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THE UNIVERSITY OF WOLLONGONG
DEPARTMENT OF ECONOMICS

**TOURISM POLICIES, ENVIRONMENTAL PRESERVATION
AND SUSTAINABLE DEVELOPMENT ON SMALL ISLANDS:
THE CASE OF MALTA**

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ABSTRACT

The basic contention of the paper is that environmental dangers have economic implications, in that they 'soil one's own nest' in the long run. This is especially so in the case of tourism, which to an extent depends on a pleasant and attractive environment. It is shown that small islands like Malta depend to a large degree on tourism, and that there are ecological dangers associated with such dependence. The question as to who is to pay for associated environmental degradation and the issue of sustainable development are discussed against this reality. The paper puts forward a number of suggestions for the adoption of tourism policies which integrate economic, environmental and cultural advancement.

Keywords:

Tourism, Environment, Sustainable Development, Pollution, Small Islands, Malta.

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1 INTRODUCTION

The basic contention of this paper is that environmental dangers have economic implications, in that they 'soil one's own nest' in the long run. This is especially so in the case of tourism, which to an extent depends on a pleasant and attractive environment.

An extreme view held by some environmentalists is that nature and its flora and fauna ought to be preserved and protected for their own sake, irrespective of the economic impact that such an exercise entails. The reason given to support this point of view is that environmental misuse has far-reaching effects. Unlike many economic mistakes, such as, for example, a loss of tourist inflow in one particular year which may be made up through better management the following year, environmental abuse may result in the irreversible extinction of a species within a particular habitat.

Some economists, on the other hand, do not give enough importance to environmental problems, principally because these are often external costs to the firm and do not fit properly into market-oriented policies. Like other undesirables, such as the stress arising from management, environmental dangers are often regarded as social costs with which society has to live in order to attain economic growth and development.

Fortunately, many environmentalists and economists do not maintain these extreme points of view, and take a more integrated and a more responsible approach towards economic and environmental well-being. This is the stand taken by the present author—who is an economist—in this paper. Environmental protection is considered as a good which is conducive towards economic well-being.

The paper is divided into five sections. Following this introduction, we shall briefly discuss the dependence of small islands on tourism. Section 3 considers the ecological dangers and benefits of tourism. The question as to who is to pay for environmental degradation associated with tourism is treated in Section 4, while Section 5 discusses the issue of sustainable development. Section 6 concludes the paper and puts forward a number of suggestions for the adoption of a tourism policy which integrates economic, environmental and cultural advancement.

2 SMALL ISLANDS AND TOURISM

2.1 Dependence on Tourism

The arguments proposed in this paper are to an extent applicable to all countries where international tourism exists, but they are especially pertinent to small islands, because these tend to depend on tourism to a very large extent for foreign exchange inflows and employment.

An analysis carried out by the present author indicates that during the second half of the 1980s, the global average ratio of foreign exchange income from tourism to GDP is around 1.7 per cent. The same ratio for Malta stood around 25 per cent during the same period, which is not much different from the average for all island countries taken together. In some instances, the ratio is as high as 82 per cent.¹

Many island governments have attempted to maximise their island's potential to attract tourists, and embarked on a policy to develop this industry through promotion campaigns, building of hotels and other tourist facilities, and so on. For many governments, the basic motive of their tourism policy is to earn foreign exchange.

Many small islands have a very large import bill, and income from tourism is regarded as a very important source of financing this bill. In many cases, attempts to develop exports markets in merchandise in small islands proved unsuccessful or not as successful as one would have wished. The relatively easier manner in which tourism yields foreign exchange has resulted in this sector being given priority.

For example, at the present time in Malta, the manufacturing sector is experiencing a number of difficulties, while the tourist industry is booming. Tourism contribution to GDP in Malta is much smaller than that of manufacturing, but the rate of growth of the former is much faster than the rate of growth of the latter sector.

¹ UNCTAD, *Handbook of International Trade Statistics*, 1990.

A characteristic of tourist trade is that it often leads to abuse of the environment², despite the fact that it is generally a good economic proposition³.

2.2 The Ecological Dangers of Tourism

Although, as will be shown in a later section, environmental problems should not all be placed at the door of tourism, it cannot be denied that tourism development does add problems in this regard. To be sure, no development is environmentally neutral. Even pro-environmental activity it self generates a degree of pollution.

In the case of Malta, and probably in the case of other islands, the growth of tourism has brought about the following environmental dangers:

- Increase in demand for building
- Increase in demand for waste disposal
- More use of environmentally dangerous products
- Increased demand for space
- Dangers to marine environment

2.2.1 Increase in demand for building

The construction 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. In some cases, building development is so fast that tourist facilities are offered long before sanitary and other facilities are installed. In a small island like Malta, where land area is one of the scarcest resources, such development reduces the space assigned to 'green areas' and completely changes the character of the town/village where it occurs. Both the St Paul's Bay and St Julians areas in Malta, which used to be lovely little fishing villages, have been completely transformed by building earmarked for business associated with tourism. Many would agree, that from an aesthetic point of view this transformation was not desirable.

² See Pigram (1980) and Budowski (1977).

³ See Eadington and Redman (1991), Briguglio (1991), and Sathiendrakumar and Tisdell (1989).

2.2.2 Increased demand for waste disposal

In many islands, one of the most dangerous environmental problems is disposal of human and domestic wastes. The problem is mostly caused by a system which has not developed in line with the demands of the native population—a problem made worse with the onset of tourism. Small islands tend to be quite densely populated. In Malta, without counting tourists, the population density exceeds 1000 per square kilometre. For this reason, the sewerage network in Malta is already very heavily taxed by the native population alone. The relatively large number of tourists, increasing the population by an equivalent of around 12 per cent during the summer months and by as much as 70 per cent in some tourist areas, renders the problems much worse. The outcome, as of this year (1991), is that the sewerage problem has got out of hand, with most of the beaches contaminated. The same can be said regarding household wastes. This is a very big problem in Malta, and tourism has of course accentuated it. Overfilled rubbish bins and waste disposal areas within a short distance of residential centres are common sights in Malta.

2.2.3 More use of environmentally dangerous products

The increase in tourism has brought with it increased use of environmentally dangerous products, such as plastic containers for water, and more 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 airplanes, speedboats, air-conditioning units, water treatment plants, and so on. Again here, the increase in demand for such products should not be attributable to tourism alone.

2.2.4 Increased Demand for Space

In many small islands, space is naturally very limited and this gives rise, as already stated, to relatively very high population densities. The intensive use of space on beaches, restaurants, roads and so on renders life quite intolerable for the residents, especially those living in tourist areas. Again referring to Malta by way of example, tourist concentration in the Sliema, St Julian's and St Paul's Bay areas reached 70 per cent of the population during

the July-September period during the second half of the 1980s. (The average stay per tourist in Malta is around twelve days, which is approximately 10 per cent of all days in June, July, August and September. The number of tourists in these months in 1990 was around 415,000, which is equivalent to 41,500 tourists staying the full summer, or 12 per cent of the total population of the whole island. However, tourists in Malta tend to concentrate in a few localities and hence the high ratio in localities mentioned).

2.2.5 Dangers to Marine Environment

In many instances, projects associated with tourism are located in coastal areas. Their construction and utilisation often fail to take into consideration the environmental requirements of the location. Apart from aesthetic considerations—which at times leave much to be desired—such projects, and the coastal roads leading to them, often lead to the destruction of the fauna and the flora of the area, and increase the problem of dumping human waste into the sea.

Having listed a number of dangers, and the list is by no means exhaustive, it is pertinent to emphasise that:

- i. the environmental dangers listed above would probably have existed in the absence of tourism. Tourism has intensified these problems, but not created them;
- ii. the problems could probably have been avoided or drastically reduced with proper planning. Once a country embarks on a policy of attracting tourists, it should expect an increase in demand on all its amenities, and it should also expect that the 'get rich quick' entrepreneur would place personal profit before long-term environmental conditions.

2.3 Some Ecological Benefits of Tourism

Although tourism is usually associated with environmental degradation in small islands, there are instances where this area of economic activity may be beneficial to the environment.

2.3.1 Enhancement of Environmental Awareness

In some cases, tourists are more environmentally aware than the local residents. For example, in Malta, dumping waste in residential areas, throwing rubbish in the streets 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. The typical tourist in Malta, and on many islands, comes from Western Europe, North America and other affluent countries, where environmental education is given more importance than is often the case in the host-islands themselves. There are instances where tourism may in fact be conducive to environmental care. For example, 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, if tourists are to be attracted. Looked at as an investment good, environmental protection is a pre-requisite for touristic development. In the case of Malta, where civic awareness as to cleanliness is not the order of the day, campaigns for keeping Malta clean are often based on the need to keep the island attractive for tourists.

2.3.2 Conservation of Trades and Places

It is possible that tourism helps promote the conservation of certain trades and places. There are many cases where traditional trades and crafts have been revived because of demand from tourists. Certain places of cultural heritage are more appreciated by tourists than by the islanders themselves. Such trades and places might have been neglected in the absence of tourist trade.

2.3.3 Alternatives to Tourism

Tourism industry has to be viewed in relation to alternative forms of production. Tourism in fact is much less environmentally dangerous than some forms of primary and manufacturing production. In many islands, such non-tourist industries have had devastating effects on the environment. Phosphate mining in Nauru is often cited as an example. One can also mention oil refining, transshipment, shipbuilding, intensive development of crops for exports, and so on. In Malta, for example, the building industry—mostly at the demand of Maltese residents—is the source of dust, devastation of the countryside, digging of quarries in scenic sights and so on. The drydocks are the main source of air, sea and noise pollution, and a major eye-sore, in the Cottonera area.

3 WHO IS TO PAY FOR THE DEGRADATION?

3.1 Tourism and Externalities

The environmental cost of tourism is often borne by society in general, and not by the polluters themselves (although the latter may also pay indirectly, if they form part of society suffering from pollution). The reason for this is that such costs are external to the producers and users of the tourist service.

A serious discussion on the environment, be it in relation to islands or to larger land masses, cannot disregard the theoretical implications of such externalities. There are goods which are common property in the sense that they are owned by no identifiable individual or firm and used by all with free access. Therefore no individual, as an individual, has an incentive to protect, conserve or improve it. Examples related to tourism are the sea, the air and the landscape. The environment in general may be defined a common property resource because no one has a defined property right over it.

An externality is a direct accidental by-product on a persons welfare of firms' profits arising from the action of the person or the firm. The characteristics of externalities is that their cost or benefits are not reflected in market prices. For a very long time,

economists have argued that if private consumption and production decisions have to be modified to take externalities into account, social welfare would increase.

An example of a positive externality of tourism is the benefits that the native population would obtain by environmentally beneficial tourist amenity, whereas an example of a negative externality is the pollution and waste emitted from hotels.

Unlike other types of resources, choices regarding public goods cannot be left to individuals acting on individual interests, since the market fails in this case. For example, tourist establishments do not include in the costs of production measures to deal with resource destruction and waste disposal. These are generally offered free of charge by the public authorities. Such environmental disutilities are not therefore paid for by the perpetrator of the disutility, and private costs would therefore be lower than the actual cost to society.

3.2 The Polluter Pays Principle

Since the costs just described are externalities, there must be some general principle on which the government should work. One solution often proposed is called 'The Polluter Pays Principle' (Garavalo 1991).

The Polluter Pays Principle has a number of attractions:

- i. it allocates costs of pollution prevention to the producer;
- ii. it serves as an incentive to minimise cost associated with environmental dangers;
- iii. it has some ethical advantages since the one who benefits from production bears the cost.

If the principle is to work, it must be a no-subsidy principle, so that the polluter has no incentive either to delay controlling pollution or to take insufficient methods to do so.

Of course, this principle is not easy to apply. First of all, the polluter has to be identified. For example, the contribution of a hotel to sewage pollution may be (a) caused by an inadequate public sewage network lying somewhere else in the island, and (b) the hotel may be the last chain in sewage and the individual contribution is difficult to monitor.

Also the 'pollution value added' of each producer needs to be identified, so that not all costs are placed on the final polluter. Generally, the final polluter uses, as input, products which have already caused a degree of pollution. In other words, the principle should also apply to intermediate goods, which in tourism are substantial. Moreover, it often happens that tourism becomes environmentally dangerous only because there is inadequate infrastructure. For example, an underdeveloped sewage network in the household sector could be the reason why a hotel's waste is pollution.

There is also the problem of establishing how much environmental danger is to be allowed to go free of charge? As stated earlier, no human action is environmentally neutral, and it is virtually impossible to privatise all these costs.

Having established how much should go free, there remains the problem of translation of environmental damage into monetary terms. This in turn would require the expertise of physical and ecological scientists, economists and geographers to identify the damage and to cost it.

The next problem relates to the magnitude of environmental costs as a ratio to total cost. Will a country lose competitiveness if it forces producers to pay for their pollution? Assuming that the costs of environmental dangers are identified, there still remains the problem that if certain environmental standards are imposed, tourism prices will increase, and the country would lose on international competitiveness compared to other countries which allow lower standards. Against this argument, one can say that tourism would be attracted as a result of better control on the environment and that new investors can be encouraged as a result of serious environmental protection.

3.3 Enforcement vs Incentives

The Polluter Pays Principle can be applied in two principal alternative ways:

- i. enforcement, and
- ii. providing incentives.

Enforcement and imposition of pollution costs onto the producer by the government is not generally regarded as a good proposition. Overall setting of standards is of course

very important in this regard, but it is generally not possible for a government to impose such standards to a satisfactory degree. The polluter would always find ways and means of avoiding the regulations. Apart from this, strict regulations tend to be expensive to administer. Again, once an offender is identified, and taken to court, he could take ages to pay fines (which generally do not compensate for the irreversible social damage caused).

Moreover, regulations only encourage the polluter to meet the minimum standards. The objective becomes one of avoiding detection or at most of appearing to adhere to the standards.

However, there are instances where government should interfere directly and foot the bill itself. These include:

- i. where grave socio-economic problems are involved;
- ii. where aid is given to develop new anti-pollution technology;
- iii. where aid is given to even out discrepancies in the cost of controlling pollution, limited to a well-defined transitional period.

The incentive-based approach generally receives more support from economists. Such incentives include indirect taxation on polluting activities, charges on effluent, and the auctioning of polluting rights. There are formidable problems here in establishing tax rates and charges, but this is also true with any taxed-based incentive policies. The most important consideration should be to make the producer economise on polluting activities.

4 SUSTAINABLE DEVELOPMENT

4.1 The Definition of Sustainable Development

Apart from the question of who is to pay for environmental degradation, there is the more important one related as to how such degradation is to be avoided or minimised. The question of sustainable development is often mentioned in this context, especially when considering touristic development. However, a review on this topic, given in O'Riordan (1988), shows that the term 'sustainable development' is given many interpretations. As Tisdell (1991) shows, it may refer to economic sustainability, ecological sustainability,

sustainability of the resource base and sustainability of cultural and community life. There is, however, an attempt to propose a working definition of the term (Farrell 1991).

The definition that we shall adopt here is that proposed by the Bruntland Report (WCED, 1987) which, loosely interpreted, states that no form of economic development can develop in the long term unless the economy is linked with environment and society interactively. This is especially true of tourism, since in this sector of economic activity, long-term development is incompatible with environmental degradation, principally because tourism itself is dependent, to varying degrees, on beautiful natural surroundings, absence of health risks and stable social relations.

4.2 Sustainable Development and Tourism

As stated elsewhere in this paper, economic advancement of whatever type will always involve changes, including environmental ones. Some of these are undesirable and irreversible. The sustainable development objective is an attempt to minimise the negative effects of change, without allowing any one of the three elements just mentioned to change to the detriment of the other.

Since, as indicated above, tourism tends to have a large impact on the environment, the issue of sustainable development is of direct relevance to this type of economic activity (Farrell and Runyan, 1991). Moreover, since small islands are of themselves already environmentally fragile, the issue becomes more important when island tourism is considered. As Beller *et al* note (1991, p.369): ‘nature allows very little margin of error for people living on small islands’.

In general, the attainment of sustainable tourism development implies a multidisciplinary and integrated approach. Of course, this is not an easy objective to attain since it requires fine tuning between a large number of what may be termed sub-objectives related to economics, ecology, culture, the resource base, and so on. Different people assign different importance to different aspects of development.

Moreover, and perhaps more importantly, implanting a policy based on sustainable development requires working definitions of ‘social profit’ and of ‘long-term’, since

sustainable development essentially implies trade-offs between social and private profit and between short-term and long-term gains.

Fortunately, attitudes seem to be changing in favour of a more integrated—and a more responsible—approach towards tourism development, where economic, environmental and cultural advancement are considered as mutually sustainable. This tendency is more obvious in affluent countries (for example, Canada, where the Land Report recommendations have had a large influence on development planning there), but it is increasingly taking root in small islands. In Malta, for example, special attention is being given to environmental protection, and environmental impact assessments are being required before the approval of tourist projects.

Ironically, the enhanced awareness of the need to protect the environment and to conserve the cultural heritage is perhaps the result of the economic affluence that tourism development—despite the fact that it has created environmental havoc in the past due to lack of regard in this respect—has brought in its wake. The rapid increases in personal incomes in Malta, partly generated by tourism itself, may have created a demand for ecological and cultural well being—a type of demand which may be associated with education and affluence.

5 CONCLUSION AND SOME SUGGESTIONS

Most goods are scarce, and fall under the principle of ‘you can’t have your cake and eat it too’. In other words, if we decide to have absolute environment protection (if this has any meaning at all, and if it can be attained in the absence of economic development), we may have to forego other things, including tourism. The question of environmental protection is therefore basically the same as that pertaining to other goods, namely using the environment, which is a scarce resource, for maximum progress, in conjunction with other goods.

In this paper, we have sought to propose a balanced view of the environmental dangers of tourism. It has been stated that many governments of islands—and, it can be

added here, the native populations as well—consider tourism a very good source of foreign exchange earnings and employment.

Many small islands are trying to develop or expand their tourist industry, and the degree of dependence on this form of economic activity is increasing. Even if it can be shown that such activity is environmentally detrimental, its economic advantages are formidable, and economic considerations often tip the balance at the expense of other considerations. After all, in many small developing countries, the most pressing need is to upgrade standards of living through economic development—which, fortunately, would give their populations the luxury to indulge in the environmental debates and to take concrete steps toward its protection.

The question hinges not on whether tourism should be relied upon, but whether the environmental damage it exerts can be reduced.

Many suggestions regarding how this can be done have been proposed by other authors, and I shall highlight a few of them here for the sake of emphasis.

5.1 Environmental Impact Assessment

In many cases, it is possible to examine certain projects before they are actually given the go-ahead. This is done by what is known as an Environmental Impact Assessment. The exercise involves the examination, analysis and assessment of planned activities with a view to ensuring that they are environmentally sound and promote sustainable development.

The assessment should contain a description of the potential direct, indirect and induced effects on the environment, 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 affects can be mitigated. Negative impact should of course be balanced against the positive economic impact—an exercise which requires the participation of expertise from different fields, including the physical sciences and economics.

5.2 Reduce Concentration

Some of the problems associated with tourism arise because too many tourists are concentrated in the same area at the same time. The solution to this problem would seem to be the promotion of low-season tourism and of cultural tourism in terms of the temporal dimension, and dispersion of tourist resorts in terms of the spatial dimension.

5.3 Setting of Standards

The government has to set certain standards which have popular support and which the producers would be expected to observe. Certain incentives need to be developed in this respect with the aim of internalising environmental damage, on the basis of 'the 'polluter pays' principle.

The setting up of standards presupposes a definition of sustainable development.

5.4 Sustainable Development

Tourism development implies activities which support and improve the standard of living and natural amenities, including the environment, of the citizens in the long run. This necessitates the conservation of natural environment and cultural heritage when implementing development plans, and stresses the need to combine economic with ecological and cultural well-being.

5.5 Planning and Monitoring

Many environmental problems arising from tourism are associated with the lack of long-term planning and monitoring exercises. The problems would probably have existed just the same in the absence of tourism, since in general, as stated earlier, tourism did not create these problems, but has only intensified them. With proper planning—which implies taking a long-term view of environmental use and abuse—and with proper monitoring of activities affecting the environment, the problems can be reduced. This of course applies to abuse by natives and by tourists, to islands and to larger land masses. The argument is of special significance to small islands in view of their small size and higher degree of dependence on tourism. It should be noted here that planning and monitoring exercises

need to be financed, and tourism is often one of the most important sources of finance for small islands.

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