

Analysis

Pressure on water resources in the Mediterranean Region

In aggregate terms there is no lack of water in the Mediterranean Region. But geographical distribution of rainfall is very uneven and there is a marked shortage of water in the South and East. Using the Falkenmark water stress index (less than 1000 m³/inhabitant/year) as a benchmark, we find that 60% of all people facing water scarcity in the world are concentrated in these areas.

At country level, Morocco, Egypt and Syria are in a situation of water stress (with between 1000 and 500 m³/inhabitant/year), while Libya, Israel, the Palestinian territories, Tunisia, Jordan and Algeria are already facing a serious water crisis (less than 500 m³/inhabitant/year). According to the Blue Plan trend scenario, the annual per capita water supply could be less than 1000 m³ in all southern and eastern Mediterranean countries by 2025 and less than 500 m³ in all countries but Lebanon by 2050.

But the problem is not only one of shortage: many Mediterraneans are supplied with water of extremely poor quality owing to pollution of ground and surface water. The quality of potable water supplies tends to be worse for rural than for urban populations and this disparity is particularly marked in Tunisia, Morocco and Syria.

But the extent of the water crisis should not blind us to the expertise shown by Mediterranean people in mobilising the resource. Forced to cope with rainfall patterns that may change in the course of the year or from one year to another, the region's inhabitants have been building water supply facilities for centuries. But despite their efforts it is not always possible to mobilise the resource.

It is therefore necessary to distinguish between existing resources, which cannot always be accessed using hydraulic techniques, and exploitable resources, which can be. In Egypt, where the Lake Nasser development makes it possible to mobilise almost all the water carried by the Nile, there is very little difference between the two. But in other countries, such as France, Turkey and Spain, the distinction is an important one. Water may be inaccessible for various reasons: technical (topography is a notable factor), environmental (ecological standards limit the amount that can be abstracted) or geopolitical (the presence of countries downstream limits the amount that can be abstracted, as in the case of Turkey).

Although hydraulic engineering techniques were first used in the region more than 2000 years ago and were rapidly developed in the Arabian world (witness the construction of wells and reservoirs along the route between Baghdad and Mecca under Harun Al Raschid), water supply management only became an important policy issue in the nineteen-fifties. Demographic pressure forced states to build more and more dams and pumping facilities and extend water supply infrastructure, which were directed increasingly towards urban and coastal areas where most of the Mediterranean population live and work. By mobilising the resource in this way they provided more or less efficiently for their potable, industrial and agricultural water requirements. Since 1970 abstraction of water in the region as a whole has increased by 45%. But while it has increased only moderately in the European countries, where intensive farming has reached its limit, and in certain countries to the South (Cyprus, Malta, Israel and Egypt) where demand for water is subject to technical and political constraints, it has more than doubled in all the other countries.

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CIHEAM

Founded in 1962, CIHEAM is an intergovernmental organisation comprising thirteen member countries from the Mediterranean Basin.

CIHEAM is made up of a General Secretariat (Paris) and four Mediterranean Agronomic Institutes (Bari, Chania, Montpellier and Zaragoza)

In pursuing its three central missions (education, research and cooperation) CIHEAM has established itself as a reference in its fields of activity: Mediterranean agriculture, food and rural development.

Most of the water abstracted is used for agricultural purposes, in countries to the South and East of the basin at any rate, where it accounts for 80 to 85% of total consumption. These countries have to increase their food supply to provide for their booming populations, which means developing irrigated agriculture, which is more productive and above all more reliable than rain-fed agriculture. Over the past few decades (1981 to 2001) the countries that have been most active in increasing the area of irrigated land have been Syria (124%), Algeria (114%), Jordan and Libya (109% each).

With supplies under severe pressure, governments of Mediterranean countries must respond to the often very vehement debate on water allocation, bearing in mind that the range of available options in water supply management policy is rather narrow.

Dam construction may not be the only possibility offered by large-scale hydraulic engineering, but the scope for the latter is becoming increasingly limited, except in countries with considerable potential for development (such as Turkey) or those lagging behind in dam construction (such as Lebanon and Algeria). Leaving aside the geopolitical constraints on certain projects, environmental problems associated with some dams also raise questions about the sustainability of this form of development.

The Assouan dam for example may have enabled Egypt to reduce its food bill, increase income from agriculture and weather social crises, but not without a cost to the environment. The dam slows the downstream flow rate, causing pathogens to flourish and fish stocks to fall, and it traps the alluvia carried down from Ethiopia, making agriculture more dependent on fertiliser. The Assouan reservoir also speeds up the process of evaporation

Apart from damming rivers, there are other, newer techniques that can be used to improve water supply. One such is desalination of marine or brackish water, in which some Mediterranean countries are world leaders.

These countries include Israel, which is expected to provide for half of its potable water requirements (350 million m³/year) in this way by 2010, Cyprus, which has just set up desalination facilities to meet the growing needs of its tourist areas, and Algeria, which ascribes particular importance to these facilities in its national water plan (2005-2040). Spain has been following the same direction since 2004. But while the cost of the process shows signs of falling as a result of technical innovations, it is still too high for the agricultural sector, which is turning rather to waste and storm water recycling to increase supply (as in Egypt, Israel, Syria and Tunisia). But it goes without saying that these new sources (desalinated and recycled water) are no panacea, as they will not be able to meet more than 8% of demand by 2025.

In view of the limited effectiveness of supply management policies, it is necessary to adopt a completely new approach, based chiefly on improved demand management. But it must be recognised that nearly all Mediterranean countries are lagging far behind in this area, because supply management policies are often considered more effective in the short term and also because the major construction projects they entail enhance their governments' political standing. Demand management, on the other hand, requires the authorities to make political, economic, institutional, legal and technical choices that could give rise to tense and potentially violent internal disputes. In particular it raises the question of appropriate trade-offs between urban and agricultural use, bearing in mind that the latter requires vastly greater amounts of water. These trade-offs are not always determined by cost-benefit ratios or negative externalities (notably environmental), but rather by political considerations, which may also be very important. Of course, in societies undergoing urbanisation the power of rural areas is reduced, which may make it easier for the authorities to adopt new policy directions; however, agriculture still has influential representatives in regional power centres.

Bibliographical References

- ISMEA - IAM Bari, *"Lo sviluppo rurale nelle politiche di integrazione del bacino del Mediterraneo"*, Osservatorio permanente sul sistema agroalimentare dei paesi del Mediterraneo, 2004.
- Blue Plan, "A Sustainable Future for the Mediterranean - the Blue Plan's Environment and Development Outlook", edited by Guillaume Benoit and Aline Comeau, Editions de l'Aube, 2005.
- Allan Tony, *"Hydro-peace in the Middle East: why no water wars? A case study of the Jordan River Basin"*, SAIS Review, XXII, 1996.
- Confluences Méditerranée, *"Eau et pouvoirs en Méditerranée"*, under the direction of Pierre Blanc, No 58, summer 2006.
- Falkenmark Malin, *"The massive water shortage in Africa: Why isn't it being addressed?"* Ambio, 18(2), 1989.
- UNDP, *"Beyond Scarcity: Power, Poverty and the Global Water Crisis"* Human Development Report 2006.

Presidency of CIHEAM

On 27 March 2007,
Mr Abdelaziz Mougou
(Tunisia) was elected
President of the
Governing Board of
CIHEAM.

He succeeds
Mr Mouin Hamze
(Lebanon),
who had held the post
since 2003.

And at the very heart of the agricultural sector, painful disputes are looming (as is in Israel and Jordan), between representatives of more advantaged sectors that use less water and players in sectors more challenged by the need to save water. There is nevertheless growing acceptance of the idea that crops should be chosen on the basis of value added per m³ of water used. From a technical standpoint, there are obvious ways of saving water and some countries are already making considerable savings by using large-scale localised irrigation (Israel, Jordan and Tunisia, for example), although there is some question about the likely return on the investment required, particularly at a time when markets are increasingly erratic. It is also possible to save water by improving water distribution networks, which currently lose vast amounts. Blue Plan estimates that the potential for actual savings is equivalent to 24% of demand in 2000. In theory, assuming that the average cost of supply is 0.4 euros per m³, it would be possible to save 270 billion euros in 25 years (between 2000 and 2025).

In order to manage demand it would be necessary to introduce new charging practices. This would also facilitate supply management, for without charges it is difficult to cover supply costs and pay for the maintenance of old and new installations without the continued support of international public aid agencies. Charging would provide extra resources to fund these operations while at the same time encouraging users to behave more economically. But given that access to water is a basic right, policy makers will need to take account of social factors when fixing charges. Charging policy cannot disregard the fact that a great number of poor farmers to the South and East of the Mediterranean see irrigated agriculture as their salvation, even though there is an obvious need to save water in the agricultural sector. Nor should charges reduce access to potable water, which is clearly a vital commodity. One solution might be a tiered charging system based on the amount of water consumed.

In addition to new policies, technical measures and charging practices, it would be necessary to implement institutional and legal reforms to support this new approach. As regards regulations, it is clear that the existing ones, some of which date back a very long way, will have to be amended if the endangered resource is to be preserved. As to the institutional context, the reorganisation of the "water power structure" is also crucial to demand management. All-encompassing, centralised arrangements for management of supply or demand no longer seem to ensure sustainability and we are currently seeing a trend towards some degree of subsidiarity, with the setting up of management units at reservoir level and the promotion of users' associations. Given the diversity of situations, it is clearly important to make front-line players more aware of local regulatory practice and more involved in its implementation.

Lastly, while it is impossible to cover everything, we should not overlook the virtual water trade as a means of implementing demand management. Agricultural commodities can be rated in terms of the litres of water used to produce them: less water is needed to produce a kilogramme of wheat than a litre of milk. This being the case, would it not be better for a country with scarce water resources to produce wheat rather than milk? This reasoning prompts some people to discount the inevitability of conflict over water (Allan, 1996). But the force of the argument, which would require countries on the different shores of the Mediterranean to specialise in particular types of farming, should not hide the fact that reconversion of agricultural economies is a delicate matter with distinct socio-political implications. And while a virtual water trade holds out rich prospects, it could only be realised if it were incorporated into the intra-Mediterranean trade project, which has yet to meet with the seal of general approval. It is more important than ever, in the field of water resources as in other matters, for Europeans and populations of countries to the South and East of the Mediterranean to develop an adequate framework for their agricultural trade. If anyone is still in any doubt, this aspect of the matter shows that the Mediterranean Region's water resources are of concern to all its inhabitants, whichever shore they live on. The water issue must be treated as a major topic in the Euro-Mediterranean debate, especially if agriculture is to become (at long last) a strategic area of cooperation.

Pierre Blanc

CIHEAM – MAI Montpellier

Interview

Henri-Luc Thibault, Director of Blue Plan

Q: In your opinion what anomalies are to be found in the way water is used for agricultural purposes in the Mediterranean Region?

We must begin by underlining the fact that demand for water in the Mediterranean Region has considerably increased over the past few years. According to Blue Plan's most recent estimates it currently amounts to nearly 280 km³ per year for the region as a whole. Agriculture is the primary consumer, accounting for 63% of aggregate demand but with a marked contrast between North and South: less than 50% of total demand in the northern countries and more than 80% in the southern ones. Over the next twenty years, total demand is expected to increase by about 50 km³ to meet the needs of a further 96 million inhabitants, about a third of whom are likely to be living in coastal areas. Moreover the region is expecting an extra 135 million tourists from both home and abroad between now and 2025.

These developments could lead to conflict between different users over access to water. The exploitation index for renewable water resources already exceeds 75% in many countries to the South and East of the Mediterranean and by 2025 some of these countries' requirements will be in excess of available renewable resources. They will be required either to import water, to access non-renewable sources (fossil water) or to diversify supply using desalination for example. These scenarios engender fears of heightened conflict over access to water, notably for domestic, agricultural and industrial use. The share of agriculture in overall demand is falling slightly but will probably remain high as it seems likely that the amount of irrigated land in countries to the South and East of the Mediterranean will continue to increase.

Today one of the main challenges for policy makers, and also for local players, is to provide for optimum distribution of water between different users and above all to ensure that it is used as effectively as possible. Annual loss of water as a result of transport, leakage and ineffective use is estimated at nearly 120 Km³. This points to the enormous potential for saving water that is already available and to the efforts that must be made to ensure that water is used more efficiently both in agriculture and for domestic purposes.

Virtual water

Q: The southern Mediterranean countries in particular grow crops that are generally intended for export and consume a large amount of water, and yet fresh water is increasingly rare in those countries. How can "virtual water" and potable water requirements best be reconciled ?

It seems to me that it is worth considering two aspects of the question. The first concerns the total amount of water needed to produce one kilogramme of cereal, meat, fruit or vegetables, and the second concerns the price of water. On the first point, the concept of virtual water sheds further light on the nature of trade between countries on the northern and southern shores of the Mediterranean: if we can link the product to the volume of water needed to produce it (by way of example it is estimated that an average of 2000 tonnes of water are needed to produce one tonne of cereal), it is possible to quantify the amounts of water traded in a commercial transaction and work out the true balance for each sector. The concept seems to me particularly helpful to countries with limited water resources. Moreover, if we factor "virtual water" into our calculations we may be prompted to consider the advisability of some degree of agricultural specialisation tailored to available resources. But the second point, the price of water, seems to me to be the critical one.

CIHEAM-EFSA Conference

On 5 June 2007 an international conference on the identity, quality and safety of Mediterranean products will be held at the headquarters of the European Food Safety Authority (EFSA) in Parma (Italy).

Jointly organised by CIHEAM and EFSA, this event will provide an opportunity to highlight the analyses compiled in *Mediterra 2007*, published in Italian for the first time.

This conference, which will be attended by fifty regional officials and experts, will be followed on 6 June by technical visits in the Emilia-Romagna Region.

Information:

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WASAMED

The final conference of the Wasamed project (*Water Saving in Mediterranean Agriculture*) was organised by the MAI of Bari from 14 to 17 February 2007.

WASAMED is a research network funded by the European Commission, comprising 42 partners from 16 countries in the North and South of the Mediterranean Basin.

The object was to exchange ideas and experiences regarding management and optimum use of water resources for agricultural purposes.

Information

www.iamb.it

Of course one reason why agriculture is the primary consumer of water is that it requires large quantities of it, but another very likely reason is that agricultural water is virtually free. This is clearly true for rain-fed agriculture but hardly less so for irrigated agriculture since most Mediterranean countries subsidise distributed water in one way or another. Water charging seems to me central to this issue, for it is a factor both in the regulation of water use and in the choice of agricultural specialisation. I am very much of the opinion that the agricultural landscape of the Mediterranean region would be significantly changed if certain externalities – more especially those associated with the rarity and quality of water – were to be incorporated into the price, especially if the water is intended for agriculture. Put more plainly, it seems to me that economic instruments should have a more important role in regulating allocation of water for different purposes or for different agricultural specialisations.

The fact remains, and I will end on this point, that considerable savings could already be made if more technically efficient supply networks were adopted and that work on these lines must be pursued. Increasing efficiency in the use of agricultural water has now become a strategic imperative.

Euro-Mediterranean cooperation

Q: In your opinion what are the priorities for Euro-Mediterranean cooperation as regards use of water resources in agriculture?

For a long time attempts to resolve the difficult problems associated with water focused on diversifying and increasing supply. Today trend scenarios show that available renewable resources will not be sufficient to meet all demand in the next few years unless consumption patterns change. This is why the emphasis must now be placed on improving demand management.

This is what Blue Plan has been trying to do for many and what more than 100 experts from Mediterranean Basin countries met in Zaragoza from 19 to 21 March 2007 to consider. Their work has left me with a strong sense that “demand management” must now be placed at the forefront of national policy agendas and that all available means – technical, regulatory, legislative or economic – must be used to promote it. With this in mind, it is important that countries seek to achieve high levels of efficiency, discuss good practice, take stock of progress on a regular basis and deploy all necessary resources, whether mobilised at national level or through development partners. I am also left with the sense that better demand management calls for the mobilisation and empowerment of players and decision makers involved at different territorial levels and that raising public awareness and organising educational events on environmental issues are essential to this process.

In conclusion, it seems to me that promotion of water demand management is essential to the Euro-Mediterranean partnership, all the more so as it is ranked among the priorities of the “Mediterranean Strategy for Sustainable Development” adopted by the 21 Mediterranean Basin countries in 2005 and endorsed by government leaders and heads of state the same year. The Zaragoza workshop, jointly organised with CIHEAM, represented an important stage in the process and Blue Plan and its partners will endeavour to act upon the message it conveyed and ensure that it prevails.

Interview by Hassane Tlili

Journalist specialising in agricultural and environmental issues.

Key figures

- **35,000**: the number of people in the world who die every day for want of access to safe water (24 deaths every minute).
- **40 %**: share of France and Turkey in the aggregate water resources of the Mediterranean Basin (20% each).
- **2 %**: share of the Maghreb (Morocco, Algeria, Tunisia and Libya) in the aggregate water resources of the Mediterranean Basin.
- **30 %**: fall in per capita water supply in France, Greece and Spain between 1950 and 1995.
- **55 %**: expected fall in per capita water supply in Jordan and Libya between 1995 and 2025.
- **7**: the number of Mediterranean countries – all located on the southern shore – that are now experiencing severe scarcity, with less than 500 m³/inhabitant/year (Tunisia, Algeria, Israel, Jordan, Malta, Libya and Palestine).
- **44 %**: the percentage of the rural population of Morocco without access to potable water in 2002 (down from 82% in 1990).
- **97 %**: Egypt's water dependency index (ratio of water imported into the country to total national water appropriation).
- **81 %**: share of agriculture in overall demand for water in countries on the southern and eastern shores of the Mediterranean (compared with 42% for countries on the northern shore).

MED OBS

CIHEAM's Mediterranean Observatory has been substantially reconfigured, with a new technical base and new sections.

It is now an integral part of the CIHEAM website.

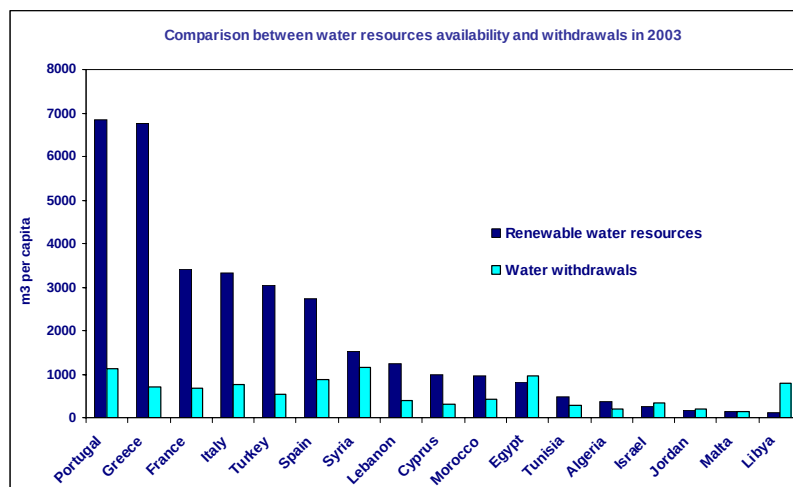
Designed to aid researchers and decision makers, the Observatory compiles analyses and disseminates strategic information on agricultural and rural issues in the Mediterranean Basin.

www.ciheam.org
or
www.medobs.org

Sources

FAOSTAT (2006)
PAI (2003)
UNDP (2006)

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Links

Blue Plan
www.planbleu.org

Euro-Mediterranean Information System on Know-how in the Water Sector
www.emwis.net

World Water Council
www.worldwatercouncil.org

Water Solidarity Programme (PS-Eau)
www.pseau.org

News in brief

The Cybermontagne programme

Since January 2006, CIHEAM, with the financial support of the FAO, has been working to establish a resource centre to promote local products and expertise in mountainous areas of the Mediterranean Region. The programme's website (www.cybermontagne.org) presents the results of a project to identify and showcase the products and services (food, craftwork, ecotourism facilities) typically found in the mountainous regions of four Mediterranean countries: Algeria, Morocco, Lebanon and Syria. The first phase of the programme has had a number of objectives: to create a specialised network for sharing information and experiences related to terroir products and services, to identify the needs of players in the sector and to target the main problems to be resolved. This phase will end in July 2007.

Talks are in progress on ways of ensuring that the programme has a lasting impact and on front-line measures to support moves by the sectors concerned to establish quality procedures recognised by the market. For more information, contact Hélène Ilbert (MAI Montpellier, ilbert@iamm.fr) and Annarita Antonelli (MAI Bari, annarita@iamb.it).

Morocco: prospect for the sugar sector

Morocco's sugar sector currently has an annual turnover of DH 6 billion and generates around 5,000 permanent jobs. According to the Moroccan daily *l'Economiste*, sugar crops provide a living for about 80,000 farming families across the country and cover just under 50% of local consumption needs. The bulk of domestic output is derived from sugar beet cultivation.

But the sugar beet sector faces several problems. Average yields per hectare are 5 to 6 tonnes in Morocco compared with 10 to 12 tonnes in Europe. Moreover, Morocco's sugar beet is grown in autumn, a time when the county is increasingly subject to hydric stress, while in other countries it is often grown in irrigated conditions. The Moroccan government has initiated broad-based consultations with all operators in the sectors with a view to setting up farmers' groups with areas of land suited to modern cultivation methods. Particular importance will be attached to the selection of disease-resistant varieties with low water requirements.

FAO: fears over sea-fish stocks

A quarter of all sea-fish stocks monitored by the Food and Agriculture Organization of the United Nations (FAO), have been overexploited and of these just 1% are recovering from depletion. This is revealed in the recent report by the FAO entitled "The State of World Fisheries and Aquaculture 2006". In the case of certain high-seas fish stocks, including stocks of hake, cod, halibut and bluefin tuna, the level of overexploitation or depletion is as high as 66%. According to the same report, total captures of wild fish amounted to 93.8 million tonnes in 2005, compared with 95 million tonnes in 2004. And yet total fish production reached a record level of 141.6 million tonnes in 2005. How is this possible?

The FAO explains that it is due to the development of aquaculture throughout the world. Today it produces 43% of all fish consumed by human beings, compared with just 9% in 1980: an eloquent testimony to the rapid development of the sector. Although further expansion is expected over the next decade, the FAO and other organisations working to improve fish stocks are still afraid that illegal fishing might aggravate overexploitation of endangered species. Accordingly, 131 countries throughout the world, including the EU member states, have met in the FAO's Committee on Fisheries with a view to adopting a binding international agreement, which will strengthen controls in ports to combat illegal fishing.

Eu-Med Agpol

A research programme funded by the European Commission, Eu-Med Agpol began studying possible impacts of agricultural trade liberalization between the EU and Mediterranean countries in 2004.

Coordinated by the MAI of Montpellier and involving nine Mediterranean partner institutions, the project ended in April 2007.

<http://eumed-agpol.iamm.fr>

Medfrol

A research programme funded by the European Commission, Medfrol began its analysis of market and trade policies in the Mediterranean Region with reference to the fruit/vegetable and olive oil sectors in 2004.

Coordinated by the MAI of Chania and involving nine Mediterranean partner institutions, the project ended in April 2007.

<http://medfrol.maich.gr/pages/activities>

Publications

European Environment Agency, "Priority issues in the Mediterranean environment", report No 04/2006, OPOCE (Luxembourg), 2006.

IEMed, *La agricultura y la asociacion euromediterranea : retos y oportunidades*, IEMed, Barcelona (Spain), October 2006.

Maurice Catin and Henri Regnault, "Le Sud de la Méditerranée face aux défis du libre-échange", Paris (France), L'Harmattan, November 2006.

Options méditerranéennes, "Politiques de développement rural durable en Méditerranée dans le cadre de la politique de voisinage de l'Union européenne", Series A, No 71, CIHEAM-MAIM, Montpellier (France), December 2006.

Revue des Chambres d'Agriculture françaises, "Euro-Méditerranée : des intérêts liés", under the coordination of Alexandre Martin, No 958, APCA, Paris (France), December 2006.

Jemaïel Hassainya, Martine Padilla, Selma Tozanli and Bénédicte Oberti, *Lait et produits laitiers en Méditerranée : des filières en pleine restructuration*, Paris, Karthala, 2006.

European Parliament, "Report on the construction of the Euro-Med Free Trade Area", by Kader Arif, Commission du Commerce international, 2006/2173 (INI), December 2006.

Options méditerranéennes, "Analyse technico-économique des systèmes de production ovine et caprine : méthodologie et stratégie à utiliser pour le développement et la prospective", Series A, No 71, Zaragoza (Spain), CIHEAM-MAIZ, FAO and University of Seville, December 2006.

Options méditerranéennes, "Water saving in Mediterranean Agriculture and future research needs. Wasamed Project", Series B, No 56 (3 volumes), Bari (Italy), CIHEAM-MAIB, February 2007.

World Bank, "Making the Most of Scarcity: Accountability for Better Water Management Results in the Middle East and North Africa", Analytical Report, Washington (USA), March 2007.

Events

23-25 April 2007 – Barcelona (Spain)

Mediterranean conference of social science researchers specialising in agrifood: an opportunity for food economists and other social scientists to discuss current realities and future challenges in the field of food production, consumption, marketing and trade within the Mediterranean Region.

Information on www.medcon.creda.es/

13-17 May 2007 – Seville (Spain)

Fourth international conference on forest fires, organised by the Spanish Government and the Andalucía Junta with the support of the Council of Europe.

Information on www.wildfire07.es/html/in/index_in.html

15-16 mai 2007 – Marrakech (Morocco)

Final seminar of the Medroplan project, funded by the European Commission (MEDA Water Programme) and coordinated by the MAI of Zaragoza, whose main purpose is to prepare guidelines on drought preparedness for the Mediterranean countries and to set up a drought management network.

Information on www.iamz.ciheam.org/medroplan

17-20 June 2007 – Seville (Spain)

International forum on drought organised by the Spanish Ministry of the Environment. The main object of the meeting is to identify new investment, operations and public awareness strategies to combat drought and improve water management.

Information on www.forosequia.com

MEDITERRA 2007

The latest CIHEAM annual report will be published on June 2007.

It focuses on the identity, quality and safety of Mediterranean food products.

Mediterra 2007 will now be available in five languages (French, English, Arabic, Spanish and Italian).

The CIHEAM Watch Letter

The next issue will be published in July 2007

To receive the Watch Letter, contact observatoire@ciheam.org