefit mutually especially in periods of shortage, and via closer collaboration on a wider scale, such as North African or Mediterranean collaboration.