

Analyses

The forest fire problem in the Mediterranean Basin

George Kazakis and Dany Ghosn

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Mediterranean forests are one of the planet's centres of plant diversity, representing 10% of the world's flowering plants in just over 1.6% of the Earth's surface. Situated in a transitional zone between the European, African, and Asian continents, these mosaics of cork and holm oaks, cedars, pines, and olive trees are home to 25,000 plant species, of which 13,000 are endemic. The forests are also home to an amazing animal diversity. Originally, forests covered 82% of the Mediterranean area; today the figure is only 17%. This degradation is mainly due to human activities, one of which is fires.

Fire is the most important natural threat to forests and wooded lands of the Mediterranean basin. Every year, about 50.000 fires burn 700.000 to 1 million hectares of land causing enormous social, economic and ecological damages as well as loss of human life.

The Mediterranean climate (Long and dry summer periods, mild winters with low precipitation) leads to the development of the so called Mediterranean type ecosystems. These ecosystems developed adaptation mechanisms (evergreen sclerophyllus and allelopathy) in order to cope with the difficult climatic conditions (high air temperature and dryness during summer). These mechanisms result in accumulation of dry and flammable forest fuel. Moreover, many Mediterranean plant species produce flammable substances such as essential oils and resin. Under these climatic conditions and fuel properties a fire can easily start and propagate even with a small addition of heat.

The Mediterranean ecosystems have been developed under the periodic influence of fire and they developed adaptation mechanisms to fire through natural selection. Some species re-sprouts or root-sprouts after the fire while some others release large amount of seeds which under post fire conditions germinate easily.

Human activity at the heart of the forest

Forest fires are an integral component of the Mediterranean ecosystem's life cycle, they have co-existed for millennia and they will continue to do so in the future. Humans have influenced Mediterranean ecosystems also for millennia creating a dynamic relationship with their natural environment. It is not possible to understand current vegetation patterns in the Mediterranean basin without taking into account past anthropogenic activities and land uses. Severe human pressure (burning, cutting, grazing on non-arable lands, clearing, terracing, cultivating, and later abandonment of arable portions) have created a strongly human-influenced landscape.

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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 an authority in its fields of activity: Mediterranean agriculture, food and rural development.

At present Mr Abdelaziz Mougou is President of CIHEAM and Mr Bertrand Hervieu is Secretary General

Human intervention has been so strong that it is still making a significant impact on current and future vegetation patterns. The changes in fire occurrence during the last decades closely reflect the recent socio-economic changes underway in the European Mediterranean countries. With industrial development, European Mediterranean countries have experienced: depopulation of rural areas, increases in agricultural mechanization, decreases in grazing pressure and wood gathering and increases in the urbanization of rural areas. These changes in traditional land use and lifestyles have implied the abandonment of large areas of farmland, which has led to the recovery of vegetation and an increase in accumulated fuel.

Fire: a constant threat to the forest

In Southern Europe, human activity has dramatically increased fire frequency as a consequence of land abandonment and tourist pressure. Land use changes produced during the present century in Southern Europe are parallel to the changes in the fire regime, from being few in number and affecting small areas, becoming very numerous and affecting large extensions every year. This trend is not observed in the Southern Mediterranean Basin where traditional land uses remain the major socio-economic system.

The annually burned area in Southern Europe has more than doubled since the 1970s. Realizing they had a problem but not fully understanding the reasons behind it, all south European countries responded by increasing their fire suppression capacity, especially through the 1990s, necessarily increasing their fire fighting budgets. The outcome of this effort is a reduction in total annually burned area in relatively easy fire seasons. However, the potential for major disasters is still there. As more fuels accumulate, in difficult fire seasons, the burned area climbs again to high levels. Furthermore, the damages are very high as fires often originate or easily reach the extensive wildland-urban interface areas that have emerged in all these countries, mainly close to the coastline. This has been demonstrated very clearly in the last three catastrophic fire seasons in Portugal (2003-2005) and in Greece (2007), with the occurrence of extremely large and destructive fires.

Although the main reason for fire increase in the last decades is probably changes in land use, climatic factors should be considered as well. Fires occur mainly in summer when temperatures are high and air humidity and fuel moisture are low. Predictions on climatic change indicate a reduction in annual rainfall, an increase in air temperature, and longer drought periods. Although there is uncertainty as to the mean and variance of the precipitation changes, all predictions suggest a future increment in water deficit. These changes would lead to an increase in fire ignition probability and propagation not only in the Mediterranean area, but also in the other fire-prone regions of the world.

Statistics on the causes of forest fire in the Mediterranean region are far from complete, but it is evident that people set the majority of fires. Natural causes such as lightning do indeed cause forest fires, and when they occur in isolated areas the extent of the damage can be enormous. In aggregate, however, the number of naturally occurring fires is small in comparison with those caused by humans. Shepherds set up fires on rangelands to promote new foliage growth for grazing animals. When this is done without the necessary precautions and coincides with high climatic risks, forest fires are practically inevitable. Although in the past there has been a tendency to blame pastoralists for nearly all Mediterranean forest fires, this appears to be an exaggeration.

Urban populations in the Mediterranean region show a particularly poor understanding of the danger of fires and of their potentially negative consequences. Despite continuous preventive awareness campaigns, many city dwellers do not consider a forest fire to be a threat even in the middle of summer. The carelessness of smokers and of excursionists who light cooking fires (negligence) is the source of about one-third of the fires in the Western Mediterranean Basin. The dumping of garbage by burning is often carried out without taking any precautions and usually leads to fire escape. Another important motivation for destructive fires is an attempt to change land-use in areas where land value is very high and where cadastral and forest maps is missing.

What is to be done about forest fires?

Regarding fire-management, forest fires have a yearly circle that logically allows people to plan for disaster management in an efficient way. The most important element in pre-disaster planning is the effort to prevent the occurrence of a disaster. In forest fires, this effort is called "fire prevention". Fire prevention includes "all activities concerned with minimizing the incidence of destructive fires" and can be divided into two broad areas: those directed at the primary cause of fire, i.e. people, and those aimed at mitigating the flammability of forest resources. Fire danger rating, pre-suppression planning, fire detection, forest fuel management, fire-aware forest management, specific prevention technology developments, fire statistics analysis, review and adaptation of legislation, and wildland-urban interface development planning, are some less known forest fire prevention means and activities that complement more direct ones such as public education campaigns.

Fire prevention is quite complex and its activities are often less obvious and impressive compared to fire suppression. The latter involves scores of fire-fighters, fire fighting trucks, planes and helicopters. Fire-fighting power is immediately necessary with an obviousness and urgency beyond any doubt, when the fires are raging. Furthermore, fire suppression provides good viewing material for the cameras and, when successful, the results are immediately recognizable by the public. Politicians can see that, and they can comprehend easily the need for supporting fire suppression. As a rule, money availability is rarely an issue for the fire suppression mechanism, especially at the time of crisis.

Having mentioned that, it is worth noting the paradox that has developed in the last two decades: Technological advancements in the form of better fire-fighting equipment, fire modelling techniques, communications etc. in this time period, should have had a decisive positive effect by now, if the problem was only a matter of fire suppression, especially when considering the corresponding global increase in fire-fighting budgets. However, the reality is quite different. It can easily be shown that the problem is much more complex than just improving fire-fighting effectiveness alone. It has to do with factors affecting the occurrence of fires, their characteristics and their destruction potential. It has to do with environmental factors, social evolution, economic development and as such it involves policy decisions and, often, delicate political balances. A one-sided approach, focused on fire suppression only, is doomed to fail in solving the problem in the long-run. What is needed is a well designed, comprehensive forest fire policies based on a good understanding of all the interacting factors and, of course, adapted to each country's environment and conditions.

Regarding forest fire policy, the simplest and most obvious objective is "keep fire losses as small as possible". This often seems to be "enough" for societies, governments and fire fighting organizations. However, although this objective seems quite straightforward and rational, it isn't really so because there is no provision for the length of time (what will happen in the long-run), there is no reference to the cost, and there are no environmental constraints. These shortcomings are responsible, to a large extent, for the failure of a one-sided fire suppression centred policy. Decision makers do not fully appreciate the ecological role of fire in the Mediterranean ecosystems, the relevant decisions emphasize only on fire suppression and the funds are allocated accordingly. What appears to work for a limited period of time only hides the problem of fuel build-up. Initial success leads to a worsening problem that requires more resources and more effort a few years down the road. This leads to the need for higher budgets for fire suppression. If these become available, suppression is still successful for a few more years, the circle is repeated and the fire potential keeps getting worse. On the other hand, depending on the degree to which certain ecosystems need fire for their regeneration and health, effective long-term fire suppression may alter vegetation composition and lead to undesirable situations.

Forest fire policies in the Mediterranean basin must be sophisticated, multi-objective, tailored to meet the characteristics of Mediterranean ecosystems, always taking into consideration, as a priority, the need to protect people, properties and infrastructures, and to make best use of the renewable resources for the benefit of the society.

Algeria and the challenge of forest fires

Abdelmalek Titah

General Director of Forests
Algerian Ministry of Agriculture and Rural Development

The main issues

Given that the majority of our forests are adjacent to residential areas, the principal challenge is to reconcile cohabitation with sustainable development of our natural resources. Policies to promote sustainable development of rural and mountainous zones, which have been pursued by the Algerian government since 2002, have made such cohabitation a reality to the extent that the socio-professional problems of these populations have been effectively catered for by integrated rural development neighbourhood programmes. By satisfying the needs of the population within an organised framework the authorities have been able to protect forest resources from various forms of degradation. The other challenge is to reduce the devastating impact of forest fires, diseases and parasites, which continue to threaten our woodland heritage year after year. In recent times the state has been mobilising considerable resources to counter these scourges.

Over the past two decades (1988-2007), the damage caused to Algerian forests by fire has been very serious: on average 1,557 fires have broken out and an area of 38,600 hectares has been burnt every year. The authorities have therefore given the General Directorate of Forests greater power to prevent and fight forest fires, notably by supplying it with first-response equipment for putting out fires before they spread (light autonomous fire trucks) and with a VHF-type radio system for rapid communication when a forest fire flares up. The DFCI (association for defence against forest fires) also continues to play a key role in optimising intervention and surveillance.

What arrangements has Algeria put in place for fighting forest fires?

Every year a range of measures to prevent and fight forest fires are put in place in Algeria. Various channels are used to raise public awareness of the problem:

- conferences/discussions in schools;
- open days on forest management;
- neighbourhood awareness schemes aimed at populations living close to forests;
- radio and television programmes;
- Friday sermons by imams, emphasising the important part played by trees in daily life and society and more importantly the need to protect forests against fire;
- articles on forest fires in various newspapers and campaigns calling upon the population for further vigilance and help in preventing and fighting fires;
- a weekly press release issued by the General Directorate of Forests giving the number of fires recorded in the previous seven days, the total number since the campaign began, and the total area affected by fire.

However, all these measures are inadequate given the extent of the territory that needs to be protected, the high population density in and around the woodland area and the complex nature of fire prevention operations in hilly terrain where access is difficult.

As to the regulatory scheme, the General Directorate of Forests, in collaboration with other interested bodies, applies the legal and regulatory provisions of the following texts:

- law 84/124 of 23 June 1984 establishing a General Plan for forests; articles 19 and 20 of the law require different state structures to participate in the fight against forest fires; it also defines the obligations on certain bodies to enforce its provisions;
- decree 80-184 of 19 July 1980, as modified and finalised, putting in place organs to coordinate measures to protect forests;

MAI Zaragoza

The 3rd annual meeting of the QUALIWATER project, coordinated by MAI Zaragoza, was held in Tunis (Tunisia) from 27 to 29 May 2008.

This European project addresses the impact of irrigated agriculture on the quality of water and soil. The aim is to produce scientific, technical and socio-economic data on nitrate and salt contamination resulting from irrigated agriculture.

This project mobilises research institutions from six Euro-Mediterranean countries (Algeria, Morocco, Spain, Tunisia, Turkey and the United Kingdom).

www.iamz.ciheam.org/qualiwater

- decree 87-44 of 10 February 1987 defining rules and standards governing prevention of forest fires in and near national woodland;
- decree 87-45 of 10 February 1987 organising and coordinating action to fight forest fires in national woodland.

The regulatory texts in force provide for essential requirements in this area: preparation and management, and above all obligations towards other structures, particularly those pertaining to preventive measures and conditions governing intervention and mobilisation of resources needed to implement the campaign. On 28 May, in accordance with the provisions of the aforementioned decree 80-184 of 19 July 1980 establishing bodies to coordinate measures to protect the forests, a new national commission for the protection of forests (CNPF) was set up by the Minister of Agriculture and Rural Development. This commission comprises 12 representatives from the Ministries and 12 representatives of different national institutions and bodies with an interest in the protection of forests. The commission meets twice a year - at the beginning and end of each season - under the chairmanship of the Minister responsible for forests, in order to:

- draw up and update the plan for preventing and overcoming the main problems afflicting forests;
- coordinate work by the different bodies involved;
- present the programme to the wilaya-level forest protection committees at the beginning of each season;
- draw up or update the plan to prevent forest fires in cooperation with the body responsible for civil protection;
- study and analyse results obtained from the wilaya-level committees at the end of each season.

Furthermore, under the preventive arrangements put in place every year, particular importance is attached to the following measures in all 40 wilayas concerned.

- digging and upkeep of fire-break trenches;
- maintenance by public building departments of verges of roads running through forest areas;
- provision of turning spaces by farmers whose land is adjacent to forests and where there is a risk of fire spreading;
- maintenance by the Electricity and Gas Company of trenches under high voltage cables;
- maintenance by the Rail Transport Company of rail tracks running through forest areas.

From the organisational standpoint, the regulations in force, notably the provisions of decree no 87/45 on the organisation and coordination of fire-fighting arrangements in national woodland, require that the following measures be taken every year:

- promulgation of forty prefectural orders approving the wilaya-level forest fire schemes and defining the terms and conditions governing implementation of preventive measures and mobilisation of resources for the recommended fire-fighting arrangements;
- establishment of forty wilaya-level operational committees to coordinate operations and mobilise fire-fighting resources on the territory of each wilaya;
- establishment of operational committees at Daira (sub-prefecture) level to coordinate fire-fighting operations and deployment of resources needed throughout each sub-prefecture's territory;
- establishment of communal operational committees, which play an important role in mobilising fire-fighting resources and are in the front-line of fire-prevention and rapid intervention operations;
- establishment of neighbourhood committees, which play a vital role in preventing and fighting forest fires, given their proximity to the forest environment. It goes without saying that, in a predominantly rural country like Algeria, neighbourhood committees are key allies in fire prevention schemes and campaigns to raise awareness among populations who live in or near the forests.

New CIHEAM website

In June 2008 CIHEAM launched its new website, designed to cater for the requirements of a more modern and effective communications policy.

This site contains information on CIHEAM's work in education, research and cooperation and also provides wide-ranging analysis and information on Mediterranean agriculture and food through the CIHEAM Observatory.

www.ciheam.org

As to fire fighting, the General Directorate of Forests is responsible for first-response operations throughout the entire season. This year they involve:

- setting up of 381 lookout posts for detection and alert, with a staff of 979 comprising forestry agents and workers;
- setting up of 479 mobile first-response brigades with a staff of 2,064;
- use of 300 light autonomous fire trucks, fitted with first-response equipment (600 litre tanks);
- mobilisation of 12 fire tenders and 45 fire trucks designed for fighting forest fires;
- setting up of 1,338 lumber operations in the forests as part of the development programmes. They employ 1,800 workers, who will be mobilised whenever needed to fight forest fires;
- identification of 1,694 water sources in or near the forests to facilitate supply of water to the fire-fighting vehicles (light fire trucks and fire tenders);
- acquisition and installation of a VHF-type radio-communications network for all 40 departments in the north of the country.

Trials from which lessons might be learned

The most interesting trials in the field of forest-fire fighting have been those conducted by Mediterranean countries (Italy, France, Spain, Greece, Iran and Cyprus). Their approaches to this problem are of interest to us because they have the same types of vegetation as us and the factors that trigger forest fires are found in much the same form in those countries as in ours. American and Canadian work in this field is also of interest to us in that these countries have developed very convincing models for predicting forest fires (notably the Behave model) from which we might draw lessons for future work on preventing forest fires in Algeria.

Towards Mediterranean cooperation on forest fires

Priorities for collaboration between Mediterranean countries cover a number of areas:

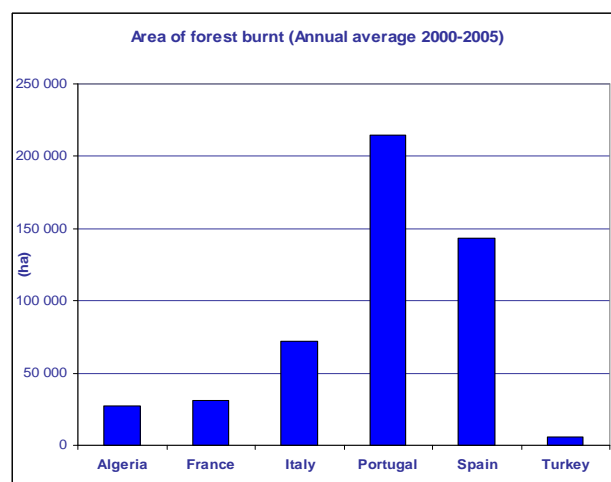
- prevention of forest fires, involving a two-pronged approach: first, the European IT system for managing forest fires must be made available to all countries on the southern shore of the Mediterranean; second, a system for preventing forest fires at regional level must be developed;
- fighting forest fires, involving a three-pronged approach: first, an emergency intervention plan must be drawn up to ensure that resources are adequate; second, instructors in the use of equipment for fire-fighting (aeroplanes, helicopters), rapid detection of fires (infra-red camera systems) and investigation of their causes must be trained and deployed; and third, procedures for pooling experience and providing technical and scientific support in managing the aftermath of forest fires must be developed;
- Damage assessment: if possible a multiform system for assessing damage and losses, notably in the ecosphere, should be devised (technical assistance should be provided for the development of an IT system for assessing damage).

Statistics on Mediterranean forests

Statistical dossier prepared by
the CIHEAM General Secretariat

Sources

- FAOSTAT 2008
- EUROSTAT, Euro-Mediterranean statistics 2007



Area of forest and other woodland burnt annually (ha)

	2000	2001	2002	2003	2004	2005	Annual average (2000-2005)
Algeria	38,462	55,782	14,378	11,194	11,998	31,676	27,248
France	24,078	20,642	30,160	73,278	13,711	22,135	30,667
Italy	114,648	76,427	40,791	91,805	60,176	47,575	71,904
Portugal	159,605	111,850	124,411	425,726	129,539	338,262	214,899
Spain	188,586	93,297	107,464	148,172	134,193	188,697	143,402
Turkey			8,513	6,644	4,876	2,821	5,714

Forest Area in the Mediterranean countries (1000 ha)

	1995	2005
Albania	779,000	794,000
Algeria	1,966,900	2,276,800
Egypt	51,500	67,000
France	14,944,500	15,554,000
Greece	3,450,000	3,752,000
Italy	8,915,000	9,979,000
Lebanon	126,000	136,500
Malta	300	300
Morocco	4,308,500	4,364,000
Portugal	3,341,000	3,783,000
Spain	14,957,500	17,915,000
Tunisia	801,000	1,056,000
Turkey	9,866,000	10,175,000

Partnership on food safety

The General Secretariat of CIHEAM and MAI Bari have undertaken to give active support to the Mediterranean study days devoted to food safety and quality, which are being organised and prepared by the Italian RIFOSAL consortium and the Mediterranean Institute for Certification (IMC).

Five events have been organised between 2008 and 2010. The first was held in Rome (Italy) on 9 June 2008 and the second will be held in Tirana (Albania) on 6 October 2008.

For more information:

www.rifosal.it

Interview

Mohamed Larbi Chakroun, President of the International Association for Mediterranean Forests (IAMF)

Q - Could you tell us more about the action taken by the IAMF in its fight against forest fires in the Mediterranean Region??

The strange fact is that people only show any interest in the Mediterranean forest when it is on fire. This interest quickly dies down, like the blaze from burning straw, only to be revived when the next forest fire occurs. These reactions reveal a certain indifference towards our forests. Technical solutions such as appropriate planning, fire-prevention equipment, proper forest management and fire-fighting techniques have all proved their effectiveness. But their implementation is hindered by this indifference, attributable to the small amount of timber produced by this particular ecosystem, which nevertheless has many roles and functions.

Our work is intended more to encourage decision-makers to consider the non-market value of our forests and so make the sustained effort needed to guarantee the long-term survival of our natural land areas.

Q - What lessons can now be drawn from the methods used to combat Mediterranean forest fires over the past two decades?

Agro-sylvo-pastoral activity in countries to the South has been a significant factor in limiting the areas covered by forest fire, despite the relatively small-scale mobilisation of resources. In the countries to the North on the other hand relinquishment of agriculture, disinvestment in the forestry sector by rural players (on account of its unprofitability) and growing interest in woodland areas on the part of city dwellers have led to the relative abandonment of silvicultural activity, which has become increasingly costly.

If we are to eliminate this scourge from the Mediterranean, it is not sufficient to have the means to fight forest fires when they break out. What we need is a rational renewal, geared to society's demands, of the use of market and non-market products from natural land areas. The implementation of two INTERREG projects by the IAMF, in association with several Mediterranean Regions, has shown that forest fires cannot be treated in isolation. They must be factored into integrated territorial planning and development schemes.

Q - How in your opinion can the arrangements to improve civil security and counter natural disasters, currently being put forward in the framework of the European Union, be made more operative and more effective in the fight against forest fires?

These arrangements should be regarded as a last resort. They would be extremely costly if they were not based on measures designed to prevent forest fires and floods. A public information and awareness-raising campaign would reduce operating costs.

Q - What do you think are the consequences of climate change on Mediterranean forests?

We are already seeing a northward migration of plant species, which is disturbing ecosystems and increasing desertification. A number of experimental models show that we can expect a sharp rise in summer temperatures and therefore an increase in the risk of fires. These models also forecast a rise in the rainfall levels, which increases the risk of flooding. It is not too late to take the appropriate preemptive action.

TerraMed 2008

The Spanish edition of the CIHEAM annual report (Mediterra) has just been published under its newly adopted name: "Terramed".

The report has been produced in Spain by MAI Zaragoza and the Ministry for the environment, rural affairs and the sea.

Terramed 2008 examines future food agriculture scenarios in the Mediterranean Region.

Award of prize for best CIHEAM thesis

At its 119th meeting in Paris on 6 June 2008, the CIHEAM Governing Board, having heard the recommendations of the President of the Scientific Advisory Committee, unanimously decided to award the prize for the best CIHEAM MSc thesis for 2007 to Kanj Hamad (Lebanon).

This student's thesis, researched at MAI Bari under the supervision of Professor Peter Midmore and Dr Patrizia Pugliese, is entitled "*institutions and development policies for organic agriculture in the West Balkan Countries, a comparative analysis*".

Work by students

It is now possible to read the best theses produced by MAI students on the CIHEAM website in the section "Research".

Q - From the standpoint of the IAMF which are the most critical areas of work for future cooperative ventures on Mediterranean forests in general and forest fires in particular?

I would cite two major areas for Euro-Mediterranean cooperation, which might involve a series of projects with multiple objectives:

- development of catchment areas, to help keep populations on their lands, manage water resources, which will become increasingly rare, and increase agricultural output;
- development of forest areas for agro-sylvo-pastoral, tourism and ecological purposes, exploiting the potential of natural environments and catering for local demand.

Interview by Hassane Tlili

*Journalist specialising
in agricultural and environmental issues.*

More information on Mediterranean forest fires

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www.fao.org/forestry/4646/en/
- **European Forest Institute (EFI) – Mediterranean regional office**
www.efi.int/portal/efimed/
- **International Union for Conservation of Nature - Centre for Mediterranean Cooperation**
http://iucn.org/places/medoffice/CDForest/contenido/index_2.html
- **Euro Forest Portal**
<http://forestportal.efi.int/>
- **Observatoire de la forêt méditerranéenne**
www.ofme.org/

News in brief

The Cevital Group moves into large-scale retail and distribution in Algeria

"Uno" is the new name in Algeria's large-scale retail and distribution sector. The Uno supermarket is being promoted by Numidis, the retail branch of the privately owned Cevital group, and the financial backing for it is 100% Algerian. The first in a series of supermarkets whose numbers are expected to grow steadily, "Uno" opened in Garridi in the heights of Algiers on 10 June and the 2000 m² store now employs 160 people. This initiative is the latest move by Issad Rebrab, Director of Cevital, to diversify his group's activities and it consolidates his ventures in the field of large-scale retail. The next step will be the opening of a 7,000 m² hypermarket, announced for spring 2009 in Bab Ezzouar, a district just outside Algeria. Other projects are also being prepared and more supermarkets are likely to be opened in Oran and Tizi-Ouzou. It should be pointed out that the Cevital group's 2005-2010 investment plan provides for a total budget of around €375 million for its large scale retail and distribution operation. Algeria's first private-sector group seems set to seize a twofold opportunity in this area. First of all, it intends to conquer a market which remains largely unexplored: the Algerian group Blanky did not succeed in developing its Promy supermarkets and Carrefour, which set up its first pilot supermarket in Algiers at the beginning of 2006, now seems to be scaling down its ambitions to set up more supermarkets in the country, despite its initial enthusiasm. Secondly, the Cevital Group is attempting to steal a march on potential competitors, who seem determined to take advantage of Carrefour's limited success: groups like Metro from Germany, Auchan from France and Walmart from the USA are actively prospecting in Algeria. One of the salient features of this growing market in a country of 35 million inhabitants is its reliance on the informal economy, which accounts for around 40% of the country's commercial activity. Cevital is therefore taking on a considerable task. To satisfy local consumers, eager to buy Algerian while at the same time demanding more access to foreign brands, the group is counting on a favourable balance of indigenous and imported products, which will produce a virtuous circle of economic and commercial development to the benefit of Algeria's agricultural producers. Numidis has accordingly identified three keys to the success of its supermarket strategy: improved logistical capacity, in-service staff training and an effective marketing system to promote its brand name.

Projects to combat desertification in Egypt

Egypt has initiated several trial schemes in the fight against desertification in the southern Mediterranean. On the occasion of the World Day to Combat Desertification, celebrated annually on 17 June, the Egyptian media has given particular attention to two projects, those of Toshka and Wadi Al-Natroune, from which many lessons can be learnt. Launched in 1997, the Toshka project involves drawing water from Lake Nasser and channelling it along a canal, built parallel to the Nile, to the western Egyptian desert, where it will irrigate 3.75 million hectares of fertile land. This measure will significantly increase Egypt's agricultural output and, more importantly, will alleviate the intense demographic pressure on the Nile Valley, which is home to 96% of the population. The Egyptian authorities are hoping that the Toshka project will increase the habitable surface of the country from 5% to 25%. Despite certain criticisms prompted by the enormous cost, the Egyptians recognise that they will eventually benefit from this unique endeavour if they invest heavily in education and knowledge. Their optimism has been fuelled by another project, more modest but still highly instructive, which was launched in the seventies by the Coptic monastery of Abou-Maqar in Wadi Al-Natroune (Valley of Natroun). The monks from this 4th Century monastery purchased 126 hectares of nearby land with a view to making it fertile. The task proved to be so difficult that the land became part of a semi-desert region, which is now crossed by the motorway linking Cairo and Alexandria. But forty years on, the experiment conducted by the monks has become a fine illustration of what a green revolution in the African continent might amount to and the fertile area around the monastery now covers 650 hectares. At first there were only date and olive trees there, but the land now produces apples, peaches, mangos, carrots, turnips and other fruit and vegetables. Moreover, the monks have been able to set up small factories to process some of their produce. Many of them are doctors, pharmacists, veterinarians, or agriculturalists and as such they have been able to forge increasingly close ties with Egyptian research centres with an interest in the problems associated with arid areas. It should be noted that one of the major achievements of this project is to have taken non-literate persons into the monastery to teach them to read and write and give them agricultural training in the field, thereby enabling them to adapt to the difficult conditions of the desert and grow plant species that are resistant to drought and salinity.

MAI Montpellier

On 5 September 2008, MAI Montpellier is organising an international conference on "Society, Water and Health in the Mediterranean Region".

This event will be held in the margins of the World Water Congress, which is being organised in Montpellier in September.

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The Governorate of Tozeur takes action to promote date production

Tunisia wishes to boost its date exports in 2008. A figure of 35,490 tonnes of exported dates has been mentioned, which would provide revenue in the region of 105 million Tunisian dinars. These results would be better than those of 2007, when 32,540 tonnes were sold on the international market, yielding income of nearly 96 million Tunisian dinars. In the Governorate of Tozeur, the heart of Tunisia's date production, preparations are coming along smoothly. A regional programme to promote the quality of dates was recently launched with a view to obtaining an additional share in the world market and if possible benefiting from the extra trade margins that might result from the entry into force as of 1 January 2008 of the free-trade zone with the European Union. Moreover, this season will see further implementation of the system for ensuring traceability of organic dates. The new arrangements will make it easier to market different varieties of Tunisian date in large stores abroad. Exporters receive incentives amounting to as much as 50% of the approval fees and affiliation charges. Furthermore, organic techniques for the treatment of date palms were introduced last May and a field project involving organic treatment of one thousand hectares is currently underway.

Meeting of Trade Ministers from the Euro-Mediterranean zone

The 7th "Euro-Med Trade" ministerial conference was held on 2 July 2008 in Marseille. It involved the 27 EU members and 12 Mediterranean partner states (Albania, Algeria, Egypt, Israel, Jordan, Lebanon, Mauritania, Morocco, the Palestinian Territories, Syria, Tunisia and Turkey). In the course of the meeting, the Ministers of Trade in the Euro-Mediterranean zone took stock of regional trends in commercial relations and discussed further measures that must be introduced if progress is to be made in economic liberalisation and integration. The conclusions of the conference show that agricultural issues took up a large part of the discussion. First of all, the Ministers had expressed their *"concerns about the effects of the price increase of ... raw material and agricultural products, and its impact"* on Mediterranean economies. On this score they had agreed *"to assess the appropriate means to counterbalance the negative effects of this situation in the spirit of solidarity of the Euro-Mediterranean partnership"*. As to the process of increased liberalisation of agriculture and fisheries products launched in November 2005 by the European Commission with Mediterranean partners, the conclusions highlighted the fact that two states, namely Egypt and Israel, had recently concluded negotiations with the EU. Jordan had been the first country to complete negotiations with the EU in 2007. Ministers welcomed the recent launch of negotiations with Tunisia and encouraged the conclusion of the on-going negotiations with Morocco, while calling upon other Mediterranean partners to open negotiations on agriculture with the EU. It is also worth noting that Ministers thought the main object of the Euro-Mediterranean agricultural negotiations should be to encourage steady progress in three main areas: rural development, agricultural productivity, and promotion of quality products.

Towards a Mediterranean scientific research area

At the initiative of the *Groupe inter-académique méditerranéen (GID)*, scientists met in Paris from 24 to 26 June 2008 to lay the foundations of a Mediterranean area dedicated to science and sharing of knowledge. Organised in collaboration with academies, universities and national and intergovernmental bodies (including CIHEAM), this conference provided participants with an opportunity to examine three broad issues regarded as crucial to the future of the Mediterranean zone and the rest of the world: agriculture and sustainable development, fish stocks and the marine environment, and adaptation to the impact of climate change. The meeting began by identifying certain themes, which would be submitted to policy makers as part of the work by the Union for the Mediterranean. Key agricultural issues earmarked for more searching analysis included *"a socio-economic approach to security of supply, studies into zoonoses, the Mediterranean diet, food safety, and water and soil management"*. With respect to fish stocks and the marine environment, conference participants placed particular emphasis on the need to *"strengthen regional observation networks"* and coordinate *"the use of marine resources needed for sustainable development of the marine environment"*. As to appropriate responses to the impact of climate change, in so far as we understand it, participants emphasised that *"they should obviously have a socio-political dimension and should take account of the economic and social acceptability of the developments envisaged"*.

MAI Bari

MAI Bari, in partnership with other institutions, is organising the 5th international conference on soil degradation from 18 to 22 September 2008.

The aim of this meeting is to see what resources need to be marshalled if we are to go beyond diagnostic analysis and devise specific measures in the field of agricultural land resources.

<http://www.iamb.it/SICLD/>

Publications

FAO, "Forests and energy", FAO Forest division report, Rome (Italy), 2008.

A.Olaizola, A.Bernues, J-P. Boutonnet (eds), "Mediterranean livestock production: uncertainties and opportunities", Options méditerranéennes, Series A, no 78, CIHEAM-MAI Zaragoza, Universidad de Zaragoza, CITA, 2008.

C. Porqueddu, M.M. Tavares de Sousa (eds), "Sustainable Mediterranean grasslands and their multi-functions", Options méditerranéennes, Series A, no 79, CIHEAM-MAI Zaragoza, FAO, ENMP, SPPF, 2008.

A.Lopez-Francos (ed), "Drought management: scientific and technological innovations", Options méditerranéennes, Series A, no 80, CIHEAM - MAI Zaragoza, EC MEDA Water, 2008.

M. Allaya (ed), "Les agricultures méditerranéennes: analyses par pays", Options méditerranéennes, Series B, no 61, CIHEAM-IAM Montpellier, 2008.

M. Palahí, Y. Birot and M. Rois (eds), "Scientific Tools and Research Needs for Multifunctional Mediterranean Forest Ecosystem Management", European Forests Institute, Proceedings no 56, Saarijarvi (Finland), 2007.

V.Fersino, M. Raeli (eds), "Il biologico nel Bacino del Mediterraneo: politiche, normative e mercati per un'agricoltura di qualità", MAI Bari-ISMEA Report, Rome (Italy), 2008.

Agenda

27-28 August 2008 - Aurillac (France)

"RuraliTIC" international seminar: information and communication technologies in rural areas ([information](#)).

15-18 September 2008 - Krakow (Poland)

Conference and exhibition on aquaculture, "Aquaculture Europe 2008", organised by the European Aquaculture Society ([information](#)).

14-16 October 2008 - Avignon (France)

First Mediterranean Fruit and Vegetable Inter-Trade Fair ([information](#)).

9-11 October 2008 - Lille (France)

World Social and Environmental Responsibility Forum: "Feed and protect the Earth: the economic players' responsibility" ([information](#)).

20-24 October 2008 - Rome (Italy)

European Forest Week is celebrating the contribution by European forests to mitigating climate change, providing wood and renewable energy, supplying fresh water and protecting our environment ([information](#)).

30-31 October 2008 - Barcelona (Spain)

The Water and Forests Conference, organised by the European Forest Institute ([information](#)).

8-13 November 2008 - Florence (Italy)

4th International Symposium on Persimmon and little used fruit species ([information](#)).

27-28 November 2008 - L'Etang des Aulnes (France)

International symposium "Foresterranee" on the subject of sustainable production of goods and services in the Mediterranean forest ([information](#)).

13 December 2008 - Tunis (Tunisia)

International seminar on the promotion of partnerships in the tomato processing industry, organised by the Tunisian authorities.

Publication of country profiles

In October 2008, CIHEAM's website will feature analyses of the agricultural systems, rural development and fisheries in each of the 13 member countries.

These monographs were written in spring of 2008 for a special edition of the review *Options méditerranéennes*.

CIHEAM Mediterranean Observatory

Recent publications

CIHEAM Analytical Notes

- *Current events in Mediterranean agriculture (January-April 2008)*, CIHEAM, no 33, May 2008.
- *Arrangements for adding value to agricultural products in France*, Alain Le Goff, n°34, June 2008.
- *Food risks and food safety in the context of globalisation*, Jean-Louis Rastoin, no 35, July 2008.

CIHEAM Briefing Notes

- *Mediterranean mountain products*, Hélène Ilbert, Maylis Luye and Annarita Antonelli, no 46, May 2008
- *Agriculture and sustainable rural development*, CIHEAM and Blue Plan, no 47, May 2008.
- *Climate change and agriculture in the Maghreb*, Mahi Tabet-Aoul, no 48, June 2008.
- *The Mediterranean and Europe and the outlook for world agriculture*, Pierre Blanc, no 49, June 2008.

NewMedit

- Summary of the 02/2008 edition of the review, July 2008.

CIHEAM Watch Letter

- Watch Letter No 05, "Socio-economic repercussions for the Mediterranean of the rise in food prices", spring 2008.

The CIHEAM Watch Letter

Every quarter
CIHEAM issues its
Watch Letter in English
and French.

The next issue will be
published in
November 2008 and
will address organic
agriculture in the
Mediterranean Region.

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

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