SUSTAINABLE TOURISM IN SMALL ISLANDS THE CASE OF MALTA¹

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INTRODUCTION

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 utilises 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 itself, 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 paper, it was written with this definition in mind. The paper looks at the issue from the point of view of a small island developing state (SIDS), namely Malta.

In many SIDS environmental degradation caused by tourism activities is commonplace. However many SIDS cannot substitute this form of economic activity with other, more environmentally-friendly activities, without great economic hardship. The paper 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 paper is divided in six sections. Following this introduction, the dependence of SIDS on tourism is briefly described. Section 3 assesses the economic impact of tourism on the Maltese economy, while section 4 deals with environmental impact of tourism on the same islands. Some preemptive and corrective measures for the promotion of sustainable tourism are suggested in section 5. Section 6 concludes the paper with 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 ISLANDS STATES AND TOURISM

It is known that small islands states tend to depend on tourism more than larger states do (Ellul, 1999; McElroy and Olazarri, 1997; Liu and Jenkins, 1995; 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 SIDS 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 gives them a competitive edge in tourism activities. For this reason, many governments of SIDS give tourism top priority, and attempt to maximise their island's tourism potential by further developing the industry through promotion campaigns, building of hotels and other tourist facilities, and enhancing their air and sea links with other countries.

The dependence of SIDS on tourism means, amongst other things, that a large proportion of employment occurs in the tourist industry or in tourism related activities. It is not always possible to

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¹ This is an updated version of a paper with the same name published in *Sustainable Tourism in Islands and Small States: Case Studies*, London, UK: Cassell/Pinter, 1996.

² This definition is based on that given in Butler (1993).

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 in contact, including sections of the public sector.

The large proportion of tourism-related employment in SIDS 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. 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 SIDS, however, tends to usher in a number of undesirable economic effects. One of these relates to foreign control of tourism and tourist related activities. Inward tourist traffic is often controlled by foreign tour operators, who often have enough bargaining power to dictate matters related to tourism in the host countries. Also larger scale tourist establishments in SIDS 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 are 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 relative 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 SIDS 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, SIDS 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 contributors to global diversity much more than in proportion to their size. The fragility of their ecosystem arises as a result of a low level of resistance to outside influences.

Islands also have a relatively large coastline in relation to the landmass. Thus a relatively large proportion of land is exposed to sea-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 tourist 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 SIDS is the fact that tourism is generally of a coastal nature. Many charming fishing villages in small islands have been transformed in 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 eco-tourism 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 very quickly reach that threshold level beyond which the natural ecosystem will be irreversible 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 SIDS, 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 SIDS, since different islands have different characteristics. Some are more isolated and more remote than others, some are smaller than others, some a 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 around 363 thousand and a land area of 316 square kilometres. The Maltese GDP at factor cost amounted to approximately US\$3600 million in 1999, and grew at an approximate average rate of 5 percent per annum in real terms, during the previous five years.

In recent years, about 24 percent of the Maltese GDP was contributed by the manufacturing sector, about 50 percent by the market services (including property income) and 20 percent by the public

sector.³ The agriculture, fishing, construction and quarrying sectors together contributed around 6 percent of GDP.

The labour force in Malta amounted to exceeded thousand in 1999, of which 138 thousand were gainfully occupied and 7.6 thousand (5.2% of the labour force) were unemployed. About 23 percent of the gainfully occupied were employed in government departments, 1 percent in the armed forces, 5 percent in public corporations, another 5 percent in companies with government majority shareholding. Thus 34 percent of the employment in Malta was in the public sector. The remaining 66 percent were divided 24% in private direct production and 36% in private market services. The unemployment rate in Malta in recent years averaged fluctuated between 3.7 percent and 5.3 percent in recent years.

Maltese Tourism Statistics⁴

In 1999, the number of visitors to Malta amounted to 1,214,230 of which about 85 percent were stayover tourists and the remaining percentage were cruise passengers. The number of incoming tourists has increased rapidly between 1960 and 1980, as can be seen in Table 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 eighties and the nineties.

Table 1. Incoming Tourists and Income from Tourism

Year	Tourists (Number)	Cruise Passengers (Number)		Tourist Expenditure Lm 000,000#
1960	19,689	8676	n.a	966
1965	47,804	16,937	n.a.	1,890
1970	170,853	64,998	2,431,000	9,820
1975	334,519	49,219	4,633,000	28,087
1980	728,732	60,196	9,588,000	111,900
1985	517,864	43,650	6,303,000	69,800
1990	871,776	56,624	9,603,532	157,400
1993	1,063,213	67,474	11,553,149	233,200
1994	1,176,223	62,820	11,950,631	241,900
1995	1,115,971	77,216	10,918,723	232,804
1996	1,053,788	69,240	10,665,253	228,868
1997	1,111,161	126,645	10,938,986	249,836
1998	1,182,240	144,862	11,325,611	254,617
1999	1,214,230	189,189	11,658,245	271,383

In 1999, the exchange rate of the Maltese lira was approximately Lm1 = US\$ 2.5

Densities. Tourist densities in Malta are very high. In recent years, the total number of tourists amounted to almost three times as much as the resident population, which can be roughly translated into 30 thousand tourist staying for a whole year, given that on average, each tourist stayed in Malta for about 9.1 nights. This is equivalent to about 8% 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 1200 persons per square kilometre.

Nationality. In 1999, about 34 percent of tourists originated from the United Kingdom, which is the most important tourist market for Malta. The second largest market is Germany, which contributed some 17 percent of tourists to Malta in recent years. Italy, France, North Africa and the Netherlands

³ 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 private companies with government majority shareholding.

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.

were 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 amongst the cheapest destination in the Mediterranean. In National Tourism Organisation (NTOM) survey, the cost\value for money attraction is given a very low score in the motivation of incoming tourists. Briguglio and Vella (1995) has 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 in Malta relate to their occupation. NTOM surveys results for the British market indicate that a large proportion of Summer tourists (51% in 1993) were 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 May to October period. In 1999, about 82 % of tourists arrived during these months, of which 46% arrived during the shoulder months and 36% during the summer months (July to September). The remaining 18% arrived during the November to Jan period (the Winter months). 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 recent years the average length of stay per tourist tended to decrease from about 9.4 in 1995 nights to about 9.1 nights in 1999. It was about 13 nights during the seventies and decreased to about 12 nights during the eighties. The overall average length of stay conceals considerable differences between the different categories of tourists. Tourists staying in 3 star hotels and tourist villages tend to stay longer than those staying in other categories of hotels. The shortest stays pertain to tourists in 5 star hotels.

Tourist Accommodation. The number of tourist establishments in 1999 was 246, with 40919 tourist was 40919. Hotel accommodation consisted mostly of the 3-star (51 hotels) and 4-star (34 hotels) category, with a share of about 77 percent of the total available hotel beds. Five star hotels accommodation accounted for only 14 percent of total hotel beds (however this category of accommodation has more than doubled between 1996 and 1999, in line with the tourism policy of the government to attract more upper market tourists by building new four and five star hotels). In 1999 the average annual occupancy rate in all establishments was around 58 percent. 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 1999, the highest occupancy rates were for 4 star hotels (with 80%), while the lowest were for 1 star hotel with 14%. In the summer months occupancy rates tend to be almost twice as high as they are in the winter months, and in August of that year they overall average might have exceeded 90%.

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 percent of the Maltese gross domestic product⁵ and 25 percent 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

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The 20 percent 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 percent, with the . In official pronouncements on this matter, it is sometimes stated that the contribution of tourism to the Maltese GDP is around 40 percent. This assertion, which is probably based on a loose 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 percent (and never exceeded 30 percent) of GDP at factor cost between 1983 and 1996.

effect than the bulk of merchandise exports, since the value added content of production associated with tourism tends to be relatively high (Briguglio, 1992, Mangion, 1999).

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 5 percent 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 1999, the hotel industry, which, in Malta, is almost exclusively geared to international tourism, employed about 9 thousand persons, which is equivalent to 6 percent 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 21,000, 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. 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 most important areas where the environmental impact of tourism is most conspicuous.

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 this development include the intense noise arising from construction activity, 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 lime-stone is used extensively in building, ancillary activities in quarrying has 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 of this 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 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 are overfilled rubbish bins, and huge waste disposal areas within a short distance of residential centres.

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⁶ The contribution of tourism to the Maltese GDP (including transport) is about Lm200 million (after excluding the import content) which is about 15% of GDP. This is a high contribution, but not as high as is normally thought. The main reason for this is that the Maltese economy is quite diversified when compared to other island destinations.

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 gasses from cars, power stations, and barbecue grills. Coupled with this, there is also an increase in noise pollution from cars, incoming aeroplanes, speedboats, air-conditioning 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 destruction of beach habitats (especially the sand dunes), trampling on fragile habitats in the country side, and over-visitation 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 ship-repair industry, which uses 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.

Some Environmental and Cultural Benefits of Tourism

Having listed a number of dangers, and the list is by no means exhaustive, it is pertinent to emphasise 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, 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 as 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 through certain preemptive and corrective measures.

Alternative forms of tourism

Like in many other SIDS, 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, amongst other things, allowing more five-star and

four-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, eco-tourism, 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 pre-determined 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 trust 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 environmental practices, such as for example, laundering of linen on request only, and time-switching 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 maximisation, as it often does. It would be wishful thinking to expect, for example, that operators on the beach front would not erect structures on 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 recognises the severe land-use competition in the Maltese Islands but also suggests pro-active 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 are essential, primarily because there is a growing concern about its 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, 1994). Since the coming into effect of this requirement there has been a slowing down of developments which harm the environment. This requirement, however, has given rise to what has been described as unacceptable bureaucratic delays, and there is a feeling of dissatisfaction by 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 in 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, and 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 practices relating to all human activity which affect the environment. The Act has been instrumental in fostering an awareness of environmental problems, although there 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 was shown above.

Internalising 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 voluntarily adopt sound environmental practices, certain mechanics may need to be put in place to allow the market itself to reduce environmental damage. Instruments such as taxes, fees, tradeable permits, and others can be used to actually alter prices in order to include also 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 are that they provide an incentive for the producer to economise on polluting activities in ways that ensure an efficient allocation of environmental resource, 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 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.

Spreading the Impact

As stated above one of the problems with tourism inflows in small island is that such inflows tend to be concentrated in some areas and in some months. In the Maltese Islands such concentration is very pronounced, and pose serious threats to the environment. This suggests that if the impact could be spread, the carrying capacity of the islands would be less taxed, and the environment less threatened. It can however be argued that this need not be the case, since the negative impacts of tourism would then be spread in areas which are yet unspoilt and the host community would not have a "quite" season during which it can recoup its energy.

CONCLUSION

This paper described the most important economic and environmental impacts on small islands states, and Malta was used as an example. It was 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 very tight rope.

The paper has argued that a policy of reducing tourist inflows would not find much support – except perhaps among those very keen on environmental protection - in an island where a large proportion of national income, foreign exchange inflows and employment are generated from tourism and tourism related activities, and where tourism growth, has been instrumental in securing a respectable level of material welfare for its citizens, even though, in the process, considerable environmental damage was

caused. It was therefore suggested that there is the need to find ways of minimising environmental damage without threatening the short-run economic well-being of the host country.

A few preemptive and corrective methods towards this end have been described, although it was shown that their success cannot be guaranteed. Planning, impact assessments, setting and monitoring standards and internalising 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 sewerage, 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 quite spaces, which were previous abundant and free, become scarce as a result of demand by 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 wellbeing.

REFERENCES

Archer, B., "The Value of Tourism Multipliers and their Policy Implications," *Tourism Management*, Vol. 4, pp. 234-244, 1982.

Briguglio L, Butler R, Harrison D., Filho Walter Leal, 1996, *Sustainable Tourism in Islands and Small States: Case Studies*. London: Cassell/Pinter

Briguglio L., Archer B., Jafari J., 1996, Sustainable Tourism in Islands and Small States: Issues and Policies. London: Cassell/Pinter

Briguglio, L. "Tourism Multipliers in the Maltese Economy", in P. Johnson and B. Thomas (eds) *Tourism Perspectives in Tourism Policy*, U.K.: Mansell Publishing, 1992.

Briguglio, L. and Vella, L. "The Competitiveness of the Maltese Islands in Mediterranean International Tourism," in M. Conlin and T. Baum (eds), *Island Tourism: Management, Principles and Practices*. U.K.: J. Wiley and Sons, 1995.

Butler, R. W., "Tourism - An Evolutionary Approach," in J. G. Nelson, R.W. Butler and G. Wall (eds.) *Tourism and Sustainable Development: Monitoring, Panning, Management*, Waterloo: University of Waterloo, pp. 27-44, 1993.

Cassar, G. "Planning in Malta - What Future?," in *Structure Plan Newsletter. No. 1*. Malta Government Planning Services Division, 1990.

Ellul Anthony, "Sustainable Tourism in the IMA-SIDS," in L. Briguglio (ed.) *The Sustainable Development of Small Island Developing States in the Indian Ocean, Mediterranean and Atlantic Regions (IMA-SIDS)*, UNEP, 1999

Hein, P., "Economic Prospects and Problems of Small Islands" in W. Beller, P. d'Ayala and P. Hein (eds.) *Sustainable Development and Environmental Management of Islands*, UNESCO, Paris and The Parthenon Publishing Group, 1990.

Hein, P., P. "Between Aldabra and Nauru" in W. Beller, P. d'Ayala and P. Hein (eds.), Sustainable Development and Environmental Management of Islands, UNESCO, Paris and The Parthenon Publishing Group, 1990

Liu, Z. and Jenkins, C. L. "Country Size and Tourism Development," in Sustainable Tourism - Issues and Policies, London: Mansell 1995.

Mangion Louise, The Economic Impact of Tourism in Malta. Malta Tourism Authority, 1999.

McElroy, J. and Olazarri, P. "A Tourism Penetration Index for Small Island Destinations," *Bank of Valletta Review* 16 (Autumn, 1997): 1-10

Malta Government, Environment Protection Act, 1991. Malta, Department of Information, 1991.

Malta Government, Development Planning Act, 1992. Malta, Department of Information, 1992.

Pigram, J.J. "Environmental Implications of Tourism Development", *Annals of Tourism Research*, Vol. 7, No. 4, 1980, pp.554-582

Planning Authority of Malta. *Policy and Design Guidelines of Environmental Impact Assessment in Malta*. Malta: Planning Authority, May 1994.

UNCTAD: Problems of Island Developing Countries and Proposals for Action, TD/B/AC.46.2, 1990.

United Nations, *Programme of Action for the Sustainable Development of Small Island Developing States*. Document produced by the UN Global Conference on the Sustainable Development of Small Island Developing States, 1994.