Sustainable Financing Sources for Protected Areas in the Mediterranean

Seville 2006

Arturo López Ornat and Sira Jiménez-Caballero

English Version - Versión Española - Version Française

MINISTERIO DE ASUNTOS EXTERIORES Y DE COOPERACIÓN
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Published by: The World Conservation Union (IUCN), Gland, Switzerland and Cambridge, UK in collaboration with Fundación Biodiversidad and Agencia Española de Cooperación Internacional of the Ministerio de Asuntos Exteriores y de Cooperación.

Citation: Arturo López y Sira Jiménez. 2006. *Sustainable Financing Sources for Protected Areas in the Mediterranean Region*. IUCN, Gland, Switzerland and Cambridge, United Kingdom, Fundación Biodiversidad, Madrid, Spain and Agencia Española de Cooperación Internacional of Ministerio de Asuntos Exteriores y de Cooperación, Madrid, Spain. 144 pages.

ISBN-10 (book): 2-8317-0936-9
ISBN-13 (book): 978-2-8317-0936-9

ISBN-10 (CD): 2-8317-0943-1
ISBN-13 (CD): 978-2-8317-0943-7

Design by: Chadi Abi Faraj

Cover photo: Alison Johnson

Layout by: Pedro Molino / Diseño, Creatividad y Comunicación

Produced by: IUCN Centre for Mediterranean Cooperation

Printed by: Gráficas La Paz. Torredonjimeno (Jaén)

Available from:

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IUCN Publications Service Unit
219c Huntingdon Road, Cambridge CB3 ODL
United Kingdom
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Index

Summary

Protected Areas (PAs) in the Mediterranean significantly contribute to sustaining the economy of the region. Covering around 300,000 Km2, PAs provide freshwater flows, important resources for hydropower, for recreation and tourism, for fisheries, biodiversity, and other ecosystem services. Regional assessments have concluded, however, that a major effort needs to be made to solve their state of chronic under funding and unpredictable funding fluctuations.

The Murcia Conference on Protected Areas in the Mediterranean and the Vth World Parks Congress, both convened by IUCN in 2003, identified a wide range of alternatives for generating revenues, emphasizing the need to develop innovative funding approaches such as debt swaps, endowment funds, and payment for ecosystem services; to improve development policies (e.g. by reforming subsidies); and to share costs and benefits through co-management and local participation. The adoption of a business approach to protected areas and the need to forge strategic alliances with partner organizations were also highlighted. These recommendations were adopted by the Convention on Biological Diversity (COP 7, 2004) in its Programme of Work for Protected Areas (Decision VII-28) and recalled and detailed at the first Ad-Hoc Meeting on Protected Areas in Montecatini (Italy, June 2005).

In this paper we review the degree of implementation of these recommendations in the Mediterranean, assessing the general financing needs and gaps, the main funding sources, and identifying the most important financing actions. The range of financing sources includes national and regional governments, bilateral and multilateral development agencies, and some market-based and private contributions. To build data-sets we have consulted literature, Internet sites, and issued questionnaires to PA country officials, to ODA agencies and to experts and interested institutions. Some information may exist on an agency or donor basis, but it is dispersed or unclear and not systematically collected. The large number of countries, the heterogeneity of institutional arrangements, and the diversity of conservation categories both in land and marine PAs further complicated this research.

We estimated the PA financial needs in the region. Budgets fluctuate strongly depending on the sub-region (mainly EU and non-EU countries), and on the specific protection needs for each area (marine or terrestrial; conservation category; and size). The broad PAs in Categories V-VI, usually allowing for multiple uses and sharing management responsibilities, require US$ 18 and US$ 60/ ha/year in land, twice as much at sea. Categories I-IV (strictly protected and National Parks) require between US$ 60-240/ha/year in land and over US$ 1000/ha/year in small marine parks. These preliminary figures suggest that the annual financial needs for PAs in the Mediterranean region would be in the range of US$ 1,147 - 3,820 million.

The information on existing domestic PA budgets is heterogeneous and non systematic. However, using this study and data collected during the IUCN Conference on “Sustainable Financing for PAs in the Mediterranean” (January 2006), preliminary data from 15 countries (from a total of 20) was made available and is presented and discussed. The regional average hides an enormous sub-regional disparity; the PAs in the European Union (US$43 /ha) receive in average 10 times as much than those in the non-EU countries (US$4.5 /ha).

All the Mediterranean countries are committed to PA conservation through the Barcelona Convention and the CBD, both of which also refer to the need for North-South cooperation. But in most developing countries protected areas are not a national priority and their financing depends greatly on international aid. However, the total bilateral ODA for biodiversity purposes in the Mediterranean is in the range of just € 6-9 million/year. Compared with other regions, these figures are quite low. While biodiversity accounts for 2.7% of all ODA worldwide, this proportion is reduced by at least 20 fold in North-Africa/Middle-East. Another possible source of support from international aid would be debt relief-swaps; in the Mediterranean this mechanism has only been tried in 3 countries, of which Egypt is the only one with a debt-for-nature swap program, established with Italy, totalling US$ 10 million for the period 2001-2006.

The EU and the GEF are the main multilateral donors for environmental purposes in the Mediterranean. The EU, through its 3 specific programmes SMAP, LIFE-Third Countries, and INTERREG, has contributed an average of US$ 3.1 million/year to PAs in the South and Eastern Mediterranean countries, while the GEF allocated an average of US$ 5.4 million/year to the same objective. Taking bilateral and multilateral ODA altogether, our estimate is that the average regional donations for PAs are US$ 14-17 million/year. On an area basis, this implies an ODA of US$ 1.5/ha/year, a similar figure to that reported worldwide for the same purpose, accounting for 1.1 - 4.0 % of the total needed in the sub-region. However, as the total domestic budgets in this area range from US$ 15-30 million/year, donor contributions are still significant (30-50% of the existing PA budgets in non-EU countries). Adding all national and international contributions, the current available funds for PAs in non-EU Mediterranean countries range from US$ 25-55 million/year, an annual allocation of US$ 2.2 - 5.3 per/ha.

Ten countries outside the EU have established Environmental Funds, fed from specific taxes on tourism, from EIA offsets, or from international sources such as ODA and debt-swaps.

However, these Funds are focused on support of the "brown" sector, and only in Jordan are they mostly allocated to PAs.

Despite their support to rural development through water, forest products, fisheries and other options, PAs rarely benefit from any subsidies, but are rather under threat from the perverse effects of subsidies to various economic sectors, including fisheries, forestry, agriculture, energy and water. Worldwide assessments, and our own calculations for the Mediterranean, show that the existing protected areas would only require a small fraction (2-5 percent) of the amount governments currently spend on environmentally perverse subsidies. The case of the EU is analysed into some detail.

In summary, funding from the public sector remains largely insufficient to cover the basic needs of PAs in the Mediterranean. Very specially in the non-EU countries, but also in the EU, diversified portfolios and new market-related sources of finance need to be developed because no single source of funding is likely to cover all costs.

Tourism and recreation are highly valued PA benefits. Considerable income can be generated for PAs through direct charges (gate fees, permits for recreational activities, indirect charges on hotel accommodation, airport departures and others). However, only 3 countries (Jordan, Montenegro and Slovenia) have established entrance fees mechanisms in all PAs, and 7 other countries allow gate fees in some PAs or are testing this policy at pilot sites. A significant potential for coastal MPAs can be drawn from the growing demand for diving activities, as divers pay as much as € 120 a day in Mediterranean marine protected areas. Some marine National Parks are completely self-financed through these entrance fees. It is also noteworthy that more often than not the income generated by PAs is transferred to government central accounts; for example in Egypt the income from PA accounts for about twice the annual national PA budget, but around 3-5% of this amount returns into the PA system.

However, at the heart of the funding gap is the undervaluing of PAs. Protected areas not only generate tourism revenues, they also provide clean water flowing to downstream farmers and cities, natural-disaster prevention, biodiversity stocks, commercially valuable fish-stocks and other benefits. If jobs, income, cultural heritage and other values are included, the services provided make a critical contribution to poverty alleviation and to the achievement of the U.N. Millenium Development Goals. In the Mediterranean context this important focus is barely recognised. The best opportunities should arise from water and hydropower production and from the tourism-recreation industries. A recent study estimates that the average Total Economic Value of forests in 18 Mediterranean countries is about € 133/ha per year: forest services alone provide a much higher economic benefit than the investment to protect them.

There is no reason why the public sector should have the sole responsibility for funding or managing PAs, their facilities and services. The cost of PA management can be shared through collaborative agreements. The Mediterranean receives over 200 million tourists a year, and PAs are increasingly valuable tourism products. Some indicators of a growing support to Mediterranean PAs from pioneering members of the tourism industry are also described in the main text.

Collaborative agreements and participation also prevent future conflicts and thus, unforeseen losses of time and money. Numerous cases in the Mediterranean region with cost-sharing examples are described, including situations where private entities and NGOs have voluntarily assumed management responsibilities; noteworthy examples come from Jordan, Italy, Slovenia and Spain. Some cases of offsets from EIAs and compensation for the environmental impacts of infrastructure are also described; this type of initiative is likely to be institutionalized rather than remaining as voluntary agreements or one-off cases. The EU has recently approved an Environmental Liability Directive which Member States must bring into force before 30 April 2007.

Conclusions

- The regional average hides an enormous sub-regional disparity; the PAs in the EU receive 10 times as much (US$ 43 /ha) as those in the non-EU countries (US$ 4.5 /ha).

In the European Union

- All together, the EU has allocated little for conservation and PAs. Natura 2000 will cover up to 25% of the surface in some Mediterranean countries, but will receive only 3-5% of the subsidies for natural resources. At best, the figure may rise to US$18/ha/year, and most of it for rural development within and around the sites. The access to these funds, usually managed by ministries other than Environment, must show they can deliver other EU priorities: jobs, rehabilitation, education and training, or control of alien species. And as the EU funds are administered at the national level, the national programmes from ministries such as Agriculture, Fisheries or Regional Development should include priorities for PAs.

- Financing for marine Natura 2000 sites has not been mentioned in the proposed Regulation for the European Fisheries Fund, so MPAs may have been excluded from the new financing perspectives. Support and funding for MPAs should be sought through the fisheries policy and also be considered as a part of the fisheries agreements signed between the EU and third countries in our region.

In the non-EU countries

- With around 10 million hectares under protection in this sub-region, the total domestic allocations range between US$ 15-30 million/year, which added to the international funding sources (another US$ 16 million) deliver an average of US$ 3 - 4.5 /ha/year in non-EU Mediterranean countries, with the weakest situation in Northern Africa (US$ 1.0 /ha).

- The funding gap for PAs in non-EU countries is between US$ 319 and 1318 million/year, and currently between 3% -15% of the needed investment is being covered. This situation is weaker than the general situation reported by the 7th COP to the Convention on Biological Diversity for the world's developing countries (17-29%).

- Most environment related Funds in these countries support the "brown" sector, which is, for the time being, the environmental priority in non-EU countries. And while biodiversity accounts for 2.7% of all ODA worldwide, this share is reduced by 20 fold in North-Africa/Middle-East. All together, the Mediterranean seems not to be identified as a priority for biodiversity (and PAs), either by the national authorities or by the international donors, even though the region is one of the world's hot-spots for biodiversity.

Donor policies on Protected Areas

- Donors tend to treat Environment as a cross-cutting issue rather than as a sector (e.g. World Bank, EU, Netherlands, UK). And frontiers between markers such as "Sustainable Development", "Environment", or "Biodiversity", are most of the times unclear in the ODA budgets.

- The donor contributions to Protected Areas in non-EU Mediterranean countries (US$ 16 million/year) even although they represent between 1.2 - 4.2 % of the PA needs in this region, still play a very important role as a leverage for national funds given these donations need be matched by national resources in a varying proportion (20-60%). In many countries international aid is still the main source of finance for PAs.

- The GEF funds have been particularly important in helping to cover the recurrent costs of PA management, a budget line usually avoided by the ODA Agencies. But as the GEF was designed to provide the incremental costs of environmental provisions in developing countries, it may not continue allocating funds for the recurrent costs of PA management, which is one of the most significant funding gaps in developing countries. The last CBD COP (7th, 2005) considered this risk declaring that "Other funding agencies, particularly the bilateral donors, will need to provide significant additional funds for PAs, including co-financing for GEF projects". In this sense, debt-for-nature swaps should be further developed in the highly indebted developing countries of the Mediterranean.

- ODA funds for PAs are scarce and project-based and do not usually last over 3 years. Funding priorities may also change, so long term PA programmes are needed. The most significant contribution from ODA Agencies has targeted sustainable development activities within and around PAs, in line with the Millenium Development Goals. In the future, to better profit from ODA donations, the PA projects in developing countries should be more long-term and programmatic, and be linked with poverty alleviation objectives, highlighting the ecosystem services provided to the rural poor. These include the provision of water, energy, fisheries and forest products, the opportunities generated on gender issues for local employment, and by innovation for the development of new and sustainable economic activities.

- PAs may also draw ODA Agencies' attention by stressing their direct support to the Millenium Development Goals through the achievement of the Goal 7 indicators on protected areas coverage and forests. Decentralization objectives are also in the agendas of donor agencies.

Mediterranean PAs all need a "Plan B" for finance

- Whatever their national or international origin, all the public sector resources for funding Protected Areas in the Mediterranean will remain largely insufficient in the short term. The traditional vision of Protected Areas as state initiatives on state-owned lands with state financing is passing away. Lack of funding is not the only reason; most Mediterranean PAs (on Category V, as marine and fisheries reserves, as private lands under some sort of ecological regulations, and as providers of ecosystem services with a significant economic value) gradually involve and interest many other social and economic partners in our societies.

- PA authorities and managers will need to resort to a much broader spectrum of financing mechanisms:

- Revised policies on subsidies, offsets from environmental impacts of infrastructures, and special taxes.

- Market-related mechanisms can and must be developed, such as entrance fees, concessions, resource extraction fees, and most importantly, the payment for ecosystem services.

- Partnerships with economic and social sectors, and raising of contributions from the private companies, should also be more widespread and developed. But PAs must be prepared to meet a growing demand from the business sector and avoid its possible influence in conservation objectives; the management provisions should be clearly set up and enforced. It is up to the PA to set the limits for private collaborations, and know where to stop.

- These tools are just starting to develop in the Mediterranean. Few countries have institutionalized these approaches, which largely remain one-off exceptions from the conventional dependence on domestic government budgets and foreign donors. The most promising in our region are (a) Entrance fees (particularly at diving sites) which may cover most of the PA recurrent costs in some countries; and most importantly (b) the payment for ecosystem services, particularly water provision to hydropower plants, to cities and to agriculture, following experience in many other PA systems around the world.

- There is a discussion on whether public heritage resources such as PAs should charge entrance fees or not, but with a general agreement about the suitability to charge for the services provided.

- Finally, PA managers need to acquire new skills to develop business plans for PAs, to fund-raise and to establish partnerships for collaborative management with interested stakeholders. Unfortunately, only MedPan provides some training on this topic, which is still far from being applied in the other eleven specialist and post-graduate courses we found available in the Mediterranean countries.

1.0 Introduction

Regional meetings and experts' reviews have underlined how Protected Areas (PAs) in the Mediterranean contribute significantly to sustaining the economy of the region. Covering around 300,000 Km^2 in land (92%), coastal (6%) and marine environments (2%), PAs provide freshwater, fisheries, biodiversity, important resources for recreation and tourism, and other ecosystem services by preventing floods and soil erosion, and as CO2 sinks. But these regional assessments have concluded that one of the key weaknesses of PAs in the region is their state of chronic under funding and unpredictable funding fluctuations (see Box 1).

The range of financing sources include national and regional governments, bilateral and multilateral agencies, international institutions, and some private contributions.

Although an accurate review of the financial situation of PAs in the Mediterranean region is not yet available, several worldwide estimates draw our attention to the issue: the COP 7 to the Convention on Biological Diversity (CBD 2005) reports that current financing of PAs in developing countries is just between 17-29% of the total required.

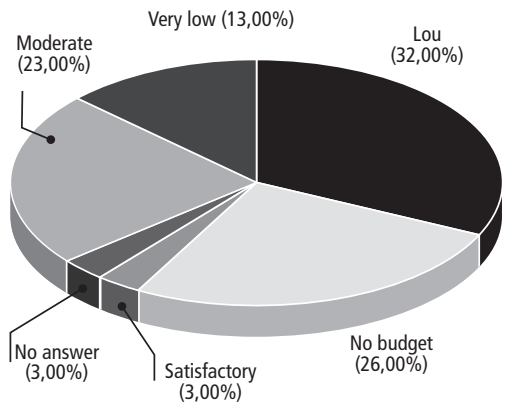
For the Mediterranean region we only find two gross approximations, both of which report a very weak financial situation. Balmford et al (2003) estimate that Northern Africa / Middle East would be financing a mere 5% of their basic needs, the same percentage as in developing Asia and the Pacific; Europe as a continent would cover around 20%, while only North America covers c.a. 80% of its PA financial needs.

A more specific Mediterranean estimate was given by RAC/SPA (1997), after a questionnaire to the managers of 59 SPA (coastal-marine Specially Protected Areas) in South and Eastern Mediterranean countries: only 3% considered finance levels satisfactory, while almost 40% declared that finance was either very low (13%) or even non existent (26%) (see Figure 1).

In response to this situation, and in preparation for the World Park Congress (WPC 2003), the IUCN Centre for Mediterranean Cooperation convened a Conference on Protected Areas in the Mediterranean Countries (Murcia, 2003), where some of the priorities, challenges and gaps relevant to sustainable financing of PA were identified, concluding (IUCN 2003) that new and innovative forms of finance should be pursued in the region, e.g. by raising funds from new markets (such as carbon offsets and other ecosystem services), by finding other donors (such as large corporations, or specific tax mechanisms), by creating partnerships with the tourism and the private sector and/or by making management needs less expensive (through co-management practices, and through international networking between existing initiatives).

During the WPC (2003) the sustainable PA financing issue was treated in depth (IUCN 2003b). The Congress identified a wide range of alternatives for generating revenues, emphasizing the need to employ new financial tools and to develop innovative funding approaches such as debt swaps, endowment funds, payment for ecosystem services or property based transactions, to improve development policies (e.g. by reforming subsidies), and to share costs and benefits through co-management and participation. The adoption of a business approach to protected areas and the need to forge strategic alliances with partner organizations were also highlighted. But *"few countries have institutionalized these approaches, which largely remain one-off exceptions from the conventional dependence on domestic government budgets and foreign donors"* (Emerton et al 2005).

Figure 1. Annual budget in Specially Protected Areas 1997



It is now the time to assess, where feasible, the degree to which the Parks Congress Recommendations are being implemented in the Mediterranean. To this end, IUCN convened a Conference on Sustainable Funding of Protected Areas in the Mediterranean Region, which took place in Seville (Spain), from 29-31 January 2006.

This document reviews the degree to which these recommendations have been implemented in the region, and briefly identifies the most important financing actions relevant to PAs, particularly from cooperation agencies and the public sector. We also illustrate the development of pioneering tools, describing case studies occurring in our region. It was presented at the Conference as a background document, and completed thereafter with the presentations and discussions from the participants.

BOX 1

REPORTS ON PA FUNDING NEEDS IN THE MEDITERRANEAN

The Parks for Life (UICN-WCPA 1994) Plan for protected areas in Europe finds that in most countries of Southern Europe, national parks suffer from a lack of staff and funding.

The Emerald Network for Central and Eastern European countries states that in these nations "in transition" the environment has been exposed to new threats resulting from rapid development, and thus protected areas are facing new challenges, such us diminishing financial resources.

A questionnaire over 59 SPAs in developing Mediterranean countries (Rac/Spa 1997 op.cit.) concludes that there is a permanent shortage of equipment and funding for the most basic protection needs of marine/coastal protected areas.

The Declaration of Cilento (IUCN/WCPA 1999) concludes that coastal and marine PAs contribute to sustaining the economy of the region, especially in the fisheries and tourism sectors, and that partnerships need to be built between the tourism industry and PAs.

An assessment from the Council of Europe on biodiversity and international agreements in the Mediterranean (Öztürk 2002) states that *"funds are fairly modest and are used only for the joint regional activities (such as meetings, preparation of documents, and their related costs)".*

Over recent decades a wide range of PA financing mechanisms have been developed and extensive technical guidance on conservation finance has been made available[1,2]. But this document does not describe or review any theory or lessons drawn from the practice on PA financial tools; it rather aims at assessing the extent of their implementation in the Mediterranean region.

1.1 Information constraints

As in most parts of the world, a global overview of PA funding by governments, donors or other sources is not available for the Mediterranean. Certain information may exist on an agency or donor basis, but it is dispersed or unclear and not systematically collected.

Even within the same country, PAs may receive support from different Ministries, such as Environment, Forests, Fisheries, Interior and even Defence. The large number of countries, the heterogeneity of institutional arrangements, and the diversity of conservation categories (which range from strict protection to multiple use; or may be inland, coastal and marine) further complicates this research. Category V areas are widespread in the region and the institutional responsibilities unclear in many cases; this adds to a strong decentralization in some countries. Moreover, PA budgets when available may include, or not, central services costs, field administration and recurrent expenditure, and/or one-off field projects or investments, making budgets difficult to compare year on year or between different countries.

Multilateral organisations or bilateral cooperation agencies seldom earmark budgets for biodiversity conservation, or for protected areas. During the last few years most ODA for biodiversity has become tied to poverty alleviation, and donors tend to treat environment as a cross-cutting issue rather than as a sector (e.g. World Bank, the EU, the Netherlands, the UK). Frontiers between markers such as "Sustainable Development", "Environment", or "Biodiversity", are most of the times unclear in the ODA budgets.

1.2 Methods

To get around these difficulties we first did a thorough revision of the information available in the literature and very especially in the Internet. The many gaps encountered were filled, to the extent possible, by directly consulting ODA Agencies, PA officers and related organizations and experts, and issuing questionnaires by email to PA officers in all the countries. We have also worked in consultation with coordinators of the most relevant Action Plans and Networks around the Mediterranean and with the IUCN constituency (WCPA, Secretariat, Members).

The particular methods followed in preparing the different data sets and Tables are detailed in each pertinent section of the document.

This document was drafted and completed during the Conference in Seville, through the information brought in by the participants. The results can be considered satisfactory concerning the aim of the document, which is to assess the general financing needs and gaps, the main sources contributing, and to review in some detail the reality of the implementation of conventional and innovative financing tools in the Mediterranean.

[1] Conservation Finance Alliance. 2002. *Mobilizing Funds for Biodiversity Conservation. A user friendly Training Guide for selecting and implementing Conserv. Finance mechanisms.* http://guide.conservationfinance.org

[2] EPA-USA. 1999. *"A Guidebook on Financial Tools"*. http:// www.wpa.gov/efinpage/

2.0 An estimate of the financial needs of Protected Areas in the Mediterranean Region

Different studies have estimated the financing gap of PAs around the world. James et al (1999a) estimate that current PA financing in developing countries is around US$ 800 million, about 25 % of the total required. Bruner et al (2004), considering the need to expand the PA network in many countries in order to protect a 15% of the world's land area, calculate that a total of US$ 25.000 million/year would be necessary over 10 years. According to these and other authors the Convention on Biological Diversity (2005 op.cit.) reports (Figure 2) that the funding gap in developing countries would be somewhere between 71% and 83%.

In the Mediterranean region, other than the qualitative evaluation from RAC/SPA (1997), the cost of protecting and managing PAs and the financial gap has not been assessed. In this section we will try to estimate the financial needs to protect and reasonably manage the regional wealth of protected areas.

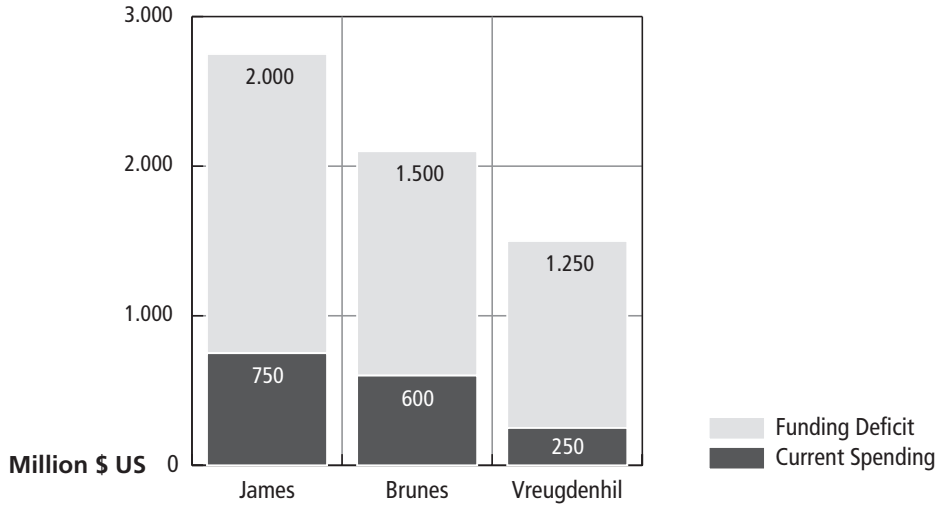
An approximation of needed budgets per hectare is hard to obtain, as these differ depending on the specific protection needs of each area:

- Size: smaller PAs are relatively more expensive to protect and manage,
- Nature: marine areas are much more costly to protect, and
- Conservation Category: strict protection areas and National Parks (Categories I-IV) require higher financial inputs than multiple-use protected landscapes, forests, or fisheries' reserves (Categories V-VI).

Even so, we have estimated costs based on the budgets available in some countries or on budgets for particular PAs which are supposed to reasonably cover the basic management needs (Table 1 and Table 4).

In Table 1 we built a preliminary data set including particular sites or conservation categories which are financed by a single institution. For example, the Ichkeul National Park in Tunisia, an inland area which is also a Ramsar Site and a Biosphere Reserve, annually receives € 160,000 for 12,000 ha (€ 14 / ha), while the Plitvice National Park, a World Heritage Site in Croatia, is self-supporting with a gross annual income of € 2.08 million for 29,482 ha (€ 73/ha). In Spain, there is a wide network of Natural Parks, typical Category V areas; here, the Protected Areas Network of Andalusia, with a total surface of 1.7 million ha. has an annual allocation of € 30 /ha, whereas the Comunitat Valenciana allocates an average of € 58 /ha to 119,970 ha (in this region sites have a comparatively smaller size, and may be more expensive to protect). In Navarra, this figure is of € 22 /ha. The EU has calculated € 15/ha for the Natura 2000 network (mostly Category V), although specialists groups, such as Birdlife International, IUCN and WWF, have considered this figure an absolute minimum (for European cost standards). All together, we can assume that a "reasonably budgeted" terrestrial PA needs an annual allocation ranging between 15 and € 50 /ha (higher in the EU given the operation costs; see Table 3).

Figure 2. The Funding Gap for effective management of existing PAs in developing countries



Marine areas require additional funding, as field teams need to be more specialised, and transport, equipment, surveillance and monitoring are all more expensive. In addition, some MPAs tend to be much smaller, proportionally raising the costs per ha. Examples of some marine National Parks in Table 1 illustrate the most intensive management and expensive end of the gradient: the Port Cros National Park (France), with only 2,475 ha, and the Miramare Marine Reserve (Italy), with just 190 ha, receive approximately the same budget (c.a. € 2 000 /ha/year). Both are very well protected and intensively used for recreation and research. Ses Negres in Spain (see Box 17) has strict conservation and scientific objectives (€ 1,860 /ha/year). While marine reserves, usually larger and not as intensively impacted by recreation, need smaller budgets. In Spain, these range between 71 and € 343 /ha/year, clearly depending on their size (Table 1).

In summary, Marine Parks and Reserves seem to require between € 50 and +1000/ha/year, depending on size, intensity of protection measures, surveillance and visitors' control needs, research activities, and sharing of management responsibilities. The three final examples, broad high seas Fisheries Reserves with no visitors, are estimated, again depending on their size, to need between 1 and € 10 /ha/year (Ministry of Fisheries Spain, and Ministry of Environment Italy, pers.comm.).

All these figures are reasonably consistent with other worldwide reports (for terrestrial protected areas): Chape et al (2003) calculated at around US$ 13 /ha/year the actual expenditure worldwide. James et al (1999a) for the mid 1990s and including inflation through the decade, report that the mean annual expenditure in developed countries was US$ 20/ha, whereas in developing countries it only reached US$ 1.57/ha. For example, African governmental expenditures range from US$ 2 to 3 /ha/year (Howard 1995) while in Latin America the mean investment has been estimated at US$ 2.5 to 4 /ha/year[3].

Table 1. Budget for some Mediterranean PAs and PA systems. Estimated annual means in €x1000

	Annual budget	Protected hectares	(€ / ha)
NATIONAL PARKS, particular sites (terrestrial)			
Plitvice NP (Croatia)	2,080	29,482	71.7
Ichkeul NP (Tunisia)	160	12,000	13.3
CATEGORY V - Multiple Use areas (terrestrial)			
EU Natura 2000 Network	6100,000	50,000,000	15
Italy, Regional Parks	130,000	1,447,883	89.8
C.Valenciana (Spain)	7,000	119,940	58.3
Barcelona Prov. (Spain)	10,000	108,000	92.5
Andalusia (Spain)	50,000	1,700,000	29.4
Navarra (Spain)	1,800	80,000	22.1
MARINE NATIONAL PARKS			
Port Cros NP (France)	5,000	2,475	2,020
Miramare PA (Italy)	400	190	2,000
Ses Negres (scientific)	42	78	1,860
MARINE RESERVES (Spain and Italy)			
Masia Blanca, Spain	120	340	353
Columbretes MR, Spain	1,235	4,400	281
Estrecho MR Spain	500	7,000	71,4
MPA network, Italy	250,000	12,000	48
HIGH SEAS Fisheries reserves			
La Graciosa (fisheries)	600	70,700	8,5
Alboran (high seas)	800	200,000	4,0
Pelagos High Seas Int´l	250	8´000,000	0.04

Table 2. Extension of Protected Areas in the Mediterranean countries

	All PAs 4[4]
North Africa	71 097
Middle East	16 202
Eastern Europe	10 458
European Union	125 57
TOTAL	**223 328 Km²**
Only coastal and wetland SPAs	**17 640 Km² (5)**
Only Marine	**5,480 Km² (6)**

2.1 An estimate of financial needs

The area of protected land and of coastal/marine areas, in our region, including all coastal countries and territories, is presented in Table 2.

An estimate of the gross financial needs for Mediterranean PAs is presented in Table 3. The protected area in different conservation Categories per region are drawn from the WCPA (2003) data sets, and reflect the reported figures per region in that year, not the areas that should be protected to ensure a representative sample of habitats and biodiversity; neither do the EU figures reflect the expected enlargement of protected areas with the foreseen implementation of the Natura 2000 Network.

The results suggest that the annual financial needs would be in the range of € 950 to 3200 million (in US$, a range of 1140 - 3840 million). The financial needs, responding to the 2003 situation, are roughly distributed as 60/40 between the EU and the non-EU countries. The EU, for the moment, despite havina a smaller protected surface area (40/60), has higher salary and operation costs; the large area of arid lands in Category V within the non-EU countries may also contribute to this difference.

[3] Seminar on *"A finance strategy for Protected Areas in Iberoamerica"*. Working Papers in preparation of the Working Group 3 "Financing and Training" for the WPC in Durban. Seville, 25-25 June 2003.

[4] WCPA. 2003. World Data Base on Protected Areas. WDPA Consortium. UICN/UNEP/TNC/WWF.

[5] www.rac-spa.org.

[6] www.rac-spa.org It includes the recently established High Seas MPA in Liguria (80.000 Km²).

Table 3. An estimate of the basic cost of operations for Protected Areas in the Mediterranean

	EU Countries		Non- EU Countries		Total estimate (in € million) per year
	Surface (ha)	Range of cost € x1000/ha/yr	Surface (ha)	Range of cost € x1000/ha/yr	
Terrestrial Categories I-IV	3 804 800	100-300	8 872 200	30-100	430-2472 million
Terrestrial Categories V-VI	8 752 300	20-70	903 500	10-30	193- 648 million
Marine, Categories I-IV	30,000	1500	30,000	1000	75 million
Coastal/marine & broad marine areas Categories V-VI	882,000	50-300	882,000	50-200	88-441 million
TOTAL in € million	13,539,100 ha	€ 644 million - € 2,063 million	10'757,700 ha	€ 312 million - € 1,120 million	**956 – 3183 € million/year**
TOTAL in US$ million		US$ 773 - 2,475		US$ 374 - 1,344 million	**1,147 – 3,820 US$ million/year**

The following notes explain the draft estimate in Table 3:

- The cost per ha, drawn from Table 1 and Table 4, considers recurrent management costs (staff, administration, equipment maintenance, and basic field activities, including surveillance, information and visitor control, basic research-monitoring activities, etc), but no infrastructures, investments, or specific projects.

- The relative coverage of Categories I-IV versus Categories V-VI per region are based on WCPA (2003 op.cit.). However, these data sets contain important errors (attributable to the software) such as figures with comas or dots in the wrong position, which had to be re-assembled.

- The area of marine Categories I-IV and Categories V-VI per region has not been found: for the purposes of Table 3, and following the maps available in Rac/Spa, we are estimating a 50/50 division between EU and non-EU.

- The cost per/ha for terrestrial PAs in non-EU countries is deemed lower than in the EU given the extension of arid lands in some areas and the actual salaries ranging around a 50% of the EU.

- The cost per/ha for Category I-IV Marine PAs should be relatively similar in all countries given the need for specialised personnel and equipment.

3.0

National public sector: policies and finances

3.1 National budgets

National government budgets are in most countries the main source of funding for PAs. Around the world, domestic input is estimated to cover 35-45% of the total existing funds for PAs. As a share of the total governmental spending, PAs account for between 0.1 and 0.5 of the GDP in many countries. In Latin America this rises to 0,9 %, but in that region 25% of the land surface is protected under some conservation category[7].

Table 4. Protected Area budgets in a sample of Mediterranean countries and PA Categories. Annual means in US$x1000

	Annual budget	Protected hectares[8]	US$ / ha
National budgets (only National Parks)			
Italy	72,000	970,000	75
Israel	16,000	325,600	49
Spain	86,000	329,178	262
		Mean	107
National budgets, all Categories			
Algeria	445	158,000	2.8
Albania	830	102,500	8
Croatia	4,700	396,000	12
Egypt	520	793,800	0.7
Greece	3,000	358,168	8.4
Italy, Reg. Parks	90,000	1'750,000	51.4
Jordan	716	70,000	10.2
Lebanon	400	20,700	19.3
Montenegro	525	94,800	5.5
Morocco	180	247,600	0.7
Slovenia	3,420	120,200	28.4
Spain, 4 Reg. Gov.	82,500	1'924,000	42.9
Syria	1,050	647,500	1.6
Tunisia	250	200,000	1.2
Turkey	7,200	993,350	7.2
Sub-regional totals, all Categories			
EU	178,920	4'152,000	43
Non-EU	17,136	3'757,000	4.5
East Europe	6,055	594,000	11.2
Middle East	9,366	1'731,000	5.4
North Africa	1,395	1'432,000	1.0
Regional averg.	196,056	7'909,000	24.7

In the Mediterranean region information on national budgets is rarely available, most of the times roughly estimated or incomplete. It may refer only to some conservation categories (mostly National Parks), sometimes including cultural or historical sites, e.g. most of the very small PAs in Israel; it may incorporate, or exclude, marine and coastal protected areas, or take into account central administration costs and/or investments.

The data obtained through questionnaires were converted into US$ (rate € 1= US$ 1.2) and are displayed in Table 4. National Parks, probably because of their more intense protection measures and expenses on surveillance and visitors' control, receive budgets proportionally higher than Category V areas, at least in our data set, perhaps as much as 5 to 10 times more per ha, and almost as high as the marine protected areas. The sample, over some 79.000 Km^2 (about a third of the protected land areas in the region, receiving an annual allocation of US$ 196 million), is still incomplete (Bosnia-Herzegovina, Cyprus, France, Libya,

Table 5. Biodiversity Strategies, Environmental Funds and PA Systems in the Mediterranean countries[9]

COUNTRY	Nat Biodiv. Strategy	Nat. PA System	Envir. Fund
Italy		Y	Y
Portugal	Y	Y	
Spain	Y	Y	
Albania	in process	early stage	
Bosnia-Herz.	in process	in process	
Croatia	Y	Y	
Fyrom	in process	early stage	Y
Montenegro	in process	Y	procs
Slovenia	Y	Y	Y
Algeria	Y	early stage	Y
Greece		2 Ministries	Y
Egypt	Y	Y	Y
Israel		Y	Y
Jordan	in process	in process	Y
Lebanon	Y	early stage	
Morocco	Y	in process	Y
Syria	in process	in process	Y
Tunisia	Y		Y

[7] See various references in Emerton et al (2005) page 9
[8] WCPA 2003. CD World Database on Protected Areas (WDPA Consortium) (op.cit.)
[9] Sources: questionnaires on country representatives. And: www.biodiv.org. And: www.gefonline.org

BOX 2

ENVIRONMENTAL FUNDS IN MEDITERRANEAN COUNTRIES

In **Jordan**, an Endowment Fund of US$ 1.5 million, raised by an NGO (RSCN) contributes to financing protected areas. It is invested in local and international markets and is professionally administered by a management company.

In **Egypt**, the Egyptian Environmental Trust Fund is managed by the Environmental Affairs Agency, under the Ministry of Environment. Revenues arise from different sources, as a green tax on airline tickets and diving fees established for some marine protected areas. Funds are used for environmental projects, most of them in the "brown" sector. Some protected areas have benefited from these allocations, but the general share is less than 5% of the total resources provided by the Fund (Egyptian Environmental Affairs Agency, and Lindberg and Halpenny 2001). An additional challenge is that governmental budgets are often overtaken by inflation, so the actual value of the Fund does not always cope with what was planned.

In **Slovenia** an Environmental Development Fund, established as a public financial fund in 2001, channels finance for environmental projects on waste, water and air pollution. It is fed from national budgets, concessions granted for public services and capital resources acquired by other legal means (e.g. land-use penalties). The GEF has contributed co-financing of US$ 6.2 million for phasing out ozone depleting substances[10]. No funds are allocated to the green sector, but according to the law, part of the profit gained from the land-selling and leasing business within the ownership of the national Fund of agricultural lands and forests is earmarked for PA management.

The **Middle East North Africa Environmental Fund** was approved by the International Finance Corporation (IFC) to encourage private participation in a wide range of environmental sectors: waste management, water supply and waste water treatment, pollution prevention, renewable energy or ecotourism. Primary target markets were Egypt, Jordan, Lebanon, Morocco, Tunisia and the West Bank and Gaza.[11]

In **Algeria** an imposed tax on airline tickets is earmarked to a national Environmental Fund. A similar mechanism is found in Greece where the ETERPS Fund, partially fed through a tax on gas, since 1995 allocates US$ 1.8 million a year to nature conservation, although the share for PAs is unknown.

In **Tunisia** the National Environmental Fund (FODEP) was created as a financing instrument to help private industries develop pollution prevention measures. In the **FYR of Macedonia**, a National Environmental Fund was created in 1998 under the Ministry of the Environment, and was transformed in 2000 into an independent body.

In **Morocco**, the GTZ (German Cooperation Agency) has helped to establish a US$ 3 million Fund, part of which should be focused on PAs. Also in Croatia the GTZ was supporting the establishment of an Environmental Fund (2004)[12]. Montenegro is planning to establish its own by 2006.

Malta and Serbia are missing) and is too heterogeneous to conclude about the national budgets at the regional level, but it provides some clear clues. The regional average hides an enormous sub-regional disparity: the PAs in the EU (US$ 43 /ha) receive 10 times as much per ha than in the non-EU countries (US$ 4.5 /ha), the weakest situation being in Northern African countries (US$ 1.0 /ha).

In Section 4.8. considering the full protected surfaces in the Mediterranean region and adding data from international funding sources, we estimate the existing funds in non-EU Mediterranean countries to be between US$ 30-45 million/year, which means around US$ 3 - 5 /ha/year.

3.2 National policies and institutional support

The deficient or missing data from some countries may reflect a weakness in the national protected area systems. Only nine Mediterranean countries (according to our questionnaires)

[10] OECD. *Selected Environmental Funds in Central and Eastern Europe*. http://www.oecd.org/dataoecd/23/59/35158062.pdf
[11] http://www1.ifc.org/ar1999/ar99/pdf/reg_camena.pdf
[12] http://www.aequiconsult.com/pages/1/index.htm

BOX 3

TAXING NEW BUILDINGS TO PROTECT NATURAL AREAS IN FRANCE

In France, each *Département* may charge a tax of *sensitive natural areas* on the construction or extension of most categories of buildings, up to 2 percent of the total value of the proposed construction. About 71 of the total 100 *départements* have established this tax, at rates varying from 0.5 to 2 percent, with annual revenues of up to € 5 - 6 million in the wider *départments*, totalling 100-120 million altogether.

The revenues are earmarked through the *Conservatoire du Littoral* for public use facilities and for land acquisitions for conservation. In a recent tax review, this fiscal conservation tool was considered to be the most important and efficient in France (Shine 2004).

have formalized a comprehensive and coordinated national conservation system establishing the PA categories, their institutional arrangements, and in some cases their management and financing strategies (Table 5).

For example, one of the recommendations arising from the Convention on Biological Diversity is the formulation of National Biodiversity Strategies in each country. These Strategies are already prepared in at least 9 Mediterranean countries (Table 5), but their degree of implementation is unknown. Two of the main actions commonly recommended by these strategies are establishing a National System of Protected Areas and developing a Financial Strategy. Protected Areas may strengthen their political support when structured through a National System, but to date at least half of the countries in the region lack them. Once a National PA System is legally and institutionally set in place, it is easier to develop a PA financial strategy at the national level. In our region we have only found information for the case of **Lebanon** (Awad 2006), where the Ministry of Environment has recently concluded a PA financial strategy including participation from stakeholders (local governments, NGOs and private interested groups), entrance fees to the areas and PA business-plans. In **Jordan** the funding strategy is based in a strong collaboration agreement with an NGO (the Royal Society for the Conservation of Nature), as described in detail in Box 9.

3.3 Environmental Funds

Another means to focus long-term finance for PAs is by establishing Environmental Funds. In the last 15 years, over 100 have been created; the GEF alone has helped to establish 23 of them. Examples are common all over the world: Madagascar (US$ 12 million), Uganda's National Parks Fund (US$ 6 million) South Africa's Table Mountain Fund (US$ 7 million), Bhutan (US$ 36 million), Colombia (US$ 30 million), Philippines (US$ 26 million) or Indonesia (US$ 25 million), among others.

Some Environmental Funds may be completely spent within 3 to 10 years, although they may be replenished through revenues coming from green taxes, debt swaps, private donations and other sources (e.g. the Mexican Protected Areas Fund FANP has substantially increased over the last years from income provided by entrance fees to protected areas).

To date, Environmental Funds have been established in 11 Mediterranean countries (Algeria, Egypt, the FYROM, Greece, Italy, Israel, Jordan, Morocco, Slovenia, Syria and Tunisia) (see Box 2). Almost all these Funds are focused on support for the "brown" sector, which is the environmental priority in non-EU countries; apparently, only the Algerian, Jordan and the Egyptian Funds are benefiting protected areas, but the latter with less than 5% of the total funds generated.

3.4 Environmental taxes

Environmental taxes exist in several countries, the revenues often feeding Environmental Funds and generally targeting the brown sector. However, taxes earmarked for the green sector are increasingly being applied in different parts of the world. For example, in Belize, foreign tourists pay a US$ 3.75 conservation fee by 1996 law, which is collected together with the airport departure tax. Tourists obtain a separate receipt for the conservation fee with a short brochure explaining how the income directly goes into the Protected Area Conservation Trust (PACT)[13]. The fuel tax in Costa Rica is not earmarked for protected areas, but represents another way of linking carbon emissions and conservation (Spergel 2003): 50% of this fuel tax is allocated to finance an environmental fund which makes payments to small landowners who agree to avoid tree-cutting on their lands for renewable periods of 5 years.

[13] www.pactbelize.org

BOX 4

THE ECOTAX IN THE BALEARIC ISLANDS (SPAIN)

The islands receive 11 million tourists annually. In 2001, the Autonomous Government introduced an eco-tax on tourism to raise revenues for a "Tourist Area Restoration Fund" with the aim of promoting sustainable tourism and to enhance competitiveness and nature conservation. On July 2001, after pressure from the hotel sector, the Central Government decided to challenge the Balearic eco-tax in the Constitutional Court, which resulted in a suspension from September 2001 until resolution in January 2002.

The eco-tax was effective in May 2002 and was paid by visitors older than 12 directly to the hotel or apartment administration. The charge ranged from Ä 0.5 up to Ä 2 per day, depending on the rating of hotels and apartments, and represented 2% of a tourist's average daily expenditure.

Finally, after a change in the Regional Government, a decree for the repeal of the eco-tax was approved in July and effective in October 2003**.**

In the Mediterranean there are also some initiatives that are interesting for biodiversity. **Algeria** and **Egypt** have established taxes on airline tickets, which are invested in the environment and may benefit protected areas (see Box 2). In **Greece** the ETERPS Fund is partially fed through a tax on gas and since 1995 allocates US$ 1.8 million a year to nature conservation. In **Spain**, the Regional Government of Aragon created in 2005 three environmental taxes, focusing on polluting industries, ski resorts and commercial centres; these taxes aim both at improving these industries' environmental behaviour and to support environmental restoration and conservation projects. In **France**, a tax on sensitive natural areas has been successfully implemented (Box 3). While in **Italy** there is a proposal to benefit PAs from a 0.5% pool for projects of general interest which is derived from personal income tax at the national level.

Communicating the benefits that arise from these taxes is especially important for public acceptance, given the concern that, under tax system reforms, green charges may be abolished. This happened in the Balearic Islands, where a tourist eco-tax was established but finally repealed (see Box 4).

In Croatia an eco-charge on visitors was proposed as an instrument to reduce and prevent pollution of the coastal and marine area of Hvar. A stakeholder analysis showed a general public support to this initiative, and a preliminary study estimated willingness to pay for environmental improvement at € 0.65 per day, more than initially proposed. As in the case of the Balearic Islands, political and legal difficulties existed in its implementation[14].

3.5 Subsidies

Governments provide financial support through subsidies to various economic sectors, including fisheries, forestry, agriculture, energy and water. A subsidy can be defined as a *"government-directed, market distorting intervention which decreases the cost to produce a specific good or service or increases the price that may be charged for it"* (Robin 2003).

"Conservation subsidies" also exist in some countries. These are direct payments for local communities to preserve their natural resources rather than exploit them. In Spain, the National Parks institution allocates part of its budget (between € 6 and 20 million per year, that is € 18 to 60 per hectare and year) to subsidize institutions and individuals inside the Parks or in their surrounding areas. The Regional Government of Aragon is establishing a subsidy of € 5.4 per hectare and year in the core areas of Natural Parks, and of € 2.7 per hectare in the buffer zones. However, providing direct economic incentives to protect biodiversity is not a sustainable solution, and conservation subsidies can be considered as costs rather than a source of funding.

Most relevant to conservation purposes are the subsidies that produce perverse effects, that *"ultimately exacerbate the negative impacts of modern agricultural practices on the environment, such as soil quality, water quality, diversity of plant and animal species, and habitats for plants and animals"* (OECD, 1998). Subsidies to activities competing with conservation or damaging the natural resource base are diverse in nature (Bishop 2006) such as input subsidies (e.g. irrigation, water, electricity, fertilizers); price supports (such as crop price guarantees, export subsidies); tax incentives (e.g. for "land development") and infrastructure (such as public roads). Around the world, financing existing nature reserves would only require a small fraction (2 percent) of the amount governments currently spend on environmentally perverse subsidies (James et al 1999b). Similar figures are provided by Steenblik (1998): *"While an estimated 30.000 million US$ would be needed annually for sustaining PAs worldwide, the gross amount for subsidies for agriculture, fishing, logging, energy production and water is estimated at US$ 500.000 million".*

In the EU, one of The headings of the financial perspective for the period 2007-2013 is *Preservation and Management of*

[14] Taylor et al. *Sustainable tourism and economic instruments: the case of Hvar, Croatia.* http://www.bath.ac.uk/cpe/workingpapers/economic-instruments-taylor-fredotovic-povh_Markandya.pdf

Table 6. EU financial framework 2007-2013. Source: EU[15]			
COMMITMENT APPROPRIATIONS		**€ million €**	**%**
1. Competitiveness and cohesion for growth and employment		379,700	44.1
2. Natural Resources, preservation and management	NNRR Market related expenditure	293,100	34.0
	NNRR Preservation and management	78,100	9.1
3. Other (Citizenship, security, justice, EU global, administration, compensation)		111,400	12.9
TOTAL COMMITMENTS		862,300	100

Natural Resources, which will receive a total € 371,200 million for the period 2007-2013 (Table 6); most of this budget will be allocated to agriculture, rural development and fisheries policies. The agricultural policy has produced all over Europe negative impacts on the environment (water-bearing pollution, habitat degradation and irrigated lands in water lacking areas of the European Mediterranean countries); the agro-environmental measures introduced since 1992, have proved insufficient to compensate for these effects to date; for example, in Greece out of € 762 million allocated for agro-environmental measures for the period 2000-2006, just a 2.7% (20.6 million) were placed in projects related to PA buffer zones. The fisheries policy has also led to decreasing fish populations and a significant loss of biodiversity.

According to the new Rural Development and Structural Funds Regulations, part of the agricultural budget could be used to fund the Natura 2000 network (the EU-wide network of nature protected areas, with over 50 million ha, or 500.000 Km^2, involved). The management cost of Natura 2000 has been estimated by the Commission at € 6,100 million per year over the period 2003-2012. This figure (€ 15/ha/year) is considered an under-estimate by Birdlife, IUCN, WWF and other international organizations[16]. The amount must be co-financed, with the EC, contributing around 35-40% (€ 2,500 million a year aprox.), and the countries holding Natura 2000 sites covering the rest; at least 50% of these sites are in the EU Mediterranean countries, for example, Natura 2000 sites as planned will cover 25% of Spain.

The current majority of EU funds would be delivered through the Rural Development and Structural Funds. In spite of an improvement in the agro-environmental measures, this budget will be used to subsidize activities with potentially important negative impacts on the environment. The proposed single instrument to unify strictly environmental measures, the LIFE+ Program, will receive a budget of € 2 190 million for the period 2007-2013 (365 million annually), of which only 47% would be applicable for Natura 2000, that is, around € 3.5 /ha/year.

In summary, the EU will be allocating (2007-2013) around € 53,000 million/year on subsidies to natural resources and agriculture: About 4.7% of this figure may benefit Natura 2000 sites (c.a. € 2500 million), half of it for EU-Mediterranean countries; while € 171 million may be expected to go directly into Protected Area management through the LIFE+ (which is 0.3% of all subsidies to natural resources).

All together, the EU has allocated little for conservation and PAs. **Natura 2000 sites will receive 3-5% of the subsidies for natural resources**, most of it for rural development within and around the sites. The access to these funds, usually addressed at ministries different from Environment, must show they can deliver other EU priorities, e.g. jobs, rehabilitation, education and training, or control of alien species. However, the EU funds are administered at the national level. Therefore the national programmes must include priorities for PAs, and define them not only for Ministries of Environment, but other relevant ministries including Agriculture, Fisheries, or Regional Development.

Financing for marine Natura 2000 sites has not been mentioned in the proposed Regulation for the European Fisheries Fund, so **MPAs may have been excluded** from the new financing perspectives. Support and funding for MPAs should be sought through the fisheries policy and also be considered as a part of the fisheries agreements signed between the EU and third countries in our region.

3.6 Offsets from Environmental Impact

These offsets are offered as compensation for the impact caused by works and infrastructure. Some countries require utility, telecommunications and energy companies to pay millions for the right-of-way to build and maintain electric, telecommunication or gas transmission structures inside protected areas. All over the world there are remarkable examples of these offsets. For example in The Philippines a telecommunication company pays an annual fee based on the companies' revenues for towers near Mount Kitanglad summit; another example is the Environmental Compensatory Mechanism set up within the framework of a pipeline construction project in Cameroon, where compensatory measures included assistance for environmental protection and biodiver-

[15] Financial Perspective 2007-2013 (2005). Grybauskaite, D., Commissioner. December 2005.
[16] Financing Natura 2000 (2004). CEEWEB, Birdlife, WWF, IUCN, BEEFEB, Planta Europa, SHE, The Coastal Union, IUCN, Coastwatch Europe. http://www.eeb.org/activities/agriculture/Natura-2000Financing-joint-FINAL.pdf

BOX 5

HIGHWAY ACROSS LOS ALCORNOCALES NATURAL PARK (ANDALUSIA, SPAIN)

The highway connecting Los Barrios with Jerez, in Andalusia (Spain), goes across one of the largest cork-oak forests in the world, home to important endangered species. The Regional Government (Junta de Andalucía) allocated 35-40% of the total works budget (more than € 313 million) to correcting and compensatory measures.

The compensatory measures (5-10% of the total budget) were defined by a team of experts, according to an agreement that the Junta de Andalucía signed with the Biological Station of Doñana. Among these measures there were specific programmes for the conservation of endangered species and habitats.

Additionally, the regional authorities have committed to compensate the environmental impact of the highway through ecological programs like the reintroduction of the Imperial Eagle, the Osprey and the Otter into the Natural Park. The European authorities supported these measures and consider them as an example for future similar actions in Europe.[17]

sity conservation activities in two National Parks, totalling approximately 1 million hectares (Bissek 2003).

In Bolivia an international energy company paid US$ 20 million to establish a Conservation Trust Fund for a natural area where it planned to construct a multibillion-dollar natural gas pipeline. This was a condition imposed to obtain a US$ 200 million low-interest loan from the U.S. government's Overseas Private Investment Corporation (Spergel op.cit. 2003).

In **Tunisia**, offsets from EIAs are foreseen but earmarked to the "brown" sector; industries needing to solve environmental problems must provide 30 percent of the required financing, while the Ministry of Environment provides 20 percent from the National Environmental Fund. The remaining 50 percent can be raised from bank credits made available at lower-than-market interest rates (Curtis 1996). Another example in southern **Spain** is directly related to PAs (Box 5), although in this case it was the government who paid the offsets.

In the future, these initiatives are likely to involve the private sector, and be institutionalized rather than remaining as one-off cases. In the **European Union**, after 15 years of discussions, the Parliament and the Council approved in April 2004 the Directive 2004/35/CE on Environmental Liability Directive. This Directive is the first EU law specifically based on the "polluter pays principle" and seeks to ensure that *environmental damage in the EU is prevented or remedied and that those who cause it are held responsible*[18]. "Environmental damage" includes damage to fauna, flora, habitats, water resources and land pollution causing significant harm to human health. The Directive applies to protected habitats and species (Annex II 1.1.3.): *"Compensatory remediation shall be undertaken to compensate for the interim loss of natural resources(...) This compensation consists of additional improvements to protected natural habitats and species or water at either the damaged site or at an alternative site(...)"*. Under the Environmental Liability Directive, public authorities must ensure that responsible operators undertake or finance the preventive or remedial measures, and public interest groups, such as NGOs, are allowed to require public authorities to act, and take illegal decisions to courts. Member States must bring into force appropriate laws and regulations to implement the Directive before 30 April 2007.[19]

3.7 Governmental Foundations and Federations

France, Italy and Spain have established governmental foundations in support of biodiversity conservation and protected areas.

France: *Conservatoire du Littoral*

The Conservatoire du Littoral is a French public foundation in charge of protecting coastal areas and wetlands through the

[17] http://www.juntadeandalucia.es/economiayhacienda/fondos/poia_interreg/POIA/ejemplos/a381/a381
[18] European Press Release: *Environmental liability: Commission welcomes agreement on new Directive.* IP/04/246, 20/02/2004
[19] http://europa.eu.int/comm/environment/liability/

acquirement and eventually the expropriation of lands for public interest reasons. Since its date of creation (1975), the Conservatoire has acquired 73 610 hectares on the coasts and riverbanks in all the French territories[20]. The sites are managed by the local authorities, sometimes in participation with conservation organizations. The Conservatoire has an annual budget of about € 30 million, of which € 25 million are earmarked for the acquirement and management of sites. Most of this amount comes from the State, but European local groups, private companies and persons can also contribute. Donations of land have occurred since 1996 and are tax deductible.

The Conservatoire has established technical collaboration with 12 Mediterranean countries in multiple projects, like the MedWet Programme. The institution has collaborated in the preparation of dossiers of different projects funded by FFEM or by the French Agency for Development.

Italy: *Federparchi*

Federparchi is a federation of 150 management bodies of National and Regional Parks, Marine Protected Areas, Regional and National Natural Reserves in Italy[21], and represents PAs in their relationships with the State, Regions, local entities, the European Union and other public or private institutions. Federparchi has actively worked for the establishment of a national system of PAs, with support from IUCN and Europarc. The Federation supports projects within the PA system, with a variable annual budget (€ 750,000 in 2005). It also allocates some funds to cooperation projects.

Spain: *Fundación Biodiversidad*

The Biodiversity Foundation of Spain was created in 1998 by the Ministry of Environment to focus on the field of conservation, survey and sustainable use of biodiversity and to support international development cooperation[22]. In 2005, its budget for Protected Areas was around € 280.000, distributed in 7 projects. Additional funds may be included when regarding projects implemented in buffer areas or targeting species living in PAs, as well as training projects that sometimes are related to PAs. Its cooperation budget was of about € 100.000 to € 150.000 in 2005. Most significantly, the Spanish Ministry of Environment has recently launched (November 2005) a Program for the Acquirement of Coastal Lands, to be developed in the next years, with a budget of € 20 million for 2006.

[20] www.conservatoire-du-littoral.fr
[21] www.parks.it/federparchi
[22] www.fundacion-biodiversidad.es

4.0 International sources and programmes

4.1 International conservation commitments

The Mediterranean countries are committed to PA conservation through a number of international Conventions, Agreements and Declarations. The most specific to the region are the Convention on Biological Diversity and the Barcelona Convention, both of which also refer to the need for north-south cooperation.

a) The Barcelona Convention

A significant support to coastal and marine Protected Areas in the Mediterranean comes through the Barcelona Convention, to which all the coastal countries are Contracting Parties. Its Protocol on Biodiversity establishes Specially Protected Areas (SPAs), with 152 sites listed since 1982, and the more strict category of SPA of Mediterranean Importance (SPAMI), with 14 sites listed since 1995. It is up to each Party to cover the finance and management responsibility. Although the declaration of SPAs has seldom ensured the budgets in many countries (see Box 1), the new SPAMIs have an improved finance perspective, as adequate financial support is one of the conditions to the Parties presenting a candidate site to the SPAMI List.

The Parties also provide finance to the Rac/Spa Center in Tunis, acting as the technical Secretariat to the Protocol. Even though the Center's budget for Protected Areas was just US$ 130,000 for the biennium 2004-2005, it has mobilized significant opportunities for training and technical support to Mediterranean developing countries in the field of coastal and marine protected areas, and has helped leverage important funds from GEF, EU and other international sources for Mediterranean SPAs and SPAMIs.

b) The Convention on Biological Diversity

The topic of finance is raised in the CBD in Art.20, which refers to the responsibilities of each Contracting Party to *"provide financial support to those national activities intended to achieve the objectives of the Convention and to provide new and additional financial resources to enable developing country Parties to meet the costs of implementing measures".* Art. 8(m) requires Parties to cooperate in providing financial and other support for in-situ conservation; Art.21 defines the GEF and Art.39 establishes the GEF as the interim financial mechanism.

c) The CBD Programme of Work for Protected Areas

The CBD Secretariat and UNEP (2004[23]) has prepared a Programme of Work on Protected Areas. One of its goals is to *"ensure that by 2008 sufficient resources to meet the costs to effectively implement and manage national and regional systems of protected areas are secured"* [24]. It underlines the need to develop sustainable finance sources, to identify and remove perverse incentives and inconsistencies in sector policies that increase pressure on PAs, to redirect these whenever possible as positive incentives for conservation, and to improve the capacities of national PA institutions to develop sustainable financing through fiscal incentives, environmental services and other instruments. In their 7th COP, the CBD Parties adopted this Plan (Decision VII/28) and urged Parties, other Governments and funding organizations to mobilize adequate and timely financial resources, while requesting the GEF to further develop its portfolio on protected areas. The 7th COP also requested the Parties to estimate the cost implications of protected areas and to report back to the 8th COP Meeting.

d) The Millenium Development Goals

At the United Nations World Summit in 2000 world leaders agreed to achieve the Millenium Development Goals, of which Objective 7 refers to environmental sustainability and includes an indicator on the ratio of land area protected to maintain biological diversity, and on land area covered by forest. The International Community again agreed at the World Summit for Sustainable Development in 2002 the need to work toward the goal of significantly reducing the loss of biodiversity by 2010.

Despite national efforts to enforce the international agreements, it is a reality that the translation of these commitments to the national level still remains seriously delayed in many countries. International cooperation agencies and multilateral organizations are contributing to their application.

[23] Secretariat of the Convention on Biological Diversity. 2004. *Programme of Work on Protected Areas* (CDB Programmes of Work). Montreal, CDB Secretariat. 31 pp.

[24] CDB. 2003. *Protected Areas*. Note by the Executive Secretary to the 7th Conference of the Parties to the Convention of Biological Diversity, PNUMA/CDB/COP/7/15.

4.2 Bilateral Official Development Assistance (ODA). OECD Statistics

In 2002 the DAC-OECD proposed that all Development Cooperation Agencies use "Rio Markers" in every project, to facilitate the assessment of total funding provided to support the three Rio Conventions (Biodiversity, Climate Change, and Desertification). These markers are still not systematically used. Where implemented, they are useful to determine biodiversity-related aid. But now this broad concept often includes any projects containing main or minor components of general environment protection, water supply, agriculture, forestry, fishing or rural development. In consequence, the information about bilateral cooperation assistance for protected areas needs to be compiled by assessing the lists of ODA projects.

Taking biodiversity-related aid as a whole, the worldwide figure during the period 1998-2000 (OECD 2002) indicate a slightly declining trend with US$ 1,090, 1,027 and 887 million a year respectively (Figure 3). So the ODA targeting the objectives of the CBD by 19 OECD countries accounted for the 2.7 percent of the total ODA during the period (Table 7).

A finer review (Lapham and Livermore 2003) suggests that funding for biodiversity conservation has recently declined, probably from US$ 700 million in the early 1990s to around US$ 400 million in the early 2000s. The same authors comment how during the last few years most ODA for biodiversity has been tied to poverty alleviation and thus it seems to be a *"diminishing support for shorter-term conservation investments and to leave little conservation actions, despite proven demand room for them".*

"On an area basis, this implies average ODA of just US$ 1.5/ha/year, up to US$ 6/ha/year in the hot-spots" (Arvind 2003). Recently, however, the OECD (DAC News, Dec 2005) has reported a rise in ODA worldwide of 5.9% since 2003, but there is no updated information on the particular trends of biodiversity aid.

Figure 3. ODA Activities targeting the objectives of the CBD by 19 OCED countries

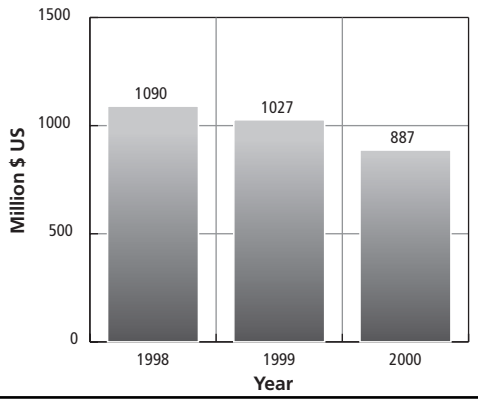


Table 7. Biodiversity-related aid by donor 1998-2000 (OCDE-DAC 2002). In US$ million

Main donor countries in the region	Annual Average	BD % from total bilateral ODA
France	44.7	1.7
Germany	275.6	9.0
Greece	not reported in DAC	
Italy	not reported in DAC	
Spain	14.5	1.4
Switzerland	15.9	2.4
United States	84.2	1.0
TOTAL for all OECD countries	**999.5**	**2.7 %**

Table 8. Biodiversity-related aid in Eastern Europe and Middle East/ North Africa[25]

	EASTERN EUROPE			MIDDLE EAST AND NORTH AFRICA		
1998-2003 (US$ million)	**Total ODA**	**ODA for BD**	**% BD / Total**	**Total ODA**	**ODA for BD**	**% BD / Total**
FRANCE	1,360	0.00	0.00	4,535	0.93	0.021
GERMANY	2,280	1.14	0,05	3,731	1.88	0.051
GREECE	626	0.45	0,07	179	0.29	0.163
ITALY	Not reported in DAC					
JAPAN	832	0.00	0,00	3,095	0.16	0.005
NETHERLANDS	1,215	0.00	0,00	1,324	0.05	0.004
SPAIN	641	0.00	0,00	1,251	1.19	0.095
SWITZERLAND	426	1.87	0,44	396	1.72	0.433
USA	4,505	0.00	0,00	13,336	11.93	0.089
TOTAL	**10,528**	**3.47**	**0,03%**	**23,314**	**17.23**	**0.074%**

[25] OECD, 2002. DAC Aid activity database and CRS/Aid Activities targeting the Rio Conventions (1998-2000). DAC Working Party on Statistics. Organisation for Economic Cooperation and Development. Paris.

Table 9. Biodiversity-related Aid in Mediterranean countries (1998-2003). Source DAC-OECD (2002)											
(US$ x 1000)	FRANCE	GREECE	ITALY	JAPAN	NETHERLANDS	SPAIN	SWITZERLAND	USA	Total ODA	ODA for BD	% BD / Total
ALBANIA		334							1728000	334	0.019
FYROM		119							1286000	119	0.009
ALGERIA						8			1124000	8	0.001
EGYPT				94				11928	6300000	12022	0.191
LEBANON							145		1318000	145	0.011
MOROCCO	932					950			2626000	1882	0.072
PALESTINIAN ADM. AREAS				22	50		816		4611000	888	0.019
TUNISIA						234			1423000	234	0.016
TURKEY		293		44					1084000	337	0.031
TOTAL	**932**	**746**		**160**	**50**	**1192**	**961**	**11928**	**21500000**	**15969**	**0.074**

In the Mediterranean, under-reporting prevents an accurate assessment. According to OECD-DAC data sets, North Africa and Middle East countries received altogether US$ 17.2 million as biodiversity-aid, a mere 0.074% of the total ODA. Only Greece and Switzerland allocated a higher percentage (Table 8).

The same biodiversity-related ODA disclosed by countries, as provided by the DAC-OECD, is detailed in Table 9. The case of Egypt is noteworthy, being relatively high when compared to e.g. Algeria, FYROM, Lebanon, Palestinian Areas, or Tunisia.

Given the generality of these data, long lists of ODA projects in the DAC data sets were reviewed looking for specific PA-related projects in the Mediterranean region. Only two projects (from the Greek and the Spanish Cooperation) were found reported between 1998 and 2003, while an active country, such as Italy, had no reports at all. This result encouraged a direct revision from bilateral cooperation agencies.

4.3 Bilateral ODA Information from the Agencies

When searching for the contribution of the ODA Agencies to biodiversity or to PAs in the Mediterranean region, some more data can be found. For example:

- **The French Development Agency** provided € 9 million for the management of Cedar forests in Morocco[26]. In addition, France is focusing most of its support to biodiversity through the FFEM (Box 6), resulting in € 4.6 million for Mediterranean PAs during the period 1998-2005, that is, around € 600,000 a year in average.
- The **Greek Cooperation** allocated € 114,800 to the Transboundary Prespa Park between Greece, FYROM and Albania, and € 210,000 to the Greek-Turkish cooperation for conservation of wetland resources (2003-2006)[27] in Turkey.
- The **Italian Cooperation** has recently contributed € 9 million to Egypt (Box 7).
- The **Spanish Development Agency** (AECI) contributes to biodiversity conservation in the Mediterranean through the Azahar Programme. This is a coordination initiative that brings together most of the Spanish public bodies, and some private, involved in co-operation in the field of sustainable development, environment and nature conservation in the Mediterranean. Its annual budget has not been reported, but our research through specific PA projects yields an annual budget of c.a. € 200,000 for training activities, and two PA-related projects for a total of € 3.2 million in the last 4 years, that is, around € 1 million per year.
- The **Swiss Agency** for Development and Cooperation, although favouring the "brown" sector, has provided a contribution of € 1.17 million for 3 years to IUCN in North Africa, earmarked to studies and measures for biodiversity conservation.

4.4 Preliminary conclusions on Bilateral ODA

The assessment of ODA Agencies suggests an average support of € 6 million/year earmarked for Protected Areas in the Mediterranean. Based on what is accounted for by the DAC-OECD, biodiversity-marked projects received around

[26] www.afd.fr
[27] www.medwet.org

BOX 6

FRENCH FUND FOR WORLD ENVIRONMENT (FFEM)

The French Government created the FFEM in 1994 as an instrument for cooperation and development, and provided it with € 201 million of the State budget for the period 1994-2006. The secretariat management of the FFEM is executed by the French Development Agency. At the end of December 2004, Mediterranean countries had received € 16.2 million, which represents 11 % percent. Close to 31 % of funds received until 2005 were earmarked to biodiversity projects, and 24.7 % to projects developed in Protected Areas[28].

COUNTRY	Total environment (€ thousand)	Biodiversity (€ thousand)	% BD/total	PA (€ thousand)	% PA / total
Algeria	1,200.0	1,200.0	100.00	-	0.00
Lebanon	2,640.3	1,400.0	53.0	1,400.0	53.0
Tunisia	3,989.6	1,475.0	37.0	1,475.0	37.0
Regional projects	2,296.1	1,770.4	77.1	1,770.4	77.1
TOTAL (all Medit.)	**18,800.8**	**5,845.4**	**31.09**	**4,645.4**	**24.7**

Projects related to biodiversity and to Protected Areas funded by FFEM in the Mediterranean (1998-2005) (FFEM database in www.ffem.net)

BOX 7

ITALIAN BILATERAL COOPERATION IN PROTECTED AREAS IN EGYPT

The **Egyptian-Italian Environmental Cooperation Program (EIECP)** was agreed in 1998. Its main objective is to assist the country in the implementation of its National Environmental Action Plan (NEAP). The EIECP has an integrated Protected Area component which incorporates three projects to support respectively the management of Wadi el Rayan, Siwa and Elba Protected Areas.

One of the main objectives of the Elba Project is the preparation of an investment plan, aimed at attracting development funds and conclude collaborative agreements with key agencies operating in the area. The Italian and Egyptian Governments agreed on February 2002 the financing of Phase II of the Program, with an Italian contribution of about € 9 million[29].

US$ 20 million during the period 1998-2003 (around € 3.5 million per year). We can not assume that there is no duplication with the OECD figures presented above, so the total bilateral ODA for biodiversity purposes in the Mediterranean may be estimated in the range of € 6 - 9 million a year, most of it for protected areas.

Compared to other regions, these figures are low. For example Latin America, probably as a response to their innovative proposals in the 1990s and to the interest that for a long time their tropical ecosystems have stimulated within international NGOs, received an average of US$ 130 million for conservation projects each year between 1990 and 1997 (Castro and Locker 2000), a significant part of it for PAs. This is about 10 times as much as for the Mediterranean. Another comparison can be built with the share of biodiversity ODA as compared to the total ODA: biodiversity accounts for 2.7% of all ODA worldwide (Table 7); this proportion is reduced by 20-30 fold (Table 8) in North-Africa/Middle-East.

All together, it is clear that the Mediterranean has not been identified as a priority for biodiversity and PAs, even though the region is one of the world's hot-spots for biodiversity.

Another indicator is that no Mediterranean country was targeted by the recently established consortium of international NGOs (Birdlife, CI, TNC, WCS, WRI, WWF), put forward during the 7th COP-CBD to support the implementation of the Programme of Work for Protected Areas (CBD 2004) in 10 priority countries of the world.

However the relatively limited ODA supply for biodiversity conservation in the region, these contributions act as a significant leverage for other sources, either national or multilateral (see GEF below) as the ODA funds are in all cases matched with a varying proportion of 20-60% from national resources.

[28] www.ffem.net
[29] http://www.eiecop.org/ambiente2/program.htm

Table 10. External debt of Mediterranean countries (2002). In US$ million. Source: OECD [30]			
DEBITOR	**TOTAL DEBT**	**GNI**	**% DEBT GNI**
Albania	985	4,495	21 %
Algeria	22,963	4,028	42 %
Bosnia Herzegovina	2,526	5,709	44 %
Croatia	14,437	22,296	65 %
Cyprus	9,807	9,983	98 %
Egypt	31,202	81,052	38 %
Israel	48,255	104,887	46 %
Jordan	12,379	9,560	129 %
Lebanon	18,561	18,670	99 %
FYR Macedonia	1,203	3,760	32 %
Morocco	16,675	36,115	46 %
Palest.	159	3,405	5 %
Serbia Montenegro	6,147	16,015	38 %
Slovenia	7,392	21,957	34 %
Syria	5,129	19,763	26 %
Tunisia	14,964	20,063	75 %
Turkey	112,771	182,476	62 %

4.5 Debt relief

The Mediterranean countries generally have important debt burdens (Table 10).

Debt swaps were created as *"alternative mechanisms to debt forgiveness, based on voluntary exchanges by creditors and debtors of debt for cash, another asset or a new obligation with different repayment terms"* (Moye 2000). The debt swap mechanism was first applied as a debt-for- nature swap in Bolivia in 1987, as an agreed conversion of a fraction of the debt value into local currency for conservation activities.

Since then, almost 30 countries have benefited from this mechanism and from bilateral debt reductions programmes and over US$ 1.000 million in environmental funding has been generated. International conservation NGOs (CI, TNC, WWF) pioneered the negotiation of debt-for-nature swaps between commercial creditors and debtor governments. IUCN has also supported an initiative to introduce debt swaps and Environmental Funds in different countries of Africa (Moye and Norris 2000). Protected areas have largely benefited from this system in some countries. For example, since the early 1990s Peru has generated about US$ 35 million funding for biodiversity conservation and sustainable development programs in over 90% of its Protected Areas.

In the Mediterranean, we have found only three countries involved in debt-swap cases (Box 8).

Debt conversions are applicable mainly in the heavily-indebted countries, but in fact not many of their governments are interested in debt swaps, as they often prefer debt reschedule or forgiveness. There is a multilateral debt-forgiveness program initiated by the World Bank and the International Monetary Fund, which may result in the cancellation of up to 90 percent of the "official" debt in the so called HIPC (Heavily Indebted Poor Countries), but none of these countries is in the Mediterranean region.

4.6 Multilateral donors: the European Union

The European Union has provided annually up to € 200 million worldwide for biodiversity conservation/sustainable use in developing countries (Lapham and Livermore op.cit.). Programs in the Mediterranean are the SMAP and LIFE, which together annually allocate € 25.8 million for biodiversity.

• SMAP-MEDA

The SMAP (Short and Medium-term Priority Environmental Action Programme) was created in 1997 based on the Barcelona Declaration, in the framework of the MEDA Programme, the main financial instrument of the European Union for the Euro-Mediterranean Partnership. SMAP priorities comprise brown issues, integrated coastal management, desertification and hot spots, this last including polluted areas and threatened biodiversity zones.

Information is available for the period 2000-2002 (Table 11), when all approved projects were designed in partnership between at least two or three countries. The projects targeted water (38%), urban issues (24%), sustainable development (14%), land use (14%), and Protected Areas (10%). PAs received € 2.8 million for 2 projects: management of biodiversity hot spots, with the participation of Lebanon, Italy, Morocco, Tunisia and Turkey; and development of coastal/marine PAs, in partnership with Algeria, Cyprus, France, Israel, Italy, Malta, Morocco, Spain, Syria, and

Table 11. SMAP contribution to projects in the Mediterranean (2000-2002) Source: www.smaprms.net		
Project type	**SMAP contribution (x€ 1000)**	**% of total**
Urban	11,029.4	37.6
Water	6,960.2	23.7
Land use	4,252.3	14.5
Sust. Develop.	4,223.5	14.4
Protected areas	2,866.2	9.8
TOTAL	**29,343.3**	**100.0**

[30] http://cs4hq.oecd.org/oecd/eng/TableViewer/Wdsview/dispviewp.asp?ReportId=2186&bReportOnly=True

BOX 8

DEBT SWAPS IN THE MEDITERRANEAN

Egypt: With an external debt of US$ 31,202 million (38% of GNI), Egypt is one of the most active countries with debt swaps. A total of US$ 900 million have been renegotiated with Germany, France, Switzerland and Italy. 50% of the funds arising from the debt swap with Germany were allocated to development and environmental programs (Radwan 2005). A new debt swap program for US$ 150 million, was established with Italy for the period 2001-2006; of this amount, US$ 10 million belong to nature investments, of which US$ 2.7 million are earmarked for PAs. Some actions considered are the reform of national conservation institutions, business plans, fund raising and marketing strategies for PA finance (Korany 2006). Egypt is also the most important partner world-wide for the Swiss Debt Relief Programme, with US$ 400 million[31], although the funds were assigned to the social and development sector, as it was also the case with France.

Jordan: Jordan has an important debt burden (129,5% of GNI), which is causing difficulties for obtaining further credit. In 2000 the Ministry of Economic Affairs negotiated with France, Belgium and other countries a debt-for-nature swap initiative developed and supported by UNDP and IUCN, by government mandate. A three year participatory process was carried out to identify the country's environmental priorities, with representatives from 60 Jordanian institutions and organizations. Waste issues were at the forefront of the agenda, but desertification and biodiversity protection, including conservation of natural sites were also considered as priorities (Saqr 2000). Although this initiative was very well conceived, it was finally not implemented due to the general policy in Jordan to work on debt forgiveness rather than debt swap[32].

Morocco: The best candidate countries for debt reductions are those with active debt-management policies in place, as is the case of Morocco. The Moroccan Government launched in 1996 an offer to potential investors for a Debt for Equity Programme, based on a bilateral agreement signed between Morocco and France, in the framework of the 1992 Paris Club agreement. A similar initiative was established with Spain (Moye 2000 op.cit).

Tunisia. In all cases, the SMAP contribution was close to 80% of the total cost of the project.

• LIFE Programme

The LIFE Program was established in 1992 as the Financial Instrument for the Environment of the EU, covering projects in 3 different areas: implementation of EU's environmental policy and legislation (LIFE-Environment; 47% of budget); implementation of the EU's conservation policy and the Natura 2000 Network (LIFE-Nature, 47%); and technical assistance for sustainable development in third countries (LIFE-Third Countries, 6%).

a) *LIFE-Nature*

The European Mediterranean countries receive altogether an average of € 18.6 million per year from LIFE Nature (Table 12), which represents almost 25% of the total annual budget of the program (€ 75 million). The majority of these funds must be invested in Natura 2000 sites (around 90%), but the program does not reach all areas: 9% of the sites in Italy, 30-50% in Portugal, less than 30% in Greece, 12- 24% in Spain, and 18-37% in France. In average, 3 of every 4 Natura 2000 sites in Mediterranean countries have never been supported by the program, although in the rest of Europe almost 90% of the sites are in the same situation.

Table 12. LIFE-Nature Project cost and budget received by the EU-Mediterranean countries [33] (€ x1000)

COUNTRY	average value of projects	average value per year	budget 1992-2004	annual mean
France	1,617	414.6	44,900	3,741
Greece	1,347	420.9	26,800	2,233
Italy	803	243.4	48,100	4,008
Portugal	803	243.4	22,500	1,875
Spain	1,374	361.5	80,700	6,725
TOTAL			**222,988 €**	**18,582**

b) LIFE-Third countries

The European Union assigned over € 38 million to LIFE-Third Countries for the period 2000-2004. Mediterranean countries received € 4.9 million of this amount for biodiversity and sustainable development (Table 13) and € 1.7 million for

[31] SDC. Development cooperation in Egypt (www.sdc.admin.ch)
[32] UNDP-ARAB STATES Subregional Resource Facility. Debt for Environment swaps. Overview, country examples and online resources.
[33] LIFE Focus / LIFE for Natura 2000. 10 years implementing the regulation. European Commission.

Table 13. LIFE-Third Countries contribution to PA and SD / BD projects in the Mediterranean (2000-2004)[34] (€ x1000)

REGIONAL	SD and BD	PA projects	Other projs.
Bird Life Int'l*	819.6		819.6
Med Wet**	638.1	638.1	
Tot. Regional	**1,457.7**	**638.1**	**819.6**
NATIONAL			
Albania	286.4		286.4
Croatia	1,290.4	551.2	739.2
Cyprus	376.7		376.7
Jordan	274.0		274.0
Lebanon	299.7	299.7	
Malta	213.0	213.0	
Syria	358.8		358.8
Turkey	345.7		345.7
Tot. National	**3,444.7**	**1,036.9**	**2,380.8**
TOTAL	**4,902.4**	**1,675.0**	**3,200.4**

protected areas (4.5% of the total budget for all third countries), that is an average of € 800,000 a year for biodiversity and € 400,000 for PAs.

c) The future of LIFE Programme: LIFE +

The current "LIFE III" Program will conclude at the end of 2006. The Commission has proposed a new phase called **LIFE +** which would run from 2007-2013 with a budget of € 2,190 million, pending final adoption and budget by the Council of Ministers and the European Parliament.

Considering the historical trend of the Programme, we may assume that 47% of these funds (around € 1,000 million) would go to LIFE Nature during the period 2007-2013: this would mean an increase in the annual budget from € 75 to 143 million. If the share for the European Mediterranean countries remained at 25%, this would mean € 36 million a year.

With the same approach, around 6 percent would be allocated for the Third Countries Program, approximately € 20 million annually; assuming 4.5 percent of the budget to Mediterranean protected areas, as in the previous period, we can estimate an annual allocation of € 900 000 for the period 2007-2013.

• INTERREG

INTERREG is a EU initiative aiming at stimulating interregional cooperation in the European Union. The INTERREG III B Medocc Programme supports projects for trans-national cooperation, including possibilities of cooperation with the non-European countries, as is the case of the MedWet regional project, an action program for Mediterranean wetlands with a contribution of € 1'277,400 in partnership with France, Greece, Italy, Portugal, Spain and Morocco. The INTERREG Programme has also restarted the MedPan activities in 2005, under the coordination of WWF France; this programme has objectives and activities similar to those of the MedWet, but is focused on marine protected areas. Another case is the use of INTERREG funds by Andalusia for the study, institutional agreement and planning for a new Mediterranean Intercontinental Biosphere Reserve of over one million ha shared between Andalusia and the north of Morocco.

4.7 Multilateral donors: the Global Environmental Facility (GEF)

Around the world and during the decade 1991-2001, the GEF has provided about US$ 1,100 million in grants for about 200 biodiversity projects with PA components, including 1000 PAs, and leveraged other US$ 2.500 million in co-financing for biodiversity projects in 86 countries. In its third replenishment 2002-2006, the GEF has received US$ 3.100 million, of which US$ 800 million are earmarked for Biodiversity and approximately 400 million for PA related projects (CBD 2005).

In the Mediterranean, the GEF has funded US$ 447 million during the period 1991-2005, from which 26% were invested in biodiversity. PA projects totalled US$ 81.4 million in 15 years (Table 14), an average of US 5.4 million/year, of which 75% was allocated to the N. Africa/Middle East countries.

Table 14. Medium and full size projects related to biodiversity funded by GEF (1991-2005)[35]. (US$ x1000)

	TOTAL GEF FUNDING	BD projs.	% BD / Total	PA projs.	% PA of Total GEF
Eastern Europe	110,693	23,242	21.00	6,050	5.47
Middle East / North Africa	336,631	93,943	27.91	61,916	18.39
TOTAL MED COUNTRIES	447,324	117,190	26.20	67,966	15.19
REGIONAL PROJECTS		13,435		13,435	
TOTAL MEDIT.		**177,454**		**81,401**	

[34] Source: http://europa.eu.int; *Líbano, Túnez; **Argelia, Marruecos, Túnez

[35] Source: Base de datos GEF (http://www.gefonline.org/home.cfm)

Additionally, US$ 13.4 million were assigned in 1997 to the project *Conservation of Wetland and Coastal Ecosystems in the Mediterranean Region*, in partnership with Albania, Egypt, Lebanon, Morocco, Palestinian Authority and Tunisia.

The GEF - Barcelona Convention SAP/BIO Program

The objective of the Strategic Action Plan for the Conservation of Biodiversity in the Mediterranean is to support the implementation of the 1995 Biodiversity (SPA) Protocol of the Barcelona Convention. Two of its 5 specific objectives are particularly linked to coastal and marine Specially Protected Areas (there are already 152 SPAs in the Mediterranean sea and coasts).

The SAP/BIO was adopted by the Contracting Parties to the Barcelona Convention, and foresees an investment of US$ 28.8 million (€ 24 million) for Protected Areas. The proposal identifies and quantifies the short and medium term needs for planning and building the basic management capacities for coastal/marine Protected Areas in the Mediterranean developing countries. The budget breakdown is shown in Table 15. At the Regional level, the SAP/BIO also foresees the following Priority Actions: PA Monitoring and survey: € 50,000; Assist to protect priority sites: € 1million; Declare/Develop new coastal/marine PAs: € 16.3million; Assist MPA management: € 5.5 million. The programme is just about to be funded (2006) from the last GEF replenishment, although following the usual GEF mechanisms, all the SAP/BIO funds should be matched by national contributions.

In total the GEF provided Mediterranean PAs with about US$ 6.4 million annually over the last 15 years, including the regional projects.

4.8 Considerations on international support to Mediterranean PAs

Table 16 summarizes the results obtained from the public sector in non-EU Mediterranean countries. All figures have been converted into US$, which is the standard currency in ODA statistics (€ 1= US$ 1.2).

The contributions to non-EU countries from donor sources can be accurately drawn out from Tables 7, 8, 11, 13 and 14, as the data cover periods over 6 years for most budget lines.

The average annual donation for PAs is US$ 16 million. On an area basis, this implies average ODA of US$ 1.5/ha/year, the same figure as previously reported worldwide for the same purpose (Khare 2003).

As we estimated (Table 3), the PA finance needs in non-EU countries range between US$ 374 and 1,344 million, and the international annual contribution to PAs (US$ 16 million) just accounts for between 1.2% and 4.2 % of the total needed. However, this contribution is very significant according to PA managers in the region, because national budgets are usually very low and oscillating, and in most countries it seems the main source of financial support to PAs is still international. For example in Egypt just 4.5% of the PA budget is domestic (Korany op.cit.), and a similar situation can be found in Lebanon, where the US$ 400,000 national budget is just a 10% of the different international contributions (from GEF, EU, UNDP, UNEP, MedWet, each of them contributing at least as much as the domestic input).

Table 15. Foreseen GEF investments in the SAP BIO Program [36] . In US$ x1000

	Total investment	PA investment	% AP /Total
Regional Priority Actions	**40,055**	**22,850**	**57 %**
Nat. Action Plans			
Albania	4,184	1,383	33 %
Algeria	1,553	1,435	92 %
Bosnia-Herzegov.	435	275	63 %
Croatia	1,845	400	28 %
Egypt	7,309	1,701	62 %
Lebanon	5,332	412	8 %
Lybia	873	320	37 %
Syria	7,000	2,575	37 %
Turkey	3,653	375	10 %
Total National Action Plans	**38,981**	**8,876**	**23 %**

Although there is no accurate and comparable information on all the national budgets, either in EU or non-EU countries, we can take the data in Table 4 as indicative: the national budgets for PAs recognized by non-EU countries add US$ 17 million /year

Table 16 - (in million US$ / year)

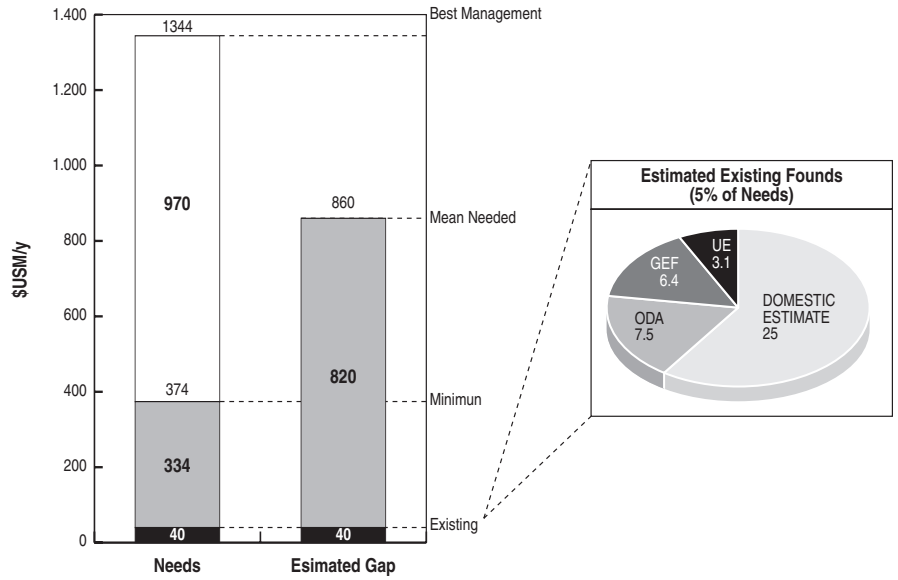
Public Sector sources of finance to Biodiversity and to Protected Areas in Non-EU Mediterranean countries.

		Biodiv.	PAs.
National Governments		?	?
Total Nat.Sources		**?**	**10-40**
European Union	SMAP	11.6	1.2
	LIFE 3rd C.	1.4	1.1
	Interreg	(n.d.)	0.7
Bilateral ODA		3.5	7.5
GEF		11.8	6.4
Total Int'l donor sources		**28.3**	**16**

[36] Source: UNEP-MAP RAC-SPA. Strategic Action Programme for the conservation of biological diversity (SAP BIO) in the Mediterranean region. Tunis, 2003.

[37] Seminar on "A finance strategy for PAs in Iberoamerica". Working Papers in preparation of the Working Group 3 "Financing and Training" for the WPC in Durban. Seville, 25-25 June 2003.

Figure 4. Funding gap for effective management, and existing financial support to Protected Areas in non-EU Mediterranean Countries (in $ US $ million/year)



(which for the 3.75 million ha accounted would mean an average of US$ 4 /ha, a figure in line with that reported for Africa (US$ 2.5-3 /ha/year) (Howard 1995) and Latin America (US$ 2.5-4 /ha/year[37]). We can assume that the national allocations to PAs in non-EU countries range between a demonstrated minimum of US$ 15 million/year and perhaps an optimistic US$ 30 million for the total 10 million ha allocated from domestic sources in the non-EU countries. Adding this figure to the known international contributions (US$ 15 million), the current **available funds for PAs in the Mediterranean non-EU countries would be in the range of US$ 30-45 million/year**, which results in an annual allocation per/ha of US$ 2.8 - 4.5/ha.

Figure 4 illustrates the funding gap in non-EU Mediterranean countries, taking the mean figures from our assumptions (US$ 860 million/year needed, 40 million available), and the origin of the US$ 40 million available:

4.9 Conclusions on the public sector support to Mediterranean PAs

At the regional level

- One of the goals from the CBD COP-7 and UNEP (2004[38]) Programme of Work on Protected Areas is to *"ensure that by 2008 sufficient resources to meet the costs to effectively implement and manage national and regional systems of protected areas are secured"*

- Our sample from 15 countries (Bosnia-Herzegovina, Cyprus, France, Malta, Lybia, and Serbia are missing) although incomplete and too heterogeneous to conclude about the national budgets at the regional level, provides some clear clues: the regional average hides an enormous sub-regional disparity; the PAs in the EU (US$ 43 /ha) receive 10 times as much per ha than in the non-EU countries (US$ 4.5 /ha).

In the European Union

- All together, the EU has allocated little for conservation and PAs. The enlargement of Natura 2000 will cover up to 25% of the area of some Mediterranean countries, but will receive 3-5% of the subsidies for natural resources, most of it for rural development within and around the sites. The access to these funds, usually addressed at ministries other than Environment, must show they can deliver other EU priorities: jobs, rehabilitation, education and training, or control of alien species. And as the EU funds are administered at the national level, the national programmes from ministries such as Agriculture, Fisheries, or Regional Development should include priorities for PAs.

- Financing for marine Natura 2000 sites has not been mentioned in the proposed Regulation for the European Fisheries Fund, so MPAs may have been excluded from the new financing perspectives. Support and funding for MPAs should be sought through the fisheries policy and also be considered as a part of the fisheries agreements signed between the EU and third countries in our region.

[38] Secretariat of the Convention on Biological Diversity. 2004. Programme of Work on Protected Areas (CDB Programmes of Work). Montreal, CDB Secretariat. 31 pp.

In the non-EU countries

- With around 10 million hectares under protection in this sub-region, all domestic allocations range between US$ 15-30 million/year, which added to the international funding sources (another US$ 16 million) deliver an average of US$ 3 - 4.5 /ha/year in non-EU Mediterranean countries, with the weakest situation in Northern Africa (US$ 1.0 /ha).

- The funding gap for PAs in non-EU countries is between US$ 319 and 1318 million/year. So between 3% -15% of the needed investment is being covered (most probably around 5%). This situation is weaker than the general situation reported by the 7th COP to the Convention on Biological Diversity for the world's developing countries (17-29%).

- Most environment related funds in these countries support the "brown" sector, which is for the time being the environmental priority in non-EU countries. And while biodiversity accounts for 2.7% of all ODA worldwide, this share is reduced by 20 fold in North-Africa/Middle-East. All together, the Mediterranean seems not to be identified as a priority for biodiversity (and PAs), either by the national authorities or by the international donors, even though the region is one of the world's hot-spots for biodiversity.

Donor policies on Protected Areas

- Donors tend to treat environment as a cross-cutting issue rather than as a sector (e.g. World Bank, EU, Netherlands, UK). And frontiers between markers such as "Sustainable Development", "Environment", or "Biodiversity", are often unclear in the ODA budgets.

- The donor contributions to Protected Areas in non-EU Mediterranean countries (US$ 16 million/year) even though they represent between 1.2-4.2 % of the PA needs in this region, still play a very important role as leverage for national funds given these donations need to be matched by national resources in a varying proportion (20-60%). In many countries the international aid is still the main source of finance for PAs.

- GEF funds have been particularly important in helping to cover the recurrent costs of PA management, a budget line usually avoided by the ODA Agencies. But as the GEF was actually designed to provide the incremental costs of environmental provisions in developing countries, it may not continue allocating funds for the recurrent costs of PA management, which is one of the most significant funding gaps in developing countries. The last CBD COP (7th, 2005) considered this risk and has declared that *"Other funding agencies, particularly the bilateral donors, will need to provide significant additional funds for PAs, including co-financing for GEF projects"*. In this sense, debt-for-nature swaps should be further developed in the highly indebted developing countries of the Mediterranean.

- ODA funds for PAs are scarce and project-based and do not usually last over 3 years; while funding priorities may change. Long-term PA programmes are needed. The most significant contribution from ODA Agencies has targeted sustainable development activities within and around PAs, in line with the poverty reduction Millenium Goals. In the future, to benefit from ODA donations, the PA projects in developing countries need to be linked with poverty alleviation objectives, highlighting the ecosystem services provided to the rural poor. These include the provision of water, energy, fisheries and forest products, and the opportunities generated on gender issues, or local employment, and by innovation for the development of new and sustainable economic alternatives.

- However, PAs may also draw ODA Agencies' attention by claiming their direct support to the Millenium Development Goals through the achievement of the Goal 7 indicators on protected areas coverage and forests. Decentralization objectives are also on the agendas of donor agencies.

Mediterranean PAs all need a Plan B for finance

- Whatever their national or international origin, all the public sector resources for funding Protected Areas in the Mediterranean will remain largely insufficient in the short term, and will require PA authorities and managers to resort to a much broader spectrum of financing mechanisms:

  - Reviewed policies on subsidies, offsets from environmental impacts, and targeted taxes (as described in Chapter 3). Within the EU budgets, PAs are receiving c.a. 3-6 % of the subsidies earmarked as "natural resources" (currently agriculture and fisheries).

  - Market-related mechanisms can and must be developed, such as entrance fees to the protected areas, concessions, resource extraction fees, and most importantly, payment for ecosystem services (see Chapter 5 ahead).

  - Partnerships with economic and social sectors, and the possibilities to raise contributions from private companies, should also be considered and developed (see Chapter 5 ahead).

- The traditional focus of Protected Areas as state initiatives on state-owned lands with state financing seems to be passing away. Lack of funding is not the only reason; most Mediterranean PAs (on Category V, as marine and fisheries reserves, as private lands under some sort of ecological regulations, as providers of ecosystem services with a significant economic value), gradually involve and interest many other social and economic partners in our societies.

5.0 Market-related mechanisms

As concluded in the previous sections, the existing resources from national budgets and from international development assistance are largely insufficient to effectively implement the CBD Programme of Work on Protected Areas. Mobilizing adequate resources will require a much broader spectrum of financing mechanisms, particularly market-based mechanisms.

5.1 Charging entrance fees

Tourism and recreation are highly valued PA benefits. For example, nature-based tourism is a major component of national income in Australia, Botswana, Costa Rica, Kenya, Nepal, New Zealand and Tanzania (Eagles 2001). For example, the revenue from tourism to Kenya's Wildlife Service in 1989 amounted US$ 18 million (McNeely 1997). In South Africa 60% of all tourists visit a natural park, and its National Park system finances up to 80% of its annual expenses from this source. In Argentina this figure is 35%.

Considerable income can be generated for PAs through direct charges. Examples of these funding sources include gate fees, licenses or permits for recreational activities (trekking, fishing, camping...) as well as indirect charges on souvenirs, hotel accommodation, airport departures and others.

However only a few countries in the world (around 20) are taking significant advantage of tourism-related user fees as a source of long term revenue for protected areas, most of them developed countries (CBD 2005 op.cit.). Legal limitations to PA financial autonomy (such as setting fees or keeping revenues) are common and although many PAs may have the infrastructure and staff required to collect fees from visitors, the law in some countries does not allow charging for entrance to PAs. Table 17 shows the situation in the Mediterranean, where only 3 countries (Jordan, Montenegro and Slovenia) have established entrance fees mechanisms throughout, and another 7 countries allow gate fees in some PA or are testing this policy at pilot sites.

More often than not, the income generated by PAs (entrance fees, sale and service concessions) is transferred to government central accounts and does not return to the PA system; this frequently serves as a disincentive for PAs to generate new forms of revenues. In the Mediterranean, only 5 countries recover the park fees into the system, but not completely (except in Montenegro and Slovenia):

- In **Croatia** the revenues from PAs (US$ 13.8 million a year) would cover 230% of the national PA budgets; but these are mainly earmarked to operations of the public environment institutions, and only partially to the protected areas.
- In **Italy**, National Parks are "Juridical Bodies" authorised to capture their own funds, while marine PAs may only ask

Table 17. Existence of different PA funding policies in the Mediterranean countries, and annual revenues from PAs (when existing)

	Entrance Fees ?	ANNUAL REVENUES			Concessions allowed	Green Taxes	Offsets from Environm. Impact
		Total in US$	% of PA budget de	Retorning to PAs?			
Albania	few PAs	25,000	3%	partially	Unusual		
Algeria	NO	-	-	-		Airport	
Croatia	in Nat. Parks	13.8 million	230%	Most to Environm.		in process	
Egypt	In Marine Nat. Parks	3-5 million	136%	Partially (<5%)	YES	Airport	
						On gas	
Greece	In 1 PA	890,000	35%	?	YES	NO	not always
Italy	few PAs	scarce	?	YES	YES	NO	some ways
Israel	few PAs	?	?	some PAs	YES		
Jordan	YES	?	?	From hotels	YES		
Lebanon	In 1 PA	?	30%	YES	YES		
Monaco	NO	-	-	-	YES		
Montenegro	YES	32,500	7.5%		YES	NO	
Morocco	NO	-	-	-	YES	YES	
Slovenia	YES	900,000	26%		YES	locally	Collaborat. Agreemnts
Spain	NO	-	-	-			
Syria	NO	-	-	-	-	NO	NO
Tunisia	NO	-	-	-	YES	NO	

Table 18. Expenditure per daily diving visitor in 3 Mediterranean MPAs[39] (and in Australia) Sources: Jiménez, J. (2000) and Dixon (1993)			
Site/Country	**Divers / year**	**Total income US$**	**Daily expenditure US$**
Corsica (France)	76.000	6.5 M	85,5
Medas (Spain)	53.000	5.2 M	98,1
Columbretes isls. (Spain)	2.500	300.000	120
Australia (mean)	1,3 million	103 M	79,2

visitors for contributions to sustain specific services.

- In **Egypt**, fees and other income arising from the Parks (see details in Table 19) are earmarked to the National Environmental Fund, which is basically used for the "brown" sector (Box 2). These funds would cover 136% of the present PA budgets but less than 5% currently returns to the PA system.

- In **Jordan**, revenues from state tourism facilities and services (e.g. hotel and camping fees, guided tours, etc) revert to PAs. Jordan is an unusual case where the management of most of the sites has been delegated to a national NGO (see Box 9)

- In **Montenegro** an annual US$ 32,500 captured by PAs are reinvested back into the system, covering 7.5 % of the annual budget.

- In **Slovenia** the US$ 900,000 revenues from PAs are completely invested back into the system, and cover 26% of the total system budget.

5.2 The high potential of diving activities

Charging for diving permits can generate large amounts of money for marine protected areas. Examples around the world are very illustrative. For example, the Caribbean islands of Bonaire and Saba (in the Netherlands Antilles) rely on diving fees (US$ 3 to 10 per dive) to pay 100 percent of the operating costs of their marine protected areas (De Meyer 1997).

A significant potential for Mediterranean PAs can be drawn from the growing demand for diving activities. There is no area as heavily visited by tourism as the Mediterranean. An example is found in the Red Sea coasts of **Egypt** (Box 10).

In **Italy**, each marine reserve is free to set its own diving regu-

BOX 9

PROTECTED AREAS IN BUSINESS: THE JORDAN CASE (RSCN 2006)

The case of Jordan is unusual as the national responsibility for protected areas, six PAs covering 70,000 ha, is delegated in an NGO, the Royal Society for the Conservation of Nature (RSCN). In 2005 the governmental contribution was US$ 75,000, while the RSCN raised US$ 641,000 for the same purpose. This NGO has moved into a business orientated approach to sustaining PAs; they calculated how much they cost to run and how much they need to generate. Business plans with concrete targets have been developed at three of the sites. Revenues come from entrances fees, camp sites, food and drinks, trails and activities. Different handicrafts and nature products are also produced and marketed with nature or site logos. Partnerships have been developed with national tour operators, and are now becoming a major player in the Government's Tourism Strategy. An Endowment Fund of US$ 1.5 million has been raised with international support and is invested in stock markets. The NGO has created the "Wild Jordan" entity to manage and market their business enterprises.

This is a case of an innovative and well planned financial strategy, which has yielded many lessons: they are prepared to manage risks, for private sector involvement and for investing in marketing; however, they had to overcome significant constraints, such as financing running costs before break-even, developing the products, maintaining standards, and conflicts of philosophy within the NGO; business is important but conservation is the prime objective: the tourism limits are set by the conservation management plans for each of the areas.

[39] Source: Jiménez, J. (2000) y Dixon (1993).

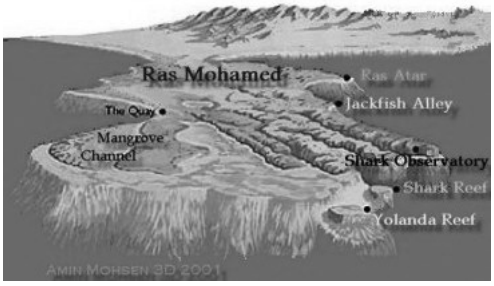
BOX 10

RAS MOHAMMED MARINE PARK (RED SEA) - EGYPT

Entrance fees are charged in four of the Parks belonging to the Red Sea Protectorates (Gulf of Aqaba, Egypt). The diving industry is in general opposed to these charges, blamed for removing potential incomes from other services, but part of the operators have agreed to support the fee if the revenues are earmarked for Red Sea conservation.

In 1996 the Ras Mohammed National Park was completely self-financed through entrance fees[40], which in 2000 were US$ 5 per person for foreigners and US$ 1.25 for Egyptians. The fees are communicated through meetings and notices and all dive operators explain the charges purpose to the visitors.

Fees and other income from the Park are earmarked for the National Environmental Fund and are used for environmental protection projects, which may include both "brown" and "green" sectors. The Red Sea Protectorates have greatly benefited from these funds, which are used to provide tools and equipment (boats, oil, etc.). Fees have not produced a decrease in the number of visitors, probably due to the increased value of the area, higher guest expectations, and good feed back.



lations and some authorities require dive centres to pay fees, or restrict diving permits to centres that already existed at the time of the reserve's designation. In Portofino, 60,000 annual divers pay a € 3 entrance fee (Tunesi 2006), while the Miramare Marine Reserve depends on the Italian Ministry of Environment but is managed by WWF Italy. It is 75% funded by the Ministry, the rest self-financed from entrance fees and activities charges such as an education program (US$ 8 per person), scuba diving (US$ 22) and snorkeling (US$ 11). There is no opposition to these fees, as all activities inside the reserve are developed by the Park's staff (biologist and scuba diving guides) and fees have not reduced the number of visitors, which is limited only by management considerations.

In the Mediterranean, divers are paying as much as € 120 a day in marine protected areas (Jimenez 2000) (Table 18). In the Medes Islands marine reserve (**Catalonia**, **Spain**), with 50.000 annual visitors, diving activities are managed by credited diving centres under concession. A € 2.30 diving fee generated € 130.000 in 1996, i.e. 68% of the reserve budget (EEA 2005). In 2004 fees were increased to € 2.45 producing € 155,800 in revenue.

5.3 Willingness to pay

Even when entrance fees are charged and return into the Park system, PAs may capture only a small part of the potential benefit, as the common situation is that PAs charge no or very low fees. A global study on Biosphere Reserves conclude that only 40% had established entrance charges (Tye and Gordon 1995) and yet, numerous studies show that visitors are often willing to pay much more than the rates charged. Pearce (1997) reports that in many Parks around the developing world, either in Africa or the Pacific, entry fees barely capture one tenth of the willingness to pay from visitors. An illustrating experience on how Botswana addressed this issue is presented in Box 11.

Protected Area managers should be aware of the level of spending by visitors. As an example, in Nepal visitors spend

[40] http://www.ecotourism.org/onlineLib/Uploaded/Protected%20Area%20Visitor%20Fee%20(Country).pdf. (Van't Hof, 1996; cit.Pearson and Shehata 1998)

BOX 11

INCREASING PARK ENTRY FEES IN BOTSWANA

In 1989, Botswana raised its National Park entry fees for foreigners by 900 percent. This led to such a dramatic increase in total revenues that it effectively eliminated the subsidy being provided by the central government to game reserves and national parks. The number of foreign visitors rose by 49 percent in the first two years after charges were increased. The rise in park entry fees was part of a deliberate government policy of promoting high-cost, luxury tourism. Surveys showed that a vast majority of international visitors from the USA and Europe approved of the new higher fees, and most of these visitors were even willing to donate additional amounts to help conserve Botswana's wildlife. Unfortunately, however, only a fraction of the revenues has been invested back into maintaining Botswana's parks.

Source: Barnes (1998)

BOX 12

RESOURCE EXTRACTION FEES AT SULTAN SAZLIGI NATURE RESERVE, TURKEY

(In Emerton, Bishop, and Thomas, IUCN unpubl.2005)

In the wetlands of Sultan Sazligi Nature Reserve (Turkey), the government management agency allows communities to cut reeds for their own use or for sale to processors. Reeds are used for various purposes including wall screens, roof thatch, insulating houses and handicrafts. Waste material is sometimes used as cattle fodder or cushioning.

Reed cutting has long been practised by local communities, but increased pressure on the resource led the General Directorate of National Parks to impose limits on both the amount of reeds harvested and the period when they may be cut. The government also charges an annual fee for the right to cut reeds in the Reserve. A permit costs about US$ 5 and is normally issued only to persons from local communities. Permit revenues of about US$ 2,000 per year are remitted to central government.

Processors pay approximately US$ 1 per bundle and up to 70 bundles per day can be harvested by one worker. Between 250 and 400 people are involved in the collection and sale of reeds, yielding an income of up to US$ 470 per person. Local people are also involved in reed processing, providing an additional source of income. Processed reed products are sold locally or exported to Holland, Denmark and other markets.

roughly US$ 23 million per year in the country, although the Park Service only captures US$ 1 million through entrance fees (Mc.Neely op.cit.). Dixon (1993 op.cit) also reports that while the direct benefits from charging divers are very significant - c.a. US$ 70-100 daily expenditure per visitor (see Table 18)- the estimated indirect benefits may be 7 to 50 times higher, including transportation and lodging.

A recent study (Becker et al. 2004) undertaken during the establishment of the first marine protected area on the Mediterranean coasts of Israel (Rosh Hanikra-Ackziv Marine Nature Reserve, around 250 ha in land and 1500 ha at the sea) estimate the use and non-use values of the area through the TCM (Travel Cost Method). This calculates what visitors actually spend when visiting the area, including travel. Using CVM (Contingent Valuation Method), based on the willingness to pay from consumers, it assessed their actual expenditures to reach the site (use value) and their declared willingness to contribute to site conservation (non-use). The results show that the commercial value of the site itself is approximately € 4.5 million, but the total value is of € 12.2 million, out of which the use value is about € 6.6 million. These authors conclude that the preservation value of the area is high enough to be considered a major economic alternative to any other development plans for the region.

5.4 Conditioned concessions

Commercial leases, concessions or franchises are used in most countries as a means to delegate broad PA management responsibility to NGOs or to private companies. The government establishes the infrastructure and equipment and these are conceded to the private sector which in turn maintains them and creates jobs. Protected Areas may earn substantial revenues by charging concession fees for the right to operate visitor lodges, stores, restaurants, tour operations, or other commercial facilities inside the park boundaries.

These concessions are established through a long-term contract, which is conditioned by the strict observation to all regulations in the Park. In most cases, the Park is just normalizing in a written contract a de facto situation, as private concessionaires are usually traditional small businesses

already operating in the area before the declaration of the protected area.

Some countries around the world have adopted a system of awarding park concessions to the highest bidder at public auctions in order to maximize revenues. An example in Delaware (USA) is a successful partnership arising in 1993 between tourism companies and the National Park Service to manage guest services, by which the companies have voluntarily invested US$ 40 million into major renovations and improvements of the Park facilities (see www.nps.gov).

There are examples of concessions in numerous Italian parks such as Abruzzo, Gran Sasso and Cilento Vallo di Diano National Parks, Maremma Regional Park and many others; and also in Catalonia (Spain): Aiguamolls de l' Empordà, Cap de Creus, Delta de l'Ebre, among others. A different case is charging for extractive operations, either large-scale to companies, or small scale license fees for recreational hunting, fishing or harvesting wild plants (see Box 12 for an example in Turkey).

In **Egypt** the income from entrance fees, penalties, concessions and regulated resource extraction provide around US$ 3.5 million/year -almost 2/3 of it from entrance fees- which accounts for about twice the annual national PA budget[41] (Table 19). However, only around 3-5% of this amount returns to the PA system, as the Environmental Fund gives priority to other national environmental needs.

5.5 Ecosystem Services

At the heart of the funding gap is the undervaluing of PAs. Protected areas produce many goods and services of high economic value, but these services are not fully understood, identified and appreciated, so the market currently underestimates them, resulting in a lack of incentive to preserve them.

Protected areas not only generate tourism revenues, they also provide valuable ecosystem services including clean water flowing from PAs to downstream farmers and cities, flood and natural-disaster buffer and prevention, biodiversity stocks, commercially valuable fish-stocks exported from marine reserves, and carbon sequestration in biomass. These services make a critical contribution to poverty alleviation and the achievement of the Millenium Development Goals. For example, as many as 1.000 million households in the developing countries of the world subsist on the goods and the ecosystem services provided by natural environments (OECD 2002b). The European Commission has recognized that the Natura 2000 Network can bring considerable benefits, both economic (the development of ecosystem services, provision of food and wood products, activities related to the site such as tourism, etc.) and social (more diverse employment opportunities, increased social stability, improved living conditions, safeguarding heritage, etc.).

Although payment for ecosystem services is still a mostly one-off experience in pioneering countries, this mechanism is starting to be recognized in some country laws (e.g. in Albania and in Colombia) and by financial multilateral institutions (such as the World Bank and the Interamerican Development Bank). For example, Colombia's 1993 Environment Law requires hydroelectric plants to transfer 3 percent of their revenues to regional governments, and an additional 3 percent to municipal governments, to carry out watershed conservation projects and sanitation projects. Payments for hydrological services have been applied in a range of situations world-wide, for example through transfers between public water and hydropower utilities to PA agencies and conservation NGOs, or through direct payments by governments to small-scale farmers (Bagri and Vorhies 1998). Some non-Mediterranean but worthy examples are summarized in Box 13.

In the Mediterranean context this important focus is barely building up. The Albanian Forestry Service has the right by law to re-invest income generated from selling forest products or services, and 70% of this income is given back to the Forestry Service for re-investment. Protected areas also benefit from this funding source and the majority of PA maintenance works are based on these funds: in 2004 the re-investment fund for protected areas was about US$ 170,000.

Table 19. Summary Sources of Income from Protectorates in Egypt (2001-2005) . In US$x1000

	2000/01	2001/02	2002/03	2003/04	2004/05	% of Total
Entrance Fees	1,898	1,649	1,576	2,745	3,773	57,82%
Penalties	1,897	6,186	0	0	0	40,15%
Concessions	46	74	5	0.074	0.108	1,76%
Hunting	5	0.8	0	0.0004	0.0003	0,03%
Other	7	13	3	0.012	0.009	0,24%
TOTAL income	3854	7925	1630	2832	3891	100,00%
National PA BUDGET	4030	2120	2000	1850	1710	(58%)

Source: Compiled from Egyptian Environmental Affairs Agency data 2005

[41] Source: Egyptian Environmental Affairs Agency 2005 (pers.comm.).

BOX 13

NON-MEDITERRANEAN PIONEERING CASES OF PAYMENT FOR WATER SUPPLY

In New York City, 90% of the water supply originates in forested basins 300Km away from town. This used to cause continuous conflict with the forest communities, which received no benefits for this important service (the annual cost of a family water consumption is estimated in US$ 160). Additionally, due to water pollution the environmental federal authorities had demanded the construction of filtering plants to an approximate cost of US$ 4,000 million plus US$ 300 million annually for maintenance. These problems arose from the New York Basins Agreement in 2002, with the participation of the City and the State of New York, the Environmental Agency and other local entities. The agreement included an investment commitment for water conservation of US$ 1,400 million during 10 years, with a City contribution of US$ 660 million over the first 5 years and a subsequent gradual increment in the price of the citizens water supply.

In Costa Rica, a national hydropower company pays US$ 10 a year per ha to the also private Monteverde upstream forest reserve, through a contract recognizing services such as "stabilization of land, soil protection, humidity and nutrient retention, water protection and biodiversity..." . In Heredia (also in Costa Rica), due to the lack of institutional response to serious pollution, water limitations and an important deforestation pressure by livestock upstream, the public bottling company ESPH S.A. undertook an initiative (Cordero 2003) to develop an ecosystem service charge in the water supply cost, accounting for around 1%-1.5% of the water bill. Incomes generated are earmarked to protect and restore the forest cover, and 800 ha has already benefited through voluntary contracts with forest owners.

At La Tigra National Park (Honduras) the annual water flow from the Park, used by the downstream city water company SAANA, was calculated to be 12 million m3; after evaluating the Park management cost, a US$ 0.15 / m3 fee was set to cover this service (Strand 1998).

Concerning carbon sinks, based on the Kyoto Protocol of the Climate Change Convention, the Clean Development Mechanism allows industrialised countries to discount a fraction (up to 7 percent) of their domestic emissions by supporting the development of clean energy technologies in developing countries; private companies may also discount from their own national emission quota by buying carbon credits to forest sinks in developing countries. These funding mechanisms, already widespread in many tropical forests areas, particularly in Central America, have not been documented yet in the Mediterranean: here, we should be aware of the limited biomass production conditioned by the dry climate, particularly in North Africa and Middle East developing countries. In the Mediterranean, the best opportunities may lie in water and hydropower production and from the tourism-recreation industries.

An interesting series of studies (Merlo and Croitoru 2005) have recently attempted to value the ecosystem services of Mediterranean forests. The results are somewhat surprising: although the relative importance of use versus non-use values varies considerably from country to country, watershed-related values such as reducing risk erosion, floods and landslides are important benefits in most countries, and can produce 50% of more of the TEV (Total Economic Value) (see Box 14). Forest products per se (e.g timber) are usually a fairly small part of the TEV. Other country-by-country variations are not surprising: recreational benefits are very important in western European countries while extractive uses such as firewood collection or grazing are more relevant in the southern and eastern countries.

When valued as a whole, the economic numbers are large: the average TEV from the 18 countries studied is about € 133/ha per year: highest in the north (close to € 176/ha) and lower in the east (about € 48/ha) and south (near € 67/ha). *Per capita* values also range from about € 70 *per capita* and year in the northern countries to less than € 11 in southern and eastern countries. These figures reflect that forest services alone provide in our region a higher economic benefit per ha than the mean investment to protect them.

The weak or missing markets for ecosystem services are not just a consequence of the lack of information on their monetary value, of the inexistence of financial reward for conserving biodiversity or penalty for damaging it, but of other structural factors such as unclear property rights and non-conducive institutional designs.

5.6 Voluntary contributions from the private sector

Donations from big private companies, which are usually tax-deductible, have occurred for years, mainly through corporate Foundations, contributing to a range of mostly cultural and social activities, although environmental projects are nowadays also frequently included within the candidate applications. More structured than these one-off altruistic contributions are long-term agreements to sponsor services in protected areas. For example, Coca Cola paid US$ 2 million to be named the "official" and sole soft drink dealer in the New York state Natural Parks (Spergel 2003, op.cit).

Private companies may also donate land or pay fees for the use of natural assets in PAs, including environmental services. For example, the construction of a gas pipeline in the

BOX 14

CALCULATING THE TOTAL ECONOMIC VALUE OF ECOSYSTEMS

This new branch of environmental economics is developing fast and so is related literature. Adopting the Total Economic Value (TEV) approach in forests attempts to include both direct and indirect use values, as well as different non-use values. Whereas direct use values (e.g consumptive uses such us forestry and non-timber forest products, and non-consumptive uses as grazing, recreation or hunting) are easier to estimate, indirect-use values (such as watershed protection, flood control, nutrient retention or provision of potable water) are usually harder to evaluate in monetary terms. Non-use values, especially those related to cultural or historical uses, landscape or simply knowing the area exists, are the most difficult to estimate in economic terms. Methods to evaluate non-market resource values, travel and cost method and others have been extensively treated in recent literature (see a review in [42]).

1990s in Bolivia led to a long-term Conservation and Sustainable Development Plan, involving stakeholder participation, financed with US$ 30 million over 15 years by Enron, Shell and four NGOs (www.fcbcinfo.org). Another case comes from El Salvador, where a unique alliance between a real estate firm and the leading conservation NGO will provide at least US$ 100,000 per year during five years for the management of the Volcanoes National Park. Corporations may also contribute with technical skills, GIS, equipment, and helping to leverage additional funds.

Since the late 1990s, environmental concerns have become a key component of Social Corporate Responsibility (SCR). Companies with well-known SCR obtain returns on image, social acceptance, advantages over competing corporations and improved interest from environmentally sensible investors. Some of the most important stock markets have established lists of "environmentally responsible" corporations. We have searched for any investments in Mediterranean PAs from the environmental reports issued by the numerous multinational corporations included in the "Footsie4Good" sustainability index list in the London Stock Market, but only some scattered information has been found on the subject, such as small contributions from two Bank Foundations in Spain (BBVA and SCH) to environmental conservation activities, including a project for recuperation of peat bogs in a Natura 2000 site (SCH) or awarding a € 230,000 prize for innovative biodiversity conservation projects (BBVA to SEO/Birdlife in 2004).

These approaches, still infrequent in the Mediterranean, can be found in some EU countries, like in Italy, where there are numerous small scale examples of collaboration with local or national firms to sponsor particular protected areas. The provincial government of Barcelona (Spain) is receiving € 5 million a year from the banking group La Caixa for PAs around the city, together with a higher amount to prevent forest fires; in some sense, this generous allocation is a response to the land-trust sponsorship from a competing bank in the same region (see Box 18). Another example comes from Slovenia, where the Secovlje Salina Nature Park (650 ha) gets a substantial support from a mobile telephone company (Box 15).

5.7 Tourism

The Mediterranean receives 228 million tourists every year (UNEP/MAP 2005), mostly in the coastal zone, and PAs are increasingly valuable tourism products. Regulated tourism should be a major contributor to conservation in the region, and tourism businesses could be sponsoring protected areas.

While PAs should be prepared to adequately prevent tourism from generating additional impacts, the tourism business, on the other hand, also expects a certain level of quality and reliability in the services provided. The level of tourism contribution to PAs conservation will depend on the ability of PA managers to set up fruitful relationships with this sector, which may include stimulating them to incorporate PAs into their itineraries, tourists' awareness before arriving in the area, and a direct financial contribution. Some examples of this relationship in the Mediterranean come from TOI (the Tour Operators' Initiative, a tourism operators network for sustainability), and from TUI (the biggest regional operator).

TUI has contributed to conservation projects around the Mediterranean, like "La Trapa" protected area in Majorca. The company supported the designation of the National Marine Park of Zakynthos (Greece), withdrawing the area from its tourism programme, funded an exchange of experiences with the Marine National Park of Cabrera (Spain) and sponsored other conservation projects on cetaceans or marine turtles.

The Tour Operators' Initiative (TOI), sponsored by WTO, UNESCO and UNDP, *"supports in full the establishment of*

[42] E.g. Randall Kramer, Duke University, USA: "Ecosystem benefits and Protected Areas: an Economic Perspective" – in WPC 2003; or see other in the Conservation Finance Alliance web (assessing the economic value of ecosystem conservation).

BOX 15

A PARK'S SUPPORT FROM A TELEPHONE COMPANY IN SLOVENIA

The mobile-phone company Mobitel supports different activities in the fields of culture, sports, nature protection and science in Slovenia, including being a major partner and sponsor for Birdlife-Slovenia. The company recognises the improved public appreciation for a "nature-friendly" corporation, which means higher subscription rates to their mobile phone offers. In 2002 the company decided to invest money in the restoration and protection of the Secovlje Salina Nature Park (650 ha). The Nature Park traditionally produces and sells salt, and here the company also supports the Park additionally by providing marketing tools. In fact, the Park yields direct economic benefits through salt sales and the growing number of visitors. The full responsibility for the management of the Park was given by the Republic of Slovenia to the private company by a concession contract. The company can share the Park revenues (9%) and use its image, but must in turn finance its recurrent costs (62%) and most importantly manage the area in accordance with the approved Management Plan, while the land within the Park remains State property. There is no special environmental fund within the company; the budget which is drafted by the Park authority is directly approved by the company's Board. It works perfectly for the Park, although there is always a threat of discontinuity as this environmental responsibility derives from the leadership and commitment from the present Board and Chairman.

SOURCE: Sovinc, A. (2006)

protected areas as these add to the tourism value of a destination both as an attraction and by supporting the long term sustainability of the environment". Their member operators contribute to PAs by including PAs in their itineraries, limiting the size of the groups, providing customers with information and guidelines on how to avoid environmental impacts, and making financial contributions to local conservation projects. TOI recommendations include the need to create local networks to link the many small complementary tourism related services on a given site, as operators need a steady number of clients (an estimate of 1.500 clients was proposed). Other protected-area / sustainable tourism related initiatives in the Mediterranean have reached the same practical conclusion. To engage the big tourism operators, a local organization should put together all the local services (apartments, hotels, restaurants, car and bicycle rent, dive operators, providers of agricultural and fisheries products) into a tourism package, help standardize their quality and then sell it to outbound tour operators. Examples from Italy are summarized in Box 16.

There are indicators of growing support to Mediterranean conservation from pioneering members of the tourism industry. Six of the 21 members in the Tour Operator's Initiative have, or are developing, social and environmental programs in sites around the Mediterranean region, or supporting conservation initiatives, e.g. the *Hotelplan* group in Switzerland established in 2001 an ECOFUND, fed by a contribution of 5CHF (about € 3) from their clients visiting the Mediterranean, to support local projects[43] such as cetacean (Tarifa, Spain) and sea turtle (Crete, Greece) conservation projects. Also since 2001 the Italian group *Viaggi del Ventaglio* is promoting an Environmental Interpretation training program on the coasts of Italy and in Sardinia. In France the Accor group is introducing social and environmental responsibilities and activities throughout their invest-

BOX 16

PROMOTING SUSTAINABLE ECONOMIC ACTIVITIES WHILE SUPPORTING PROTECTED AREAS IN ITALY

In Italy, the Parks have an active marketing policy, both for the Parks themselves and for the Park-related products. Local rural tourism, fisheries tourism, ecological agriculture, may use the Park's logo and the park gets a share of 7% (Cosentino 2006).

In North-Eastern Italy, Cinque Terra National Park has established a sustainable tourism initiative that includes an Environmental Quality Brand for accommodation facilities, guidelines for tourists, public information about conservation and a plastic card. The Cinque Terra Card was designed to control the number of tourists, and its price includes access to all paths, nature observations centers, botanic displays, picnic areas and bird watching areas, as well as unlimited access to train and bus between villages. Tourists can purchase a 1, 3 or 7-day card. The fee goes to protect the trails, and the marine and National Park.

[43] http://www.hotelplan.ch/Hp/Fr/Environment/Projekt/Default.aspx?link=5

ment areas. It is noteworthy that *Dynamic Tours* in Morocco has developed environmental guidelines and practices for their clients to mountain and desert tours. In the UK and Ireland, *First Choice Holidays* and *The Travel Foundation* provide funds for sustainable development community-based projects in Cyprus.

We were unable to assess any real figures on the financial contribution from the tourism industry to Mediterranean protected areas, but taking the number of declarations and the levels of support to a wide range of small environmental and biodiversity projects we may conclude that some serious interest to collaborate from the tourism industry in the Mediterranean is building up. Again, as for other international corporations and sectors, the level of contribution of tourism to PAs conservation will depend on the ability of PA managers to set up fruitful relationships with the sector, stimulating them to develop more structured, long-term, win-win agreements to sponsor services in Protected Areas.

Experts and practitioners point out, however[44], that in the long term PAs should not rely too much on tourism as a prime financing source, as this growing and demanding industry may influence conservation objectives when the management provisions are not clearly set up and enforced. It is up to the PA to set the limits and know where to stop. There are however other initiatives aimed at preventing any possible overuse of the PA natural resources. The European Charter for Sustainable Tourism is a voluntary agreement between the Park and the tourism services; they analyse the existing lodgements and services, contribute to raise their quality and environmental standards, and in training local managers. Only legally established businesses are supported, and always though voluntary collaboration. In Europe 30 Parks have signed up to this agreement.

5.8 Collaborative management approaches

Managing protected areas can be less expensive if collaborative management is adopted: in general, all types of participation also prevent future conflicts and thus, unforeseen losses of time and money. Any approach to reduce costs or to delegate management actions to others may be important pieces in sustainable finance strategies. There is no reason why the public sector should have the sole responsibility for funding or managing PAs, their facilities and services. Cost-sharing examples include situations where private entities and NGOs have voluntarily assumed certain management responsibilities.

Community-based and collaborative approaches to managing PAs and surrounding areas is a growing issue in the Mediterranean PA system, where 69% of the protected area in the northern countries are managed in this way - however, only 10% in the East and South belong to IUCN Category V (WCPA 2003 op.cit.). Collaborative management has been developed to different extents in the Mediterranean countries, in a gradient of cases ranging from full governmental management -normally in National Parks- to full stakeholder management -usually in small reserves on private lands (see Table 20).

For example, in Albania the PA Law allows the private sector or NGOs to be in charge of the management of the protected

Table 20. Examples of Collaborative Management Approaches

	Full Governmental management	Government Consultative Management	Government Cooperative Management	Delegated management	Stakeholder management
Cyprus				Lara	
France	Natural Reserves	National Parks	Regional Parks	Conservatoire du Littoral	Voluntary reserves
Egypto	Zaranik	Omayadhs			
Jordan				6 Parks to a national NGO	
Lebanon				Supervised	Iniciativa de los humedales de Amiq
Slovenia	Marine/Coastal Reserves	National Park		Secovlje Salina Natural Park	
Spain		National Parks	Natural Parks	Ses Negres marine reserve	Flora microreserves
Tunisia	Zembra Marine National Park	El Feija forest Park			

[44] Discussion at the Conference on Sustainable Financing of PAs in the Mediterranean. Seville, January 2006. IUCN Mediterranean Office, Malaga

BOX 17

"SEA TRUSTS" (or "marine stewardships") IN CATALONIA

While land stewardship in private lands is being developed in some Mediterranean countries (see Box 17), a similar approach is also pioneering into the marine environment. The Ses Negres Marine Reserve (42 ha for strict protection and scientific research) was established on a biodiversity hot-spot by the Autonomous Government of Catalonia in 1993 and its management was delegated to the Nereo local NGO. The government does not allocate any budget to the reserve, but facilitates the local group to obtain conservation-related subsidies when available. The mean annual costs for the Reserve's management are around € 78,000. Over the years, the NGO has developed skills to fundraise from a range of private sources, mainly from the nautical sector, sport marinas, and from local Bank foundations (www.nereo.org). The local government of Begur also collaborates with the management of the reserve.

Most interesting are the collaborative arrangements for a sea trust with the Fishing Ministry of Spain, local governments, diving clubs and marine research centres for a network of Posidonia oceanica marine meadows which are protected from trawlers.

BOX 18

LAND STEWARDSHIP PROGRAMMES

Land Stewardship is a mechanism by which voluntary agreements for the conservation of natural resources are promoted between land owners and private or public entities (institutions, NGOs, foundations, etc). These may include management agreements, donations and land acquisition. In the Mediterranean context, the Conservatoire du Littoral is an example of a public entity with a conservation activity based on land acquisition. WWF- Italy started a similar action in 1968, and currently the so called Oasis are small and medium size areas acquired by WWF (46 areas totalling 5100 ha), or areas managed through renting or agreements with the owners (57 areas, 22,000 ha).

In Catalonia (Spain) the Fundació Territori i Paisatje was established in 1997 as a social institution of the local banking entity Caixa Catalunya; one of its working strategies is land purchase for conservation, and acquisition of timber rights in mature forests. They have also developed over 70 agreements with small land owners adding another 9000 ha to the network. This foundation is part of EUROSITE, an organization of European private entities managing areas for conservation and one of the launching institutions of the Green Register of natural ownership, an international initiative promoted by the Balearic Islands and Catalonia, France and Italy, aiming at guaranteeing conservation of an important part of the Western Mediterranean coasts (Arquimbau et al 2001). This initiative prompted a competing local bank to launch another conservation programme (already cited in Section 5.6.) involving substantial allocations to the protection of Parks in the province of Barcelona.

Sources: Miquel Rafa and Vicenç Sureda. Conference on Sustainable Financing of PAs in the Mediterranean. Seville, January 2006. IUCN Mediterranean Office, Malaga

areas, based on a contract with the government; and in Italy, a growing number of small protected areas are managed by NGOs. Land Stewardship practices, involving voluntary agreements with land owners and marine-resource users, are also being developed, particularly in the EU countries. Table 20, Box 17, and Box 18 present a number of examples from different Mediterranean countries.

As with the initiatives described for Italy to certify and standardize local tourism services around Protected Areas, other local economic sectors such as organic agriculture quality trademarks can help to build support for PAs, even if not contributing with direct funding. Box 19 describes two cases in Spain, both closely linked to PA conservation, and Box 20 describes a case in Albania.

5.9 Business Plans

The Conservation Finance Alliance (CFA) has developed a Training Guide for Conservation Finance Mechanisms (available at http://guide.conservationfinance.org), designed primarily for government officials, PA managers, NGOs, consultants and donor agencies. One of the 13 specific mechanisms developed are business plans for Protected Areas, an important tool that goes beyond simple budgeting and cost accounting. Business planning is widely used by the private sector to determine the viability of an enterprise, e.g. define their model, evaluate potential markets and investors, assess costs and profitability... To date, business plans have been completed for over 50 National Parks in the US, and other PAs in Brazil and Madagascar (WPC 2003).

BOX 19

QUALITY TRADEMARKS RELATED TO PAs IN SPAIN

Natural Park Trademark in Andalusia

Over 1.7 million ha[45] are covered by Natural Parks in Andalusia, a Category V modality establishing core zones with conservation purpose surrounded by buffer zones where sustainable rural development is the main objective. To support sustainable traditional and innovative uses of natural resources in the buffer zones, the regional government has promoted the trademark "Parques Naturales de Andalucía" by subsidizing the certification of social and environmental quality of agricultural goods and rural tourism services. The initiative is linked to a NGO, Andanatura, doing an active search for potential sustainable development entrepreneurs and leaders in the rural environment, providing training to local inhabitants, networking, and supporting commercialization activities. The scheme has proved a success in promoting local understanding and participation in sustainable development and general acceptance of the Park regulations. The number of certified small local enterprises continues to grow, and to date 108 rural businesses and 462 products have received the quality label.

SEO/Birdlife Riet Vell NGO-Company

To support the conservation of protected and endangered birdlife habitats, SEO (Birdlife-Spain) launched the Riet Vell company. Riet Vell produces ecological rice in the Ebro Delta protected wetlands, and produces ecological wheat and grapes in the semi-desertic environments of Important Bird Areas in Monegros (Aragon). These high quality agricultural products are sold to European specialized markets. The ecological rice experience has shown that economically profitable rice production is compatible with the best water quality, with increasing populations of fish, amphibians and birds, and with educational activities. Other producers in the natural Park environment are following the experience. In the Monegros arid lands, it is most interesting how local wheat producers are helping to conserve these unique habitats by maintaining their traditional production techniques, free of irrigation and pesticides, in light of the new certified commercialising opportunities.

Business plans have already been developed for three Parks in **Jordan**. Revenues come from entrance fees, camp sites, food and drinks, trails and activities. Different handicrafts and nature products are also produced and marketed with nature or site logos. Partnerships have been developed with national tour operators. Egypt and Lebanon are also considering this modality to sustain financial needs in some PAs.

As it was mentioned before, PAs must be prepared to the growing demand from the business sector and avoid its possible influence in the conservation objectives; the management provisions should be clearly set up and enforced. It is to the PA to set up the limits for private collaborations, and know where to stop.

5.10 Self-financing capacities and training opportunities

As a response to the diverse range of funding mechanisms for protected areas, experts are recommending to incorporate funding skills into the PA management background and staff, especially adequate for PA managers. When possible, it is always better not to outsource but to strengthen the staff capacities; it is the staff who has the passion and interest for the area.

Managers need to have the whole picture, and so do the national authorities. As an example, since payments for ecosystem services are rapidly emerging as a significant new funding source, future progress will require a broader view of the range of goods and services that PAs provide. There is a need to strengthen the capacity of PA authorities in some countries to implement consumer-oriented models of PA management.

Protected Area managers will need to develop skills in business planning, financial management, fund raising (particularly writing and submitting proposals), marketing and promotion, and tourism management for PAs. But this type of training is still far from being applied in the Mediterranean.

Only the Pan Parks initiative has developed different financing training courses since the year 2000, focusing in marketing for national parks, economic benefits arising from tourism, the importance of partnerships in providing financial

[45] Junta de Andalucía. RENPA. CD La RENPA en Cifras. Edición 2004, Seville.

BOX 20

THE PARK AS AN OPPORTUNITY: A CASE STUDY FROM ALBANIA

The Butrint National Park in Albania was established in an economically depressed area. A project aimed at bridging among the Park authorities and different actors in the buffer zones; it started a participatory process compatible with the local context, and established small scale pilot initiatives based on realistic and visible results while training locals and staff on the practice. A boat tour service was designed with the local fishermen; the nicest villages were selected and families identified to offer rural hospitality, and received training, mostly by learning by doing, with collaboration from trekking associations. The locals developed their first skills on eco-tourism and the whole network was eventually set for a series of visits from specialised Italian eco-tour operators. The Park logo is used in marketing tourism and other local products. As a result, the project has strengthened the links and understanding between the Park and the local people, new economic activities have been developed and the Park has become a matter of pride to the local society. The project slogan "Living near the Park is an opportunity" has now become a reality.

Source: S.Petrosillo (2006).

resources and recommendations on marketing strategies and potential financial instruments for PAs. Our search of European University postgraduate courses focusing on PA management and conservation (11 in total) shows a weak attention to this crucial topic. Only one of these specialist courses, with a total of 350 hrs of lecture in Spain, includes just 6 hrs on PA financing, while two other courses in Italy include 21 hrs (out of 60) and 100 hrs (out of 500) on related issues (economic management); the other eight PA specialization courses in Europe do not include any related topic.

Training opportunities in PA management and conservation

		COUNTRY	TOTAL HOURS	HOURS DEVOTED TO FINANCING
MASTER EN ESPACIOS NATURALES PROTEGIDOS	UNIVERSIDADES AUTÓNOMA Y COMPLUTENSE DE MADRID, LA UNIVERSIDAD DE ALCALÁ DE HENARES, LA FUNDACIÓN FERNANDO GONZÁLEZ BERNÁLDEZ Y EUROPARC-ESPAÑA.	SPAIN	350h	6h
MASTER EN CONSERVACIÓN DE LA NATURALEZA Y GESTIÓN DE RECURSOS NATURALES BIÓTICOS	IUSC Y UNIVERSIDAD DE BARCELONA	SPAIN	500H	No financing Joaquim Gosálbez Dirección: Dept. Biologia Animal, Fac. de Biologia Av. Diagonal, 645 08010 Barcelona Espanya Correo electrònico: jgosalbez@ub.edu Página web: http://www.ub.edu/bioani Teléfono: 93 402 14 51 FAX: 93 403 57 40
MASTER UNIVERSITARIO EN GESTIÓN Y CONSERVACIÓN DE LA NATURALEZA	IUSC FUECA Y UNIVERSIDAD DE CADIZ	SPAIN	550H	No financing
EXPERTO UNIVERSITARIO EN PLANIFICACIÓN Y CONSERVACIÓN DE ESPACIOS NATURALES	IUSC FUECA Y UNIVERSIDAD DE CADIZ	SPAIN	300 h	No financing
EXPERTO UNIVERSITARIO EN GESTIÓN Y CONSERVACIÓN DE FLORA, FAUNA Y ESPACIOS PROTEGIDOS	UNIVERSIDAD DE SALAMANCA	SPAIN	260 H	No financing
MASTER PROGETTAZIONE DEL PAESAGGIO E DELLE AREE VERDI	UNIVERSITÁ DEGLI STUDI DI TORINO IN COLLABORAZIONE CON LA CITTÀ DEGLI STUDI S.P.A DI BIELLA	ITALY		Only references
MAESTRIA EN ADMINISTRACION DEL TURISMO Y DEL DESARROLLO LOCAL SOSTENIBLE	UNIVERSIDAD DE SIENA	ITALY	500h	Approx.100h devoted to PA economic management
MASTER GESTION DE LA BIODIVERSITE ET DES ECOSYSTEMES CONTINENTAUX ET COTIERS	UNIVERSIDAD DE LILLE 1	FRANCE	250h	Ne traite pas du financement
TECNICHE PER LA PROGETTAZIONE E LA VALUTAZIONE AMBIENTALE	MASTER UNIVERSITARIO DI II LIVELLO DEL POLITECNICO DI TORINO - I FACOLTÀ DI INGEGNERIA, I E II FACOLTÀ DI ARCHITETTURA	ITALY	60 CFU (european training credits)	Opere pubbliche e strumenti di finanziamento 1CFU (21 horas)
MASTER OF INTERNATIONAL NATURE CONSERVATION (MINC)	LINCOLN UNIVERSITY HAS JOINED WITH GEORG-AUGUST UNIVERSITY, GOETTINGEN, GERMANY	GERMANY-NEW ZEALAND		Protected Areas Management (15 ECTS)
ENVIRONMENTAL POLICY & MANAGEMENT	UNIVERSITY OF AEGEAN	GREECE	12 months	1 MONTH of PA Management. No financing

6.0 Literature cited

Awad, Nancy. 2006. Ministry of the Environment, Lebanon. Conference on Sustainable Finance for PAs in the Mediterranean. Seville, January 2006. IUCN-Med. Office, Málaga.

Arquimbau, R., J. Pietx and M.Rafa. 2001. *La custodia del territori: una guia per a la implantació en Catalunya.* Fundació Territori i Paisatge. La Caixa Catalunya. Barcelona.

Balmford, A., Gaston, K. Blyth, S., James, A. and Kapos, V. 2003. (cit Emerton et al 2005): *"Global variation in terrestrial conservation costs, conservation benefits, and unmet conservation needs"*. PNAS, 4 100(3):1046-50.

Bagri, A. and F. Vorhies. 1998. *Options for biodiversity finance: insights for combating desertification*. IUCN. Workshop on the 12th Biodiversity Forum, Senegal, Dec.1998.

Barnes, J. I. 1998. *Wildlife economics: A study of direct use values in Botswana's wildlife sector.* Ph.D. thesis. London: University College.

Becker, N. et al. 2004. *Socioeconomic study on the recreation activities of Rosh Haniqra - Akhziv area*. In: Lopez Ornat et al 2004. Management Plan for the RH Marine reserve. Rac/Spa with MedMPA project, EU.

Bishop, J. 2006. *Stimulating private investment in PAs.* Conference on Sustainable Financing for PAs in the Mediterranean. Seville, January 2006. IUCN-Med Office, Malaga.

Bisseck, P. 2003. FEDEC: An Environmental Compensatory mechanism set up within the framework of a pipeline construction project, Cameroon. Vth IUCN World Parks Congress: Sustainable Finance Stream. September 2003 · Durban, South Africa

Bruner, A., Gullison R.E. and Balmford, A. 2004. op cit

Castro, G. and Locker, I. 2000. *Mapping Conservation Investments: An Assessment of Biodiversity Funding in Latin America and the Caribbean*. Biodiversity Support Programme, Washington DC.

CBD. 2005. *Options for mobilizing financial resources for the implementation of the Programme of Work by Developing Countries and Countries with Economies in Transition.* Secretariat of the CBD and UNEP. Monteccatini, Italy 13-17 June 2005. UNEP/CBD/WG-PA/1/3.

Cosentino, Aldo. 2006. *Financing the Protected Area system in Italy*. Conference on Sustainable Financing of PAs in the Mediterranean. Seville, January 2006. IUCN-Med Office, Malaga

Cordero, C. 2003. In: *Building a secure financial future: finance and resources*. Proceedings of the Workshop Stream. Vth IUCN World Parks Congress, Durban, South Africa, Sept.8-17 2003. IUCN, WCPA, WCS.

Chape, S., Blyth, S., Fish, L., Fox, P. and Spalding M. (compilers). 2003. *2003 United Nations List of Protected Areas. IUCN:* Gland, Switzerland and Cambridge, UK and UNDP-WCMC. (cit.Emerton et al 2005).

Curtis, 1996. As *First Arab State to Create Ministry of Environment, Tunisia Retains Its Lead.* Washington Report on Middle East Affairs. http://www.washington-report.org/backissues/1196/9611075.htm

De Meyer, K. 1997. *How tourism can help protect the environment: A case study of the Bonaire Marine Park*. Tourism Focus, no. 9, UNEP Tourism Program.

Dixon, J.A. 1993. *Economic benefits of marine protected areas*. Oceanus: 36(3): 35-40.

Eagles, P. 2001. *"International trends in Park Tourism"*. EUROPARC 2001, Oct. 3-7, Hohe Tauern National Park, Australia. Cit Bishop et al 2005, p.55.

EEA. 2005. *Priority Issues in the Mediterranean Environment*. European Environmental Agency and UNEP.

Emerton, L., Bishop, J. and Thomas, L. 2005. *Sustainable financing of protected areas: A global review of challenges and options*. IUCN, Gland, Switzerland and Cambridge, UK. Unpublished draft Aug.2005.

Howard, P. 1995. *The economics of Protected Areas in Uganda: Costs, Benefits, and Policy issues*. Unpubl.MSc. Thesis submitted to the University of Edinburgh, UK. (cit. Emerton et al 2005)

IUCN/WCPA. 1994. *Parks for Life: Action for Protected Areas in Europe.* Commission on national Parks and Protected Areas (1994). IUCN, Gland, Switzerland and Cambridge, UK.

IUCN/WCPA. 1999. *The Cilento Declaration*. Regional Meeting on Protected Areas in the Mediterranean. Cilento, Italy.

IUCN 2003a. *Management of Protected Areas in the Mediterranean: Assessment and Opportunities of Networks and Action Plans*. Lopez Ornat, A. and E. Correas. IUCN. Gland, Switzerland, and Cambridge, UK.

IUCN 2003b. *Building a secure financial future: finance and resources*. Proceedings of the Workshop Stream. Vth IUCN World Parks Congress, Durban, South Africa, Sept.8-17 2003. IUCN, WCPA, WCS, on behalf of the Conservation Alliance

James, A.N., Green M.B.J. and Paine J.R. 1999 a. *Global Review of Protected Areas and Staff*. WCMC. UK.

James, A.N., Gaston J. and A. Balmford. 1999b. *Balancing the Earth's Accounts*. Nature. Vol. 401:23. Sept.1999.

Jiménez, Juan. 2000. *El uso turístico de las reservas marinas del litoral Mediterráneo*. I Congreso Nacional de Reservas Marinas. Murcia, Spain.

Khare, A. 2003. cit. Molnar, Augusta, Scherr, Sara J. and Khare, A. 2004. *Who conserves the World Forests? Community driven strategies to protect forests and respect rights*. Forest Trends. Washington D.C. (cit.Emerton et al 2005).

Korany Taha, Ahmed. 2006. *Debt swaps as a tool for financing PAs: Egypt case study*. Conference on sustainable financing of PAs in the Mediterranean. Seville, January 2006. IUCN-Med Office, Malaga.

Lapham, P. and R.J. Livermore. 2003. *Striking a Balance: ensuring conservation's place on the international biodiversity assistance agenda*. Conservation International.

Lindberg & Halpenny, 2001. *Protected Area visitor fees. Country Review*. PNUD Conference. La Habana.

López Ornat, A. 1997. *Assessment on the management of marine and coastal Specially Protected Areas in the Mediterranean*. Mediterranean Action Plan, UNEP, Rac/Spa. Tunis.

López Ornat, A. and E. Correas. 2003. *Management of Protected Areas in the Mediterranean: Assessment and Opportunities of Networks and Action Plans*. IUCN Gland, Switzerland, and Cambridge, UK.

McNeely, J. 1997. *Sustainable finance for protected areas*. PAs in the 21st century: from islands to networks. Albany, W. Australia Nov.1997.

Merlo, M. and L. Croitoru, Eds. 2005. "*Valuing Mediterranean Forest: towards total economic value"*. 397 pp. Cabi Publishing, CAB International, Cambridge, MA, USA.

Moye, Melissa. 2000. *Overview of Debt Conversion*. Debt Relief International.

Moye, M. and Norris, R. 2000. *Preliminary assessment of the current situation and capacity building needs of environmental funds in Africa.* IPG by Pact Publications. World Conservation Congress, IUCN 2003.

OECD-DAC. 1998. *Protecting our planet, securing our future: Linkages among global environmental issues and human needs*. Adapted from R.T.Watson, J.A. Dixon, S.P.Hamburt, A.Janetos y R.H.Moss. OECD. Working Party of Development Co-operation and Environment. París.

OECD. 2002. *Aid targeting the Objectives of the Rio Conventions 1998-2000*. DAC-Development Assistance Committee, Working Party on Statistics. Organisation for Economic Co-operation and Development. Paris.

OECD-DAC. 2002b *"Integrating the Rio Conventions into Development Co-operation"*. The DAC Guidelines. OECD. Paris

Öztürk, B. 2002. *Report on international programmes on conservation of marine and coastal biological diversity of the Mediterranean and Black Seas*. Council of Europe, Bern Convention. T-PVS/Inf (2002)3

Pearce, D. 1997. *Can Non-Market Values save the world's forests?* Working Paper GEC 97-13, Centre for Socio Economic Research on the Global Environment, University College London, London.

Petrosillo, Stephania. 2006. *Living near the Park is an opportunity.* Conference on Sustainable Financing of PAs in the Mediterranean. Seville, January 2006. IUCN-Med, Malaga.

Rac/Spa. 1997. *Assessment on the management of marine and coastal Specially Protected Areas in the Mediterranean.* A. López Ornat (Consultant). Regional Activity Centre for Specially Protected Areas. Tunis.

Radwan, S. 2005 (based on Kamel & Tooma). T*he Egyptian debt swap experience. An overview.* Pan-Arab Regional Dialogue, Cairo.
http://www.wsis-egypt.gov.eg/Overview_of_the_Egyptian_Debt_Swaps_Experience%20ver%203_files/frame.htm#slide0001.htm

Robin, Sarah, Ed. 2003. *Perverse Subsidies and the Implications on Biodiversity: a review of recent findings and the status of policy reforms.* Overview Session, Panel B. Vth IUCN World Parks Congress: Sustainable Finance Stream. September 2003 · Durban, South Africa.

RSPN 2006. *PAs in business, the Jordanian Experience*. Conference on Sustainable financing of PAs in the Mediterranean. Seville, January 2006. IUCN-Med Office, Malaga.

Saqr, R. 2000. *Government, IUCN, UNDP to launch "Debt for Nature Swap".* Jordan Times Oct 10.

Shine, C. 2004. *"Using Tax Incentives to conserve and enhance biological and landscape biodiversity in Europe"*. 8th Meeting of the Experts Committee for the development of the Pan-European Ecological Network (STRA-REP 2004) 10. Council of Europe and UNEP. Strassbourg, Sept 2004.

Sovinc, Andrej. 2006. *Secovjle Salina Natural Park*. Conference on Sustainable Financing of PAs in the Mediterranean. Seville, January 2006. IUCN-Med Office, Malaga

Spergel, B. 2003. *Raising revenues for protected areas: a menu of options*. WWF.

Steenblick, R. 1998. *Previous multilateral efforts to discipline subsidies to natural resource based industries*. OECD: Paris. http:economics.iucn.org and WPC (2003).

Strand, John 1998. In Echavarria, M. 1999. *"Agua: Valoración del servicio ambiental que prestan las áreas protegidas".* Publicaciones América Verde. The Nature Conservancy. USA.

Tunesi, L. 2006. *Scuba diving tourism in PAs: the experience of Portofino national MPA*. Conference on Sustainable financing of PAs in the Mediterranean. Seville, January 2006. IUCN-Med Office, Malaga

Tye H. and D. Gordon 1995. *Financial and human investments in Biosphere Reserves*. WCMC, Cambr. UK.

UNEP/MAP. Plan Bleu. 2005. *Dossier on tourism and sustainable development in the Mediterranean.* MAP Technical Report series, nº159. Athens 2005.

The Azahar Programme

The Azahar Programme is an international cooperation initiative aimed at having, through the coordination of all Spanish public and private bodies involved, a real impact on human development of the Mediterranean countries. This sustainable development must be compatible with the protection of the environment and the preservation of natural resources. The Azahar Programme is focused on seven areas of action and three large sub-regions: Maghreb, the Middle East and the South East of Europe.

www.programa-azahar.org

The Biodiversity Foundation

The Biodiversity Foundation is a non-profit making foundation addressing issues related to the study, conservation and sustainable use of biodiversity, as well as international cooperation. The foundation seeks to provide a reference point, both in Spain and internationally, on issues related to conservation and restoration of biodiversity in support of the policies of the Ministry for Environment. Through its programme it seeks to add value to sustainable development and to society in general. The Ministry of Foreign Affairs and Cooperation plays an active role through the Spanish International Cooperation Agency.

www.fundacion-biodiversidad.es

IUCN – Centre for Mediterranean Cooperation

The Centre was opened in October 2001 and is located in the offices of the Parque Tecnologico de Andalucia near Malaga. IUCN has over 157 members in the Mediterranean region, including 15 governments. Its mission is to influence, encourage and assist Mediterranean societies to conserve and use sustainably the natural resources of the region and work with IUCN members and cooperate with all other agencies that share the objectives of the IUCN.

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Core support to the IUCN Centre for Mediterranean Cooperation is provided by the Spanish Ministry of Environment and the Junta de Andalucia.

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