# Sustainable Tourism in the Maltese Islands

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The issue of sustainable tourism is often discussed in terms of the balance between economic and environmental concerns. It is well known that many, if not all, economic activities have an impact on the environment and that this has a feedback effect on the economy itself. This is especially so in the case of tourism which utilizes the environment as a resource. Tourism depends to a very large extent on an milieu which is pleasant and attractive to tourists, and negative environmental impacts caused by tourism may therefore have the effect of 'soiling one's own nest' in the long run.

Sustainable tourism may be defined as tourism which is developed and maintained in such a manner and scale that it remains viable in the long run and does not degrade the environment in which it exists to such an extent that it prohibits the successful development of other activities. Although the term 'sustainable tourism' will not feature frequently in this chapter, it was written with this definition in mind. The chapter looks at the issue from the point of view of a small island developing state (SIDS), namely Malta.

In many SIDSs environmental degradation caused by tourism activities is commonplace. However, many SIDSs cannot substitute this form of economic activity with other, more environmentally friendly activities without great economic hardship. The chapter therefore argues that preemptive and corrective measures are called for in order to reach an optimal solution between the evils of environmental degradation and the benefits of economic growth and development.

The chapter is divided into six sections. Following this introduction, the dependence of SIDSs on tourism is briefly described. Next, the economic impact of tourism on the Maltese economy is assessed, while the section following deals with the environmental impact of tourism on the same

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islands. Some preemptive and corrective measures for the promotion of sustainable tourism are then suggested; and finally, the chapter concludes on the optimistic note that tourism itself is sharpening our awareness of the evils of environmental degradation, and this could be conducive towards the adoption of sustainable tourism policies and measures.

### Small Island States and Tourism

It is known that small island states tend to depend on tourism more than larger states do (Liu and Jenkins, 1996; Hein, 1990; and UNCTAD, 1990). The reason for this could be associated with the comparative advantage that islands tend to have in tourism-related activities. Many SIDSs attempt to develop export markets in merchandise, but these tend to be unsuccessful or not as successful as these countries would wish. On the other hand, the natural attractions (including the climate) of many small islands often give them a competitive edge in tourism activities. For this reason, many governments of SIDSs give tourism top priority and attempt to maximize their island's tourism potential by further developing the industry through promotion campaigns, the building of hotels and other tourist facilities, and enhancing their air and sea links with other countries.

The dependence of SIDSs on tourism means, among other things, that a large proportion of employment occurs in the tourist industry or in tourismrelated activities. It is not always possible to give precise estimates of such employment because it does not only occur in areas usually associated with tourism, such as hotels, restaurants, airports, seaports, transport, travel agencies, souvenir shops and restaurants, but also in agriculture, fishing, banking, printing and other activities with which the tourists come into contact, including sections of the public sector.

The large proportion of tourism-related employment in SIDSs means that a large proportion of national income originates directly and indirectly from tourism, and this, in turn, induces further income, giving rise to a multiplier effect (Archer, 1982).

Tourism is also economically important because it is a source of foreign exchange inflows. Many SIDS would register relatively large balance of payments deficits in the absence of proceeds from tourism.

There are also a number of advantages which are not directly economic, but which have an impact on the material well-being of the local population. These include a renewed interest in local arts and crafts, improvements in educational, leisure, communication, medical and other facilities in the host countries, a general awareness of the man-made and natural aesthetic assets, and a broadening in the outlook of the islanders.

Tourism in SIDSs, however, tends to usher in a number of undesirable economic effects. One of these relates to foreign control of tourism and tourism-related activities. Inward tourist traffic is often controlled by foreign tour operators, who frequently have enough bargaining power to dictate matters related to tourism in the host countries. Also, larger scale tourist establishments in SIDSs tend to be foreign owned, and this may lead to developments which are not in the long-term interest of the island itself.

A related problem is that tourism as an industry depends on the whims and fancies of foreign travellers, whose decision to visit a particular island is influenced to a very large extent by conditions outside the control of the island itself, including economic conditions and reports in the popular press in the country from which the tourists originate.

Other economic dangers often associated with tourism in any country, but which are especially important in small islands due to their relatively large dependence on this form of economic activity, include seasonal unemployment and a rapid increase in the price of land, often accompanied by land speculation.

### The environmental impacts

General characteristics of islands

Due to their small size, many SIDSs face relatively large environmental dangers, even in the absence of tourism, mostly due to the pressures arising from the process of economic development. Many islands experience a fast depletion of agricultural land, which normally accompanies an increased demand for residential building, entertainment facilities and industrial construction. The process of economic development also brings with it an increased demand for resources, some of which are non-renewable.

Apart from the pressures of economic development, SIDSs also face problems associated with their geographical and natural characteristics. They tend to have unique and fragile ecosystems. The rarity of the ecosystem, an outcome of their insularity, renders these islands as much greater contributors to global diversity than in proportion to their size. The fragility of their ecosystems arises as a result of a low level of resistance to outside influences.

Islands also have a relatively large coastline in relation to their land mass. Thus a relatively large proportion of land is exposed to waves and winds, giving rise to a relatively high degree of beach, rock and soil erosion.

# Tourism-related dangers

Many of these environmental dangers are of course exacerbated by tourism. International communications, for example, are required even in the absence of tourism, but the increased traffic caused by tourism poses severe strains on many islands. Airports and seaports in islands take up very large areas in proportion to the total space available, posing increased land-use pressure as well as air and sea pollution. In the case of air traffic, flying crafts also

contribute considerably to noise pollution, affecting practically the whole population of small islands.

The large amount of waste generated by tourism-related activity gives rise to relatively large waste dumps, which are often only a short distance away from the tourist centres. This creates health hazards (such as creating habitats for rats and other vermin, and toxic substances seeping through aquifers) and reduces the aesthetic qualities of the place.

Of particular importance in the case of SIDSs is the fact that tourism is generally of a coastal nature. Many charming fishing villages in small islands have been transformed into tourist playgrounds; many mangrove swamps and wetlands have been destroyed; many beautiful beaches have been polluted by sewage and fuel emissions; and many quiet coastal areas have been disturbed by noise from sea craft.

Although islands can be regarded as coastal areas in their entirety (United Nations, 1994, section IV), they also face special inland problems. For example, in islands where ecotourism is being promoted (as is the case in Dominica) distances are so short that ecologically important areas are also easily accessible to tourists who do not have a special interest in ecological matters, and who therefore, maybe unknowingly, trample on delicate vegetation thereby threatening rare species. In islands where cultural tourism is promoted, as is the case in Malta, considerable wear-and-tear damage occurs through frequent tourist visitations.

Another problem of small size is related to density and carrying capacity. Many islands experience high tourism densities in relation to their population and land area. The concept of carrying capacity is very important in this regard, since small islands tend to reach very quickly that threshold level beyond which the natural ecosystem will be irreversibly damaged.

However, there are instances where tourism can actually be conducive towards the protection of the environment. The reason for this is that tourism tends to create an awareness that the country needs to be attractive, that the air needs to be clean and that the sea needs to be unpolluted. In the case of many SIDSs, where civic awareness as to cleanliness is not the order of the day, campaigns for keeping the island clean are often based on the need to keep the place attractive for tourism.

More importantly, perhaps, the dependence on tourism forces the authorities of the islands to take a more serious view of planning, monitoring and market-based incentives precisely because in the absence of such instruments the negative effects of tourism on the environment could, in the long run, destroy tourism itself.

Such benefits and dangers of tourism are, of course, not present in equal doses in all SIDSs, since different islands have different characteristics. Some are more isolated and more remote than others, some are smaller than others, some are more environmentally fragile than others, and some have put into place corrective measures before others. In the next two sections the specific experiences of a small island developing state, namely Malta, are described.

# The Impact of Tourism on the Maltese Economy

Malta is a small Mediterranean island with a population of about 363,000 and a land area of 316 square kilometres. The Maltese GDP at factor cost amounted to approximately US\$2250 million in 1993, and grew at an approximate average rate of 6 per cent per annum in real terms during the previous five years.

In recent years, about 27 per cent of the Maltese GDP was contributed by the manufacturing sector, about 34 per cent by the market services sector and 23 per cent by the public sector.<sup>2</sup> The agriculture, fishing, construction and quarrying sectors together contributed around 8 per cent of the GDP, and the remaining 8 per cent originated from domestic property.

<b>Table 9.1</b> Incoming	tourists and	income f	rom tourism	
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Year	Tourists	Cruise passengers	Guest nights*	Tourist expenditure**
1960	19,689	8676	n.a.	966
1965	47,804	16,937	n.a.	1890
1970	170,853	64,998	2431	9820
1975	334,519	49,219	4633	28,087
1980	728,732	60,196	9588	111,900
1985	517,864	43,650	6303	69,800
1990	871,776	56,624	9604	157,400
1993	1,063,213	67,474	11,553	233,200

<sup>\*</sup>Guest nights in thousands

The labour force in Malta amounted to around 138,000 in 1993, of which 132,000 were gainfully occupied and 6000 were unemployed. About 23 per cent of the gainfully occupied were employed in government departments, 7 per cent in public corporations, another 7 per cent in companies with government majority shareholding, and 3 per cent were in temporary employment in the public sector. Thus 40 per cent of the employment in Malta was in the public sector.<sup>3</sup> The remaining 60 per cent were divided almost equally between private direct production and private market services. The unemployment rate in Malta in 1993 averaged 4.2 per cent, and had fluctuated between 3 per cent and 4 per cent during the previous five years.

<sup>\*\*</sup>Tourist expenditure in millions of Maltese liri. In 1993, the exchange rate of the Maltese lira was approximately LM1 = US\$2.5.

#### Maltese tourism statistics4

In 1993 the number of visitors to Malta amounted to 1,130,687, of which 94 per cent were tourists and the remaining 6 per cent were cruise passengers. The number of incoming tourists has increased rapidly between 1960 and 1980, as can be seen in Table 9.1. There was a relatively large decrease in tourist inflows between 1980 and 1985, but the numbers picked up rapidly again during the last half of the 1980s and the early 1990s.

#### Densities

Tourist densities in Malta are very high. In 1993, the total number of tourists amounted to almost three times as much as the resident population, which can be roughly translated into 32,000 tourists staying for a whole year, given that, on average, each tourist stayed in Malta for about 11 nights. This is equivalent to about 10 per cent of the population and, as expected, such high densities exert heavy pressure on the environment and infrastructure of the Maltese Islands where population density is already extremely high, with about 1150 persons per square kilometre.

### Nationality

In 1993, 49 per cent of tourists originated from the UK, which is the most important tourist market for Malta. The second largest market is Germany, which contributed some 17 per cent of tourists to Malta in the year. Italy, France, North Africa and the Netherlands are also major markets for tourism to Malta. In recent years there was a tendency for the percentage of British tourists to decrease. At present there is an attempt to attract more tourists from North America.

# Socio-economic background

Malta is not among the cheapest destinations in the Mediterranean. In the National Tourism Organisation of Malta (NTOM) survey, the cost or value-for-money attraction is given a very low score in the motivation of incoming tourists. Briguglio and Vella (1995) have also shown that in brochures of major tour operators, the Malta package tours are on the expensive side when compared to similar package tours to Spain and Greece. For this reason, one would not expect a very large percentage of incoming tourists to be very low income earners.

The only officially published statistics as to the socio-economic background of incoming tourists to Malta relate to their occupation. NTOM surveys results for the British market indicate that a large proportion of summer tourists (51 per cent in 1993) are managers, directors or belong to the

professions. It would appear, therefore, that Malta's tourists are not typically low-income earners.

### Seasonal pattern

Tourism in Malta is very seasonal, with the majority of incoming tourists arriving in the June to October period. In 1993, about 58 per cent of tourists arrived during these months (averaging about 12 per cent per month) and the remaining 42 per cent arrived during the November to May period (averaging about 6 per cent per month). This, of course, means that the problem of tourist densities is exacerbated in the summer months. The Maltese tourist authorities are at present trying to attract more winter tourists to Malta, but it is doubtful whether this will mean, if successful, a reduction of tourist inflows in summer.

### Average duration of stay

In 1993, the average length of stay per tourist was 11 nights. The average length of stay per tourist has tended to decline over the years; it was about 13 nights during the 1970s and decreased to about 12 nights during the 1980s.

The overall average length of stay conceals considerable differences between the various categories of tourist. Tourists staying in three-star hotels and tourist villages tend to stay longer than those staying in other categories of hotels. The shortest stays pertain to tourists in five-star hotels.

#### Tourist accommodation

The number of tourist beds in 1993 was 42,978, of which 48 per cent were in hotels, 31 per cent in tourist villages/aparthotels, and 17 per cent in holiday flats. The remaining 4 per cent were in guest-houses.

In recent years, hotel accommodation has consisted mostly of the threeand four-star category, which have an 84 per cent share of the total available beds. Five-star hotel accommodation accounted for only 7 per cent of total hotel beds. At present, there is an attempt to attract more upper-market tourists by building new four- and five-star hotels, and the share of five-star hotels is likely to double within a few years.

In 1993, the average annual occupancy rate in all establishments was around 60 per cent. As is the case with the length of stay, the overall occupancy average conceals considerable variation between different types of accommodation and different seasons. In 1993, the rate was 63 per cent if hotels only are considered. A more detailed analysis of occupancy rates indicates that in three- and four-star hotels the rates are 65 per cent and 68 per cent respectively. In the summer months occupancy rates were almost twice as high as they are in the winter months, and in August of that year the overall average rate reached 99 per cent.

#### **Economic contribution**

The direct contribution of tourism to the economy can be measured in terms of its contributions to GDP, to the balance of payments and to gainful employment.

In recent years, tourist expenditure directly contributed around 15 per cent of the Maltese GDP5 and 25 per cent of foreign-exchange inflows from exports of goods and services. Multiplier analysis related to Maltese incoming tourism would seem to indicate that tourism expenditure tends to have a higher multiplier effect than the bulk of merchandise exports, since the value-added content of production associated with tourism tends to be relatively high (Briguglio, 1992).

Tourism also contributed to the domestic economy through international transportation, since a considerable amount of incoming tourists use the national carrier, Air Malta, in scheduled flights and charter hire. In recent years, transportation expenditure associated with tourism amounted to an estimated 6 per cent of foreign exchange inflows from exports of goods and services.

There are no published statistics on the total contribution of tourism to gainful employment in Malta. As already stated, it is not an easy task to measure this contribution, since tourist expenditure generates employment in almost all economic sectors. It is known, however, that in 1993, the hotel industry, which, in Malta is almost exclusively geared to international tourism, employed just under 6000 persons, which is equivalent to 4.5 per cent of the total gainfully occupied population. This, of course, does not represent all employment generated by tourism. A 'guestimate' of the total number would be about 24,000, assuming that employment generated by tourism as a ratio of total employment reflects the contribution of tourist expenditure (including transport) to GDP.

At present, tourism does not contribute as much as manufacturing to the Maltese economy in terms of income and employment, since the manufacturing sector's contribution to GDP is about 1.5 times higher than that of tourism. However, the economic contribution of tourism is growing while that of manufacturing is declining, and it is quite possible that within a decade the share of GDP originating from tourism will overtake that originating from manufacturing.

# The Impact of Tourism on the Maltese Environment

Although, as argued above, environmental problems in small islands should not all be placed at the door of tourism, it cannot be denied that tourism development does pose a major problem in this regard. This section lists the

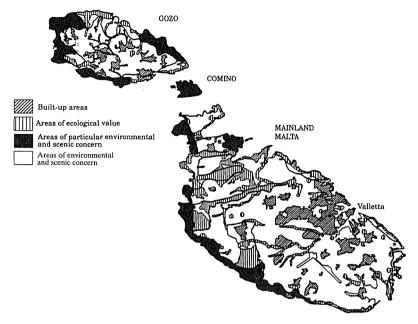


Figure 9.1 Map of the Maltese islands showing areas of environmental importance Source: Malta Structure Plan Report Survey, July 1990

most important areas where the environmental impact of tourism is most conspicuous (Figure 9.1).

# Increase in demand for building

Building of tourist accommodation, notably hotels and blocks of flats, has increased at a very rapid rate as a result of intensive development in certain areas. The St Paul's Bay area and the Sliema/St Julians area have been completely transformed because of such development. Other negative outcomes of these developments include the intense noise arising from construction activity and the vast amount of waste material and dust from demolished structures and from excavations. Newly developed tourist structures, sometimes forming a whole village, have also obliterated habitats in the Maltese countryside.

One can add here additional negative impacts associated with aesthetics, especially where new high-rise concrete structures have replaced beautiful traditional Maltese houses. Moreover, since limestone is used extensively in building, ancillary activities in quarrying have given rise to unsightly scars in many parts of the Maltese islands, besides causing considerable environmental damage to natural habitats and water-tables.

### Increased production of waste

The sewage network in Malta is very heavily taxed by the native population alone. The relatively large number of tourists intensifies this problem. The outcome is that in recent years a number of popular bays were closed for swimming due to sewage pollution. This has caused considerable discomfort associated with foul smells and the inability to swim in the bays, and, perhaps more importantly, it has damaged marine and coastal life and induced an accumulation of toxic substances in marine organisms.

Problems arise also from household wastes. This is a very big problem in Malta, and tourism has, of course, accentuated it. One of the commonest sights in Malta is overfilled rubbish bins and huge waste disposal areas within a short distance of residential centres.

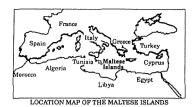
More use of environmentally dangerous products

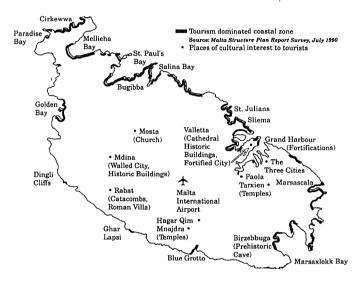
The increase in tourism has brought with it increased use of environmentally dangerous products, such as plastic containers and emissions of toxic gases from cars, power stations, and barbecue grills. Coupled with this, there is also an increase in noise pollution from cars, incoming aircraft, speedboats, airconditioning units, water-treatment plants, and so on.

### High tourist densities

As already explained, Malta is very densely populated even without tourism. Tourism has intensified the use of transport, beaches, and other entertainment and cultural facilities. This congestion not only creates discomfort for the local residents, especially those living in tourist areas, but has additional side-effects, including the destruction of beach habitats (especially the sand dunes), trampling on fragile habitats in the countryside, and overvisitation rates in fragile archaeological sites.

A note on the environmental impact of non-tourism economic activity on the environment is in order here. Although tourism is often associated with environmental degradation, it should be kept in mind that non-tourism activities also have major negative impacts on the environment, and therefore the identification of environmental harm by tourism need not be a case for alternative forms of development. In Malta, for example, the manufacturing industry, with its reliance on machinery, fuel and water consumption, may at times be more environmentally unfriendly than tourism. The shiprepair industry, which uses a considerable amount of grit in sandblasting, and the agriculture industry, with its reliance on pesticides, also cause irreversible environmental damage in Malta. To be sure, no economic activity is environmentally neutral, and tourism is not always the worst culprit in this regard.





**Figure 9.2** Location map of Malta and map showing some tourist attractions in mainland Malta Source: Malta Structure Plan Report Survey, July 1990

#### Some environmental benefits of Maltese tourism

Having listed a number of dangers, and the list is by no means exhaustive, it is pertinent to emphasize a number of positive points associated with the impact of tourism on the environment.

### Environmental awareness of tourists

Tourists who come to Malta are often more environmentally aware than the local residents. Dumping waste in residential areas and littering the beaches is associated more with Maltese residents than with tourists. Building without any aesthetic and environmental considerations is more common in domestic residences than in hotel and tourist complexes. Most tourists visiting Malta come from Western European countries, where economic affluence and stronger civic awareness has enabled the local population to

assign more importance to environmental protection than is the case in Malta.

### Promotion of arts and crafts

Certain traditional arts and crafts of the Maltese Islands, such as lace-making and filigree work, have been revived because of demand from tourists.

### Awareness of cultural heritage

Malta is renowned for its wealth of historical and archaeological heritage (Figure 9.2), which, before the advent of large-scale tourism, were probably not appreciated enough. The places of cultural importance are, even now, more valued by tourists than by the locals, probably because the local residents take this patrimony for granted.

## **Preemptive and Corrective Measures**

In Malta, the degree of dependence on tourism as an economic activity is growing, even though it is known that such activity has major negative environmental impacts. The economic benefits which Malta derives from tourism are formidable and the question at issue here does not therefore relate to whether or not Malta should continue to derive income and generate employment from tourism, but rather, how best to reduce the damage caused by this type of economic activity. The remedies often suggested in this regard relate to the development of alternative forms of tourism or to certain preemptive and corrective measures.

#### Alternative forms of tourism

Like those in many other SIDSs, the Maltese tourism authorities and the operators in the industry attempt to attract as many tourists as possible, no matter how much net income is left in the host country, and how much pressure is exerted on the infrastructure and the environment. Admittedly, the Maltese authorities attempt to attract more high-income tourists by, among other things, allowing more four- and five-star hotels to be built and restricting developments in other categories. The chances are, however, that the structure of tourist inflows will not change drastically in the foreseeable future, as will be shown below.

The question arises here as to whether on not small islands like Malta could reduce their dependence on mass or 'mainstream' tourism and instead foster alternatives, such as cultural tourism, ecotourism, retirement tourism, health tourism and so on.

In general, what is termed 'alternative' tourism is often very small scale, and not sufficiently financially rewarding on its own. In the case of Malta, for example, there would seem to be a very attractive case for promoting cultural tourism, given that the islands have a rich historical and archaeological heritage. However, relying on this form of tourism alone is unlikely to be viable. Most tourists who come to Malta state categorically in the various surveys carried out by the NTOM that they visit the islands mostly because of its Mediterranean climate, and its sea and sun.

Also, Malta's dependence on foreign tour operators conditions the quality of its tourist inflows. In all tourist brochures, Malta is sold as a sea and sun destination, with the cultural heritage as an added bonus. Malta's climatic endowments sell, and, as is well known, these attractions appeal mostly to what one may call 'mainstream' tourists.

One is tempted to conclude therefore that, at least in the Maltese Islands, alternative forms to mass tourism are attractive only if they supplement traditional tourism and if they enhance the potential of the island as a tourist resort.

Another factor which may not permit drastic diversification of Malta's tourist inflows relates to the existing structures of hotel and tourist facilities, which are geared mostly to 'mainstream' tourism. It does not make much sense for the authorities to force the existing hotels, which operate on the basis of the profit motive, to operate at very low occupancy rates.

Finally, it may not make much political sense for the government of Malta to adopt measures which will reduce tourism inflows, knowing that from each tourist there is at least a small net contribution to the islands' GDP and gainful employment. Eventually, there will be a slowing down of the rate of increase of tourist inflows, but this will not probably be the result of a predetermined government policy, but rather an outcome of the constraints arising from the carrying capacity of the islands.

These realities by no means contradict the argument that mass tourism is associated with certain environmental dangers and negative social impacts. The thrust of the argument here is that given the attraction of mass and 'mainstream' tourism on economic grounds, preemptive and corrective measures to reduce its negative impacts may be more meaningful and operationally useful than policies to reduce the inflows.

### Self-regulation

Self-regulation can be advocated as a means of reducing the negative environmental impact of tourism. As has been pointed out earlier, it is in the interests of the tourism industry itself to protect the environment and therefore there exists an incentive for the tourist industry itself to prevent destruction of the environment. Moreover, in some cases firms can make substantial financial savings by promoting good environment practices, such

as, for example, the laundering of linen on request only, and the timeswitching of air conditioners.

Yet past experience in the Maltese islands has shown that self-regulation alone may not be sufficient to ensure adequate environmental protection. This is especially so when such protection works against private profit maximization, as it often does. It would be wishful thinking to expect, for example, that operators on the beach-front would not erect structures on the beaches if no control by the authorities is in place. There exists a case, therefore, for government intervention of various forms, ranging from planning and monitoring to direct control.

### Legal controls and planning

In a small island state, where land is one of the scarcest commodities, legal constraints as to land use may be indispensable. In Malta, such constraints have, in recent years, been placed within the framework of the Structure Plan, with the aim of regulating development. The Structure Plan is a legally binding document which not only recognizes the severe land-use competition in the Maltese islands but also suggests proactive measures for the enhancement of the environment as well as other measures to ensure efficient use of resources and a better quality of life in the islands.

Inevitably, tourism-related developments feature prominently in the Structure Plan. Before the introduction of the plan, haphazard tourism development was the order of the day. There is now a general consensus in Malta that planning tourism activities is essential, primarily because there is a growing concern about their impact on the environment (Cassar, 1990).

### Impact assessments

Planning is, by definition, a general statement of policies, but in many cases more specific measures involving a project-by-project assessment are required. It may be necessary to examine certain individual project proposals before their commencement to reduce the chances of conflicts between an individual project and the plan's overall objectives.

Environmental and social impact assessments can be undertaken for this purpose. Such assessments should contain a description of the potential direct, indirect and induced effects on the environment and on society at large, and a description of alternative sites which can be used for the same projects.

The exercise should also propose suggestions as to how the adverse environmental and social effects can be mitigated. The negative impact should, of course, be compared to the positive economic impact – an exercise which requires the participation of expertise from different fields, including the physical sciences and economics. These types of assessments are especially important for projects associated with tourism where an array of considerations are involved, including land use, protection of the environment, transport planning and social effects.

In Malta, environmental impact assessments are required by law in terms of the Environmental Protection Act of 1991 for projects that are likely to have a 'substantial' impact on the environment (see Planning Authority of Malta, 1994). Since this requirement has come into effect there has been a slowing down of developments which harm the environment. The requirement has, however, given rise to what have been described as unacceptable bureaucratic delays, and there is a feeling of dissatisfaction among developers whose proposals are trapped in a very long waiting list.

### Setting standards and monitoring

Many environmental problems arising from tourism are associated with the absence of standards and ineffective monitoring. Certain activities need to be controlled and monitored on an ongoing basis, either because they cause damage due to certain unforeseen circumstances, or because, with improved knowledge, the requirements of environmental protection may become more stringent with time.

Monitoring implies setting quality and quantity standards and codes of good practice in the first place, which in the case of tourism could include, for example, levels of permitted tourist capacity on certain beaches, maximum levels of pollution (arising from waste, fuel and noise) and so on. The monitoring exercise would then involve assessing the degree of compliance with these standards and codes by the industry itself in a self-regulatory regime and by the public authorities in a command and control framework.

Assuming that standards can be enforced, they can, however, create rigidity as circumstances change; legislation should, therefore, allow for a certain degree of flexibility according to environmental and other circumstances. For instance, standards can be varied as waste disposal becomes more efficient, or as public transport becomes more efficient and can effectively replace hired private transport.

In Malta, the Environmental Protection Act gives the power to the Minister for the Environment to make regulations setting objectives, directives and codes of practice relating to all human activity which affect the environment. The Act has been instrumental in fostering an awareness of environmental shortcomings, although there are a number of problems associated with its implementation, notably enforcement.

Certain directives are difficult to enforce, either because of lack of policing personnel or non-availability of technical tools for proper assessment and monitoring. There may also be lack of will to enforce certain standards due to

the negative impacts on business. In Malta, enforcement problems are now probably the main reason why environmental degradation still takes place at what to many is an unacceptable level. The legal and institutional set-up is sufficiently developed, as has been shown above.

### Internalizing costs

Given that legislation is not always effective, especially because it requires a well-developed enforcement apparatus, and that it would be expecting too much to wait for private firms to adopt sound environmental practices voluntarily, certain mechanics may need to be put in place to allow the market itself to reduce environmental damage. Instruments such as taxes, fees, tradable permits and other measures can be used to alter prices in order to include environmental costs. For instance, a tax on sewage emissions could be viewed as the price which the government charges for the dissipation services provided by the sea. Unfortunately, such instruments are not commonly used in Malta.

The most important advantage of these methods is that they provide an incentive for the producer to economize on polluting activities in ways that ensure an efficient allocation of environmental resources, hence promoting their sustainable use. They also provide an incentive for the development of technological improvements to limit pollution activities. Charges also represent a source of revenues which can subsequently be used to offset subsidies for environmentally beneficial activities or to manage environmental resources. Finally, they foster the awareness that pollution and environmental services do have a cost, even if this is not usually demonstrated in the market price.

Again here, however, there is no guarantee that market-based instruments will produce the desired results. First of all, they may require methods of valuation based on a large array of assumptions and creation of proxy variables. If market-based procedures are used, such as selling limited pollution rights, there is the problem of fixing arbitrary quotas by a central authority. If taxes and fees are imposed there is the risk of creating distortions due to lack of knowledge about environmental costs.

### Conclusion

This chapter has described the most important economic and environmental impacts on small islands states, and Malta was used as an example. It has been shown that the economic benefits of tourism are often very large. It has also been argued that the negative impacts on the environment in small islands tend to be relatively large, mostly due to low carrying capacities and high densities. The objective of sustainable tourism is, therefore, not very easy to attain, and it often involves walking on a tightrope.

The chapter has argued that a policy of restraint on tourism inflows would not make much sense for an island where a large proportion of the national income, foreign-exchange inflows and employment are generated from tourism and tourism-related activities. The argument that 'in the long run we're all dead' may be relevant for a small island state which, through tourism growth, has managed to secure a respectable level of material welfare for its citizens, even though considerable environmental damage has been caused in the process. It has been suggested, therefore, that there is a need to find ways of minimizing environmental damage without threatening the shortrun economic well-being of the host country.

A few preemptive and corrective methods towards this end have been described, although it has been shown that their success cannot be guaranteed. Planning, impact assessments, setting and monitoring standards, and internalizing environmental costs are likely to halt the pace of environmental damage, but, like all other economic activities, tourism will never be environmentally neutral. Hotels will always emit sewage; tourists will always add to the space constraints in islands where space is very scarce; air, land and sea-based traffic will continue to pollute the air with fumes and noise.

Fortunately, tourism, being natural resource based, has quickly made us all more appreciative of the services that are offered by the environment. As goods such as clean air, clear seas and quiet spaces, which were previously abundant and free, become scarce as a result of demand from tourists, we tend to become more and more aware that environmental degradation is a great loss, not only in terms of long-run or sustainable development, but also in terms of current well-being.

#### **Notes**

- 1. This definition broadly follows that given in Butler (1993).
- 2. In the Maltese national accounts statistics, the public sector is defined as including public administration and public corporations, and the percentage given here refers to this definition. In employment statistics, on the other hand, the definition also covers employment in companies with government majority shareholding.
- 3. See note 2 for a definition of the public sector in Maltese employment statistics.
- 4. The statistics to be presented in this section are taken from various reports compiled by the Research and Planning Division of the National Tourism Organisation of Malta.
- 5. The 15 per cent direct contribution of tourist expenditure to GDP in recent years is calculated by the present author on the assumption that the import content of tourism expenditure is about 50 per cent. In official pronouncements on this matter, it is sometimes stated that the contribution of tourism to the Maltese GDP is around 40 per cent. This assertion, which is probably based on a statement found in a 1989 report on Maltese tourism written by PA Cambridge Consultants is obviously an exaggeration, given that tourist expenditure, including its import content, averaged 22 per cent (and never exceeded 30 per cent) of GDP at factor cost between 1983 and 1993.

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