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Photo WWF/M. Pugliani

Palm forest, North Sinai.



Photo WWF

Poseidon chariot, Vatican Museums. Rome, Italy.



Photo WWF/A. Mourout

Medieval fortification, Marvão, Portugal.



WWFP. Guglielmi

Boat, Karaburun, Albania.



Introduction

Tourism is one of the biggest and fastest growing sectors in the global economy and has significant environmental, cultural, social and economic effects, both positive and negative. Tourism can be a major tool for economic development but, if not properly planned it can have destructive effects on biodiversity and pristine environments, and can result in the misuse of natural resources such as freshwater, forests and marine life. At a number of sites tourism development has resulted in serious water shortage affecting both local communities and industry, forests have been depleted and coral reefs have been damaged.

The adverse impact that tourism can have on the environment both undermines the basic resource for tourism in coastal areas and heavily affects other non-tourist economic activities. To avoid these impacts tourism needs to be planned,

managed and undertaken in a way that is environmentally sustainable, socially beneficial and economically viable.

Sustainable tourism development always needs to respect the environment and refer to accepted principles of sustainability. It must be planned to make balanced use of the resources of any site, thus avoiding negative effects, reducing visitor satisfaction, or adversely impacting the local society, economy and culture. Sometimes it may be difficult to quantify limits, but they are essential for sustainable tourism .

Thus, if it is to maintain the main elements on which it is based, the tourism sector needs to invest in the maintenance of the natural environment. If properly planned, tourism can become a positive force for conservation and environmental protection, and economic development.

WWF Mediterranean Programme Office

WWF has been active in the Mediterranean region for more than 30 years, having established National Organizations (NOs) in France, Italy, Greece and Spain. In 1992, WWF International also established a Mediterranean Programme Office, based in Rome, managing and funding an increasing number of regional projects.

In addition to the above four NOs, the Mediterranean Programme Office works with an associate organisation in Turkey, the Society for the Protection of Nature (DHKD), and has opened Project Offices in Tunis and Barcelona. This institutional presence enables WWF both to be sensitive to local needs and to intervene at national level influencing government policies.

In 1995, WWF further strengthened its Mediterranean Programme and developed a comprehensive five-year strategy, which focuses on three priority biomes, Forests, Freshwater, Marine and the Education & Capacity Building area. The Mediterranean Programme also recognises the relevance of communications and public awareness and incorporates both of these together with crucial cross-cutting issues such as energy and pollution, agriculture, and tourism in its strategy.

The overall goal of WWF's strategy is to work towards a Mediterranean region where nature is conserved and restored, where resources are sustainably used for the benefit of all and in which social and cultural characteristics are enhanced.

Salient features of tourism in the Mediterranean basin

Attractive landscapes, cultural heritage, traditional lifestyles together with a mild climate and beaches, have made the Mediterranean basin one of the most popular tourist destinations in the world. During the last thirty years the pressure on the coastline has tripled and a large part of the littoral zone has been transformed by human intervention, through strong competition for multiple land use.

The Mediterranean region, with 46,000 km of coastline, is the world's favourite holiday destination area, attracting more than one third of global tourist arrivals every year: 165 million international tourists in 1996 alone! And projections show that this figure could reach 325 million by 2025!

Many of the visitors to the area come from Northern European markets; Germany is the largest market followed by the United Kingdom, France and Italy. In 1995, 32 of the 73 million German tourists and 11 of the 19 million British



WWF/P. Guglielmi

Ligurian coast, Italy. The Mediterranean region attracts more than one third of global tourist arrivals every year.

tourists came to the Mediterranean. This massive flow of visitors has fostered enormous economic activities and in most Mediterranean countries tourism accounts for a large percentage of GNP, ranging, in 1996, from 1,9% (France) to 8% (Tunisia).

According to WTO revised estimates, in the Mediterranean area there are 6 million hotel beds, providing over 800 million bed-nights a year. Official hotel accommodation figures represent only a fraction of the total flow of international



WHO BRINGS THE TOURISTS? The European Tour Operator Industry (1997)

Tour Operator	Customers	Turnover (in Millions)	Main destinations
TUI (TOURISTIK UNION INTERNATIONAL)	6.462.650	3893 US\$	Spain 38%, Germany 11.3%, Italy 8.2%, Greece 6.9%, Turkey 2.7%
NUR (NECKERMANN UND REISEN), Germany	4.825.600	2523.4 US\$	Spain 51%, Germany 7.4%, Italy 7.8%, Greece 10.9%, Turkey 3.7%
THOMSON TOUR OPERATIONS, UK	4.600.000	1801.4 US\$	Greece, Spain, Turkey, Florida
FIRST CHOICE, UK	3.133.617	1064.5 US\$	Greece, Turkey, Cyprus, Portugal
NOUVELLES FRONTIÈRES, France	2.530.450	1214.2 US\$	Spain 22.8%, Greece 16%, Corsica 11.6%, U.K. 6.9%, Italy 6.9%
KUONI, Switzerland	2.000.000	963.5 US\$	Mediterranean Countries
HOTELPLAN, Switzerland	1.434.939	743.5 US\$	France 35.6%, Italy 16.6%, Spain 11.9%, Greece 5.3%, Usa
CLUB MÉDITERRANÉE, France	1.400.500	1239.1 US\$	France 35.1%, Usa 18.3%, Italy 7.2%, Germany 6.5%
SASLEISURE, Sweden	1.028.000	599.3 US\$	Spain, Greece, Cyprus, Gambia, Tenerife
ALPITOUR, Italy	695.000	464.2 US\$	Mediterranean Countries, West Africa

and domestic tourists.

"Unregistered" accommodation, consisting largely of private guesthouses and secondary homes (apartments or villas) rented out for short/long periods of time, represents a significant sector outside official figures. Unofficial estimates put the total capacity at around 12 million beds in a wide range of registered and unregistered accommodations (guesthouses, camping sites, holiday villages, youth hostels, agro-tourism properties, etc.).

Another important feature of tourism in the Mediterranean basin is its strong seasonality. Most tourists travel during August and no less than 40% of all arrivals are registered in the peaks months of July, August and September. Such a strong seasonality dictated by the weather, gives rise to two kinds of problem. From an economic

standpoint, it is important to optimise the use of the tourism infrastructure to accommodate high flows during the summer, while at the same time trying to redistribute flows to reduce the risk of hotels being economically non-viable during the rest of the year. From an environmental perspective, during the hot and dry months, both domestic and international tourism are heavily dependent on water resources, and this pressure may cause depletion of the resource base.

Tourism growth, coupled with fast urban and industrial development in the area, has occurred at a remarkably rapid pace, and the travel and tourism industry compete with industrial, recreational and residential uses for space and resources. Infrastructure and services development has not kept pace with the rapid development of the sector and this has caused localised pollution and congestion problems. For this reason, many Mediterranean countries, in collaboration with the main tour operators, are trying to spread out their tourist arrivals over the year. The idea is to direct tourist flows along alternatives routes, offer different products for each season, and reduce pressure on attractions that have reached their full carrying capacity.

Tourism in the Mediterranean also reflects global socio-economic imbalances. Most tourists belong to the one third of the world's population living in western countries and using two thirds of the world's resources. Tourism can contribute in a positive way to the redistribution of these resources, creating new job opportunities and promoting economic development. It is estimated that the current urban population living in coastal Mediterranean areas will double reaching 150 million in 2025. This will comprise a low increase in European countries but a high demographic increase on its eastern and southern shores, as a result of rapid population growth and urban migration.

The combined effect of population growth and tourism development in the Mediterranean has the potential to aggravate social problems such as migration, and will put further strain on available water resources, causing soil erosion, increasing waste and discharges into the sea and heightening the likelihood of forest fires.

Impact of tourism in the Mediterranean

The positive and negative environmental impact of tourism is influenced by physical, social/economic and cultural/educational factors.

Land use

The exploitation of land is a basic requirement for any form of tourism. As a result many areas have undergone enormous transformations due to tourism development, especially along the Mediterranean coast, where tourism development is in direct competition with other forms of land-use (agriculture, nature conservation).

In all countries land-use legislation is typically applied either by local government, within a statutory planning framework established at national or federal level, or by agencies granted local government powers for planning purposes in designated areas. Today land-use control (or local permission) is required before an operator can either develop land for holiday uses or modify the use of an existing site.

After the 1992 Rio Conference many governments have made it a regulatory requirement that the potential environmental impacts of all significant new development proposals are first evaluated as part of the process of achieving planning consent.

According to the 1985 Directive of the European Commission, tourist projects must be subjected to an Environmental Impact Assessment (EIA). This is designed to be an instrument of preventive environmental protection that appraises and evaluates various alternatives and then makes recommendations. The EIA of tourist projects has proven to be useful for comparing the economic benefits with the adverse impacts on the environmental, social and cultural conditions of the site. Conflicts of interest can be reduced or even avoided by means of an EIA that makes all significant conditions and opportunity costs transparent.

However, the EIA in itself is not enough to ensure the protection of the environment. Just to provide



*Illegal buildings on Salaman coast, Turkey.
Tourism development is in direct competition with other forms of land-use (agriculture, nature conservation).*

a practical example, of the approximately 8,000 km of Italian coastline, 43 % is completely urbanised, 28% is partially urbanised and only the remaining 29% is still free of construction. Also, there are only 6 stretches of coast that have no construction for over 20 km and only 33 stretches with no construction between 10 and 20 km.

As a result of loss of habitat, tourism has a very direct negative impact on biodiversity, directly affecting rare and endangered species of flora and fauna. For example, sea turtles that are in danger of extinction in the Mediterranean basin have had their coastal nesting grounds reduced by tourism development and disturbed by tourists visiting beaches.

Freshwater management

The issue of an adequate supply of fresh water is creating a crisis for many countries in the world. Global water withdrawals have grown more than thirty-five fold during the last three centuries and are projected to increase by 30-35 % in the next two or three years. The current pattern of freshwater use cannot be sustained if the human population reaches 10 billion by 2050. Many countries already suffer serious water shortages and competition for the various uses of water is growing and exceeding the capacity of the government to manage it.

Freshwater is becoming a particularly important issue as demand outstrips supply, and desertification poses a threat in many

Positive impacts

Physical:

- Provides a long-term justification for the protection and conservation of natural resources, including the conservation of biodiversity
- Encourages improvements in the quality of the physical environment available to local communities
- Provides an economic justification for the restoration of degraded environments

Social/Economic:

- Creates economic value markets for natural or built environments that otherwise may have made no direct economic contribution to resident populations
- Generates financial resources that may be used for conservation activities
- Encourages small and medium-sized enterprises to support tourism businesses
- Raises the standard of living for residents (by means of foreign currency and tax revenues)
- Improves the quality of the life for residents who are able to use the tourist services (restaurants, local transport, sports recreation facilities)

Cultural/Educational:

- Supports local culture and art (music, theatre, festival), and provides new markets for local handicrafts
- Reinforces local identities and traditions

Negative impacts

Physical:

- Erodes natural spaces through new constructions
- Over-development puts pressure on fragile natural elements
- Disturbs wildlife habitats and ecosystems
- Generates litter and pollution
- Diverts local resources (e.g. water and land) for tourism development, disadvantaging residents

Social/Economic:

- Utilises the environment for profits that are directed out of the country
- Disrupts traditional employment patterns and the local socio-cultural framework
- Utilises economic benefits to import materials, food and beverages typical of western society, but alien to many developing communities
- Provides a market for prostitution, drugs and crime
- Introduces moral standards typical of developed countries, into local communities
- Generates tension between visitors and residents

Cultural/Educational:

- Trivialises the local arts and cultural traditions of residents by turning them into artificial events
- Undermines original local identities and traditions

Mediterranean countries. During the summer the serious water shortages in the southern regions and on the islands are exacerbated by tourist flows.

The management of freshwater resources will become increasingly important, especially for tourist facilities, which are heavy consumers of water. For example, it has been estimated that a north Mediterranean (e.g. Spain) city dweller uses some 250 litres a day, while the average tourist uses 440 litres. With an allowance for watering gardens and golf courses and filling swimming pools, this can rise to some 880 litres per day for visitors in luxury accommodation. Such consumption patterns have acute effects, particularly on small islands and semi-desertic environments.

Water is especially scarce in areas with slight or irregular precipitation; and going back to the issue of seasonality, tourists prefer areas and months with low rainfall, and this very frequently causes problems in water supply and pollution. Improved freshwater management systems can bring about an immediate reduction in the volume of wastewater produced and this in turn reduces the additional pollution load discharged into the sea. As population increases, the sustainability of human and tourist use of water depends on people adapting their behaviour to the water cycle, managing their uses in ways that maintain the quality and quantity of water supplies both for people and for the ecosystems that support them.

Wildlife trade

Every year millions of wild plants and animals are traded on both domestic and international markets. This has become an important source of illegal business activities, with a global annual turnover of US\$ 3,000 million in animal trade and US\$ 20,000 million in plant trade.

The Convention on International Trade in Endangered Species of Wild Fauna and Flora (CITES), that most countries have ratified, calls for strict wildlife protection, and prohibits for example the collection of corals and the export of products made from elephants, rhinos and sea turtles. Despite this, the European Union is still one of the world's largest consumers of exotic wildlife and wildlife products, such as live parrots

and tortoises, plant bulbs, caviar, and reptile skins. The level of consumption in the region affects the biodiversity of many countries around the world.

In many cases, wildlife and wildlife products such as stuffed native birds and live turtles, chameleons and other animals, native and exotic are legally offered for sale in popular tourist locations such as Cairo or Istanbul, but bringing these purchases home can often be illegal or require special permits. The Mediterranean species that are most threatened by illegal trade are reptiles such as chameleons, spiny tailed lizards (*Uromastix* spp.) and tortoises. Sponges, seahorses and corals also suffer a severe depletion due to excessive collection and it is not rare to find fennec (the desert fox) for sale on the streets of North African cities. Trade is allowed for some species, although tourists should always check to see what permits are required, for the export of plants, insects and shells.

In order to tackle these problems, WWF and IUCN the World Conservation Union have created TRAFFIC, the Wildlife Trade Monitoring Programme which aims to ensure that wildlife trade is kept at sustainable levels and in accordance with domestic and international laws and agreements. This is achieved through the investigation, monitoring and reporting of illegal trade. In particular, the Italian office of TRAFFIC is currently collecting background information on illegal trade in Tunisia, Morocco, Turkey and Egypt with the aim of promoting action on the more critical situations in the Region.



WWF/D. Karavellias

Sea turtle (*Caretta caretta*). The Convention on International Trade in Endangered Species of Wild Fauna and Flora (CITES) calls for strict wildlife protection and prohibits the export of products made from elephants, rhinos and sea turtles.



WWF/M. Gauthier

Parched land, Kelbia Lagoon, Tunisia. During the summer the serious water shortages in the southern regions and in the islands are exacerbated by tourist flows.

Pollution

The Mediterranean sea receives 10 billion tonnes of industrial and urban waste yearly of which only a tiny portion receives even primary treatment. Some international environmental organisations have estimated that swimming in Mediterranean waters can cause infections of the ear, nose and throat, hepatitis and other diseases. Rivers that drain their waters into the Mediterranean are often the source of industrial agricultural and human effluent; 60,000 tonnes of detergents and 3,600 tonnes of phosphates are also discharged into the waters every year.

The Mediterranean basin suffers pollution from four main sources: municipal wastewater, industrial wastewater, agricultural run-off and discharge from the intensive traffic of ships. Tourism contributes to all types of pollution, but it is difficult to isolate its specific impact.

Although an overview of the environmental impacts caused by tourism cannot be precise, experts' opinions indicate that the following are issues of major concern associated with tourism:

- **Wastewater production** - the production of wastewater in tourist areas often exceeds the carrying capacity of the local infrastructures. In many cases, appropriate treatment plants are insufficient or non-existent and wastewater is discharged without treatment, contributing to chemical and bacteriological pollution. Investments to meet the pronounced seasonal demand for treatment of waste water

associated with tourism is a cost, but the failure to treat wastewater adequately is also a cost that is often borne by local communities rather than tourists or the tourism industry.

- **Solid waste production** - the production of solid waste from tourism is also seasonal and often in excess of local infrastructures and waste management schemes that are designed primarily for local communities. Poor solid waste management often means littered beaches, illegal dumping in natural areas or into the sea.
- **Air pollution** - it is extremely difficult to estimate the share of air pollution that results from tourist activities. Given that 70% of Mediterranean tourists travel by car (36 million cars in 1996), and considering the contribution of other means of tourist transportation, the affect of tourism on atmospheric pollution is clear.

Some answers to the problems

From what has been presented so far, it is clear that uncontrolled growth of tourism can have a negative impact on the natural and socio-cultural environment. For many developing countries tourism is already an important sector or is expected to become so. Some of these countries are already important destinations, with a developed tourism industry and a local economy that depends upon it. Other countries are developing destinations that receive small, but increasing economic benefits. Thus, their success depends on their ability to manage and control the development process. Finally there are emerging destinations with very little tourism activity, that are trying to develop their tourism potential.

In this complex and diversified situation, all stakeholders have a crucial role in promoting responsible forms of tourism. WWF has developed codes of conduct for responsible tourism in the Mediterranean which indicate on how the different stakeholders can contribute to the process (WWF, 1999). WWF urges all the interested parties to make a positive contribution influencing the way this crucial sector is managed.

The role of governments and local authorities

The local governments of the more tourist-developed sites of the Mediterranean basin are starting to become more discriminating about the type of tourism they encourage, and some of them are taking initiatives to diversify the nature and the type of tourism they are promoting. Many local authorities are beginning to include appropriate planning and management criteria as essential conditions for the development of tourism facilities and services.

Most countries on the northern shores of the Mediterranean, which host by far the most top tourist sites, are moving in the direction of developing more responsible forms of tourism; they have not yet been able to find a comprehensive solution, but they appear to be moving in the right direction. The situation on the southern and eastern shores is not so simple. Countries like Egypt, Turkey, Morocco and Tunisia



WWF/P. Guglielmi

Sewer draining into Ligurian sea, Italy. In many cases, wastewater is discharged without treatment, contributing to chemical and bacteriological pollution.

are characterised by a rapidly developing tourism industry, but appear to be repeating the mistakes that northern countries made a few years ago and are developing their infrastructure in a disorderly and excessive fashion.

Careful land-use planning and enforcement are critical factors for ensuring the development of more responsible forms of tourism. Whatever the stage of development of the countries, governments and concerned line agencies have a clear responsibility for making decisions related to tourism development.

Thus, WWF exhorts all the Mediterranean governments to:

at a national level

- **lay down an adequate legal framework that can provide the tools for implementing all measures related to the development of more sustainable tourism activities and the protection of the environment. In particular, special attention should be devoted to the regulation and enforcement of land-use plans - not only for traditional types of tourism but also for secondary homes - minimisation of pollution, adequate management of freshwater resources and regulation of the illegal trade of wildlife.**
- **provide adequate incentives and disincentives for the implementation of measures related to the impact of tourism development on the environment. On the one hand, it is important that an adequate portion of the existing taxes paid by tourists are used for programmes which mitigate the environmental damage of tourism activities; on the other, fiscal incentives should be given to those actors that decide to adopt environmentally friendly technologies.**
- **promote national-level education and information programmes on sustainable tourism and on the conservation of the natural environment.**

at a local level

- **use land-use planning as a tool for regulating the development of tourism activities, both in terms of spatial location and impact on ecosystems.**
- **apply building regulations in an effective manner in order to minimise the impact of construction on the natural environment and whenever possible to proactively introduce new technologies for energy and water saving and reduction of pollution.**
- **adequately plan the development of new infrastructures, which should have minimum impact, be proportionate to the foreseen tourist development of the area and always be accompanied by adequate monitoring of the development of the area.**



WWF/P. Giglielmi

Scandola, Corsica. This area, declared as National Marine Park in the '70s, has been preserved intact.

- **promote local-level education and information programmes on sustainable tourism and on the conservation of the natural environment.**
- **adopt appropriate visitor management models. Currently, there are a number of these models available. Among the most used are the LAC (Limits to Acceptable Change) used by the USDA Forest Service and the TOMM (Tourism Optimisation Management Model) which is being tested in Australia. None of these models provides all the answers. They are however, very useful planning tools.**

Initiatives in the travel and tourism industries

Tourism in the Mediterranean is dominated by organised trips; there are countries where more than 75% of international tourist arrivals are under the control of a limited number of major tour operators. If anything is to change in the direction of sustainable development of tourism, the collaboration of tour operators is essential in influencing both demand and supply. In addition many tourist sites have already reached their carrying capacity and so the ability to offer holidays in a pollution-free environment is becoming increasingly attractive. Of course, the industry would have an immediate interest in environmental protection measures if:

- costs could be reduced through these measures (saving energy or water).

- environmental damage would lessen the attractiveness of a destination (sea pollution, traffic noise, garbage problems).
- these measures result in an enhanced image which can be used as an advantage over competitors.

However, it is clear that if activities are not initially planned to maximise their sustainability, the lifespan of a given destination will be greatly shortened, thus reducing the return of the initial investment.

In view of the large impact their activities have on the conservation of the Mediterranean region, WWF calls on tour operators to:

- **ensure that all products included in their catalogues meet the highest environmental standards, selecting to operate in integrated and carefully controlled resort developments. This can be done either by directly adopting measures and technologies or by putting pressure on associate hotels and villages to adopt more stringent environmental criteria. (see appendix 1).**
- **build partnerships with local or regional authorities and NGOs to develop and promote sustainable tourism destinations. This would provide some replicable models of development and at the same time provide the area with a leading edge in the market.**
- **privilege means of transport that have the least damage on the environment.**
- **promote and participate in certification programmes that are independently developed and verified. Many such schemes have already been proposed by companies, or regional and national organisations. For example, the Green Globe 21 has recently re-launched the certification programme that is directed at businesses that intend to improve their environmental performance. (WWF UK is shortly to produce a report on Tourism Certification.) However, this mechanism like many other similar schemes could be easily interpreted as internal to the industry and a further effort should be made to collaborate with other public and private sectors to reach a more independent means of verification.**

- **disseminate the principles of responsible tourism and the links with environmental conservation through catalogues, in-flight magazines, brochures and all other means of communication at their disposal.**



WWF/P. Guglielmi

Foça, Turkey. The ability to offer holidays in a pollution-free environment is becoming increasingly attractive for tour operators, as many tourist sites have already reached their carrying capacity.

New management for tourism establishments

Reducing the environmental impact of the hotel or the tourist village is becoming more and more an imperative for those businesses that want to compete in the tourism market. All the establishments that cater to international tourists, particularly those from northern Europe, are beginning to adopt a combination of management practices and technological innovations in their business operations. Their main objectives are to reduce the wastage of water and energy, to improve the management of waste and to address all other environmental issues connected to the business (water quality, air quality, improvement of grounds, noise management, etc.).

In addition to improving their image, these progressive businesses are in many cases saving money! In fact, through the adoption of water-saving devices (such as aerators for taps, improved showerheads or dual flushes) or by using low energy bulbs, hotels are cutting their bills by at least 25%. And these are just some of the simplest measures. Hotels around the world are continuously looking for new ways of

The issue of local communities

One of the key problems of tourism development is the participation of local communities. In fact, some important sectors of local communities are often excluded from the development of the tourism industry in their territories or rather from the decision making process. This of course results in strong conflict within the community on both the appropriateness of promoting tourist development and on the ways in which this should be done. In any case, directly or indirectly, the locals could play a significant role in this economic sector and should invest on achieving a higher level of professional training and capacity for negotiation. They should also play a more important role in the social and political sectors by deciding on the future of their land and committing themselves to preventing the development of tourist projects that go against the preservation of their social and natural heritage.

Participation of local communities in planning tourism development is thus not only desirable, but also necessary because it is their surrounding environment that will undergo transformations difficult to revert once initiated, and because they are ethically entitled to take part in decisions that will have an impact on their well being.

improving their environmental efficiency. Tens of thousands of dollars are saved annually by ingenious ideas such as recovering steam from laundry machines, computerised building management systems, metering in the different departments of the hotels, etc.

Of course technology alone is not enough. It is essential that hotels adopt environmental policies and management procedures that complement and integrate the introduction of technological innovation. Many savings in fact can be obtained simply by rationalising washing procedures or by inspecting the water systems regularly for leaks. In view of assisting the establishments that wish to improve their environmental performance the International Hotels Environment Initiative has put together a very complete manual on environmental management (see appendix) which provides a full range of possible solutions and case studies from hotels around the world. Also, WWF-UK in collaboration with IHEI, has

developed a comprehensive Hotel Benchmarking Tool to be launched in September 2000. This will enable individual hotels to compare their performance with best practice in their categories as well as providing suggestions for improvement.

Just to provide a practical example, the Blue Villages of Fritidsresor (a company that has collaborated with WWF on many environmental issues) have adopted an environmental action plan. In each village, there is a staff member that co-ordinates environmental work and supervises the implementation of the action plan. Among the measures already taken we can find:

- main switch controlled by the key in every room
- improved energy management system for the swimming pool
- water saving equipment in the kitchens and bathrooms (25% savings)
- use of recyclable products and non chlorine bleach paper
- priority given to local suppliers (impulse to local economy and reduction of transport costs)
- use of environmentally friendly cleaning products

These are only part of an ongoing process of improving environmental standards which needs to be supported by both staff and customers, as will be shown in the next paragraph.

Consumer responsibility

The north European countries, considered the first international tourist market, primarily drive consumer demand in the Mediterranean basin. Consumers are becoming more experienced and more discerning in the products they choose and in some cases this has changed the structure of the tourism industry. There is an increasing request for cultural and environmental quality, as well as the traditional sea and sun elements. Price is an important element but less important to many tourists than environmental quality. There is a clear indication that tourists tend to boycott areas that are perceived to have sea pollution or congestion, or that are overdeveloped, and are moving on to areas which are able to offer a

pollution free environment. Tourist demand could push governments, tour operators and hotels to develop a new kind of tourism. If adequately supported, the combination of these sophisticated consumers and a culture which promotes law suits against companies failing to deliver quality products could keep the Mediterranean travel and tourism industry at the forefront of positive environmental developments.

WWF urges tourists to contribute to the effort of preserving the Mediterranean by:

- **demanding better products. More than in any other region of the world, consumers could drive the growth of the sustainable tourism market and the demand for green consumer labels on tourism products. If the industry and governments feel the pressure, they will ensure the creation of more appropriate products and make the necessary adjustments to their offer.**
- **behaving in a responsible manner and respecting the environmental, social and cultural values of the destinations they visit.**



WWF/P. Gaglielmi

Crowded ferry boat, Italy. Credit: Transport operators have a dominant role to play in development of more sustainable tourism.

- **providing feedback on their experiences to both the tour operators and the hotel facilities, indicating their level of satisfaction for the services, the level of information received and their perception of efforts to reduce environmental impact.**

Improvement of transport systems

Transport operators have a dominant role to play in the development of more sustainable tourism through reducing and controlling their substantial contributions to pollution and waste. Historically public transport was not developed for leisure and holiday purposes. Most transport companies did not fully recognise tourism as their primary growth market until around the 1970s. In the last part of the twentieth century the developments in air transport technology have produced a reduction in cost and flying time. The Mediterranean basin was made accessible to new markets of origin (Northern Europe, North America and Asia). But all forms of transport impose costs on society, which ultimately have to be paid for. Air transport produces emissions, which pollute the atmosphere, noise which affects people living near airports; the construction of an airport, a railway or a motorway, takes away green space and

causes fragmentation in natural habitats, affecting the local ecology. Air transport technology is focusing on increasing the fuel efficiency of engines to travel the same distances for less cost and on reducing the output of emissions and noise. But today tourism is still dominated by private transport, particularly the car, chosen for much of international as well as domestic tourism. Cars and buses running their engines continuously to operate heating and air conditioning (even while they are parked) contribute significantly to atmospheric pollution. These costs of transport are only partly met by tourists or operators; the environmental costs resulting from transporting more visitors to a destination than it can manage sustainably are not currently addressed by transport operators. The general public pays for the remainder of environmental costs.

NGO involvement

Governments and tour operators have to be absolutely transparent in all decisions concerning sustainable tourism, given the repercussions that this market has within the Mediterranean basin. Information relating to tourism has to be made public, and NGOs, being the driving force of the criticism of the environmental and social impacts of tourism, act as representatives of civil society and should be able to participate in decision-making processes that have to do with this sector. During recent years NGOs have promoted initiatives for sustainable tourism in the Mediterranean on local, national and international levels. They have had an impact on the environmental education of tourists, residents, local industries and administrators. There are many NGOs active in the nature-tourism segment that have published guidelines for tour operators, and are testing procedures for evaluating the environmental and social compatibility of tour plans.

In 1998, WWF decided to develop a set of principles and codes of conduct to help steer the necessary changes in the tourism sector in the Mediterranean basin. WWF recognises the limitations of these guidelines in the absence of a system for the verification of their implementation. The organisation will continue to support the process towards more sustainable tourism through policy activities and international public awareness campaigns.



WWF/P. Guglielmi

Dalyan Beach, Turkey. Dalyan Beach, one of Turkey's most important breeding sites for the loggerhead sea turtle. DHKD, WWF's Associate in Turkey, in the early '90s managed to stop the construction of an hotel in this area (on the right it is still possible to see the cement foundations).

Field projects in Turkey

The Belek and Cirali project is one of the most important examples of the Coastal Zone Management (CZM) approach being carried out in the Mediterranean basin. The project, which started in the early 90s in Belek (30 km East of Antalya), aiming at the production of a Management Plan for the area, and financed by the World Bank, is co-ordinated by the WWF Turkish Associate DHKD. In 1997 the approach was extended to the small village of Cirali (70 km West of Antalya), and the full project started being financed by the EU (LIFE 3rd Countries).

The two sites provide an excellent comparative case of CZM in completely different areas: Belek is a typical mass tourism destination, with large hotels, badly-planned housing and heavy human pressure. The sea turtles, which originally frequented the area, nowadays tend to avoid the beaches facing the rows of hotels due to the heavy disturbance. Only a limited number of marginal and buffer sites - established through continuous advocacy actions and participation in the investors and developers meetings - are still quiet enough for nesting. As a result, most of the work carried out in this area has to be directed towards damage mitigation.

Cirali, on the other hand, is a magnificent small coastal community, with the backdrop of the already established Olympos National Park, where the geo-physical features of the area and the presence of important archaeological remains limit the likelihood of large-scale development. DHKD, WWF's associate in Turkey, has worked with the local community on a number of initiatives. The existing laws - particularly those on defining the distance of constructions from the coastline - have been finally enforced and, quite extraordinarily, the numerous kiosks and restaurants built too close to the shore have been demolished. More importantly, the new town plan calls for the development of limited and low environmental-impact guesthouses. A local association has recently been created and, during the summer season, locals, tourists and volunteers monitor the still numerous nesting turtles that visit the three-km beach facing the village. This might be a small example, but it demonstrates ways in which all the relevant stakeholders can develop a new vision for environmentally responsible tourism.

Conclusions

The bulk of the tourism market in the Mediterranean region is controlled by a small number of large conglomerates that are capable of influencing the market and the behaviour of local decision makers. It is easy to see how, through their activities, these companies can shape the development of new tourism areas and the management of existing ones. This situation creates both threats and opportunities. By putting pressure on local authorities and businesses large tour operators can push for the opening of new areas for tourism or modify land use plans. They can also push for the application of stricter environmental laws which may add to customer satisfaction.

Appropriate tourism development largely depends on the ability of governments and local authorities to play the fundamental role of elaborating and enforcing land use plans. This not only applies to the traditional tourism infrastructure, but also to the uncontrolled proliferation of secondary homes, once the main infrastructure is in place. For every hotel that is built, thousands of small houses are built, often with very limited attention to environmental impact and to encroachment into natural spaces. In the Mediterranean, this applies particularly to beach and sand dune ecosystems, where many species are at risk of disappearing. In essence, there should be a change of attitude towards land-use planning. The creation of protected areas and buffer zones should no longer be considered only as a means of mitigating impact, but also as offering increased opportunities for recreation and attracting visitors.

However, land-use planning alone is not sufficient. These measures must be supported by the introduction of new technologies and more effective management practices for reducing the environmental impact of the tourism industry

such as wastage of water and energy and for improving the management of waste.

Governments can play an important role in providing incentives, information and training to those establishments that intend to reduce their footprint.

From all of the above, it is clear that the most important actors in this context are those responsible for the decisions which eventually lead to environmental impacts, as well as those actors who in one way or another are able to influence the former towards adopting more sustainable decisions. Identification of relevant actors must also be accompanied by appropriate strategies to establish partnerships and networks with a view to activating the elements that operate in favour of sustainable development and responsible tourism.

There are plenty of examples of tourism-related partnerships throughout Europe, especially at the local level. Some tour operators have formed innovative partnerships with local authorities to improve product quality and to develop significant environmental improvements. Federations of tour operators are working with governments seeking new ways of managing tourism, motivated by a growing recognition of long-term vested interests.

Effective strategies should combine top-down and bottom-up approaches to promote sustainable development, taking into account elements of supply and demand. Such a comprehensive approach will certainly require significant resources and a well defined work programme.

WWF is participating in the ongoing debate on tourism and environment, and contributing constructively to this process. It is engaged in a process of dialogue and partnership with all relevant actors, including the tourism industry. WWF intends to promote alternative models of tourism development through policy activities, field projects and public awareness campaigns.

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Appendix

Information on appropriate technologies and best management practices

Selected printed material

- ACTA, 1993. *Ecologia in albergo. Manuale per il recupero ambientale nei luoghi dell'ospitalità*. ZAO Turismo e Habitat, Milano.
- ENEA, 1993. *Manuale per l'uso razionale dell'energia nel settore alberghiero*. ENEA, Italy.
- International Hotels and Restaurant Association and UNEP, 1996. *Environmental good practices in hotels: case studies*, UNEP, Paris.
- International Hotels Environment Initiative, 1996. *Environmental management for hotels*, Butterworth Heinemann, Oxford.
- Kirk D., 1996. *Environmental Management for Hotels. A student's handbook*. Butterworth Heinemann, Oxford.
- Von Weizacker E., A. B. Lovins and L. H. Lovins, 1998. *Factor Four: Doubling Wealth - Halving Resource Use*. Earthscan.

Selected Web Sites

- BRE, a centre for research on buildings and construction: <http://www.bre.co.uk>
- The ECoNETT site contains an extensive collection of best practices: <http://www.wttc.org>
- Grecotel has started to adopt some environmental measures: <http://www.grecotel.gr>
- The "Green" Hotels Association provides ideas and products: <http://greenhotels.com>
- Green Culture contains a catalogue of ecological products and services: <http://www.greenculture.com>
- Dynamo Ecology provides environmental services to businesses: <http://www.dynamo.se/ecology/index.html>
- The page of the International Hotels Environment Initiative describes the programme and provides other useful information: <http://www.ihei.org>
- Real Goods provides an extensive catalogue of environmentally friendly products: <http://www.realgoods.com>
- All the latest information on waste management can be found at PRISM: <http://www.wrfound.org.uk>
- Information on green building materials and products can be found at OIKOS: <http://oikos.com>



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