



MED WAVES

MAP COORDINATING UNIT - NEWS BULLETIN PUBLISHED IN ARABIC / ENGLISH / FRENCH - N° 42 - 43

THE BUREAU MEETING IN DAMASCUS
HERITAGE AND CULTURAL TOURISM IN SYRIA

فاذربدا العصير فصفه فهذا الشراب موافق لوجع الحلق والجنب والربو
والاسه والرافف ولين بلغم غليظ في حلقه يصفى اللون ويكثر التورم



وليس له عياله موافق للمثانه والكلام ع ع
صنعه شراب للزكام والسعال

وورم البطن واسترخا المعد خذ ربع اوقيه واصول حوس ثم اوقيه
وظل انيض ربع حوس اوقيه ذقه جميعا واربطه خرقه واجعله في لبنه امشاط شراب
طيب وانك تلتنه ايام ثم صفه وارفعه في اناء نظيف اشرب منه بعد العشا

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WHAT IS MAP?

The Mediterranean Action Plan (MAP) is dedicated to the protection of the environment and the development of the Mediterranean Basin. It was adopted in Barcelona (Spain) in 1976 by the Mediterranean States and the EC, under the auspices of the United Nations Environment Programme (UNEP). Its legal framework is made up of the Barcelona Convention (1976, revised in 1995), and six Protocols on specific aspects of environmental protection. It is composed of a Coordinating Unit based in Athens, six Regional Activity Centres scattered throughout the Mediterranean, and a MED POL programme for monitoring and controlling pollution. The Mediterranean countries and the EU meet every two years to decide on MAP's budget and programme.

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The MAP logo adopted at the Bureau meeting in Damascus, in November 2000.



CALENDAR OF MAP MEETINGS

Working Group on the reporting system	28 February 2001 Athens(Greece)
Meeting of the Interagencies coordinating Committee (tentative)	March 2001 Athens (Greece)
Meeting of the GEF Project Coordinating Committee (tentative)	March 2001 Athens (Greece)
Consultation Meeting on the Informal network on compliance and enforcement	15-17 March 2001 Sorrento (Italy)
Second Meeting of National Legal/Technical Experts to amend the Emergency Protocol	2-6 April Monaco
Meeting of the Bureau of the Contracting Parties	26-28 April 2001 Nicosia (Cyprus)
5th Meeting of the MCSD Steering Committee	17-18 May 2001 Monaco
Meeting of MEDPOL Focal Points	28-31 May 2001 Venice (Italy)
Joint Meeting of PAP/BP/ERS-RAC Focal Points	12-16 June 2001 Palermo (Italy)
Meeting of MAP Focal Points	11-14 September 2001 Athens (Greece)
7th Meeting of the MCSD	3-6 October 2001 Antalya (Turkey)
12th Ordinary Meeting of the contracting Parties	14-17 November 2001 Monaco

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Arabic version of a medical manual by Dioscorides



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MAP IN DAMASCUS

THE MEETING OF THE BUREAU OF THE CONTRACTING PARTIES

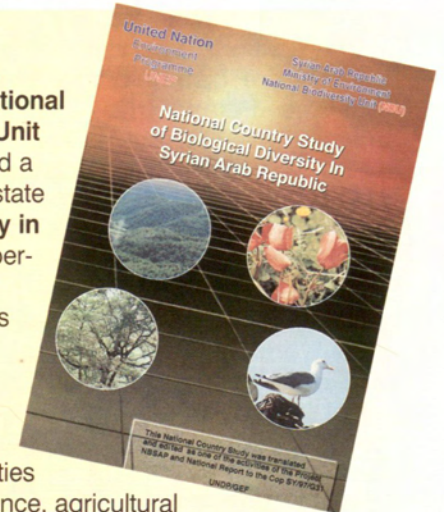
(31 October – 1st November 2000)

Examination of activities conducted recently, revision of the Emergency Protocol, the reporting system, the adoption of the MAP logo, and the criteria for selecting NGO partners were on the agenda of this meeting, held just before the 6th session of the MCSD.

The second meeting of the Bureau to be held since the Contracting Parties met in November 1999 and was opened under the chairmanship of Mr. F. Zammit Dimech, the Maltese Minister of the Environment. It was the first institutional meeting to be held by MAP in the Syrian Arab Republic, and Mr. Farouk Adli, the Syrian Minister for environmental affairs, was anxious to recall that for his country, which lay in a sensitive region with its share of pockets of tension and conflict, solidarity between peoples was the only feasible way of facing up to environmental problems, and that this was only possible in a climate of peace, prosperity and security. The six members of the Bureau (Malta, Syria, Libya, Cyprus, France and Italy) issued a further appeal for speedier ratification of the new or amended instruments of the Barcelona system, and invited the Secretariat to convene a meeting in Monaco in April 2001 for experts responsible for examining the draft revision of the Emergency Protocol. The Bureau would only adopt its final position on the details and dates for the conference of plenipotentiaries responsible for adopting the revised Protocol once it had been apprised of the outcome of this initial meeting. The meeting felt that this possible adoption should go hand in hand with capacity building within REMPEC in Malta, to enable it to accomplish the new tasks incumbent upon it under the new provisions in the Protocol. Regarding the single reporting system which countries are expected to respect within MAP, participants felt that it should be simplified as far as possible, and gradually harmonised with the systems applied by other conventions and the European Union, the latter being destined to play an ever-increasing role in the region with the prospect of accession by other Mediterranean countries. Finally, the Bureau adopted a logo combining two proposals made by Italy, still awaiting its final touches, and decided that the criterion of making a tangible contribution to the programme's activities should be brought into the balance for the selection of MAP's NGO partners. At the proposal of the Syrian delegation, the Bureau adopted a "Damascus Declaration", which basically recalled the need for speedy ratification of the Barcelona system's new or amended texts, and the implementation of the Strategic Actions Programme. The excellent climate which prevailed during the meeting as a result of the consideration shown by the Syrian authorities was illustrated when, on the fringes of the meeting, the Syrian Prime Minister, Mr. Mustafa Miro, met with Mr. F. Zammit Dimech, President of the Bureau, and Mr. L. Chabason, the Coordinator of MAP. Mr. Miro spoke to them of the great interest which his country and its leaders had in cooperation between all the Mediterranean riparian states, in order to ensure the integrity of their common sea, and to contribute to the sustainable development of the region. ■

The Syrian Environment Ministry's National Biodiversity Unit

has conducted a study on the state of biodiversity in Syria, in cooperation with the United Nations Environment Programme (UNEP). Over 200 scientists from the faculties of natural science, agricultural engineering and economy in the country's universities and research centres took part in this huge undertaking, which was intended to provide a back up for the first essential protection measures, and the preparation of a national strategy for meeting the aims of the Convention on Biodiversity, to which Syria is a party. The richly illustrated 367 page document which came out of it, and which appeared during 2000 in Arabic and English ("*National Country Study of Biological Diversity in the Syrian Arab Republic*") is the first major national inventory of species of fauna and flora, their status, and the threats which some of them face. It also highlights the great variety of Syrian eco-systems, alternating between the forest slopes to the North, the coastal plains, the narrow North-South Ghab valley irrigated by the Orontes (the "fertile crescent"), the succession of plateaus and valleys surrounded to the East and South by the desert and several oases, the desert itself giving way on its fringes to the steppe: many different habitats with a great wealth of fauna and flora, including several endemic species, but which demand the application of voluntarist policies since Syria is lagging way behind in the effective creation of specially protected areas, national parks and nature reserves. The publication of this study bears witness to a national awakening in this sphere. (Ministry of State for Environmental Affairs, Tolyani, P.O. Box 3773, Damascus, Syrian Arab Republic). ■





SYRIA: OPTING FOR CULTURAL TOURISM BASED ON AN OUTSTANDING HERITAGE

At the sight of Syria's cultural heritage, the heads of historians, archaeologists, and particularly visitors start to spin, such is the succession of ages and civilisations, spanning virtually the entire history of mankind, from the Palaeolithic and the arrival of the first humans in the region one million years ago, up to the Ottoman period (1516-1918). Each stratum has turned up evidence of the major watershed in civilisation: the introduction of agriculture and irrigation, metal-working, the invention of the cuneiform alphabet (the Ugarit tablet, XIVth century B.C.), the first towns, the first palaces, the first empires (Akkadian, Amorite, Babylonian, Mitannian, Hittite, and Assyrian), the birth of navigation and trade between Asia, Africa and the Mediterranean banks of Europe. Four sites have been included on UNESCO's World Heritage List: Damascus (1979), Bosra (1980), Palmyra (1980) and Aleppo (1986). However, this country which

boasts over a hundred other sites which have already been studied, excavated, and inventoried, still possesses a stock of remains as yet unexplored, making it potentially one of the richest areas of the world in terms of the chronological span and diversity of the civilisations present.

Damascus, the capital, which lies at the foot of Mount Kassioun, vaunts its old town, the Great Umayyad Mosque, evidence of an age where the town became both the cradle (660) and the capital of the Arab-Muslim empire, to which would be added madrasas (religious schools), Saladin's Tomb, and the Tekkiye Suleiman Mosque. Bosra boasts a theatre constructed by Rome, one of the best preserved in the Middle East (IInd century AD). Palmyra owes its prestigious history to the presence of a spring, mentioned as far back as the IIIrd millennium, and to its position at a crossroads of caravans; the oasis has left amazing

Roman remains, haunted by the memory of Queen Zenobia, whilst in Aleppo, the North's main town and also a major caravan stopping-point, the Arab citadel is surrounded by souks, caravanserai, hammams, mosques and churches. Besides these sites, which over a history spanning more than four millennia acted as trade and cultural exchange centres between Asia and the Mediterranean world, the defensive works left by the crusades should not be left unmentioned, such as the Krak des Chevaliers, which overlooks an area stretching from the mountains of Lebanon to the plain of Homs and the coast, or the Byzantine "ghost towns" in the Aleppo region.

Like most sites in the Mediterranean Basin, although relatively well preserved by a dry and temperate climate, Syria's have not been spared the damage caused by poor management, changes to the surroundings, demolition and reconstruction-

(suite page 6)

Palmyre



An interview with Mr. Farouk Adli, Minister of State for Environmental Affairs for the Syrian Arab Republic

You were recently appointed Minister of State for Environmental Affairs in the Syrian Arab Republic. Could you give us a brief overview of the priority issues you will have to tackle?

Let me begin with a historical reference. In the past, Syria suffered considerably as a result of not taking environmental considerations into account in the development process. I believe this is the case of most developing countries. However, this trend was reversed in 1991 when the late President Hafez El- Assad, who passed away last June, set up the Ministry of State for Environmental Affairs, the first of its kind in the Arab world.

In other words, as of that date the environment became a part of environmental action in its own right, and is now dealt with as such?

Yes, but this needs to be seen in perspective: initially, the Ministry's activities were very much limited by the fact that there was not the experienced staff needed to carry out the necessary studies. Gradually, the human resources were trained and, more recently, a national strategy has been developed, focusing on some major priority issues. To quote in particular: the relative deterioration of agricultural land, the over-exploitation of water basins, the absence of waste dumps, and uncontrolled urban settlements around the main towns, etc.

So you are at the stage of exploring and identifying the problem issues?

No, we have moved well beyond that. To address these problems, short and medium term national plans have been developed. They are currently being discussed among the relevant ministries and other public bodies to find ways to implement them. Environmental concerns have

become part and parcel of all development plans: no project is considered if it does not respect this criterion. This is particularly true of the industrial sector, where reviews are conducted to ascertain the pollution potential of factories, in order to take the necessary measures to reduce or eliminate it. In this respect, national



standards and classifications have also been designed to promote a sound environment. Moreover, in his inauguration speech, President Bashar El-Assad emphasised the importance of addressing the root causes of our environmental problems at the dawn of the 21st century.

In 1989, Syria asked MAP to implement a Coastal Area Management Programme (CAMP), a request which was approved by the meeting of the Contracting Parties in 1989, and was one of the first 4 CAMPs. It was implemented between 1990 and 1994. Did this CAMP produce any practical effects for the Syrian coastline? Has there been any follow-up?

Yes, this first initiative in regional cooperation has had some positive effects. Let me remind you that, amongst other things, this CAMP included a study on integrated coastal planning, application of the

geographical information system, the preparation of a monitoring programme for our coastal waters, preparing for an environmental impact assessment, a case study on the impact of climate change on the Syrian coast, and the identification of areas to be protected. Thanks to these studies conducted at the time, and in order to apply their conclusions in the form of specific action, an environmental body has been set up in Tartous, with a subsidiary in Latakia. Laboratories and equipment have been provided to enable these bodies to operate correctly.

So you are all for regional cooperation then?

Absolutely! Our cooperation with MAP has in fact been followed up and extended by cooperation with the European Union to finance part of the joint pilot project between Syria and the Lebanon on coastal resource management. Two wastewater treatment plants have been built in the Tartous and Latakia Governorates. The ministry has also cooperated with the Global Environment Facility (GEF) to develop protected areas at Al-Arz, Al-Shawah and Latakia, with funding from the World Bank for a three-year period. Finally, with the support of REMPEC- MAP's Malta-based emergency response centre for marine pollution- and the European Union, we are developing an emergency plan in case of accidental oil pollution on the Syrian coast. A plan has also been developed on using sprinkler irrigation over a four-year period to conserve water resources. This handful of examples is proof enough that we are ready to exchange experience and transfer technology on an equal footing, and that we fully support MAP's endeavours to make the Mediterranean an area of prosperity and peace, shaped within the perspective of sustainable development.

which have run rife in Aleppo, Raqqa and Hama in particular. Of the main factors affecting Syria's heritage, apart from erosion and changes to the coastline and river morphology, mention should be made of the quarries, uncontrolled housing and urban expansion. As for the major works which have marked recent decades, they have not been without their cost either. During the construction of lake Assad to the East of Aleppo, which was inaugurated in 1973, and which is the biggest dam in the Middle East after Aswan, intended to regulate the flow of the Euphrates, and to prevent flooding caused by the thawing of the Anatolian snows, Syria appealed to UNESCO to move or consolidate certain buildings. Archaeological missions put in some intensive work to excavate the tells (artificial mounds formed by the ruins of ancient towns) on the two banks of the Euphrates before they were submerged. According to a UNDP/World Bank report (1998): "*large dams are often accused of creating environmental damage, but in Syria the preparatory work for the construc-*



Tekkiye Suleiman - Damascus

tion of the dams on the Euphrates has contributed significantly to our understanding of the archaeology of the region. The surveys and excavations in advance of dams and irrigation works have expanded and rewritten the history of the region. Dam construction has provided an introduction to environmental assessment techniques".

Mention should finally be made of the role in Syrian heritage of the extraordinary burgeoning of

manuscripts which began in Damascus (661-750) under the Umayyad dynasty, and which was to reach Cordoba (756-1031) and extend through other dynasties in Muslim Spain. Many of these manuscripts are translations and commentaries from the great authors of Greco-Roman antiquity, and it was the erudite and knowledgeable pre-Reconquista Arabs and Jews - we need only to mention Averroes and Maimonides - who were to maintain, enrich, renew and pass on ancient knowledge - particularly in medicine (see *cover page of this edition*), astronomy, philosophy, and mathematics - thus allowing the West to a great extent to become aware of and assimilate the elements in which the Renaissance was to be rooted. The study of these manuscripts also provides modern-day historians with an opportunity to recreate a more accurate picture of the historically very fruitful links between Islam and science.

As for tourism, although it provides a major incentive for protecting heritage, it also creates a negative effect, since it exerts tremendous pressure on natural resources and landscapes. This explains why the Syrian authorities long since opted to avoid mass tourism, which would seriously undermine the environment, preferring instead to encourage cultural tourism which, given the country's remarkable heritage, would seem destined for great things. The coastal strip, 183 km in length - 65% of which is rocky - is particularly vulnerable as home to the industrial sites of Tartus, Latakia and Baniyas; in the past remains have on occasion been lost through ill-advised development and excessive numbers of visitors, as at Arwad off Tartus, the only island - albeit tiny - on the Levantine coast. Nowadays, the Syrian coasts welcome mainly national tourism as well as visitors from neighbouring coun-

tries, and one of the main problems it is facing is that of waste management. From 1990 to 1994, MAP conducted a Coastal Area Management Programme, which led to experts being trained and local leaders made aware of integrated management and the use of tools such as the Geographic Information System (GIS), the tourist carrying capacity assessment (CCA), and the environmental impact assessment (EIA), and the Ugarit site was included on the list of the Marseilles-based 100 historic sites programme.

In this context, the value of Syria's heritage is directly related to cultural tourism, which is well ahead of beach tourism, and should also be related to a strong movement of religious pilgrimage (the Shiite sanctuaries in Damascus and Aleppo attract large numbers of visitors from Iran and the Arab countries). The Syrian Ministry of Tourism is expecting an annual increase of 5-6% in international arrivals up to the year 2015, presuming that the political situation in the Middle East stabilises. According to a growth forecast moderated over 20 years, in 2015 Syria will thus receive 5.9 million foreign visitors, and 7.3 million overnight stays (including domestic tourists) as compared with 1.8 and 2.3 million respectively, for the reference year of 1995. This reasonable increase, which the Syrian authorities would like to be in keeping with sustainability, could well help Syria avoid the environmental repercussions faced by many other Mediterranean riparian states over the last 30 years, and which often led to tourism destroying its own powers of attraction. ■

(see "State of the Environment in Syria" UNDP/WB (1998), e-mail: post@ermuk.com, <http://www.ermuk.com>; "Report of the Conference on the final results of the coastal area management programme for the coastal region of Syria", UNEP/MAP/1994), <http://www.unepmap.gr>

THE SIXTH MEETING OF THE MEDITERRANEAN COMMISSION ON SUSTAINABLE DEVELOPMENT

(Tunis, 14-17 December 2000)

As was decided by the members of the MCSD meeting in La Marsa, near Tunis, the Strategic Review 2000 would provide the basis for a Mediterranean strategy on sustainable development, and for the Mediterranean's contribution to the 2nd Earth Summit in 2002. The presence of the Tunisian Prime Minister, nine Ministers for the Environment and Heads of Delegation conferred great importance on the "Tunis Declaration".

A Frank Review

Opening the 6th meeting of the MCSD, Mrs. Faiza Kefi, the Tunisian Minister for the Environment and Land Planning stated: "five years after the MCSD was set up the time is now ripe for a first frank assessment to be drawn up". Representatives from the countries, the EC and the three groups from civil society were presented with a document summarising the contributions which they themselves had made, as well as some regional studies. This was an unprecedented phenomenon in MAP's history, which meant that the various different actors in sustainable development in the region could be involved, from ministry heads and experts to local authorities, socio-economic actors and NGOs. Nor has inter-activity ever been so much in evidence, with feedback constantly refocusing and updating the text. This is indeed a "frank" Review, as a result of its strict approach, its analyses, diagnoses and conclusions. Thus the MCSD did nothing to spare itself, so-to-speak, homing in on several of its "detrimental flaws". By and large, the Review recognises that, although practically all Mediterranean countries and regional organisations have environmental policies, more often than not they have a fragmented view of sustainable development. Transversal links are as good as disregarded, and in the best of circumstances environmental concerns are inappropriately incorporated in development policies. In terms of content, most relevant sustainable

development policies in the Mediterranean have failed to address three major problems: firstly, policy reform in the key sectors, particularly agriculture and tourism; secondly, controlling urbanisation and littoralisation; and thirdly, the development of infrastructures with due respect for local resources and heritage.

Towards a Mediterranean strategy on sustainable development

The members of the MCSD unanimously stressed the quality of the Review, the wealth of information it contained, and the relevance of its analyses. As to how it would be used in the future, consensus was quickly reached on preparing a summary in brochure form, to be widely circulated to all sectors of civil society. The Review and its summary would also be used as the basis for MAP and the MCSD's contribution to forthcoming major international conferences, particularly the 2nd Earth Summit in 2002. Finally, the meeting welcomed the proposal that the Strategic Review should be used to prepare a **Mediterranean strategy on sustainable development**; an initial guidance document would be submitted to forthcoming meetings of the MCSD and the Contracting Parties in 2001, to be finalised and submitted for adoption at a meeting of the representatives of the Contracting Parties, which Spain was proposing to host in 2002, before Rio + 10.

The Tunisian Prime Minister's Speech to the MCSD

Mr. Mohamed Ghannouchi, the Tunisian Prime Minister, opened the high level Segment stressing that at the dawn of this new millennium his country was actively pushing for an environmentally friendly model of development, and that it was proud to host a meeting which represented an important stage in assessing the achievements accomplished by the sustainable development process since the MED 21 Ministerial Conference in 1994. Mr. Ghannouchi highlighted Tunisia's efforts to set up a "global fund for solidarity and combating poverty". He invited Mediterranean countries to support this initiative and to endeavour to enact it, in order to establish the values of solidarity between States and peoples. The appeal was well received, since in a motion thanking the Tunisian authorities at the close of the high level Segment, the Commission members expressed their support for the initiative, and in the "Tunis Declaration" express reference is made of a "solidarity fund" as part of the "innovatory mechanisms, better adapted to sustainable development" to be introduced under cooperation. It should also be noted that at domestic level, as far back as 1992 the Tunisian government set up a "national solidarity fund" (the so-called 26-26), the concern of the Tunisian authorities being to defend and push this concept through in the various international bodies, particularly those belonging to the United Nations.



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The high level Segment

As timing would have it, the Tunis meeting was held in the same week as two other international meetings, also of direct interest to the Mediterranean: the conference on climate change in The Hague, and the Marseilles conference on the Euro-Mediterranean process. Some of the nine Environment Ministers from riparian states, and the heads of delegation comprising the high level Segment and who gave statements on their vision of the Mediterranean future, commented that the Tunis-The Hague-Marseilles triangle underscored the inter-weaving, or rather the convergence of problems, objectives and partnerships. The "Tunis Declaration" adopted by the high level Segment did not only represent a solemn act dictated by circumstances and intended for the media; the lively, in-depth discussions before the adoption of each paragraph, the emphasis placed on the need to strengthen cooperation and to increase the funding allocated to public development aid, the demand for increased accessibility to the financial instruments, the inclusion in the final wording of support for a "solidarity fund" advocated by the Tunisian authorities, and the concern to encourage more active participation, where possible through networks, by local authorities, the socio-economic actors and NGOs, undoubtedly reflected a more voluntarist attitude on the part of the Mediterranean community, and its determination to enact commitments already entered into at regional or international level- such as those in the Kyoto Protocol for which the Commission proposed that the

governments of the riparian states "take the necessary initiatives".

Appointment in Antalya (2001)

The Secretariat had prepared some assessment charts to help the meeting select a limited number of issues for the second round of MCSD work, to begin in October 2001. On this occasion, participants held a frank, often "self-critical" debate on the role and operation of the MCSD. Noting a lack of participation in its work by the local authorities and socio-economic actors- whilst it was the Commission's aim to bring MAP into closer contact with civil society as a whole- most members called for more effective participation on the part of the groups in question, and a genuine follow-up and implementation strategy from the countries for the recommendations it issued on each theme it tackled. Furthermore, they felt that new issues should square with the Mediterranean strategy to be prepared over the next two years, providing input and feeding into it. As was pointed out by the WWF observer, this exercise in self-scruti-

ny which the Commission had regularly carried out since it began, was a sign of vitality, the desire to be efficient, which still needed to be expressed in a more integrated working method and in greater mobilisation of the region's various groups and partners. In this spirit, the meeting selected three issues on a preliminary basis, which it felt deserved attention, providing the Secretariat specified what added value could be expected of them: "agriculture and rural development", "urban waste management and consumption patterns", and "international cooperation: mobilisation of resources and partnerships". With Turkey having confirmed its offer to host the 7th meeting in Antalya, representatives set a date for early October 2001, in other words a few weeks before the Twelfth Meeting of the Contracting Parties in Monaco (14-17 November, 2001), to which would be submitted the recommendations and proposals for action for the three themes currently underway: "Industry and environment", "free-trade and sustainable development", and "urban management and sustainable development". ■



Carthage

Documents submitted to the Tunis meeting

The new Steering Committee

The first task incumbent upon the Tunis meeting was to elect its new Steering Committee, with the exception of the President of the Bureau of the Contracting Parties (Malta) who, as a full member, stays on as Vice-president. The presidency shifts to Monaco, with the other three posts of vice-president being taken by Tunisia (which held the presidency of the outgoing Bureau, and will thus provide for the necessary continuity), Greece, EOAN (Group of chambers of commerce for the development of the Greek islands, also an outgoing member), and the ENDA (Environnement et Développement au Maghreb), with the Municipality of Naples taking over as rapporteur. It is thus comprised of four representatives of riparian states plus three members representing the socio-economic actors, NGOs and local authorities respectively, with a balanced North/South distribution which is a good reflection of the Commission's composition.

The Strategic Review 2000

Prepared between January and September 2000, it is a summary of the reports sent in by all the Mediterranean countries, 6 members of the three groups from civil society, and three regional studies drawn up by experts on civil society, regional cooperation in the Mediterranean Basin, and the MAP/Barcelona system in terms of sustainable development. The work and successive meetings of a steering committee and a coordinating and drafting group comprised of the Secretariat and experts/consultants gave rise to an initial version which was sent out in July 2000 to all MCSD members for comment. These comments were then taken on board to produce the final version, submitted in Tunis. The Review, comprising 80 pages and completed by annexes containing tables which sum up the main quantified data, is broken down into six main sections: The aims of the Review; Development Stakes in the Mediterranean; Regional instruments and actors for sustainable development in the Mediterranean; MCSD: system and activities; The activities of the Contracting Parties; Performance, flaws and weaknesses in policies applied. A 7th section entitled "Recommendations and proposals for action" was examined in special session and in plenary at the Tunis meeting, and was adopted by the Commission. The Strategic Review, the preparation of which was foreseen by the MCSD's mandate, aimed to provide MAP and the MCSD with the political impetus needed to develop their activity, to allow the effective nature of measures decided upon by the Mediterranean community and its partners to be assessed from the point of view of sustainable development, and to assist in shaping and implementing a regional strategy on sustainable development in the Mediterranean. The Tunis meeting felt that the text before it met these objectives, and that the impetus created by its preparation, the fruit of excellent cooperation and interaction between consultants, experts, MCSD members and the Secretariat should be exploited in order to establish MAP's strategy on a sound basis in the future.

**The Tunis Declaration
addressed by the
Mediterranean Commission
on Sustainable Development
to the Contracting Parties**

In this three-page document drawn up on the basis of a Tunisian proposal, which opens with recitals referring to the main landmarks in Mediterranean cooperation, and references to the founding texts- such as the 1994 Agenda MED 21- the members of the MCSD

submit some specific proposals to the Contracting Parties to the Barcelona Convention in the areas of cooperation and financing, the legal framework, decentralisation and participation. The Tunis Declaration is an innovation compared with the previous Genoa (1985) and Barcelona (1995) Declarations: for the first time in the history of MAP it was jointly examined and adopted by the Contracting Parties and Mediterranean civil society. Besides its actual content, which comes in recommendation form, on a deeper level it stands as a commitment by all the partners involved in sustainable development, from the public authorities and heads of companies to leaders of the associative movement and local councillors, and is therefore a sign of the movement which for some years now has been underway in the Mediterranean towards placing responsibility vis a vis the main stakes for the future on the community in its entirety.

**The Secretariat's report
on the MCSD's activities
(July 1999-October 2000)**

This was the working document for the Tunis meeting, with a brief historical run-down of the MCSD, a summary of its activities since the 5th meeting in Rome, a presentation of the agenda items for Tunis and the annexes recapitulating the conclusions of the 3rd and 4th meetings of the MCSD Steering Committee (Tunis, January 2000 and Corfu, June 2000). Annexed to it were three interim reports on the three MCSD themes currently underway and to be completed for the Antalya meeting.

**Free-trade and the environment
in the Euro-Mediterranean
context: Report by
the task managers and
the Secretariat (BP/RAC)**

On this theme, which is crucial to the future of the Mediterranean since several riparian states have entered association agreements with the EU with the prospect of setting up a free trade area by 2010, the MCSD's thematic group is initiating its work, largely in the light of elements gleaned from a workshop held in Montpellier-Mèze in October 2000, which brought together experts from 10 Mediterranean countries and several international and non-governmental organisations. Based on the work done in Montpellier-Mèze, France and the Lebanon (the two task managers) have provided some leads as a first outline of

MED POL STUDIES THE EFFECTS OF DESALINATION PLANTS ON THE ENVIRONMENT:

The problem of the offshore dumping of brine

the proposals for action to be submitted at the Antalya meeting.

Urban management and sustainable development: progress report

This overview of the work carried out by the thematic group was prepared by BP/RAC in conjunction with the task managers (Medcites, Egypt and Turkey); it goes hand in hand with a report, circulated separately in Tunis, on the first meeting of the Working Group's steering committee on the theme (Paris, April 2000), which has annexed to it some "elements for a report", in other words a summary of all the work done by this thematic group, particularly at the first meetings in Split (April 1999) and Rome (October 1999): general trends in urban development; recurring questions (unregulated housing, the urban environment, and the role of the informal sector); urban policies and town management.

Industry and Sustainable Development

From the outset, this thematic group has endeavoured to provide some practical tools, which could be used to modernise the industrial sector within the context of sustainable development. For this purpose, it also drew on those centres which have direct links with the sector, such as the Cleaner Production Centre in Barcelona, and UNIDO-ICS (which has installed an Internet information system- ICSnet- in this field), and the MEDPOL programme which runs activities intended to reduce industrial pollution under the LBS Protocol and the Strategic Actions Programme.

Pre-feasibility Studies

This document brings together the pre-feasibility studies conducted on nine themes. Its aim was to assist the Commission in picking out those which seemed best suited to the second round of its work to begin in October 2001 at the 7th meeting in Antalya. The term "theme" was replaced by "issue" during the Tunis discussions, to indicate that the MCSD must avoid excessive "sectorisation", and work in an integrated fashion, sustainable development being a jigsaw, whose individual pieces may not be dissociated. Although three issues were selected on a preliminary basis (see above), the Secretariat was invited to present a further report in Antalya, assessing the added value to be expected, and providing the impetus for other issues by building on available competence.

(to consult or download texts,
Web: www.unepmap.org; to request information
and copies: e-mail: watts@unepmap.org).

It is a well known fact that several Mediterranean countries have been prompted by a shortage or lack of water to begin desalinating seawater on an industrial scale- Spain, Italy, Algeria, Israel and Libya, and the two island states of Cyprus and Malta- the latter covering 50% of its supply in this way. Several techniques are used, such as distillation- the oldest process, consisting of heating water to boiling point and condensing the steam- or particularly reverse osmosis, where saltwater is forced under pressure along membranes which let the water through whilst retaining the salt. By and large these techniques tend to be limited by their energy cost, but with future improvements expected in their viability, they are likely to take off. Although at first sight they would appear to be in keeping with sustainable development since they use a resource which is inexhaustible by very definition, they do nonetheless generate an impact on the environment through the large quantities of brine produced during desalination. It is estimated that around 8 million m³/day are discharged into the Mediterranean Sea. The main effects, as is revealed by the first studies conducted in this as well as other highly exposed regions such as the Persian Gulf, consist of changes to the physico-chemical properties of

the seawater (salinity, temperature, currents) and of damage to the marine fauna and flora- particularly coral reefs, and certain species of plankton and fish. These effects largely depend on the characteristics of the discharge site. In vitro experiments have shown the lethal effects on the eggs and juveniles of various species of marine organism.

As a follow up to contacts which some Mediterranean countries have had with MAP concerning the problems and possible options related to the management and disposal of brine, MED POL has endeavoured to collect relevant data and information with the aim of preparing a formal position on the issue. Apart from the previously mentioned harmful effects on ecosystems, the dumping or discharging of brine in the Mediterranean also represents a breach of the provisions in the Barcelona Convention's LBS and Dumping Protocols. An initial technical and legal review has been drawn up, and will be used to prepare a complete assessment, with recommendations for proposing alternatives to discharging, or mitigating its effects. The final document will then be submitted to the Mediterranean governments and the European Union for approval and follow-up. ■

Cleaner Production

THE BARCELONA-BASED CP/RAC LAUNCHES A CAMPAIGN TO PROMOTE CLEANER PRODUCTION IN THE MEDITERRANEAN BASIN

The Barcelona Centre for cleaner production is currently making tremendous multimedia efforts to circulate information about cleaner production techniques in several industrial sectors. Various supports have been used:

A book: Guide to the Minimisation-Opportunities Environmental Diagnosis (MOED) (in English, French and Spanish). The guide presents the methodology prepared by the Centre for applying the MOED, intended to assess industrial activities in order to identify any possibilities for preventing and reducing pollution at source, and providing firms with sufficient data to steer their policies in the direction of cleaner practices, which are both technically and economically feasible. A

workshop on the MOED was held in Barcelona in June 2000, and brought together experts and representatives of industry.

A video cassette: two cassettes in short documentary form have been produced and circulated by the Centre (in English, French and Spanish), along with leaflets: one on the *prevention of pollution in the metal finishing sector*, and the other on the *prevention of pollution in the olive oil production sector*. These videos have been designed as teaching material for seminars, workshops or other events organised in MAP countries to promote cleaner production.

Finally, The Centre has continued to publish its CP News review (*No. 7, September 2000*),

which provides information about cleaner production activities and initiatives in the region, as well as its MedClean data sheets (nos. 21 to 24 published in September 2000) on case studies and successful examples of Mediterranean companies which have applied waste reducing processes.

This promotional campaign has the backing of UNEP/MAP, the Spanish Environment Ministry and the Autonomous Government of Catalonia. The Centre is currently preparing studies on ways of preventing pollution in the canned foods sector, and possibilities and opportunities for recycling used oil. The following article reproduces most of the aspects contained in the video cassette on olive oil production.



CLEANER PRODUCTION TECHNOLOGY IN THE OLIVE OIL SECTOR, SYMBOL OF THE MEDITERRANEAN

The olive oil sector, one of the most traditional in the Mediterranean, is nowadays facing a new challenge: that of integrating cleaner production technology and reshaping its role in order to minimise its environmental impact.

An expanding sector

Thanks to the spread of the Mediterranean culinary culture throughout the world, and the circulation of medical studies which highlight the beneficial

effects of oil with a high mono- and poly-unsaturated fatty acid content, over recent years there has been a major upturn in demand for olive oil, as well as in its market value.

95% of world olive oil production is still concentrated in the Mediterranean Basin, where it played and continues to play an important role in economic, environmental, landscape and cultural terms (the olive tree, the symbol of the region, is the species usually used by geogra-

phers to set the limits of the Mediterranean area).

The Basin's olive groves extend over some 8.5 million hectares and almost 2 million tonnes of virgin oil are produced each year from the fruits of around 720 million trees. In absolute terms, that represents around 40,000 million US dollars per year. Olive oil production is thus an important source of income for the agricultural economies of the Mediterranean riparian states.

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THE NATIVE OLIVE

The olive tree, the vine and wheat: these three pillars of the Mediterranean agro-food economy over thousands of years are also natives, unlike many species which although we often think of as being typical of the region, were in fact imported over time, such as the cypress, the orange tree, the aubergine or the tomato. From the earliest civilisations the olive tree, the vine and wheat have also had their gods, their cults and their myths. Still today the olive tree bears the honour of being used by most geographers to define the limits of the Mediterranean, as if it alone summed up its uniqueness.



One final piece of evidence of its symbolic power: the MAP logo which was adopted at the Bureau meeting in Damascus in November 2000 depicts two olive branches. Probably originating on the banks of Asia Minor, the olive tree has bequeathed fossilised leaves to us which date back 50-60 000 years. The dove which announced the end of the flood in Mesopotamian and Biblical writings bore "a fresh olive branch" in its beak. The tree was also grown in Minos and Mycenae, as well as in the Egypt of the Pharaohs. In classical Greece, its status as a sacred tree was sealed in numerous religious rites, writings and the arts: its

branches crowned the heads of Olympic champions, its oil covered the bodies of athletes and lit the temples. A symbol of peace from an early age, the olive has remained as such. The role which olive oil has always played in economic exchange in the Mediterranean cannot be emphasised

enough. The wrecks of trading ships from antiquity found in the different parts of the Basin virtually all turn up amphora of oil. Although for more than a century consumption slumped seriously as a result of competition from other vegetable oils and its price, it has made a comeback over recent years because of its claimed dietary virtues, based on certain epidemiological studies, as well as the enthusiasm

for the so-called "Mediterranean" diet which has emerged in the Northern industrialised countries, of which it provides one of the four or five basic elements. Of the MAP states, Spain ranks first in production terms (825,000 tonnes), followed by: Italy (497,000), Greece (390,000), Tunisia (180,000) Syria (91,000), Morocco (76,000), Turkey (56,000), Algeria (16,000), Libya (10,000), and the Lebanon (6,000). Outside of MAP, only Jordan (18,000) and Argentina (12,000) rank anywhere of note. In terms of yield, 5kg of olives produce 1 kg of oil, and 1 olive tree produces 1.5-3.5 kg of oil.

Olive oil extraction has long been carried out using processes which require the addition of large quantities of water, and generate a considerable amount of waste and by-products, which are contaminants if not correctly managed or treated. It should be noted that the so-called "vegetable water"- i.e. the water which is extracted from the olives at the same time as the oil in pressing- has a high

content of organic matter when it is discharged into bodies of water such as sewage systems, and can create a serious environmental impact, affecting the flora and fauna in rivers, and rendering the water unsuitable for other uses, or causing the deterioration of the networks themselves.

To give some idea of the environmental impact, it is esti-

mated that the vegetable water produced in the Mediterranean by the traditional 3-phase process generates a pollution load equivalent to that produced by a town with 8-10 million inhabitants. This is aggravated by the fact that the liquid is produced within a short period of time and within a limited area.

On the other hand, waste and by-products from oil mills have ./..

useful properties, such as their fat content, their energy potential, fertilising properties, etc.

The production process

Although there are several techniques available, the olive oil production process usually consists of five basic, separate steps: reception, cleaning, milling, mixing and extraction, as well as the additional classification and storage operations.

Before milling the olives are usually given a final rinse. Once milling has been completed, the resulting paste is mixed in order to facilitate liquid/solid separation on the presses, or in a centrifugal decanter or by surface tension. This produces oil mixed with vegetable water (the water making up the olive), spent olives (or cake made up of the stones and other milling waste, also containing some vegetable water and a little oil).

The liquid phases are then sep-

arated using decanters, vertical centrifuges or a combination of the two (the most common method), and the virgin olive oil is finally obtained. At the end of the process, in addition to olive oil, two waste or by-products are also obtained: spent olives and vegetable water.

Cleaner production alternatives

As far as the spent olives are concerned, there are two alternatives: in situations where a second extraction using solvents cannot be carried out to produce "crude olive residue oil" to be refined, they are usually used as fuel (with a yield of 3,000 Kcal/hr.), as cattle fodder or as fertiliser after composting. As for the vegetable water, and bearing economic interest and environmental efficiency in mind, the clean management alternatives consist of: 1) using it in fertilising irrigation where

there is sufficient land and appropriate crops; this wastewater has a high organic matter and mineral salt content, although it has an acidic pH and high salinity; 2) disposal by forced or natural evaporation in stabilisation basins.

The technical and economic feasibility of these processes needs to be studied in each case in relation to factors such as the size of oil mills, the geographical area covered by vegetable water, and the agricultural use to which the surrounding area is put.

In this respect, it is clear that the best process is one which will avoid any impact on the environment. There is one olive oil production system available nowadays which prevents the generation of vegetable water and allows water consumption to be considerably reduced: this is the continuous two-phase system, where the main difference lies in the internal lay-out of the decanter which separates the oil on the one hand and the spent olive and vegetable water paste on the other; it is the vegetable water from the spent olives- and not added water- which moistens the mass being used for extraction, and two rather than three products are obtained: the oil and the damp spent olives. The amount of wastewater produced by the oil mill is thus reduced. This system generates a new by-product,



2 Sustainable Development

however: wet spent olive oil, which is of a pasty consistency due to its high moisture content (over 60%), and its low oil content (2-3%), which creates difficulties in handling and transport. Consequently, a specific and appropriate management plan needs to be implemented, involving in particular a new drying phase. Drying installations are economically worthwhile when there is sufficient



enough volume to be treated. As a rough guide, the minimum capacity of the mill would have to be more than 10,000 T/year, which is a very normal capacity in most production areas. Each cleaner production process will need to be studied and decided upon following careful examination of the characteristics of the production unit and the local context.

The activities of the priority actions programme

A meeting on coastal legislation in the Mediterranean was held from 15-18 January 2000 at the premises of the Split Centre, and at the latter's invitation. It was attended by six experts from Mediterranean countries. The main aim of the meeting was to examine a summary report prepared on the basis of answers to a questionnaire on national coastal legislation completed by 15 Mediterranean countries and the EU. The following article, PAP's contribution to this edition of Medwaves, sums up the main conclusions of the meeting

COASTAL AREA LEGISLATION IN THE MEDITERRANEAN

*by Michel PRIEUR,
PAP/RAC Consultant*

The current trend in environmental law in the wake of the Rio Declaration is to include environmental concerns in all public policies, this being seen as the main way to ensure sustainable development. Nowadays, everyone agrees on the need for a new approach to the planning and management of coastal areas: this requirement crops up at all levels in most international, community, national and comparative law texts.

Anxious to improve current conditions in coastal area management, back in 1998 MAP and its Regional Activity Centre for the Priority Actions Programme (PAP/RAC) began to look in detail at the legal aspects of the integrated management of these areas. After an initial meeting of experts responsible for preparing guidelines for national legislation on coastal areas (Nicosia, Cyprus, 19-20 March 1998), the decision was taken to conduct a comparative study of existing national legislation. To this end, a legal questionnaire was prepared in January 1999, drawing on the Council of Europe's draft standard law on coastal areas. The questionnaire was sent out to PAP's national focal structures in all of MAP's member countries.

Answers from 16 countries were received by PAP/RAC between April and October 1999 (Bosnia and Herzegovina, Croatia, Egypt, Spain, France, Greece, Israel, Italy, Lebanon, Libya, Malta, Morocco, Monaco,

Slovenia, Tunisia and Turkey), as well as from the European Union. They were used in the preparation of a summary document on legal systems in the Mediterranean*, which was studied by a second meeting of experts convened in Split on 17 and 18 January 2000.

The situation as observed

One first general comment it was possible to make as a result of this survey is that legislation shows marked differences from state to state. Most countries, however, face the same obstacles to integrated coastal area management, usually arising from difficulties related to land, institutions, and the coordination of legal provisions.

The existence of a specific law on coastal areas

Only four countries have specific legislation on the coastal areas (Spain, France, Greece, Lebanon). Turkey has a coastal law dating from 1990, which covers the delimitation of the coast, land use, and construction within a 100m-wide strip. Tunisia has no framework law for its coasts, although it does have a specialised agency whose vocation since 1995 has been to usher in integrated planning. Two states are actively working on framework legislation for the protection of the environment: Israel and Morocco. Laws relating specifically to coastal area planning and management are just as rare as framework laws (France, Lebanon, Italy, Turkey, and indirectly also Tunisia).

Despite its economic and ecological ./..

importance, the coastline is still shunned by law. Legislators are always reticent about passing any special laws for one part of the land, although given the specific nature of the area in question, special treatment would be fully justified.

Definition and delimitation of coastal areas

Coastal areas are only legally defined in three countries: Egypt, France and Tunisia. In fact, one of the main obstacles to integrated management is the lack of any legal instruments capable of shaking off the traditional split which distinguishes between the territorial seas and the coastal strip, the latter belonging to the public maritime sphere. The notion of the coast or coastal area is still a vague geographical concept, one which national law has still not managed to specify and delimit.

Institutions and coordination

It is rare for responsibility for the coastal areas to lie in the hands of one national authority alone. Usually, various different ministries bear responsibility in accordance with the traditional split which distinguishes the sea (merchant navy and public sphere) from the land (town planning, public works, agriculture, environment...). Advisory committees specialising in the coastal areas at national or local level are few and far between; the coastal areas usually tend to be dealt with in general national environment or land planning committees.

It is rare for local cooperation on coastal area issues to be possible or planned for. Even in those countries where it is legally possible (Croatia, France, Lebanon, Malta, Morocco and Turkey) it never covers coastal area management as a whole, tending rather to deal with highly sectorised fields (drinking water management, waste, or transport).

Information relating to the coastal areas

There are quite a lot of coastal area

inventories, but their content (usually sectoral) and implementation vary widely. Few permanent observatories specialising in the coastal areas exist (Egypt, Slovenia, Tunisia, European Union), and their roles vary from aiding decision-taking to monitoring, research and training.

Land ownership and coastal access

Since ownership of the coastal strip traditionally covers the public maritime sphere, it is usually the State which holds ownership. Public land purchasing policies on the coasts are still the exception. The State may certainly make a compulsory purchase order if the legal conditions exist, but there is no real targeted policy to protect the coast through public purchasing. Only France has a specialised operational instrument in the guise of its Coastal Conservatory, which has enabled it to purchase 11% of the coast for protection purposes.

The question of the non aedificandi area on the coastal strip is closely related to the status of the public maritime area and its delimitation. All countries have an area contiguous to the public maritime area which may not be built up, ranging from a width of 6m in Morocco to 200m in Egypt.

Coastal access depends on the legal system which governs the beaches, depending on whether they are deemed to be State or local community property. The principle consists of ensuring free access to beaches and to the coast, and free movement along the coast, although this is far from being a general principle.

Land planning and controlling activities

All coastal areas are covered by land use plans, but it would be interesting to see to what extent these plans are

legally binding, and how frequently they are revised. To varying extents, all countries have a prior authorisation or declaration system before industrial or commercial activity may be started up on the coast. Widespread use is made of the impact assessment for plans and projects affecting the marine and coastal environment, but it would be useful to examine the scope of implementation, since lists or thresholds could end up considerably reducing the scope of this pollution prevention instrument.

Protection of nature areas

Five countries still have no legal measures for protecting natural areas, applicable to the coast (Bosnia-Herzegovina, Lebanon, Libya, Morocco and Slovenia). Everywhere else, general or specific texts apply throughout the parks or nature reserves. The land and sea-based sections of these protected areas are covered without major difficulty, which would tend to prove that the land-sea distinction can be overcome from a legal point of view, and could well be for other activities too.

How can this state of affairs be improved?

Legally organised integrated management demands a three-way effort: at the level of the land area in question, at institutional level, and in planning terms.

Most current legislation is dominated by the land-sea divide, and is dated. A general law on coastal areas should be drafted, embracing those maritime areas in the public maritime sphere, as well as the coastal areas involved as areas with some ecological, economic and social influence. Clearly defining and legally delimiting the coastal...

3

Environmental

News from the Split-based PAP Centre

- *The Centre was selected after an international tendering process as the implementing institution for the GEF Croatia Karst Ecosystem Conservation Project. The main aim of the project is to protect the biodiversity of karst ecosystems in Croatia in a participatory and economically viable fashion, integrated with the country's socio-economic needs, goals and plans.*

- *Erosion and desertification are one of the priority activities on which the Centre has recently been concentrating. Capacity building in this area has led to two meetings being held, one in Valletta from 20-22 June 2000, and the other in Tunisia from 5-7 October 2000. A workshop on technologies for the management and control of erosion and desertification in the Mediterranean region is currently being organised under the 1998 grant agreement reached with the European Union. Finally, three documents, "National reports on problems and practices of erosion control management in the Mediterranean region", a "Synthesis" of these reports, and "Guidelines" have also been produced.*

- *PAP's current Web site (www.ppa.te.hr) is being redesigned, and will be completed so as to better serve users through the quantity of information provided, and keeping it up-dated. The address of the new site will be: www.pap.thecoastcentre.org.*

area in law would confer a legal identity upon this area.

National coordination between the various ministries concerned is of the essence. This requires a "pilot" (the Environment Ministry, for example) and a forum for discussion and arbitration within a national ad hoc committee open to all players.

In planning terms, a national strategy is essential to enable the national and local administrative authorities to take better decisions, as is regional or inter-communal planning in order to put the national strategy line across at local level.

And finally, integrated coastal area management should tie in closely with national implementation of the Barcelona Convention and its Protocols in post-1995 amended form. Until such time as a protocol on sustainable coastal management emerges, based on the 1997 recommendations on the integrated management of those areas approved by the MCSO, the Council of Europe's 1999 standard law on sustainable coastal area management, and the European Landscape Convention approved by the Council of Europe in 2000, it is therefore essential for States to closely relate their national policy to international commitments when considering and taking action on their coasts, in order to meet the aims set out in article 4 of the Barcelona Convention on "promoting integrated coastal management".

* *The document entitled "Summary of responses to the Questionnaire on national legislation on coastal area management in the Mediterranean, and proposed guidelines", drafted by Mr. Michel PRIEUR and Mr. Mahdi GHAZALI (RIDEAU CNRS, Limoges) is available on request from PAP/RAC.*

The Palermo centres 'FORUM' initiatives

The "Forum" initiatives have been launched by the Palermo-based ERS/RAC with the aim of promoting opportunities in the Mediterranean to discuss environmental themes of national relevance, to which remote sensing techniques may provide an effective contribution.

They are carried out by the Centre with the aim of "providing Mediterranean planners and decision-makers with a base of knowledge derived through satellite observation and its integration with other conventional sources, for understanding, preventing and intervening in several fields such as coastal zone transformation, urban sprawl, soil



resource assessment, oil spill monitoring, tourism-related environmental change, and so forth".

The basic objective of the "Forum" is to bridge the persisting gap between remote sensing possibilities on the one hand, and the coastal planning and management requirements

remote sensing

of Mediterranean Countries on the other.

Besides being a methodology and a tool, Remote Sensing can also integrate reliable sources of environmental information, as well as serving as a base for geo-referenced data from various sources, such as statistical and socio-economic data, the results of field campaigns, and laboratory analyses.

The "Forum" formula promoted by ERS/RAC mainly consists of arranging one-day meetings involving both remote sensing experts and planners and decision-makers, and having them discuss examples of remote sensing applications, present priority plans and requirements in the field of environmental issues in the country concerned, and draw conclusions on how advanced monitoring techniques can assist in taking well-advised decisions.

"Forums" of this type have already been held in Egypt (1998), Malta (1999), and Lebanon (1999). Others are planned for the near future...

In October 2000, a "Forum" took place in Rabat, Morocco, using a slightly different formula: the national remote sensing centres from Mediterranean countries were invited by ERS/RAC to decide on the setting up of an information web (MERSI.WEB) linked via the Internet, aimed at implementing a database on remote sensing activities and results in the basin.

4 Coastal Planning

CAMP "Israel" : the final presentation Conference

(Jerusalem, 24-25 May 2000)

In cooperation with the Israeli Ministry of the Environment, MAP and PAP organised a conference in Jerusalem on 24 and 25 May 2000, to present the results of three years of intensive research and studies within the context of the "Israel" Coastal Areas Management Programme, which belongs to a new generation of MAP CAMPs, and represents the first programme of this kind in a developed country, largely drawing on domestic expertise.

The conference was attended by high level representatives of the Israeli government, representatives of MAP and PAP, international and national experts, and representatives of NGOs. The main topic of the conference was the presentation of the Final integrated Report on CAMP Israel, summarising the CAMP activities, evaluating the results achieved, and proposing follow-up activities. (Communicate from the Split-based PAP/RAC)

Within the framework of CAMP "Israel": an exercise in urban expansion modelling based on remotely sensed information

In the framework of CAMP "Israel", and within the RESSAC project, co-funded by DG XII of the European Commission, and coordinated by ERS/RAC, a specific module was developed by the Palermo Centre in order to provide the Ministry of the Environment's Planning Department with a new tool for simulating urban expansion- relying on an analysis of remotely sensed urban distribution information- according to different planning scenarios for the year 2020.

Land cover assessment over a ten-year period relying on satellite analysis showed that the main change in the area studied is due to urban sprawl associated with a loss of agricultural areas. This period in time was, in fact, mainly characterised by heavy immigration flows, which brought in some 850,000 additional inhabitants between 1990 and 1996, 530,000 of whom entered the country in the 1990/93 period alone.

The Planning Department defined three kinds of future scenarios:

- urban expansion continues without specific environmental rules and constraints;
- urban expansion continues in the whole territory except for a coastal strip of 300m;
- urban expansion continues taking into consideration all the natural spaces to be preserved from any human activities: national parks and

reserves; forests (natural and afforestation); highly sensitive landscape units; river banks.

The model was set up in various different stages:

- quantitative analysis of urban change between 1987 and 1996 relies on land-use classification by satellite, in order to identify different types of urban areas relating to their growth rate and spatial sprawl, to define preferential axes of urban expansion over the last 10 years; this step was fundamental to understanding how the urban expansion phenomena occurred in the area under study, and to establish the basic hypothesis for the construction of the model;
- designing the model
- transposition of the model concept into GIS functionalities and implementation, verification of the procedure using urban data from 1987, 1991 and 1996 (extracted from land-use maps derived from satellite imagery);
- production of urban growth maps relying on the different scenarios mentioned above for the year 2020. The number of km² to be built up between 1996 and 2020 was estimated by the Planning Department using existing development plans which take into account the prerequisites of sustainable development in the country.

The examples produced with the urban expansion model showed how it can be a very interesting new tool for generating urban scenarios in a long-term planning process. It has proved to be a very helpful decision support system for land-use planners, and for helping to demonstrate to the public the impact of different scenarios of urban expansion on a specific area.

5

The activities of the Blue Plan

The latest demographic forecasts for the Mediterranean

by **Elisabeth Coudert**,*Head of the Forecasting and Territories Mission, BP/RAC*

In response to the remit it received in 1977 from the Contracting Parties, the Blue Plan has developed a systemic and prospective system for studying the impact of economic development on the environment and natural resources in the long term, at regional, national and coastal level. The approach largely focuses on the interaction between the population, essential economic activities and the biosphere. One of the main cornerstones of the Blue Plan's work is therefore to obtain demographic data (number, growth, structure according to age and sex, distribution, etc.).

Thus, from 1986 to 1987, five population scenarios were worked out, for 2000 and 2025 for three main groups of countries. These five scenarios were based on a reasoned combination of demographic hypotheses produced by the United Nations Population Division, and in conjunction with other basic hypotheses, of an economic nature in particular, allowed some possible futures (1) to be sketched out for the countries in the Mediterranean basin.

The changes which have come about in Mediterranean countries over the last fifteen years have not left the demographic field unscathed, with a rapid drop in fertility having led to a constant downward revision of the United Nations' population forecasts. To be able to pursue its work, the Blue Plan has therefore undertaken a thorough updating of demographic data

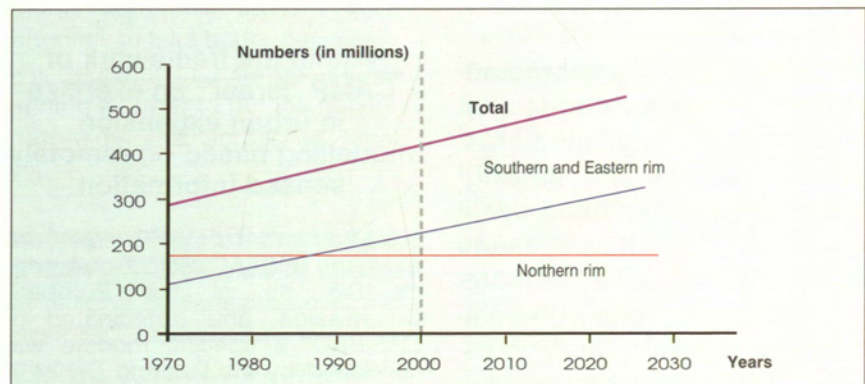
for all the riparian states and their coastal regions. Some of the results of this study (2) are presented hereafter.

This demographic study differs from the one published in 1989 on various points: different sources were used, i.e.:

- existing national data and forecasts for Spain, France, Italy, Slovenia, Yugoslavia and Greece;
- The forecasts from the United Nations Population Division for Monaco, Malta, Croatia, Bosnia and Herzegovina, Albania and Cyprus;
- Recently established (3) independent forecasts for Turkey, Syria, Lebanon, Israel, the Palestinian Territories, Egypt, Libya, Tunisia, Algeria and Morocco.
- Results are presented according to two groups of countries, the South and East making up one, and the North the other.
- One single forecast has been retained per country.

The total Mediterranean Population

Between 1970 and 2000, the riparian states' population grew from 285 to 427 million, in other words an increase of 142 million inhabitants. For 2000 to 2025,



Population trends on the Northern and Southern and Eastern banks of the Mediterranean, 1970-2025

the most recent forecasts indicate an increase of more than 96 million. Population growth in the Mediterranean will therefore be much slower, the average annual increase slowing from 1.35% for the preceding period to 0.82% for the next 25 years, with a total population of 523.7 million in 2025. The countries to the South and East (Turkey, Syria, Lebanon, Israel, Palestinian Territories, Cyprus, Egypt, Libya, Tunisia, Algeria and Morocco) will gain a further 92 million inhabitants, whilst to the North (Spain, France, Monaco, Italy, Malta, Slovenia, Bosnia and Herzegovina, Yugoslavia, Albania and Greece) growth will amount to 4 million inhabitants.

1. M. Grenon, M. Batisse, 1989. *The Blue Plan, Futures for the Mediterranean Basin*, Paris, Economics.
 2. Isabelle Attane, Youssef Courbage, *Demographic Forecast for the Mediterranean countries and their coastal regions, 2000-2025*. Blue Plan (downloadable from the website: www.planbleu.org)
 3. Youssef Courbage. *New Demographic Horizons in the Mediterranean*. INED-PUF, Paris, 1999.

Population growth on the Northern and Southern and Eastern banks of the Mediterranean, 1970-2025.

Some countries to the North, where the fertility index is particularly low, are set to see a fall in absolute numbers in their population in 2025 compared with their current levels: in Italy (fertility in 2000: 1.37 children per woman; 3.5 million less inhabitants in 2025), in Croatia (1.54 and 280,000 inhabitants respectively), in Greece (1.59 and 165,000 inhabitants). Albania is the only country to the North where fertility (2.38 in 2000 and 2.1 in 2025) will remain above the generation replacement threshold, estimated at 2.1 children per woman of child-bearing age.

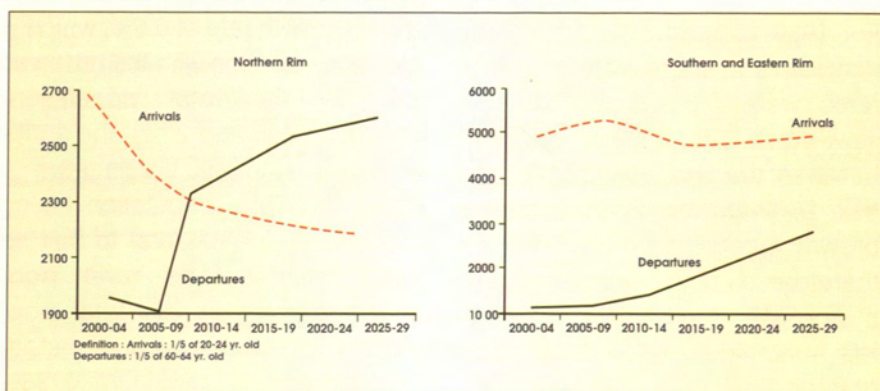
Despite its volume (92 million additional inhabitants in 2025), the population increase in countries to the South and East is showing clear signs of slowing down compared with previous decades. Looking at the two demographic "giants"- Turkey and Egypt- it can be seen that their average annual growth rates for the periods from 1970-2000 and 2000- 2025, in fact fall from 2.03 to 1.14%, and from 2.38 to 1.45% respectively. In absolute terms, the population grew by 30 million from 1970-2000 in Turkey, and by more than 33.5 million in Egypt. From 2000-2025, forecasts indicate respective increases of 21.6 and 28.8 million inhabitants, although the starting populations are much bigger.

This phenomenon can largely be ascribed to a drop in fertility rates along the whole of the southern and eastern rim- with the exception

of the Palestinian Territories (5.29 in 2000, and 2.92 in 2025) and Israel (2.75 and 2.2 respectively)- which will hit the generation renewal threshold in 2025, if not nudging slightly below it (Morocco, Tunisia, Cyprus and Turkey). This steady and steep fall in fertility (apart from

age automatically produces growth which will be felt well after 2025, even if the overall figures are cause for optimism.

Differences in population growth to the North, and to the South and East will be reflected in differences



Those joining and leaving the labour market from 2000 to 2030 (in millions)

in Egypt where fertility has fluctuated over time) is to be seen on the one hand in relation to the level of female education, which is constantly rising, and on the other to various outside influences: foreign television and other media, contact with migrant populations returning either on a temporary or on a permanent basis, and bringing with them a different way of life. Moreover, the funds sent back by emigrant workers are often used to develop local socio-cultural services likely to affect the most deprived populations. Thus in Morocco, fertility amongst illiterate women, which stood at 7.4 children per woman in the early 70s, fell to a mere 4.04 in 1993.

Notwithstanding, this major drop in fertility to the South and East is still not reflected in a stabilisation of population growth. In fact, the pool of young women of child-bearing

in the way in which the age structure develops. The population on both rims will be ageing, but at different rates and with surprising results, in other words that the overall ageing of the Mediterranean population will be led by the South and East. However, the countries to the South and East will continue to face an imbalance on the labour market, where the number of people coming onto the market will exceed the number leaving it, contrary to what is happening on the northern rim. Despite the declining relative importance of young people under 15 (from 32.2% in 2000 to 22.2% in 2025), net arrivals in the active population will continue to rise until 2010 (4,2 millions), not showing any clear drop until the end of the period (2.2 million in 2025). Net arrivals will be highest in Turkey and Egypt: 987,000 and 1 million respectively for 2000, 561,000 and 822,000 in 2025.

Urban population and rural population

The urban population in the riparian states rose from 94 million in 1950 to 154 million in 1970, to hit 274.5 million in 2000. In 2025, it will have reached 379 million.

For 1950-1970 and 1970-2000, the respective average annual growth rates were 2.5% and 1.95%. A slow-down can already be seen between the two periods. For the next 25 years, the average annual growth rate will be 1.3%. There is therefore a major deceleration in the growth of urbanisation, which will nonetheless grow at a much greater rate than the total population, which will have an average annual growth rate of 0.82% over the period.

There will be an additional 104.5 million town-dwellers. Virtually all of them (98 million) will be on the Southern and Eastern rim, with 23 million in Turkey and 36.2 million in Egypt. The urban population on the Northern rim will grow by 6.3 million. These figures mean that each year the numbers of town-dwellers in the countries to the South and East will rise by almost 4 million, with a corresponding figure for the countries to the North of only 253,000. The rate of urbanisation in the Mediterranean countries will rise from 64.3% in 2000 to 72.4% in 2025, with a marked difference between the South and the East, where the urbanisation rate will show a notable rise from 61.9% to 74.4%, and the North where it is stabilising out, with the urbanisation rate rising from 67.3% to 69%. The reversal in trend is clear, with

the South and East becoming more highly urbanised than the North.

The growth of the rural population is tracking that of the urban population. From 1970 to 2000, the rural population grew from 131 to 152.5 million, i.e. more than 21 million additional land-dwellers, but with an annual growth rate of 0.5%, which is low in comparison with the urban as well as the total population. Between 2000 and 2025, the annual growth rate will be negative (-0.2%), the rural population losing 7.7 million inhabitants to fall to 144.7 million. The rural population's share in the total population is showing a constant downward trend: 46% in 1970, 36% in 2000, and 28% in 2025.

However, this overall trend masks the different forces at work on the Northern, and on the Southern and Eastern rims, as well as between the countries in these two blocks. The changes are much more marked to the South and East than to the North. Thus, the rural population's share in the total population to the South and East, which stood at 57% in 1970, only makes up for 38% in 2000, and will fall to 26% by 2025. The corresponding figures for the North for the same dates are 38%, 33% and 31% respectively. However, despite this drop in the rural population's share, in 1999 there will still be a large active agricultural population, more than 20% in Yugoslavia, Algeria, Tunisia and Syria, and 30% in Egypt and Morocco, reaching as much as around 50% in Turkey and Albania.

To the South and East, this drop in the proportion of rural dwellers

between 1970 and 2000 occurred in conjunction with a growth in the rural population at an average annual rate of almost 1%, i.e. 22.8 million additional land-dwellers. To the North, the negative average annual growth rate (-0.08%) entailed a loss of 1.5 million land-dwellers. Over the next 25 years, growth rates on both rims will be negative, two times greater to the South and East (-0.26%) than to the North (-0.13%). At the end of the period, this will mean respective losses of 5.7 and 2 million land-dwellers. This future drop in rural population at regional level will not affect all countries, with some of them continuing to see an increase in their rural populations. Oddly enough, in 2025 the highest number of new land-dwellers will be in France (1.9 million), followed by Algeria (1.4 million), the Palestinian Territories (1 million), Libya, Syria, Israel, Lebanon and Tunisia.

At the end of this study, it should be emphasised first and foremost that the speed of demographic change in the Mediterranean demands that population data be constantly updated.

Finally, it should be noted that the results of this work are already being used and will continue to be so in the near future as input into thinking on Development/Environment relations, which is highly complex, and has major consequences in terms of human development. This applies to sustainable town management, rural development, waste and consumption patterns, as well as the issue of employment to the South and East, to quote but a few examples.

FRANCE-MONACO-ITALY: 20 YEARS AFTER COMING INTO FORCE, WHAT IS THE STATE OF PLAY ON THE RAMOGE AGREEMENT?

In 1993, in its 29th edition, Medwaves ran a detailed article entitled: "RAMOGE, a convincing example of a sub-regional agreement", and has since reported on the agreement's achievements and publications on many occasions. An example for the region as it was, RAMOGE continues to stand as such, and now, almost twenty years after it came into force, its leaders provide us hereafter with an overview of its current activities.

The RAMOGE agreement is the instrument adopted by the governments of France, Monaco and Italy to make the coastlines of Provence-Alpes-Côte d'Azur, the Principality of Monaco and the Ligurian Region a pilot area for combating and preventing pollution of the marine environment, and for protecting the environment on these coastlines as a whole. The RAMOGE agreement provides a framework for scientific, technical, legal and administrative consultation, which was set up by the States in order to protect a coastal area.

Signed in 1976, the Agreement came into force in 1981. Originally, the RAMOGE area stretched from Saint Raphael to the West, to Monaco and then Genoa in the East, hence the name RAMOGE, which is made up of the initials of these three towns. It now stretches from Marseilles to La Spezia, and more specifically from the mouth of the Great Rhone to the West, to the mouth of the river Magra.

The RAMOGE Agreement works through three operational bodies: the Commission, the Technical Committee, and the Working Groups. The Commission is the executive body; it is assisted in the various aspects of its work by the Technical Committee, and sets up Working Groups to study certain specific questions.

Activities organised within the framework of the RAMOGE Agreement can be grouped into four main themes:

"Combating pollution" involves in particular studying the impact of marinas on the quality of coastal waters, information exchange within the biomonitoring field, studying the origin of macro waste and

floating waste from the river catchments, and the exchange of data under the RAMOGEPOL plan, a contingency plan in case of accidental marine pollution in the RAMOGE area.

The work conducted under the **"Awareness, information and public participation"** theme leads on the one hand to the production of information documents such as educational pamphlets or CD ROMs on the theme of "The Mediterranean Marine Environment, an eco-system to be protected", and on the other to the various data being translated into a geographic information system, which allows an environmental image of the RAMOGE area to be produced.

The **"legal aspects"** theme involves organising administrative competence and comparing regulations on environmental protection in the three countries which comprise the RAMOGE area's coastal space.

"Preserving the natural limits" comprises a section on coastal erosion, and one on setting up protected areas.

The members of the RAMOGE Agreement's Commission met for their 31st Commission Meeting on Friday, 26 May 2000, in the presence of Mr. Francesco Civili, the MED POL coordinator also representing the Mediterranean Action Plan, and several non-governmental organisations.

The 1999 annual activity report presented the results of studies and work, proposals for action, and the Commission's recommendations addressed to the Governments. The recommendations refer to: marinas, with particular emphasis being placed on equipping them (with careenage areas, waste collection points, quay-side sewage emptying facilities...) and on raising the environmental awareness of the various actors involved in pleasure cruising; marine environment monitoring networks with proposals to harmonise monitoring in the three countries; and protected areas with a list of marine areas of ecological interest within the RAMOGE area being proposed.

The Commission then examined the

progress made by its Technical Committee and its working groups. Under the "Combating pollution" theme, it was apprised of the first recommendations to stem from the campaign conducted during the 1999 summer season to identify the nature of the macro waste either floating in the sea or washed up on its beaches, and to quantify it. The Commission encouraged its experts to complete the marine sediment analysis campaigns in the marinas, in order to complete the study conducted in 1998/1999 on the quality of the water column and, more generally speaking, to provide some information on the impact of marinas on the quality of neighbouring coastal waters. The Commission was also pleased to note that a meeting of representatives working under the RAMOGEPOL Plan had been held in Toulon on 30 March 2000. Under this plan, which was signed on 7 October 1993 between the authorities of France, Italy and Monaco, it is possible for the three countries to effectively work together in case of accidental marine pollution. The representative of the Italian Environment Ministry invited the representatives from the other Party States, REMPEC and MAP to take part in the demonstration of an offshore simulation exercise for combating oil pollution using specialised vessels, to be organised off Genoa on 3 and 4 October 2000.

Under "Preserving the natural limits", the Commission noted the progress made on the erosion guide, a "practical" guide for project leaders and decision-takers in the RAMOGE area. It noted with satisfaction that the cooperation instigated with the Mediterranean Action Plan (MAP), and more specifically the Tunis-based Regional Activities Centre for Specially Protected Areas (SPA/RAC) was being continued. It also confirmed its interest in further pursuing this cooperation, using a data sheet prepared by MAP to enable inventories of natural sites of conservation interest to be drawn up on a common basis throughout the Mediterranean, as a reference instrument to prepare two inventories of little-known sites in the RAMOGE area (the islands of Palmaria, Tino and Tinetto in Italy, and the Ile Verte in France).

UNEP's Sasakawa Prize 2000 awarded to MICHEL BATISSE

"The honour bestowed upon Michel Batisse reflects on the entire Mediterranean scientific community and upon MAP", declared Mrs. F. Kefi, the Tunisian

Environment Minister, at the opening of the 6th meeting of the MCSD in Tunis. It could not be better put. President of the Sophia Antipolis Blue Plan since it was

set up in 1985, Michel Batisse was in on all the ensuing major stages in MAP's life, and in 1988 along with Michel Grenon, he jointly signed the "Futures for the Mediterranean Basin" report, the "sum total" of forecasting and an essential reference, which has given rise to scores of studies on environment-development relations in the region- including the famous Blue Plan "fascicules". But this French engineer and physicist- who is also a lawyer- has followed a career path of which MAP is merely an extension, a by-road, who can say, so involved has he been in all the struggles on behalf of the environment and our planet's natural resources. Let us just mention the best known: Unesco Scientific Officer for the Middle East (1951-58), Coordinator of UNESCO's arid zones programme (1958-1961), organiser of the International Hydrological Decade (1965-74), then of the Man and the Biosphere Programme (MAB), Assistant Director general (Sciences) in Unesco (1983), UNEP advisor and author of around one hundred publications. The entire MAP family is delighted at this distinction being bestowed upon him, and which puts the finishing touch to his long-established international recognition. ■

(for more detailed information regarding M.Batisse's career and bibliography, e-mail: elisabeth.guilbaud-cox@unep.org).



COMINGS...

Mrs. Colpan Polat Beken, MED POL's new programme officer in the Athens Coordinating Unit, took up her position on 4th September 2000. She is responsible for the implementation of all aspects of Phase III which are related to the pollution monitoring programmes set up under MED POL by the Mediterranean countries. A Turkish citizen, in 1987 Mrs. C. Beken graduated in environmental engineering from the Middle-East Technical University (METU) in Erdemli, before studying for a masters in chemical oceanography at METU's Marine Science Institute, where for 8 years she worked as a research assistant, taking part in many scientific voyages in the Mediterranean, Black Sea and the Sea of Marmara. In 1996, she joined Istanbul University's Institute of Science and Marine Management (IU- IMSM). Appointed as assistant professor in 1999, she became head of the IU-IMSM's chemical oceanography department.

Mrs. Margaret Watts-Dimas took up her position as librarian in the Athens Unit in June 2000, taking over from Mrs. N. Davakis who has now retired, having held the post since it was first created. An Australian citizen, she studied librarianship and documentation at Curtin University. She held several librarian posts in Australia, particularly over the last six years when she worked as library service administrator in the state of Western Australia's Ministry of Planning, introducing computerised documentation systems.

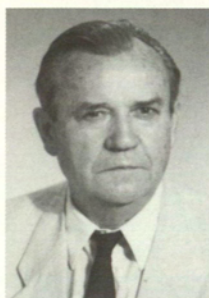
Two appointments at the Split Centre: **Mr. Marko Prem** took up the post of Deputy Director to the Centre in early August 2000. A Slovenian citizen, he graduated in agronomy and landscape architecture from Ljubljana University. He then studied for his masters (M. Sc.) in Environmental Policy and Management at the University of Hull (UK). He worked for five years at the National Office for Physical Planning within the Environment Ministry. In the late 1990s he became president of the Slovenian Association of landscape Architects. **Mrs. Daria Povh** took up her post as environmental economist at the Centre in September 2000. A Croatian citizen, she graduated in Integrated Coastal Management and Planning from Zagreb's University of Economics. In 1995 she conducted a research project at the University of Venice on the Integrated Management of the Venetian lagoon. In 1999 she participated in the Medcoast Institute training programme on ICAM.

AND GOINGS ...

Marco Barbieri played a central role in the Tunis-based SPA/RAC from 1992 onwards, as an expert in marine biology, being mainly responsible for three decisive dossiers: preparation and follow-up of the negotiating process for the new SPA/Biodiversity Protocol adopted in Barcelona in 1995, preparation of the Annex to the Protocol on the selection criteria for specially protected areas of Mediterranean interest (SPAMIs), and the preparation of inventories of the elements of biodiversity. Finally, along with other experts from the Tunis Centre, he was in charge of revising the action plan for the conservation of Mediterranean sea turtles, with the final text being adopted at the Malta inter-governmental meeting in 1999. This Genoan, a biologist by training, whose ability and great discretion have enabled him to carry out some in-depth work in the biodiversity field, was thus in on the introduction in the Mediterranean of the new legal framework which governs the Tunis Centre's activities, and which was consecrated by the coming into force of the SPA Protocol (the first element in the revised Barcelona system to have been ratified to date). All his friends in MAP would like to wish him every success as he embarks on his new role as Scientific and Technical Support Officer at the Secretariat of the Bonn Convention on Migratory Species.

THOSE WHO HAVE LEFT US

Franjo Gasparovic



One of the outstanding members of the MAP family during the 1970s and 1980s, Franjo Gasparovic (Croatia), passed away on July 12, 2000, aged 85. Mr.

Gasparovic, an economist by profession, was specialised in town planning as well as coastal zone planning. In the 1950s he joined the Croatian Town Planning Institute in Zagreb, and later the Ministry of Housing and Physical Planning. In the 1970s he was involved in the implementation of three UNDP coastal management projects for the Adriatic coast, which were among the first, if not the first coastal management projects implemented in the Mediterranean region. Mr. Gasparovic took an active part in the activities leading up to the establishment of MAP, and in the meetings of the Plenipotentiaries which marked the introduction of the Barcelona legal system, then in the first seven ordinary meetings of the Contracting Parties. He contributed greatly to the formulation of PAP/RACs programme framework, and its implementation over the period from 1979-1990. In addition, as a member of the Blue Plan Steering Committee, he contributed to the activities of the Sophia Antipolis Centre and to the preparation of the Blue Plan scenarios for the future of the Mediterranean Basin. In 1988 he was awarded the UNEP Global 500 Award in recognition of his great contribution to the environment in the Mediterranean. This MAP pioneer has left his mark on Croatia's environmental history, heralding the principles of Rio and sustainable development in the field of planning, his sphere par excellence.

Bani Layachi

Director of monitoring, studies and coordination at the Moroccan Environment Ministry, Mrs. Layachi passed away on 14 July 2000 following a long illness. A geographer and demographer by profession, she was to play a decisive role in her country as of 1973 after the Stockholm Conference, gradually setting up the structures for land planning and the environment, within the Housing Ministry from 1973 to 1985, and then taking over responsibility for these two areas in the Ministry of the Interior and later the Environment Ministry when it was established in 1992. With her passing Morocco is losing an unparalleled organiser, and MAP one of its most active advocates and architects. From when the programme was launched in 1975 she spoke out with great determination on behalf of her country at all the major institutional meetings, calling for Mediterranean cooperation. From 1995 to 1997 when in the shape of its Environment Minister, Mr. Alami, Morocco held the presidency both of the Bureau of the Contracting Parties and the Steering Committee of a still fledgling MCSD, she devoted her experience and energy to preparing and ensuring the success of the Commission's first meeting in Rabat in December 1996. An indefatigable worker, strict yet very open, as demanding on herself as she was on her colleagues, she embodied a new generation of Moroccan women, anxious to shoulder responsibility.



She spoke out on this point with her usual frankness, expressing her wariness of male condescension, as she admitted in an interview to MedWaves (no. 33, winter 96/97): *"I personally cannot accept pressure being brought to bear to get women into positions of responsibility if they are simply to be there as shields or alibis. And when people tell me that women are supposedly more sensitive to environment and sustainable development matters I am always a bit wary, because that to me already smacks of discrimination at task level..."*. At the last meeting of the Contracting Parties in Malta, in October 1999, in a contribution which made its mark, she stressed what to her mind continued to present a major obstacle: *"Current consumption and production patterns line the pockets of some countries, whilst impoverishing others, particularly the developing countries. The new free trade agreements which govern international relations do not take sufficient account of environmental concerns. The very fact of not introducing the changes essential to sustainable development clearly means that this principle will remain a dead letter...The developing countries bear precious little responsibility for polluting the environment, yet they are being asked to bow to the rules and values imposed by developed countries. This has notable repercussions on poverty in those countries which do not have the necessary means to couple development to environmental protection. The means for cooperation in this field are still the same ones as those which were applied in traditional cooperation, although a new field should call for a new approach"*. Words of warning which ring out today as a testament. ■

Series of technical reports

UNEP-MAP/MEDPOL/WHO: Municipal wastewater treatment plants in Mediterranean coastal cities. The study on which this report is based was intended to assess the prevailing situation in the various Mediterranean cities regarding existing wastewater systems, the quantities of municipal wastewater in proportion to the population, the impact of discharge into the sea, and pre-disposal treatment. Most of the data was collected by the MED POL national coordinators, and was used to draw up the country- by- country tables contained in the annexes. Notwithstanding certain loopholes, particularly for the figures on the tourist population- the volume of wastewater may be multiplied many times over during the summer season, which imposes a tremendous burden on the municipalities- the report provides a reasonably fair and complete overview of the provision of Mediterranean coastal cities with wastewater treatment plants, and of requirements and trends in this area, which is of major importance to the cleanliness of coastal waters. In 1985, in the Genoa Declaration, riparian states committed themselves to providing all towns with more than 100,000 inhabitants with sewage treatment plants, and all towns with more than 10,000 inhabitants with outfalls and/or treatment plants. Although these objectives have still not been reached, improvements made over the last fifteen years have been spectacular, and this technical report allows the countries to stand up and be counted (**No. 128 of the MAP Technical Reports Series, Athens 2000, 65 pages, in English and in French**)

UNEP-MAP/MED POL: Guidelines for the management of dredged material. This document collects together in MAP's four official languages the guidelines approved in December 1998 by an experts meeting in Malta, and then adopted by the Contracting Parties in their November 1999 meeting under the Dumping Protocol. MedWaves reported in edition no. 38 on this meeting of experts, the problems related to disposal of this material, and the interest of these guidelines adapted to the Mediterranean context. The first section deals with the assessment and management of dredged material, and the second with the monitoring of dumping operations. Four technical annexes provide technical supplements on the analyses needed for the assessment of material, standardisation techniques for the spatial distribution of contaminants, considerations before taking any decision to grant a dumping permit, and best environmental practice for dredging activities. (**No. 129 of the MAP Technical Reports Series, Athens 2000, 46 pages, in English, Arabic, Spanish and French**).

Blue Plan/RAC: Lebanon, the stakes and policies of environment and sustainable development. This work ushers in a new, more analytical series of Mediterranean country Profiles, which seeks to identify the priority issues for the countries studied. It is also published in English (as with the Algerian profile in the previous series), and is soon to be followed by an edition on Tunisia. In sixty pages or so the reader is presented with a "precis"- one could almost say a "manual", given its highly operational thrust- of most of the aspects related to the country, from the historical and political context, the economy, and socio-economic disparities to the major environment/development stakes. Think in particular of how it could benefit a journalist who is forced in a very short time to build up an overview of a country where he is required to conduct in- the- field investigations. In the case of Lebanon it provides what is certainly only a rough overview: as Guillaume Benoit writes in his introduction, "*in spite of the efforts made over recent years to rebuild its administration, this country still does not have a sound national accounting system. The data comes from estimates and highly heterogeneous samples, depending on the sources, which makes it difficult to prepare any finely-tuned analysis based on precise figures*". One further reason for appreciating the merit of this book, since with the assistance of Silvia Laria, its author, George Abu-Jawdeh, has managed to juggle his sources and thereby to focus in on the fundamental problems faced by a Lebanon brought to its knees by 6 years of conflict (1974-1990) which cut its GDP by two thirds. The author concludes that "*between the view which emphasises the shakiness of the situation and the reconstruction and development process, and the optimistic view regarding the Lebanon's potential for reconstruction and development, the future of the country will be less clear-cut, and is likely to lie somewhere between the two. This will mean that the process of environmental deterioration and increasing social and regional disparities will nonetheless persist.*"



European Commission: Mediterranean Desertification, Research results and policy implications. Particular reference was made to this publication at the 6th MCSD meeting in Tunis, when desertification was considered as one of the forthcoming themes to be dealt with, in order to instance the very rich bibliography to which the issue has already given rise. The first volume of these, the proceedings of an EC-sponsored international conference held in Crete, provides the keynote speeches given by some 24 scientists from all walks of life, mostly Mediterranean. The second volume comprises a summary of the results of several research projects, largely EC-funded, on the following subjects: historical changes; climate variability; hydrological and soil erosion; Mediterranean eco-systems; mitigation action management; monitoring and mapping desertification.

(European Commission, General Directorate for Research, 1999).

Land-Ocean Interactions: Managing Coastal Eco-systems- Fourth International Conference on the Mediterranean Coastal Environment- Fourth International Conference on the Environmental Management of Enclosed Coastal Seas, November 9-13, 1999. Antalya, Turkey. Here we have the proceedings of two jointly-held conferences, organised respectively by MEDCOAST (Middle East Technical University, Turkey), and by the EMECS (Kobe, Japan), two initiatives launched in the early 90s, at regional level for the former, and at global level for the latter, in order to contribute to the conservation and integrated management of the marine and coastal environment of enclosed seas- such as the Mediterranean and the Black Sea. Over the years these MEDCOAST and EMECS conferences have created a considerable stir. The joint event in 1999 attracted an impressive array of scientists, who covered all aspects of the two issues in question. The result is three volumes comprising some 180 speeches, amounting to 1940 pages, published under the supervision of Professor Erdal Özhan, chairman of the joint conference. A major organisational, scientific and editorial feat.

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