

Is water demand becoming more moderate?

Better water demand management, especially for agriculture, is one of the priority actions recommended in the framework of the Mediterranean Strategy for Sustainable Development.

This implies stabilising water demand (reducing in the north and controlled increase in the south and the east). But water demand and growth in GDP should also be decoupled, while increasing the value added per cubic metre of water used.

Better demand management could also bring about a decoupling of the rise in irrigated production and the rise in the use of water for irrigation.

Overall, the evolution in water demand is alarming in the Mediterranean countries because this resource is often scarce.

The evolution in demand over the last ten years is different from one country to the next. In Croatia there has been a 48% reduction and a reduction of 30% in Slovenia, while Albania has increased its demand by 21% and Algeria by 31%.

The share of water for agriculture remains high in all the countries, often higher than 50% and even 90% in Syria and Morocco.

In some countries such as Croatia where green water (rainwater evapo-transpired by vegetation) is used for agriculture, demand for irrigation purposes is low.

The volume of water used to produce 1000 dollars of agricultural value added goes from about 15 m³ in Slovenia to more than 3000 m³ in Syria and Egypt.

Drinking water demand per inhabitant varies greatly from one country to the next, from fewer than 30 m³/year/inhabitant (80 litres/day) to about 150 m³/year/inhabitant (410 litres/day).

Definition

Total water demand is defined as the sum of the volumes of water mobilised to meet the various uses, including the quantities lost in production, transport and use.

It corresponds to the sum of the water withdrawals, of unconventional production (desalination, reuse, and so on) and of imports less exports.

Water demand compared to GDP per sector of activity corresponds to the demand for water used divided by the value added in the same sector (agriculture, industry).

Precautions / Notes

For agriculture, the indicator could be even more polished by calculating the ratio of irrigation water demand to the value added of the irrigated production.

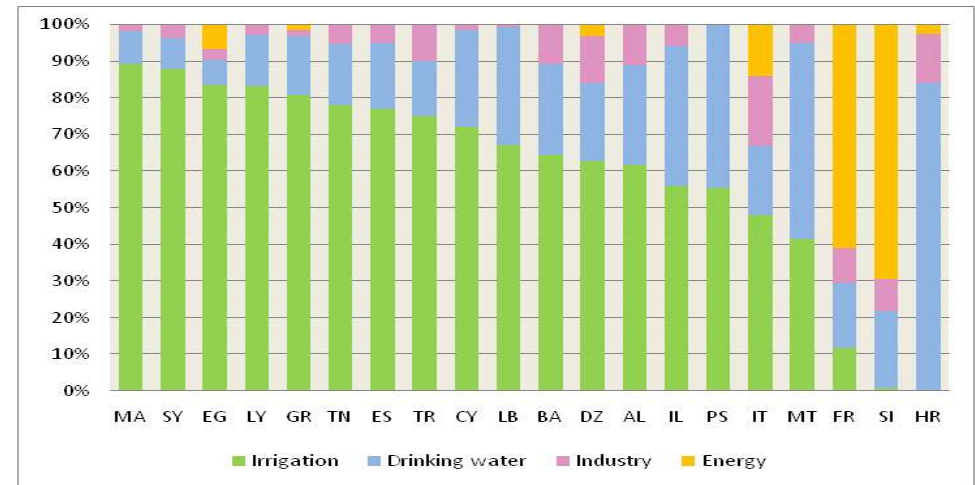
Sources / References

FAO-Aquastat, Eurostat, World Resources Institute, Plan Bleu from various national sources, including the reports presented at the regional workshop in Saragossa in 2007.

World Bank for the agricultural value added and the population.

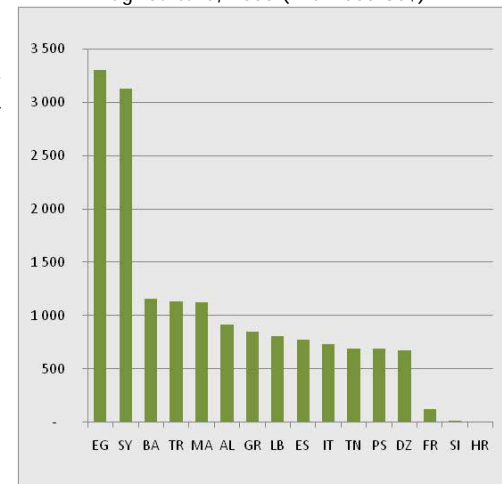
2. Water demand, total and by sector, compared to GDP

Water demand by sector (period 2005-2007)

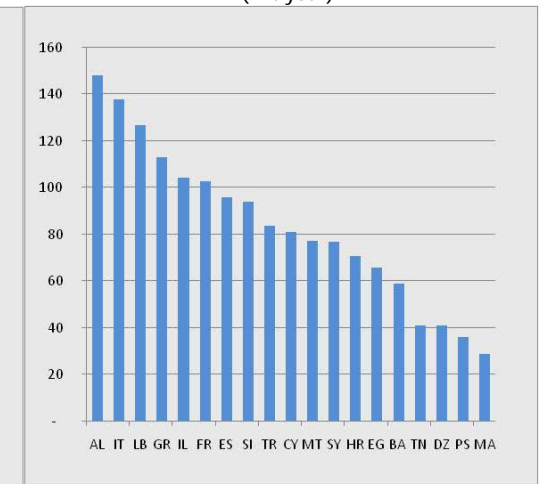


Source: Plan Bleu from national sources

Water demand in agriculture / Added value in agriculture, 2005 (m³/ 1000 US\$)



Drinking water demand per inhabitant, 2005 (m³/year)



Source: Plan Bleu from national sources