

WATER

3% of world water resources for 7% of its population

Water resources in the Mediterranean countries are limited and unequally distributed in space and in time, and climate change is likely to make for less and even more irregular rainfall. Water provision is a matter of immense concern for agriculture, given the combination of random rainfall patterns and drought.

- ✓ Agriculture absorbs 63% of total water demand (42% in the North – 81% in the South and East). By 2030, the area under irrigation could well have risen by 38% in the South and 58% in the East (FAO)
- ✓ 25% of water demand could be saved through better management (70 km³/yr, saved from losses of 110km³/yr from a total demand of 281 km³/yr)
- ✓ 24% (190km³) = the water losses it is estimated could be avoided through better management
- ✓ 180 million « water-poor» with less than 1000 m³ per capita per year throughout entire countries. This figure could reach 249 million by 2025.
- ✓ 59 million people short of water (less than 500 m³)
- ✓ 20 million people have no access to drinking water (South and East)
- ✓ 6 countries together (Cyprus, Israel, Libya, Malta, Palestinian Territories) have less than 1% of natural renewable water resources.
- ✓ Montenegro's per capita natural resources (>25 000 M³/yr) are 500 times bigger than those of Gaza, the most « impoverished » area.

To meet water demand, national strategies focus on increasing water supply by constructing more reservoirs and drilling, at the risk of exhausting some fossil resources, destroying aquifers through salt water seepage, degrading water quality and that of the aquatic systems, reducing flow and seeing the wetlands shrink. Moreover, many dams in the Southern and Eastern countries will have a limited lifespan due to reservoirs silting up, and only a handful of countries still have any potential to tap into the long term.

Most if not all Mediterranean countries are simultaneously facing various water-related issues: how can they sustainably manage their limited water resources, how can they ensure access to drinking water for those people still not supplied, and how can they teach users to use water more sparingly.

The first point recognised in the Blue Plan's work is that water demand and availability trends are incompatible.

The alternative scenario put forward by the Blue Plan suggests **improved water demand management (WDM) and would allow a quarter of the demand to be saved**, i.e. some 86 km³ in 2025.

The greatest potential lies in agriculture with almost 65% of total potential water savings identified in the Mediterranean, taking into account:

- Transport losses halved
- Irrigation water efficiency up to 80%
- Equipment modernised

With a 50% recycling rate industry could make 22% water savings.

Finally, urban drinking water supply could achieve 13% savings by halving transport losses and user-level leakage to reach 15% and 10% respectively.

These global estimates are based on specific experiments essentially conducted in Tunisia and Morocco

Tunisia has introduced a national strategy for saving irrigation water, which involves setting up user associations, with charging having gradually allowed costs to be recouped, and targeted financial instruments for equipping farms with water-friendly technology and supporting farmers' incomes. Since 1996 this policy has led to a stabilisation in the demand for water for irrigation, despite huge growth in the farming sector, and has meant that the demands of both the tourist sector- a source of currency- and the towns- a source of social peace- have been secured.

In **Morocco**, increasing water demand in the Rabat-Casablanca conurbation has been noticeably curbed over the last fifteen years in spite of surging urban growth. Improved water management (reducing network leakage, progressive charging, systematic metering, marked awareness raising amongst consumers) has meant that some major investments (dams, transfer channels) initially planned for in the 1980 master plan have been postponed if not cancelled, whilst at the same time needs could still be met. These investments would have been difficult to finance without going further into debt and could well have proved to be superfluous in the long term.

The shift from a trend scenario to a more sustainable one can only come about progressively, through reforms which take account of integrated water resource management in all policies- agricultural, urban, industrial...- and which provide the financial means for its implementation.

The Blue Plan's forthcoming activities in the water sector will focus on:

- Preparation for the 5th World Water Forum to be held in 2009 in Turkey
- Continuing its work, particularly on water savings and policy in the Mediterranean countries
- Continuing the exchange of good practices between countries following the 3rd regional workshop on water demand management (March 2007) and in preparation for the 4th workshop in 2012.