



# 1

## Economic characteristics of the tourism sector

The purpose of this first chapter is to focus on a number of economic characteristics of the tourism sector. They are the fundamentals of many aspects of the economics of tourism to which we shall refer in further chapters of this book. However, before starting with an overview of the economic characteristics, let us define what we understand by 'tourism' and what do we not consider to be tourism.

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### What is tourism?

What is tourism? This is not such a simple question as it seems. Colloquially, free time, leisure, recreation, travel and tourism are used synonymously and are almost interchangeable. This is not quite correct. From a scientific and practical point of view, the reality is quite different. The case of Austria is a simple illustration. In 1999, based on the Tourism Satellite Account, tourism represented, in terms of value added (direct and indirect effect), 8.7 per cent of GDP. However, tourism and recreation together make up a total of 15.5 per cent of GDP (Franz *et al.*, 2001). The difference is clear.

In the tourism literature, a distinction is made between conceptual and statistical (technical or operational) definitions of tourism.

## Conceptual definitions

One of the oldest conceptual definitions of tourism was given by two pioneers of tourism research, Hunziker and Krapf (1942), who defined tourism as 'being a sum of relations and phenomena resulting from travel and stay of non residents, in so far a stay does not lead to permanent residence and is not connected with any permanent or temporary earning activity'. For a considerable time this definition was generally accepted – including by the AIEST (Association Internationale d'Experts Scientifiques du Tourisme) – although it had more than one shortcoming. For example, a stay in a hospital could be considered to be tourism, and a business trip would be excluded as being related to an earning activity. Moreover, under this definition non-residents were identified with foreigners – in other words, domestic tourism was totally excluded.

The AIEST discussed the definition once again on the occasion of the annual congress in Cardiff in 1981. This congress accepted the following definition:

The entirety of interrelations and phenomena which result from people travelling to and stopping at places which are neither their main continuous domiciles nor place of work either for leisure or in the context of business activities or study.

A clearer definition can be found at the British Tourism Society, which in 1979 adopted a definition based upon the work of Burkart and Medlik (1974):

Tourism is deemed to include any activity concerned with the temporary short-term movement of people to destinations outside the places where they normally live and work, and their activities during the stay at these destinations.

Within this definition we can identify the inclusion of those activities that are involved in the stay or visit to the destination. There is no insistence on overnight stays or foreign visits, and it allows for domestic as well as day visits (Gilbert, 1990).

According to Burkart and Medlik (1974) – and this still applies today – conceptually, tourism has five characteristics:

1. Tourism is an amalgam of phenomena and relationships rather than a single one
2. These phenomena and relationships arise from a movement of people to, and a stay in, various destinations; there is a dynamic element (the journey) and a static element (the stay)
3. The journey and stay are to and in destinations outside the normal place of residence and work, so that tourism gives rise to activities which are distinct from those of the resident and working populations of the places through which tourists travel and of their destinations
4. The movement to the destinations is of a temporary, short-term character
5. Destinations are visited for purposes not connected to paid work – that is, not to take up employment.

A conceptual definition that deserves special attention is the one given by Gilbert (1990) and proposed for a social understanding of tourism:

Tourism is one part of recreation which involves travel to a less familiar destination or community, for a short-term period, in order to satisfy a consumer need for one or a combination of activities.

The merits of this definition are several. It places tourism in the overall context of recreation; retains the need for travel outside the normal place of work habitation, and focuses on the reasons for travel.

### Operational or technical definitions

The main practical need for exact definitions of tourism and the tourist has arisen from the necessity to establish adequate statistical standards (Mieczkowski, 1990). Furthermore, many people, including tourism experts, have difficulty in considering business trips and vocational travel as tourism activities. They are often included with tourism because they respond to the characteristics described in the preceding section, and their economic significance is also the same (see Burkart and Medlik, 1974). Business travellers are pure consumers, and it is difficult or impossible in practice to separate them from those travelling for pleasure. The main difference is purpose, but most hotelkeepers or accommodation providers are unable to make a distinction between holidaymakers and business travellers.

In the opinion of Burkart and Medlik (1974), a technical definition of tourism must:

- Identify the categories of travel and visits that are and are not included
- Define the time element in terms of length of stay away from home (i.e. the minimum and maximum period)
- Recognize particular situations (e.g. transit traffic).

A well-known definition is the one recommended on the occasion of the United Nations Conference on Travel and Tourism held in Rome in 1963, although it should be recognized that the UN definition was not the first (see Committee of Statistical Experts of the League of Nations, ETC, IUOTO, OECD and IMF, in Gilbert, 1990). The UN Conference recommended the following definition of 'visitor' in international statistics:

For statistical purposes, the term 'visitor' describes any person visiting a country other than that in which he has usual place of residence, for any reason other than following an occupation remunerated from within the country visited.

This definition covers:

- *Tourists*, i.e. temporary visitors staying at least 24 hours in the country visited and the purpose of whose journey can be classified under the headings of

either (a) leisure (recreation, holiday, health, study, religion, and sport) or (b) business, family, mission, meeting.

- *Excursionists*, i.e. temporary visitors staying less than 24 hours in the country visited (including travellers on cruises).

The statistics should not include travellers who, in the legal sense, do not enter the country (for example, air travellers who do not leave an airport's transit area, and similar cases).

Later the phrase '24 hours' became a point of discussion, and was replaced by 'overnight' (United Nations Statistical Commission of 1967 and the IUOTO meeting of 1968, in Gilbert, 1990). This precision does correspond better to the reality (a trip with an overnight stay may last less than 24 hours), but is after all of minor importance.

The UN definition refers to international tourism (visiting a country other than that in which a traveller usually resides), but there is no reason to neglect domestic tourism. A person travelling from New York to California (domestic tourism) to visit the city of San Francisco is no less a tourist than is a Belgian visiting Paris (international tourism). The 1980 Manila Declaration of the WTO extends the definition implicitly to all tourism, both domestic and international. Excluded from the definition are returning residents, immigrants, migrants (temporary workers staying less than one year), commuters, soldiers, diplomats and transit passengers.

This was the standard definition for a long time, although it was not applied in all countries. In that respect, the USA is a typical example. Even within the USA the definition of tourism and tourists varies from state to state (De Brabander, 1992).

There was, however, still not a common language of tourism statistics. Many scientists and organizations were aware of the problem, and the early 1990s saw a long period of preparation, in which several international organizations participated (Eurostat, OECD, WTO and UN Statistic Division), to solve the problem. This ended, in 2000, with the adoption by the United Nations Statistical Commission of the *Tourism Satellite Account: Recommended Methodological Framework* (Eurostat *et al.*, 2001). The Vancouver Conference of 2001 was a celebration of 10 years of scientific and intellectual international cooperation leading to a consensus on the development of the tourism satellite account. This remarkable achievement by the tourism industry was the culmination of the life's work of the late Enzo Paci – the WTO's former chief of statistics (see Enzo Paci World Conference on the Measurement of the Economic Impact of Tourism, Nice, 1999, in Eurostat *et al.*, 2001). At the same time it was a reformulation of a technical definition of tourism which was (or should have been) accepted worldwide:

Tourism comprises the activities of persons travelling to and staying in places outside their usual environment for not more than one consecutive year for leisure, business and other purposes not related to the exercise of an activity remunerated from within the place visited.

where the persons referred to in the definition of tourism are termed 'visitors', a visitor being defined as:

Any person travelling to a place other than that of his/her usual environment for less than twelve months and whose main purpose of trip

is other than the exercise of an activity remunerated from within the place visited.

This definition differs in two respects from the former UN description: first, the maximum duration of stay (one consecutive year) outside the usual place of residence is determined; and secondly, 'usual place of residence' is replaced by the term 'usual environment'.

In the new definition, 'usual environment' is a key element. In the *Tourism Satellite Account: Recommended Methodological Framework* (Eurostat, 2001), this corresponds to the geographical boundaries within which an individual moves during his or her regular routine of life. The usual environment of a person therefore consists of the direct vicinity of his or her home place of work or study and other places frequently visited, and has several dimensions:

- Frequency – places that are frequently visited by a person (on a routine basis) are considered as part of the usual environment even though these places may be located at a considerable distance from the place of residence
- Distance – places located close to the place of residence of a person are part of the usual environment even if the actual spots are rarely visited
- Time – how much time does the visitor spend between leaving the place of residence and returning home?
- Definition – the definition of places where people perform routine activities (homework, shopping, study, etc.).

To determine the usual environment, there are two different approaches in survey research: endogenous and exogenous. In the endogenous approach, the researcher has to define distance and time thresholds and must indicate what is 'frequent'. The available international applications show how different the interpretations of the abovementioned dimensions are. Many factors are influential, including the size of the country, population density, spreading of regional city centres etc. In rural areas the usual environment can be quite large, whereas in an urban centre the people living in one part of the city might never (or seldom) visit another part although the distance between them is relatively small.

In the exogenous approach, visitors are supposed to indicate themselves if the place visited is within their usual environment. The latter method is preferred by the WTTC (World Travel and Tourism Council), but it is a very dangerous path because the interpretation of individuals is very subjective.

All the discussion seminars attended on the subject of 'usual environment' have led to the conclusion that there is no general rule. The researcher has to be very pragmatic. There is always a grey line between tourism and recreational activities, and between tourism and routine activities. In practice, this will not greatly influence research results.

## Dimensions of travel and tourism

Notwithstanding the many international and/or scientific definitions of tourism, there seems not to be a universally accepted definition. There is, however, more



# 7

## The economic impact of tourism

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### Introduction

Tourism can have a great impact on regions and, obviously, destinations. The dimension of tourism worldwide has an economical, social, cultural and environmental influence on tourism destinations (Mathieson and Wall, 1982), and the influence can be positive and/or negative. This chapter focuses on the economic impact. Some sociological, cultural and environmental impacts will be dealt with as cost elements in here and in Chapter 8.

What are the main aspects of an economic impact? They can be classified into seven major groups:

1. Income generation
2. Employment generation
3. Tax revenue generation
4. Balance of payment effects
5. Improvement of the economic structure of a region
6. Encouragement of entrepreneurial activity
7. Economic disadvantages.

Six major factors govern the magnitude of the economic impact:

1. The nature of the main facility and its attractiveness
2. The volume and intensity of expenditure

3. The level of economic development in the destination
4. The size of the economic base of the destination
5. The degree to which tourist expenditures recirculate within the destination
6. The degree to which the destination has adjusted to the seasonality of tourist demand (Mathieson and Wall, 1982).

Most of these generic advantages and disadvantages, and the factors just mentioned, will be developed in the different sections of this chapter. In the first section, 'tourism' is considered as a strategic dimension of regional and national economic development. Tourism has a number of comparative advantages relative to most other sectors in the development of backward areas. A later section examines the balance of payment effects, and will show that these effects are much more than inbound and outbound expenditures.

In tourism it is quite common to speak of direct and indirect effects, and most measurement methods make a distinction between each group of effects. To allow better understanding of those effects, we will explain the underlying mechanism. This brings us to the famous and magic 'tourism multiplier'. In fact, there is a whole variety of multipliers. Some clarification and demystification of the multiplier concept is necessary.

The main part of this chapter focuses on the measurement of income and employment generation. Special aspects concern tax-revenue generation, the impact of events, the qualitative aspects of employment in tourism, improvement of the economic structure of a region, and encouragement of entrepreneurial activity. Most of these aspects are interwoven with topics dealt with in other sections of this chapter.

### Tourism as a strategic dimension of economic development

Until relatively recently, tourism was not considered to be a vehicle for economic development. The first Lomé Conference for ACP countries, in 1975, rejected tourism as a sector to be supported in the developing process of less developed countries. At that time, the attitude towards tourism was rather negative in some publications (de Kadt, 1979) – tourism provoked leakages, lack of foreign exchange, inflation, etc. Fifteen years later, on the occasion of the fourth Lomé Conference, the attitude had completely changed. Tourism had become a very important vehicle for development. Why the radical change? In the 1980s many publications proved the benefits of tourism, and gradually the attitude of international organizations changed. The second Lomé Conference paid little attention to this, but by the third Lomé Conference, in 1985, the change of attitude was noticeable. Tourism at last received the interest it deserved.

Why was it so long before tourism was recognized as a valuable component of economic development? In the 1970s, many publications – reports, books and articles – were written by authors who had never been in a developing country and/or who had an inadequate economic background. Import leakages, income transfers, foreign ownership, tourism as a factor of inflation, destruction of culture, mono-industry and social impacts were the key words in many publications. It cannot be denied that all these negative factors exist to some degree in many destinations; however, from an economic point of view it is not realistic to deny positive factors either. Mass tourism is unimaginable without economic return.



Many benefits are mentioned in the literature, but the subject is as chaotic and diverse as the Tower of Babel. Frequently mentioned variables include expenditure, income generation, employment creation, foreign exchange earnings, tax receipts, social benefits, the tourism multiplier, the transaction multiplier, and many more benefits or presumed benefits. Very often these variables are not put into their right context or relationships.

To define the role of tourism as a strategic dimension in regional and national development, and as a background for the tourism multiplier (see below), we refer first to some notions of regional (destination) economics.

### Basic and non-basic activities

In regional development theory great emphasis is placed on the basic/non-basic approach, a distinction being made between basic and non-basic activities. A non-basic activity is defined as an activity that for economic reasons needs to be performed within the areas considered (e.g. shops, primary schools); a basic activity is one that, although performed within the boundaries of the area, need not to be located there (e.g. industrial plants, universities). It follows from this definition that non-basic activities are not exported to other areas; since the same holds for other areas, neither are there imports of those activities. By definition, therefore, there is no interregional trade of services or goods produced by non-basic industries. It should be emphasized that a basic industry is not necessarily an importing industry; it may export its products just as the area might import its products. In terms of a region's (nation's) balance of payments, a basic industry will reduce imports or contribute to exports (or both). It follows that basic activities generate initial income in the region. This income will be spent partly in the region, and the relationship to non-basic activities is quite evident.

However, the concept of non-basic activity is more complex than is generally presented. So far, we have linked non-basic activity to basic activities through the spending of consumers' income earned in basic activities, but there are also non-basic activities that originate in spending by the basic industries themselves. If basic industries purchase goods or services (e.g. transportation services), although part of these services may have to be performed within the area, they certainly are not non-basic in the sense used so far. These goods are produced, or these services are rendered, only because the basic industry is located in and producing within the region (Klaassen and Van Wickeren, 1975); their production is induced as a secondary production. Secondary effects can be called non-basic in so far as they must be produced within the region, and basic in so far as they need not. With the introduction of the secondary effects the distinction between basic and non-basic becomes vaguer, and a distinction between multipliers for different industries becomes necessary (see below).

Surprisingly, in regional economics, agriculture and industry are mostly classified in the group of basic activities, and tertiary activity is considered to be the non-basic group. The very term 'basic industries' illustrates that general idea; however, it is, of course, too rough a classification. Not all agriculture and industrial activities are basic, and not all services rendered are non-basic. Tourism is an excellent example of the latter, all the services rendered by the tourism sector of a region being exports to other regions. Its contribution to the balance of payments



of the region is by definition positive, and tourism generates initial income in the region. Tourism is also a good illustration of an activity that by its own spending supports other branches; when the tourist sector purchases goods (for instance, a hotel buying bread from the bakery) or services (e.g. transportation services) these may be produced in the region but cannot be compared with non-basic activities in the strict sense.

As a basic activity, tourism can be a development vehicle with comparative advantages for backward regions and developing countries.

### Comparative advantages of tourism

A tourist product is composed of several elements: attractions, facilities, transport, entertainment, image, etc. The basic element is the attractions, which can be of very different types. Many developing countries or developing regions in Europe are rich in natural or man-made attractions. A development based on these attractions offers the tourism sector some comparative advantages *vis-à-vis* other economic sectors.

The first comparative advantage is directly related to natural attractions (e.g. sun, beaches, mountains, etc.) and many cultural attractions (e.g. churches, castles, abbeys, museums, etc.). These attractions are raw materials that can become beneficial as attractions at limited cost, and the danger of exhaustion is more or less non-existent. As Mossé (1973) comments:

Besides, the host country may have been endowed by nature with an abundance of readily marketable assets for whose enjoyment tourists are willing to pay: sandy beaches, picturesque sites (mountains and forests), a sunny climate, and the remnants of ancient civilizations. Out of the 20 dollars, the tourist may well have gladly spent 5–6 dollars to enjoy these 'free utilities', as Bastiat would have called them, on whose supply the host country did not have to spend a penny, either in local or in foreign currency.

The question is how to internalize these benefits. The only channels are higher value added creation in the supplying enterprises and the related taxes.

This first comparative advantage should be situated in a broader context of international trade theory. The theories of factor endowments (Heckscher–Ohlin theory) and absolute advantage (Vellas and Bécherel, 1995) can be applied. The first theory posits that the international tourism specialization of a country will be directly linked to an abundance of the resource necessary to develop the supply of tourism products for which there is a demand. Vellas and Bécherel make a distinction between three categories of factor endowments:

1. Natural resources, culture and cultural heritage
2. Human resources
3. Capital and infrastructure resources.

The theory of absolute advantage (and technological advantage) is a development of Adam Smith's analysis of international trade. Absolute advantage plays a crucial role in international tourism. As Vellas and Bécherel put it:

Certain countries have unique tourism resources which can be either exceptional natural sites, like the Grand Canyon, or, more usually, architectural or artistic resources known all over the world. These

man-made resources motivate tourists to visit a country. Their importance in terms of international tourism factors is determined by their uniqueness which gives a country a monopoly or a near-monopoly.

This statement applies as well to natural attractions; the word 'countries' can be replaced by 'destinations'. Typical examples of such unique tourism resources are the Taj Mahal, the Borobodour Temple, the Angkor Wat, the Pyramids, the Acropolis, the Forbidden Palace, Bali, Macchu Pichu, the Iguacu Falls, the Norwegian Fjords, Paris, London, Venice, Bruges, Prague and Vienna, and so many others.

The second comparative advantage concerns the import content. There are grounds to believe that tourism on average has a lower import content than other basic economic sectors. A number of publications support this thesis (UNCTAD, 1971; Theuns, 1975). The reason is evident: the tourists are buying services that the local population can provide to a large extent. Furthermore, it is not too difficult – at least in most regions – to develop the agricultural sector, in the long run, towards the needs of the hospitality industry. Mossé supports this point of view. 'As a source of foreign exchange, tourism is on a par with other export industries, but with one difference: they [export industries] require costly inputs' (Mossé, 1973; Vanhove, 1977).

The third advantage is the very high growth rate noted earlier. This growth, together with the good prospects and high-income elasticity, makes tourism a preferential sector for economic development.

Fourthly, tourism has a stabilizing effect on exports. Export markets in raw materials are unstable, and therefore foreign earnings are uncertain. This is not the case with tourism products (either in terms of volume or price). The price obtained for raw materials is governed by the world market price, and is subject to terms-of-trade conditions. To avoid a deterioration of terms-of-trade, tourism development is often a solution. Mass tourism yields important amounts of foreign exchange, which allow the country to import manufactured goods. The counterpart is a limited quantity of resources. To quote Mossé (1973):

A balance of what is given and what is received should be struck not on the basis of the hours of work necessary, but in regard to the utility of the items exchanged. The utility of exports consisting of abundant wild fruit, stretches of sandy desert or trees growing by themselves in the forest, is insignificant, in contrast to the great utility of importing electrical and telephone equipment, transport facilities, etc.

Unfortunately, there is no universally accepted measure of utility and use must be made of costs expressed in money or man-hours.

The tourism sector should not, however, be presented in too optimistic a manner. Tourism is very sensitive to internal problems, political events, diseases, bad news, etc.

A fifth comparative advantage is related to the labour-intensive nature of the sector. This high labour intensity is notable in the accommodation sector, the sub-contracting sector, services, etc. This comparative advantage finds a lot of support in economic theory.

## Other benefits

Development of tourism on a large scale, based on mass tourism, creates external economies. Improvements in transportation networks, water quality and sanitation

facilities may have been prompted by the tourist industry, but also benefit other sectors of the economy. An international airport – a *conditio sine qua non* for tourism development – provides improved access to other regions for locally produced goods.

Another benefit is the generation of entrepreneurial activity. According to Mathieson and Wall (1982), the extent to which the tourism sector can establish linkages with local entrepreneurs depends on:

- The types of suppliers and producers with which the industry's demands are linked
- The ability of local suppliers to meet these demands
- The historical development of tourism in the destination area
- The type of tourist development.

In terms of technical polarization, backward linkages can be identified. When a number of big hotels are located in a region, there is an immediate demand for large volumes of agricultural products and different kinds of services. Local suppliers are often unable to meet this demand in quantity and quality. After a number of years, however, the imported supplies might decrease and the local supplies increase, depending on the ability of local suppliers to meet the new demands. Entrepreneurial activity may be further stimulated by the external economies created (de Kadt, 1979; Mathieson and Wall, 1982; Krippendorf *et al.*, 1982; Vanhove, 1986; Bull, 1995; Frechtling, 1994).

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### Economic disadvantages

Each coin has two sides. Benefits were dealt with in the preceding section, but there is no economic activity or project without costs. A distinction is made between private costs (e.g. a hotel) and external diseconomies. The costs the latter impose are called incidental costs. The sum of private costs and incidental costs is called the social costs of an activity. There is an extensive literature dealing with benefits and costs of tourism. Some authors have emphasized the cost side (Krippendorf, 1975; de Kadt, 1979), others have stressed the benefits (Archer, 1991a), and a third category pays attention to both sides of the coin (Mathieson and Wall, 1982; Bull, 1995; Frechtling, 1994).

It is often commented that few studies have attempted to pay attention to economic costs of tourism in a systematic way. Mathieson and Wall assert that research has been limited largely to the measurement of the more obvious costs, such as investment in facilities, promotion and advertising, transportation and other infrastructure. Most studies have failed to address the indirect costs, such as the importation of goods for tourists, inflation, the transfer of the profits, economic dependence and opportunity costs (Mathieson and Wall, 1982). Nevertheless, a correct assessment of benefits takes into account a number of these qualifications.

Indeed, all transfers and imports should be eliminated. As a consequence, leakages are taken into account and the tourist income multiplier is lower. However, local inhabitants might change their buying behaviour due to a 'demonstration effect' of tourists (e.g. purchase imported products instead of local ones).

It is agreed that opportunity costs must be considered. If labour or land is used for tourism its social cost to an economy is its opportunity cost – or the cost of the

opportunity of using it in the (presumably) next best activity. However, in most tourist countries or regions with a tourism vocation there is no full employment. The question is seldom 'manufacturing or tourism?' but very often 'tourism or unemployment?'. Even when an alternative activity can be retained, a tourism region with valuable resources starts from the free raw materials as a main advantage. Is it not remarkable that many objective 1 regions of Southern Europe, eligible for European Regional Development Fund support, have opted for tourism as a strategic development path?

Over-dependence on tourism can be a danger. The sensitivity of tourism demand to all kinds of external factors has been emphasized above. Tourism is susceptible to changes from within (e.g. price changes and changing fashions) and outside (e.g. global economic trends in the generating markets, political situations, religious confrontations and energy availability).

### Tourism and inflation

'Tourism produces inflation' is a frequently heard saying, and a very dangerous slogan. The relationship between tourism and inflation is more complex, temporal and local.

A high inflow of tourists during a season can provoke a rise in prices of many goods and services in the tourist region. Durand *et al.* (1994) assert that it is indisputable that in cities and tourist areas the prices for products and services are in general higher than in cities or regions where there is little or no tourism, and that in holiday resorts the prices for tourist services are higher in the peak season than in the rest of the year. This upswing of prices is presumably greater in poor regions than in richer ones. Tourists can afford to buy items at high prices, so retailers increase their prices of existing products and provide more expensive goods. This has two consequences: first, local residents have to pay more for their goods; and secondly, retailers selling to tourists can afford to pay higher rents and taxes, which are passed on to the consumer (Mathieson and Wall, 1982).

How far away is the impact noticed? Tourist demand is very often concentrated in a limited number of streets or areas. Local residents change their buying behaviour and move to other points of sale. Furthermore, tourists in general are only interested in a narrow range of goods and services, such as souvenirs, sport articles, clothes, beauty products, meals and special products (e.g. chocolates and lace in Bruges).

A different aspect is the price evolution of accommodation (hotels, rented apartments) and other facilities. In the short term, supply is inelastic and an upswing of mass tourism in a region may lead to higher prices. There is not always much discipline in the tourism sector. A substantial increase in demand is followed by price increases. Regions very often forget that they are in competition with other regions, and the movement of demand from one Mediterranean country to another is a well-known phenomenon.

It is said that mass tourism makes land prices higher. Growth of tourism creates additional demand for land, and competition from potential buyers forces the price of land to rise. The local inhabitants are forced to pay more for their homes. Are the increasing land values to be considered negatively? All owners, land-owners and local residents, profit from the additional value. From the

macro-economic point of view, the final result is a benefit. Furthermore, this effect is quite local.

All in all, the impact of tourism on local residents should not be overemphasized. The costs are largely compensated for by the benefits: greater wealth, more jobs and higher land values. However, there can be situations – when tourism demand is very high – where inflationary tensions in tourism spill over into the economy at large and contribute to a rise in general inflation. In some countries tourism demand represents 10 per cent and more of the GDP, and inter-sectoral linkages of tourism are intensive.

Another question is: what are the factors responsible for inflationary pressure in the tourism sector? The French authors Durand *et al.* (1994) make a distinction between demand and cost inflation in the tourism sector. First of all there is demand inflation, which results in:

- Seasonal demand
- Inelastic supply
- An insufficient market reaction (certain resorts or firms profit from an economic rent)
- Imported inflation due to international arrivals (impact of hard currencies and increase of the money mass).

Cost inflation is a consequence of a number of factors:

- Peak management
- High taxes on some tourist products and services.

However, prices cannot be increased without considering the consumer – given the law of supply and demand, which stabilizes prices. Many tourists have changed their destination from France to Spain and from Spain to elsewhere because of price differentials.

### Incidental costs of tourism

The costs emphasized by de Kadt, Krippendorf and many other authors are summarized very neatly by Frechtling (1994), and covered by the term 'incidental costs' or detrimental externalities or external diseconomies.

Incidental costs, according to Frechtling, lead to quality-of-life costs and public or fiscal costs. Indeed, the local population of a region affected by external diseconomies of tourism can choose to deal with them in one of three ways:

1. They may have to accept a lower quality of life than they enjoyed without tourists
2. They may redress the decline in their quality of life through public expenditure for which they pay taxes
3. They may directly impose monetary costs on the tourists through taxes and fees.

Table 7.1 summarizes a number of important categories of incidental costs that are related to tourism import. It is not certain that a specific volume of tourists will produce costs in all categories.

**Table 7.1 Possible direct incidental costs of tourism**

| <i>Life-quality costs</i>               | <i>Fiscal costs</i>   |
|---|---|
| Traffic congestion                      | Highway construction, police services, public transportation, port and terminal facilities        |
| Crime                                   | Police services, justice system   |
| Fire emergencies                        | Fire protection   |
| Water pollution                         | Water supply and sewage treatment   |
| Air pollution                           | Police services, public transportation  |
| Litter                                  | Solid waste disposal, police services   |
| Noise pollution                         | Police services, zoning   |
| Destruction of wildlife                 | Police services, park and recreation facilities, forestry maintenance, fish and game regulation   |
| Destruction of scenic beauty            | Park and recreation facilities, police services   |
| Destruction of social/cultural heritage | Maintenance of museums and historic sites, police services  |
| Disease                                 | Hospitals and other health maintenance facilities, sanitation facilities, food service regulation |
| Vehicular accidents                     | Police services, justice system   |

*Source:* Frechtling (1994).

Besides direct incidental costs, Frechtling (1994) distinguishes secondary incidental costs. Additional visitors lead to new businesses, or the extension of existing ones, which in turn require more employees and consequently a greater population. The latter imposes additional life-quality and fiscal costs on the community. Some of these costs for the additional residents are similar to those of additional visitors.

It is beyond the scope of this chapter to develop these indirect costs which are not generated directly by tourists, but indirectly. One example is very typical. Tourism demand is seasonal in many regions, and provides seasonal job opportunities. The region or country attracts a labour force that requires unemployment compensation and other income transfer programmes during the off-peak season.

### Balance of payments and tourism

For a long time, earning foreign currencies was considered to be the main benefit of international tourism. For many developing countries earning hard currencies has a vital significance, and tourism is a welcome source of the foreign currencies they need to finance necessary imports. The relative importance of tourism with respect to foreign currencies is far less important for developed countries.

Nevertheless, in many western countries in the 1950s and 1960s tourism was considered to influence the international liquidity position. It is not so long ago – in the 1960s – that France and the United Kingdom took the decision to restrict their citizens taking holidays abroad in order to support their balance of payments and, more particularly, to protect the value of their own national currency. This was a kind of tourism import quota. The impact of these restrictive measures could be serious for some destinations (e.g. the Belgian Coast suffered from the British and French decision in 1967), but the overall effect on the balance of payments for

the generating countries was rather limited. Some governments overestimated the role of international tourism on the value of the local currency. To get a better understanding of the role of tourism in the international liquidity position, we must define the place of the sector in the balance of payments. This is not limited to the travel account. This section should make it clear.

The balance of payments is 'an account which shows a country's financial transactions with the rest of the world. It records inflows and outflows of currency' (Tribe, 1997). It is a statement that takes into account the value of all goods, all services, all foreign aid, all capital loans and (in former days) all gold coming in and going out, and the interrelations underlying all these items (Samuelson, 1964; Bull, 1995).

### The structure of the balance of payments

The basic convention applied in constructing a balance of payments statement is that every recorded transaction is represented by two entries with equal values. One of these entries is designated a credit (positive), while the other is designated a debit (negative). In principle, the sum of all credit entries is identical to the sum of all debit entries, and the net balance of all entries in the statement is zero. In practice, however, the amounts frequently do not balance. Data for balance of payments estimated are often derived independently from different sources, and as a result there may be a summary net credit or net debit (i.e. net errors and omissions in the accounts). A separate entry, equal to that amount with the sign reversed, is then made to balance the accounts.

A balance of payments (IMF standard presentation) is composed of two main parts:

1. The current account, which includes
  - goods
  - invisibles or services (travel, transportation, other services)
  - income (compensation of employees, investment income)
  - current transfers
2. The capital and financial account, which refers to capital transfers and acquisitions/disposal of non-produced, non-financial assets, and financial assets and liabilities
  - capital account (e.g. migrants' transfers, debt forgiveness)
  - financial account (direct investment abroad, direct investment in the country)
  - portfolio investment (assets, liabilities)
  - financial derivatives
  - other investments
  - reserve assets.

As described above, there is generally a third and minor part: net errors and omissions.

Let us illustrate all this with a practical case – the balance of payments for Spain, a typical tourism destination.

From Table 7.2, it can be derived that tourism is a major export item for Spain (32.7 billion US dollars). Travel represents 18.7 per cent of the total exports of goods and services and 15.7 per cent of all credits in the current account. The net



**Table 7.2 The balance of payments for Spain, standard presentation, 2001 (millions of US dollars)**

|                                 | <i>Exports/credits</i> | <i>Imports/debits</i> | <i>Balance</i> |
|---------------------------------|------------------------|-----------------------|----------------|
| Current account                 |                        |                       | -15 082        |
| ■ Goods                         | 117 561                | -149 061              | -31 500        |
| ■ Services                      | 57 775                 | -33 516               | 24 258         |
| ■ Travel                        | (32 718)               | (-5961)               | (26 757)       |
| ■ Income                        | 19 796                 | -29 342               | -9545          |
| ■ Current transfers             | 12 567                 | -10 862               | 1705           |
| Capital and financial account   |                        |                       | 22 186         |
| ■ Capital account               | 5833                   | -872                  | 4960           |
| ■ Financial account             |                        |                       | 17 226         |
| ■ Direct investment<br>(abroad) |                        | -27 704               | -6164          |
| (in Spain)                      | 21 540                 |                       |                |
| ■ Portfolio investment          |                        |                       | -15 959        |
| ■ Assets                        |                        | -43 528               |                |
| ■ Liabilities                   | 27 569                 |                       |                |
| ■ Financial derivatives         |                        |                       | 47             |
| ■ Other investment              |                        |                       | 37 962         |
| ■ Reserve assets                |                        |                       | 1340           |
| Net errors and omissions        |                        |                       | -7104          |

Source: IMF, *Balance of Payments Statistics Yearbook* (2002).

travel balance amounts to 26.7 billion US dollars. However the travel balance of Spain in Table 7.2 shows only the top of the total tourism balance (see above). Let us now pay a little more attention to the travel balance of EU countries, Australia, Japan, USA and a number of developing countries specializing in tourism.

The share of tourism exports in total exports of goods and services of the countries in Table 7.3 varies from 46.3 per cent for Cyprus and 30.4 for Greece to only 2.6 per cent for Germany and the Netherlands and 0.7 per cent for Japan. All Mediterranean countries show a share of 8.2 per cent or more; all these countries register a positive net travel balance. Notice the high net negative travel balance of Germany and the United Kingdom. The net positive travel balance of the United States is striking; this is largely due to personal travel and not business travel.

A travel deficit in itself is not bad; it must be seen in the framework of the international trade theories. Many factors can be responsible for such a deficit: tourism supply, exchange rate, climate, and economic health of the country. The thesis of a balance in the travel account, which is sometimes put forward, is a dangerous one. We fully agree with Gray (1970) when he posits:

The idea of the desirability of balance in travel account f.o.b. might seem to argue for balance in all sub accounts of the balance of payments or particularly in the current balance. That this is a spurious doctrine which would contravene all mechanisms whereby nations gain from the exchange of goods and services needs no detailed investigation here. Such a concept, carried out to its ultimate, would debar trade in all categories

**Table 7.3 Travel balance per country, 2001 (millions of U.S. dollars) \***

| Country           | Travel credit (a) | Travel debit (b) | Travel balance (c) | Export goods and services (d) | $((a/d) \cdot 100)$ |
|-------------------|-------------------|------------------|--------------------|-------------------------------|---------------------|
| Austria           | 10 244            | -8 885           | 1 359              | 79 795                        | 12.8                |
| Belgium-Lux.      | 7 622             | -10 548          | -2 926             | 207 450                       | 3.7                 |
| Denmark           | 4 624             | -5 534           | -970               | 77 856                        | 5.9                 |
| Finland           | 1 437             | -1 852           | -415               | 48 776                        | 2.7                 |
| France            | 30 450            | -18 060          | 12 390             | 371 800                       | 8.2                 |
| Germany           | 17 200            | -46 120          | -28 920            | 657 450                       | 2.6                 |
| Greece            | 9 155             | -4 177           | 4 978              | 30 071                        | 30.4                |
| Ireland           | 2 753             | -2 869           | -116               | 98 565                        | 2.7                 |
| Italy             | 25 815            | -14 210          | 11 605             | 299 978                       | 8.6                 |
| Netherlands       | 6 710             | -11 993          | -5 283             | 255 875                       | 2.6                 |
| Portugal          | 5 464             | -2 102           | 3 362              | 34 582                        | 15.8                |
| Spain             | 32 718            | -5 961           | 26 757             | 175 336                       | 18.7                |
| Sweden            | 4 253             | -6 921           | -2 668             | 98 198                        | 4.3                 |
| United Kingdom    | 18 180            | -37 940          | -18 180            | 386 500                       | 4.7                 |
| Cyprus            | 2 006             | -427             | 1 579              | 4 329                         | 46.3                |
| Czech Republic    | 3 104             | -1 386           | 1 718              | 40 496                        | 7.7                 |
| Estonia           | 505               | -191             | 314                | 4 981                         | 10.1                |
| Hungary           | 3 920             | -1 306           | 2 614              | 35 778                        | 10.9                |
| Latvia            | 119               | -224             | -105               | 3 403                         | 3.2                 |
| Lithuania         | 383               | -218             | 165                | 6 046                         | 6.3                 |
| Malta             | 578               | -180             | 398                | 3 110                         | 18.6                |
| Poland            | 4 645             | -3 495           | 1 150              | 51 419                        | 9.0                 |
| Slovak Republic** | 443               | -296             | 147                | 14 317                        | 3.1                 |
| Slovenia          | 1 001             | -528             | 473                | 11 303                        | 8.9                 |
| Australia         | 7 693             | -5 807           | 1 886              | 79 909                        | 9.6                 |
| Japan             | 3 310             | -26 530          | -23 220            | 448 110                       | 0.7                 |
| Switzerland       | 7 509             | -6 350           | 1 159              | 123 552                       | 6.1                 |
| United states     | 90 090            | -62 670          | 27 420             | 998 030                       | 9.0                 |
| Kenya             | 308               | -143             | 165                | 2 981                         | 10.3                |
| Morocco           | 2 583             | -389             | 2 194              | 11 171                        | 23.1                |
| Mexico            | 8 400             | -5 702           | 2 698              | 171 142                       | 4.9                 |
| Thailand          | 7 075             | -2 924           | 4 151              | 76 226                        | 9.3                 |

\* Travel excludes passenger services, which are included in transportation; \*\* 2000.  
Source: IMF, *Balance of Payments Statistics Yearbook* (2002).

except those in which two-ways trade takes place and would be even more constraining than insistence upon bilateral balancing of trade with each individual trading partner.

### The real tourism external account

As noticed earlier, the travel account is only part of the story (see also the TSA in Chapter 2). To find out what tourism is worth to a country, we should include all international transactions that are in some way necessary because of tourism

**Table 7.4 Tourism external account according to Baretje and Defert**

| <i>Credit</i>                                  | <i>Debit</i>                                   |
|--|--|
| Tourist receipts from abroad                   | Tourist expenditures abroad                    |
| Exports of goods                               | Imports of goods (food and equipment)          |
| Transportation (payments by foreign companies) | Transportation (payments to foreign companies) |
| Foreign tourism investments                    | Tourist investment abroad                      |
| Dividends, interest and profit received        | Dividends, interest and profit paid out        |
| Training of foreign staff                      | Payments for training abroad                   |
| Income from national workers abroad            | Salaries repatriated abroad                    |
| Promotion                                      | Promotion                                      |
| Other services                                 | Other services                                 |
| Balance: deficit                               | Balance: surplus                               |

(Baretje and Defert, 1972; Durand *et al.*, 1994). These include not only final tourism payments, but also international payments for goods and services needed for investment in and operation of the tourism industry. The result can be termed the 'real tourism external account'. Baretje and Defert were the first to develop such a real tourism account (see Table 7.4). Later the WTO (1988) developed a standard model (see Table 7.5).

Both tables give a totally different view than the traditional balance of payments of the real significance of the international tourism transactions. However, it is not so simple to estimate all the different items.

In line with the preceding paragraphs, Airey (1978) divided the effects of tourism on the balance of payments into three categories: primary, secondary and tertiary effects. The primary effect refers to tourism receipts from abroad and payments of residents abroad. Secondary effects are the effects on the balance of payments of the direct tourist expenditures as they percolate through the economy. Secondary effects, therefore, do not require the initial visitor expenditure to have taken place in another country (Mathieson and Wall, 1982). They may appear in a number of different forms:

- Direct secondary (import hotels, marketing expenditure abroad, dividend payments to overseas investors etc.)
- Indirect secondary effects (imports of subcontractors)
- Induced secondary effects (expenditures permeate through the economy and this creates a multiplier effect).

Tertiary effects are flows of currency not initiated by tourist expenditures (purchase of travellers' requisites, export stimulus of foreign products – such as the purchase of ouzo at home after a visit to Greece). The distinction between primary, secondary and tertiary effects is interesting from the theoretical point of view, but difficult to identify in practice.

Finally, the travel account is drawn up according to two possible approaches. The first is the 'survey method', and is based on periodic surveys to measure tourist receipts and expenditures. This is the case in the United Kingdom and the United States. France, Germany and many other European countries, however, practise

**Table 7.5 A model of a real tourism external account**

| <i>Tourism accounts</i>                              | <i>Credit</i> | <i>Debit</i> | <i>Balance</i> |
|--|---------------|--------------|----------------|
| A. Service accounts                                  |               |              |                |
| A.1. international travel                            |               |              |                |
| 1. pleasure  |               |              |                |
| 2. professional                                      |               |              |                |
| 3. other purposes                                    |               |              |                |
| A.2. tourism services                                |               |              |                |
| 1. restaurants, bars, cafés                          |               |              |                |
| 2. hotels, etc.                                      |               |              |                |
| 3. international transport                           |               |              |                |
| 4. other tourism services                            |               |              |                |
| B. Income accounts                                   |               |              |                |
| B.1. earnings from work in tourism                   |               |              |                |
| B.2. earnings from tourism investments               |               |              |                |
| C. Transfer accounts                                 |               |              |                |
| C.1. private tourism sector                          |               |              |                |
| C.2. public tourism sector                           |               |              |                |
| I. Current account balance (A + B + C)               |               |              |                |
| D. Capital account                                   |               |              |                |
| D.1. direct tourism investment                       |               |              |                |
| D.2. portfolio tourism investment                    |               |              |                |
| D.3. investment in tourism property<br>(real estate) |               |              |                |
| D.4. other tourism investment                        |               |              |                |
| D.5. commercial credits related to<br>tourism        |               |              |                |
| D.6. loans to tourism enterprises                    |               |              |                |
| II. Basic tourism balance = (I + D)                  |               |              |                |

Source: Adapted from WTO (1988).

the *méthode bancaire* or bank method (Durand *et al.*, 1994). This method is based on financial regulations and exchange figures from banks and other financial institutions (Bull, 1995). Both methods have pros and cons, but the bank method has the big disadvantage that the purpose of a financial transaction is not always clear. Furthermore, in a monetary zone such as the euro-zone there are no longer exchange transactions by the individual tourist.

## The magic tourism multiplier

### The basics of the tourism multiplier

Mathieson and Wall (1982) define the tourist multiplier 'as a number by which initial tourist expenditure must be multiplied in order to obtain the total cumulative income effect for a specific time period'. This is a dangerous definition, as it is presented as a black box process and there is a variation in multiplier values;

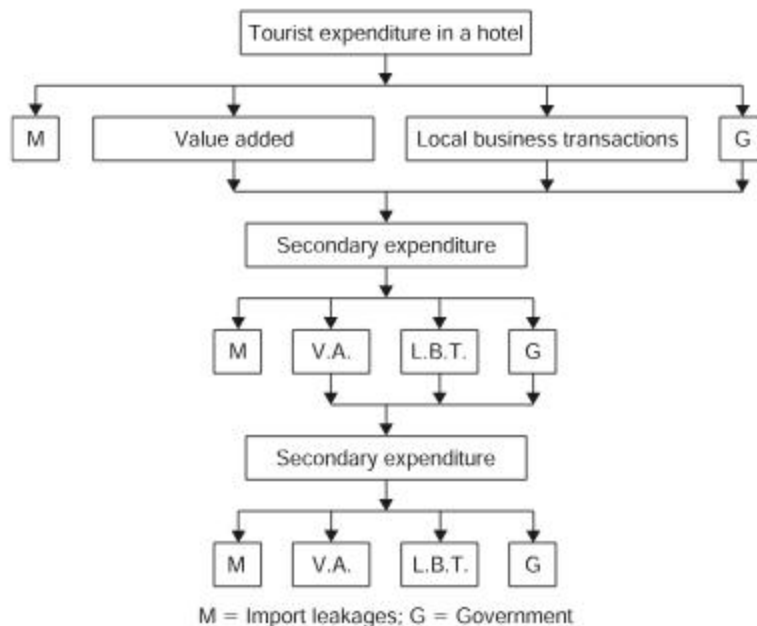


Figure 7.1 The tourism multiplier mechanism (adapted from Cooper *et al.*, 1993)

the income multiplier is one of them. A more precise description can be found in Fletcher and Archer (1992). It is based upon the recognition that the various sectors that make up the economy are interdependent. In addition to purchasing primary inputs such as labour, imports, etc., each sector will purchase intermediate goods produced by other establishments within the local economy. Therefore, any autonomous change in the level of final demand (domestic expenditures, inbound tourism or investments) will not only affect the industry that produces that final good, but also that industry's suppliers and suppliers' suppliers, etc.

Owing to this sector interdependence, any change in final demand will bring about a change in the economy's level of output, income employment and government revenue. The term 'multiplier' refers to the ratio of the change in one of the above variables to the change in final demand that brought it about. We can illustrate the mechanism with the following scheme (see Figure 7.1).

Taking the expenditure in a hotel as a starting point, to whom does this expenditure accrue? One part creates value added or factor remuneration in the hotel. It is direct income within the region concerned. A second part leads to local business transactions – a hotelier must restock inventories to provide for future sales (bread, meat, vegetables, fruit, etc.). A third part of the expenditure is used to pay profit taxes, local taxes, etc. to local, regional or national governments. A fourth part is spent on leakages such as imports of goods (e.g. whisky) and payment of profits to people and organizations outside the region or country.

Purchases of meat, bread and vegetables provoke, in turn, the same above-mentioned effects – income creation, intermediate purchases, public transfers and import leakages – for the butcher, the baker and the farmer, etc. This process

continues with a third and a fourth round. Following each round, the national or regional effects become smaller. The income created in successive rounds is called the indirect income, and the degree of magnitude of these indirect effects is governed by the extent to which business firms in the nation or region supply each other with goods.

However, a second derived impact can be noted. The more wages and profits (direct and indirect) due to the hotel expenditure rise, the more consumer expenditure increases – and this provides a further impetus to economic activity. Additional business turnover occurs, and this generates income. These are the so-called induced effects.

The indirect and induced effects together (called secondary effects – but note that this must not be confused with secondary expenditure) can be quite considerable in the absence of important leakages, such as savings (assuming that sufficient resources are available). In Figure 7.1, indirect and induced effects are presented together.

To summarize, there are three different effects:

1. The direct effect of a change in final demand refers to first-round effects
2. The indirect effect recognizes the need for an industry – subject to a change in final demand for its product – to make purchases from other industries within an economy in order to produce its output
3. The induced effect occurs as income levels rise throughout the economy as a result of the initial change in final demand, and a portion of the increased income is re-spent on final goods produced within the local economy. This additional local expenditure, arising from increased income, will generate further repercussive effects. The addition to total output, income, employment and government revenue caused by this re-spending of local income is known as the induced effect.

Two important observations should be made. First, the supplying firms should have of enough resources and spare factors of production. Secondly, there are few arguments to suggest that induced effects in tourism are different from the same effects in other sectors. The consumer behaviour of tourism earners cannot be so different from that of textile earners or other economic sectors.

## Determining factors

The first factor is the size of the destination – the smaller the size of the region, the bigger the leakages. The second factor concerns inter-sector linkages. A mono-structure, by definition, leads to high imports (see next section).

This brings us to the third factor, or possible leakages. There are three well-known leakages:

1. The saving quota of the population of the destination
2. The import quota, or the share of tourism expenditure that is spent to imported products
3. The tax quota, or the share going to the public sector.

A fourth possible factor is the supply constraints in the economy (see below).

## Types of multipliers

There is a lot of confusion about the term 'tourism multiplier'. In reality there are several types, each with its own meaning.

The most interesting is the *tourism income multiplier* (TIM). It shows the relationship between an additional unit of tourist spending and the changes that result in the level of income in the economy. However, in theory, any income accruing to non-nationals resident in the area is usually extracted from the sum.

With respect to the income multiplier, a further distinction is made between the orthodox income multiplier (also called 'ratio' multiplier) and the unorthodox income multiplier (see Mathieson and Wall, 1982; De Brabander, 1992; Mihalic, 2002). For both income multipliers, two types are distinguished:

1. Orthodox income multipliers
  - type I – (direct + indirect income)/direct income
  - type II – (direct + indirect + induced income)/direct income
2. Unorthodox income multipliers
  - type I – (direct + indirect income)/change in final demand (additional expenditures)
  - type II – (direct + indirect + induced income)/change in final demand (additional unit of spending).

These orthodox multipliers are of little value, although they can give an idea of the degree of internal linkages in the local economy. Much more emphasis should be given to the two types of unorthodox income multipliers. The multiplier with the greatest practical value and that makes the most sense is undoubtedly the *unorthodox income multiplier type I*.

Table 7.6 lists the values of the orthodox and unorthodox multipliers of type II of a number of sources; these statistics give an idea of the great differences in function of the destination and accommodation forms.

**Table 7.6 Values of various type II multipliers**

|  | <i>Direct income</i> | <i>Orthodox multiplier</i> | <i>Unorthodox multiplier</i> |
|--|----------------------|----------------------------|------------------------------|
| Gwynedd case (Archer et al., 1974)                         |                      |                            |                              |
| ■ Hotel  | 0.23                 | 1.43                       | 0.32                         |
| ■ Bed and breakfast  | 0.57                 | 1.10                       | 0.63                         |
| ■ Caravan  | 0.14                 | 1.49                       | 0.21                         |
| ■ Composite  | –                    | 1.34                       | 0.37                         |
| Seychelles (Archer)  | 0.34                 | 2.87                       | 0.88                         |
| Edinburgh (Vaughan, 1977)                                  |                      |                            |                              |
| ■ Hotel  | 0.20                 | 1.43                       | 0.29                         |
| ■ Bed and breakfast  | 0.14                 | 1.80                       | 0.26                         |
| ■ Caravan  | 0.16                 | 1.38                       | 0.22                         |
| ■ Composite  | 0.19                 | 1.47                       | 0.28                         |
| Flanders (Vanhove, 1993 – type I)                          |                      |                            |                              |
| ■ Composite  | –                    | 1.30                       | 0.57                         |
| Antwerp province (Yzewijn and De Brabander, 1989 – type I) |                      |                            |                              |
| ■ Composite  | –                    | 1.36                       | 0.57                         |



Looking at Table 7.6, an expenditure of 100 euros in Edinburgh leads to a direct income of only 19 euros and the sum of direct, indirect and induced effects amounts to 28 euros; these effects are of course higher from the point of view of Scotland or the United Kingdom – the larger the region, the lower the leakages. Notice the very different effects per accommodation type.

Archer and Fletcher (1990) have compiled a number of income multipliers (probably unorthodox income multipliers: (direct + indirect + induced income creation)/direct income creation) from reports and publications. The calculation of these multipliers is based on different methods and refers to different periods. Some of them are listed in Table 7.7 to illustrate how different they can be.

It is obvious from Table 7.7 that the larger the area, the higher the corresponding tourism multiplier value. The value of the multiplier is determined by the structure of the economy, the inter-sector relations, the import content, and the nature of the tourism product etc.

As stated above, the greatest interest is in the unorthodox income multiplier of the type (direct + indirect income creation)/tourist expenditure. With the knowledge of the expenditure and the tourism income multiplier, direct and indirect income creation can be estimated. The crucial point is the knowledge of TIM, which is unknown. However, TIM-values can sometimes be used for countries and/or destinations with similar products and general economic circumstances.

One precaution should be mentioned. There is quite often confusion between the terms ‘multiplier’ and ‘multiplicand’. The quantity of expenditure is basically the multiplicand. However, not all the expenditure is available to create income in the destination; some tourist expenditure never enters the economy at all (e.g. a rented camper van in Spain, but the camper van owner lives in Paris and thus the rental charges do not enter Spain). The same applies to package tours; a large proportion of the money paid by the holidaymaker accrues to airlines from outside the destination.

A second multiplier is the *employment multiplier*. This multiplier describes either the ratio of the direct and indirect (secondary) employment generated by additional tourism expenditure to the direct employment alone, or the amount of employment generated by a given amount of tourist spending. Similarly to the income multiplier, a distinction can be made between orthodox and unorthodox types. The tourism sector is characterized by many part-time

**Table 7.7 A selection of income multipliers from reports and publications**

| <i>Country/region</i>   | <i>Multiplier value</i> |
|-------------------------|-------------------------|
| Turkey                  | 1.96                    |
| United Kingdom          | 1.73                    |
| Ireland                 | 1.72                    |
| Egypt                   | 1.23                    |
| Bermuda                 | 1.17                    |
| Missouri State (USA)    | 0.88                    |
| Gwynedd, North Wales    | 0.37                    |
| East Anglia, UK         | 0.34                    |
| City of Winchester (UK) | 0.19                    |

workers, and therefore all jobs should be converted into full-time equivalent job opportunities.

Any tourism employment multiplier starts from three assumptions:

1. Each productive sector fully utilizes its current labour force
2. There is spare capacity in the labour force
3. There is no change in the capital/labour mix.

The next two multipliers are very similar to each other. Because most tourism products are not 'stocks', the terms 'sales' and 'output multipliers' are more or less synonyms.

*The sales or transactions multiplier* measures the effect of an extra unit of tourist spending on economic activity within the economy; the multiplier relates tourism expenditure to the increase in business turnover that it creates. The *output multiplier* relates a unit of tourist spending to the resultant increase in the level of output in the economy (this is very similar to the sales multiplier; see Fletcher and Archer, 1992). While the sales multiplier considers only the level of the sales that result from the direct and secondary effects of tourism spending, the output multiplier takes into account both the levels of sales and any real changes that take place in the level of stocks. The sales multiplier in the Archer study for the county of Gwynedd, North Wales, was 1.46; the corresponding income multiplier was 0.32 (Archer, 1991b). A sales multiplier, after all, is not of such great importance. Indeed, a clear distinction should be made between value added and turnover; value added (income creation) is a part of turnover creation. A destination is only interested in the generated value added and employment. However, during the 1960s the turnover effect of Clement (1961) was considered to be the real multiplier in many tourism circles. Clement's transaction multiplier was equal to 3.48, and several tourism experts and politicians used this multiplier whether it was relevant or not. The funniest thing was that in many tourism circles, this was considered to be the same in all countries and all destinations.

*The government revenue multiplier* demonstrates how much government revenue is created by each additional unit of tourist expenditure (taxes, charges, etc., less grants).

*The import multiplier* demonstrates the value of imported goods and services associated with each additional unit of tourist expenditure.

It must be clear that the various types of multipliers are intrinsically linked. Let us take an example:

|                            |       |
|----------------------------|-------|
| Tourist expenditure        | €1000 |
| Output generation          | €2500 |
| Direct income generation   | €350  |
| Indirect income generation | €200  |
| Induced income generation  | €200  |

In this case the Keynesian multiplier is 0.75, the ratio multiplier (total income generated to direct income) equals 2.14, and the output multiplier is 2.5.

### How can the TIM values be defined?

This section is devoted to the income multiplier – the orthodox multiplier and the unorthodox multiplier (see Bull, 1995). The traditional Keynesian multiplier formula is equal to:

$$k = \frac{1}{1 - c + m} = \frac{1}{1 - MPC} \quad (7.1)$$

where

k = income multiplier  
 MPC = marginal propensity to consume  
 MPS = marginal propensity to save.

However, account must be taken not only of the saving quote, but also of the taxation on income and the expenditure on imports. These are two additional leakages from extra local consumption-income circulation. Equation (7.1) therefore becomes:

$$k = \frac{1}{MTR + MPS + \{[1 - MTR - MPS]MPM\}} \quad (7.2)$$

where

MTR = marginal tax rate  
 MPM = marginal propensity to import.

With an MPS value of 20 per cent; an MTR equal to 30 per cent and an MPM on consumption expenditure equal to one-third, the multiplier k equals 1.5.

So far the assumption has been that all the original tourism expenditure turned directly into direct and indirect income, but this may not be the case. Very often some of food and drink in a hotel is imported. There is even tourist expenditure that never enters the economy – for example, payments for transport operated by foreign carriers, foreign-owned lodging, etc. In this case, equation (7.2) becomes:

$$k = \frac{1 - L}{MTR + MPS + \{[1 - MTR - MPS]MPM\}} \quad (7.3)$$

or

$$k = \frac{1 - L}{\text{leakages}}$$

where L = the immediate leakage attributable to tourist spending not entering the economy, or the need to import goods, services and factors to provide directly for tourists' needs.

With the same parameters as for equation (7.2) and L equal to 40 per cent, the tourism multiplier k is not higher than 0.9.

The developed equation 7.3 is far too simplistic, and is unable to measure variations in the form and magnitude of sectoral linkages and leakages out of the destination's economy during each round of transactions (Cooper *et al.*, 1993). Cooper *et al.* posit that 'Even the most complex and comprehensive Keynesian models developed for some studies are unable to provide the level of detail that is required for policy making and planning'. Therefore they suggest using *ad hoc* models.

### Ad hoc models

*Ad hoc* models are similar in principle to the Keynesian approach. They are suited to regional analysis, where it may be impractical or too expensive to undertake a full input-output analysis.

The simplest *ad hoc* model is shown in equation 7.4:

$$A \cdot \frac{1}{1 - BC} \quad (7.4)$$

where

A = the proportion of additional tourist expenditure remaining in the economy after first-round leakages – i.e. A equals the (1 - L) expression in the Keynesian model

B = the propensity of the local people to consume in the local economy

C = the proportion of expenditure by local people that accrues as income in the local economy.

More advanced models have been developed to calculate tourist multipliers to estimate the effect of expenditure on income and employment. One of these models was developed by Archer and Owen (1971):

$$\sum_{j=1}^N \sum_{i=1}^n Q_j K_{ji} V_i \cdot \frac{1}{1 - c \sum_{i=1}^n X_i Z_i V_i} \quad (7.5)$$

where the first part of equation 7.5 is direct and indirect income generated:

j = each category of tourists, j = 1 to n

i = each type of business establishment, i = 1 to n

Q<sub>j</sub> = the proportion of total tourist expenditure spent by the jth type of tourist

K<sub>ji</sub> = the proportion of expenditure by the jth type of tourist in the ith category of business

V<sub>i</sub> = direct and indirect income generated by unit of expenditure by the ith type of business

and the second part includes the additional income generated by re-spending of factor earnings by resident population:

X<sub>i</sub> = the proportion of total consumer expenditure by the residents of the area in the ith type of business

$Z_i$  = the proportion of  $X_i$  that takes place within the area  
 $c$  = the marginal propensity to consume.

### The multiplier and input–output analysis

Input–output analysis provides a general equilibrium approach to measuring economic impacts, rather than the partial equilibrium approach used in the methods discussed above. The input–output approach is very often used to estimate the income and employment generation; the corresponding multiplier is a derived product. It can be considered to be the best method to estimate income and employment multipliers. Input–output analysis is concerned with interrelations arising from production; the main function of inter-industry accounts is to trace the flow of goods and services from one production sector to another. Table 7.8 shows the structure of a traditional input–output table. This table, which is called a transactions matrix, covers all the goods and services produced in an economy (country, region, destination). It is distinguished by the fact that production activities are grouped together into a number of sectors. Tables in actual use range in size from about 25 to 100 or more productive sectors.

Each sector appears in the accounting system twice, as a producer of outputs (by row) and as a user of inputs (by column). The elements in each row of the

**Table 7.8 A basic input–output table**

| Sales to                      | Intermediate demand sectors |          |          |          |              | Final demand $Y$ | Output |
|-------------------------------|-----------------------------|----------|----------|----------|--------------|------------------|--------|
|                               | 1                           | 2        | 3        | 4        | ... n        |                  |        |
| Purchases From                |                             |          |          |          |              |                  |        |
| Sector 1                      | $x_{11}$                    | $x_{12}$ | $x_{13}$ | $x_{14}$ | ... $x_{1n}$ | $Y_1$            | $X_1$  |
| Sector 2                      | $x_{21}$                    | $x_{22}$ | $x_{23}$ | $x_{24}$ | ... $x_{2n}$ | $Y_2$            | $X_2$  |
| Sector 3                      | $x_{31}$                    | $x_{32}$ | $x_{33}$ | $x_{34}$ | ... $x_{3n}$ | $Y_3$            | $X_3$  |
| Sector 4                      | $x_{41}$                    | $x_{42}$ | $x_{43}$ | $x_{44}$ | ... $x_{4n}$ | $Y_4$            | $X_4$  |
| ...                           | ...                         | ...      | ...      | ...      | ...          | ...              | ...    |
| ...                           | ...                         | ...      | ...      | ...      | ...          | ...              | ...    |
| Sector n                      | $x_{n1}$                    | $x_{n2}$ | $x_{n3}$ | $x_{n4}$ | ... $x_{nn}$ | $Y_n$            | $X_n$  |
| Remuneration of factor labour | $W_1$                       | $W_2$    | $W_3$    | $W_4$    | ... $W_n$    | $W$              | $W$    |
| Profits/dividends             | $P_1$                       | $P_2$    | $P_3$    | $P_4$    | ... $P_n$    | $P$              | $P$    |
| Taxes                         | $T_1$                       | $T_2$    | $T_3$    | $T_4$    | ... $T_n$    | $T$              | $T$    |
| Imports                       | $M_1$                       | $M_2$    | $M_3$    | $M_4$    | ... $M_n$    | $M$              | $M$    |
| Total inputs                  | $X_1$                       | $X_2$    | $X_3$    | $X_4$    | ... $X_n$    |                  | $X$    |

where:

$x_{ij}$  = all intermediate deliveries

$X$  = output

$Y$  = final demand composed of private consumption, investment, government expenditure and exports

$M$  = imports.

table show the disposition of the output of that sector during the given accounting period. It is composed of two parts: the intermediate deliveries ( $x_{12}$  shows the deliveries from sector 1 to sector 2), and the final use. With respect to tourism, the final use relates to domestic consumption, inbound tourism (or exports), tourism investment and government expenditures.

The role of a sector as a purchaser of inputs is shown in a column. Each column is composed of three elements:

1. Purchases from other sectors (e.g.  $x_{12}$  means that sector 2 purchases from sector 1)
2. Primary inputs (wages, capital returns, taxes); this comprises the value added of the sector
3. Imports.

Transactions are usually recorded at the producer's price rather than at the purchaser's cost, which means that trade and transport margins are ascribed to the using sectors.

The separation between intermediate and final use and between produced and primary inputs leads to four types of transactions, which are shown in four sections of Table 7.8.

- Section 1 comprises the main part of the inter-sector accounts. Each entry  $x_{ij}$  indicates the amount of commodity  $i$  used by sector  $j$ .
- Section 2 contains the final use of produced goods and services; in practice broken down by major types of use (C, I, E and G)
- Section 3 (the bottom left-hand section) shows each sector's purchases of primary inputs (W, P and T) and imported goods and services
- Section 4 contains the direct input of primary factors to final use (e.g. government employment and domestic service).

It is very important to notice that the 'tourism sector' is never registered as a single sector in an input-output table; tourism consumption is spread over several sectors (see Chapter 1).

The relationship between the different parts of an input-output table can be written in algebraic terms (to ease the presentation, all types of final demand are represented by a column vector  $Y$ ):

$$X = AX + Y \quad (7.6)$$

$$X - AX = Y$$

$$(I - A)X = Y$$

$$X = (I - A)^{-1}Y$$

$$\Delta X = (I - A)^{-1}\Delta Y \quad (7.7)$$

where

$X$  = vector of total sales of each sector

$Y$  = vector of final demand

$A$  = a matrix of inter-sector transactions and  $(I - A)^{-1}$  is the inverse matrix of the transaction coefficients

$I$  = unit matrix.

A change in the level of  $Y$  ( $\Delta Y$ ) will create an increase in the level of activity in the economy ( $\Delta X$ ) (see output multiplier). With respect to the income multiplier, we are only interested in income generation.

Direct income creation can be calculated using the formula:

$$Y_d = \hat{B}_k \cdot b \quad (7.8)$$

where

$Y_d$  = direct income generation

$\hat{B}_k$  = diagonal matrix of income coefficients

$b$  = column vector of tourist expenditure after elimination of imports and VAT.

In the next step, the indirect income generation is calculated:

$$Y_t = \hat{B}_k (1 - A)^{-1} \cdot b \quad (7.9)$$

where

$Y_t$  = direct and indirect income creation

$(1 - A)^{-1}$  = inverse matrix.

Indirect income generation is the result of subtracting direct income (equation 7.8) from the total income generation (equation 7.9).

Now we have all the ingredients to calculate the orthodox and unorthodox income multiplier type I. We have only to apply the definition. To avoid any misunderstanding, income is sometimes only one part of the total value added; in most cases it comprises all items of value added. The same exercise can be applied for all aspects of value added and tax revenue. For the Seychelles, Archer calculated an average tourism multiplier for all value added components (direct + indirect + induced) of 0.88; the government revenue amounted to 0.28 per cent of tourism expenditure.

It is important to be aware that Table 7.8 and the abovementioned formulae are a simplification of a normal presentation and application of input-output analysis. Nevertheless, they give the basic principles. More refined methodology is beyond the scope of this publication.

### Some remarks

Additional production of tourism services requires the commitment of resources that could otherwise be used for alternative activities (Cooper *et al.*, 1993). If labour is in abundance, there is no problem. The situation changes when labour or other resources are not abundant. In the latter case, meeting the tourists' demands may involve the transfer of labour from other activities to the tourism sector. This provokes an opportunity cost or income foregone (see Chapter 8) which is often not considered in the estimation of the economic impact (Archer, 1991). When there is a real shortage, there may be the need to import labour. This will result in higher import leakages, as income earned from this imported labour may, in part, be repatriated. There can be a similar situation with the use of capital resources.

A second comment is linked to the first. It concerns the displacement effect. According to Cooper *et al.* displacement can take place when tourism development



occurs at the expense of other economic activities and is referred to as the opportunity cost of the development. Displacement is more commonly referred to when a new tourism investment is seen to take away tourism demand from existing firms – for example, a successful big new hotel complex may reduce the turnover of existing hotels. As a consequence, the overall tourism activity may not (or may only partly) have increased (see Chapter 8).

A third remark is of a completely different nature. The use of input–output analysis poses the problem of insufficient correspondence between the sector in an input–output table and the data derived from visitor expenditure surveys. As a consequence, the tourist expenditure has to be deconstructed to fit the sectors defined in the existing input–output table. A loss of accuracy is the logical result.

The final comment concerns the static character of most multiplier methods. They assume that production and consumption functions are linear, and that inter-sector expenditure patterns are stable (Cooper *et al.*, 1993). Furthermore, they assume that all sectors are able to respond to additional demand (supply capacity condition; availability of factor resources). The models are also based on constant relative prices, and they suppose no change in technology (Archer, 1991).

It must be clear that multiplier analysis does not measure the long-term benefits for a destination due to the growth of tourism (Archer, 1991; Cooper *et al.*, 1993).

### Measurement of income generation

The preceding section is a good introduction to measuring the impact of tourism on income. The two basic driving forces for the tourism sector are expenditure and investment, both of which are essential elements of final demand in an input–output table. Receipts in foreign exchange are a component of expenditure, and as such the export element of final demand. Foreign exchange earnings in tourism can be of great importance in certain countries – Spain is a good example.

The key elements of the final demand, tourism expenditure (tourism export included) and tourism investment, are the basis of two major benefits: income and employment. In other words, what does tourism create in terms of income and employment generation? As such, there is a relationship between the four key variables in the tourism sector: expenditure and investment on the one side, and income and employment on the other.

Between these four key variables there are special links. For example, investments depend on the expenditure in the present and the future. In turn, investments can stimulate expenditure.

There is also a linkage of the key components with other aggregates. Government receipts in tourism are a derivative of expenditure and investments. In principle, each economic activity yields returns to the public sector, such as direct taxes, VAT, company taxes, social security receipts etc. These returns are a function of the key variables, as is the case for any other economic sector.

To measure income generation, different methods have been developed. The most commonly applied are:

- The national accounts method (simplified)
- The Henderson–Cousins method
- The input–output approach

# Chapter 5

## The socio-cultural impacts of tourism

### Learning objectives

At the end of this chapter you should be:

- able to describe in your own words the nature of socio-cultural impacts of tourism;
- aware of range of socio-cultural impacts of tourism and aware of the context in which these occur;
- able to discuss the implications that these impacts have for the good management of the tourism industry.

## Introduction

Any discussion of socio-cultural impacts of tourism will require reference to and discussion of meanings of the terms society and culture. Sociology is the study of society and is concerned with people in groups, their interaction, their attitudes and their behaviour. Culture is about how people interact as observed through social interaction, social relations and material artefacts. According to Burns and Holden (1995), culture consists of behavioural patterns, knowledge and values which have been acquired and transmitted through generations. Burns and Holden (1995, p. 113).also indicate that 'culture is the complex whole which includes knowledge, belief, art, moral law, custom and any other capabilities and habits acquired by man as a member of society'.

## Key perspectives

This chapter is concerned with the study of the impacts of tourism on people in groups, and this includes both residents of tourism areas (such people are usually referred to as hosts) and tourists themselves. It also concerned with impacts on the culture of the host population (and with any effects on the culture of the visitors themselves). The way in which culture can be used and even packaged to promote tourism, and hence the subsequent effects this has on culture are also topics investigated.

Cultural attractions in relation to tourism include the following (Ritchie and Zins, 1978):

- handicrafts
- language
- traditions
- gastronomy
- art and music
- history of the area/including visual reminders
- types of work engaged in by residents
- architecture
- religion (including visible manifestations)

- education systems
- dress
- leisure activities.

Before proceeding with a discussion of socio-cultural impacts, it is worth considering once again the influences on the impacts of tourism which were presented in Chapter 3. All factors discussed there are important in relation to socio-cultural impacts. Clearly, a key influence is 'who is involved' and the 'activities engaged in' will be significant. Of particular importance, in relation to socio-cultural impacts of tourism, is the nature of both visitors and host populations. The interaction of the two groups will be a major issue in affecting the types of impact. As Burns and Holden (1995) argued when there is a large contrast between the culture of the receiving society and the origin culture, then it is likely that impacts will be greatest.

Some of the more beneficial impacts of tourism on society include the following: the creation of employment; the revitalization of poor or non-industrialized regions; the rebirth of local arts and crafts and traditional cultural activities; the revival of social and cultural life of the local population; the renewal of local architectural traditions; and the promotion of the need to conserve areas of outstanding beauty which have aesthetic and cultural value (Mason, 1995). In developing countries in particular, tourism can encourage greater social mobility through changes in employment from traditional agriculture to service industries and may result in higher wages and better job prospects.

However, tourism has the reputation for major detrimental effects on the society and culture of host areas. Tourism can cause overcrowding in resorts, which can cause stress for both tourists and residents. Where tourism takes over as a major employer, traditional activities such as farming may decline. In extreme cases, regions can become over-dependent on tourism. Residents may find it difficult to co-exist with tourists who have different values and who are involved in leisure activities, while the residents are involved in working. This problem is made worse where tourism is a seasonal activity and residents have to modify their way of life for part of the year. In countries with strong religious codes, altered social values caused by a tourist invasion may be viewed as nationally undesirable.

One of the more significant socio-cultural impacts of tourism is referred to as the 'demonstration' effect. This depends on there being visible differences between tourists and hosts. Such a situation arises in many developing countries. In the demonstration effect, it is theorized, that simply observing tourists

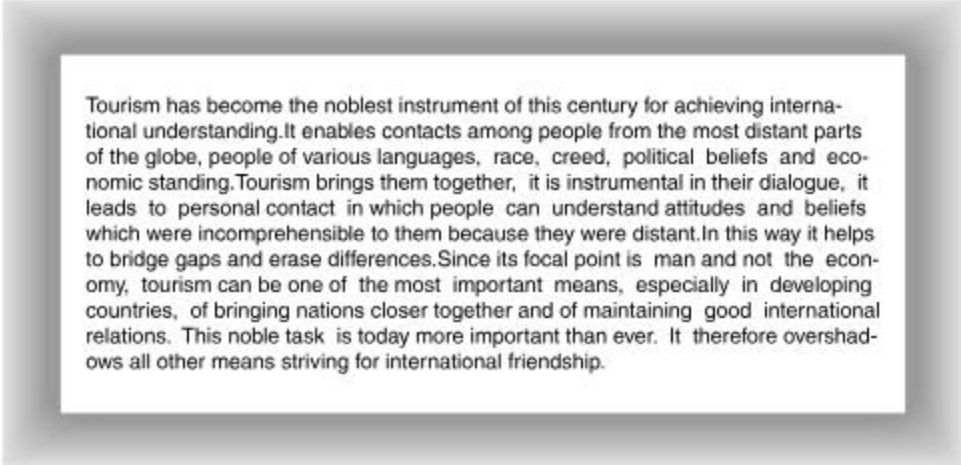
will lead to behavioural changes in the resident population (Williams, 1998). Under these conditions, local people will note the superior material possessions of the visitors and aspire to these. This may have positive effects; in that it can encourage residents to adopt more productive patterns of behaviour. But more frequently it is disruptive in that locals become resentful because they are unable to obtain the goods and lifestyle demonstrated by the visitors (Burns and Holden, 1995). Young people are particularly susceptible to the demonstration effect. Tourism may then be blamed for societal divisions between the young and older members. The demonstration effect may also encourage the more able, younger members of a society to migrate from rural areas in search of the 'demonstrated' lifestyle in urban areas or even overseas.

The demonstration effect is most likely to occur where the contacts between residents and visitors are relatively superficial and short lived (Williams, 1998). Another process, known as acculturation, may occur when the contact is for a longer period and is deeper. As Williams (1998, p. 153) noted:

Acculturation theory states that when two cultures come into contact for any length of time, an exchange of ideas and products will take place that, through time, produce varying levels of convergence between the cultures; that is they become similar.

However, this process will not necessarily be balanced, as one culture is likely to be stronger than the other. As with the demonstration effect, it is in developed world/developing world relationships where the process is most likely to occur. As the United States has one of the most powerful cultures, it is usually the American culture that predominates over the one from the developing country in any such meeting of cultures. This particular process of acculturation has been dubbed the 'MacDonaldization' or 'Coca-colonization' of global cultures (Mason, 1992; MacCannell, 1995). One of the perceived negative effects of this acculturation process is the reduction in the diversity of global cultures.

At the beginning of the age of mass tourism in the early 1960s, it was possible for a number of researchers and commentators to view the relationship between tourists from the developed world and residents of developing countries as a potentially positive one (see Tomljenovic and Faulkner, 2000). Such writers considered that tourism could act a positive global force for the promotion of international understanding. An example of such a statement is presented in Figure 5.1.



Tourism has become the noblest instrument of this century for achieving international understanding. It enables contacts among people from the most distant parts of the globe, people of various languages, race, creed, political beliefs and economic standing. Tourism brings them together, it is instrumental in their dialogue, it leads to personal contact in which people can understand attitudes and beliefs which were incomprehensible to them because they were distant. In this way it helps to bridge gaps and erase differences. Since its focal point is man and not the economy, tourism can be one of the most important means, especially in developing countries, of bringing nations closer together and of maintaining good international relations. This noble task is today more important than ever. It therefore overshadows all other means striving for international friendship.

**Figure 5.1** Tourism and international understanding (adapted from Hunziken, 1961)

Approximately a quarter of a century later, views on tourism's potential to contribute to greater global understanding had changed somewhat as is illustrated in Figure 5.2. As Figure 5.2 indicates, misunderstanding rather than understanding among different people was a more likely outcome of an encounter between visitors from the developed world and residents of the developing world.

Although acculturation became an important process towards the end of the twentieth century, the desire of many tourists to experience a different culture is still a major motivation for tourist visits (Ryan, 1997). The motivation is to see and experience, at first hand, the actual culture and its manifestation, in terms of art, music, dance and handicrafts. This desire has contributed to a revival of traditional crafts as well the development of new activities, in a number of locations, including, for example, Bali (Cukier and Wall, 1994; Mason, 1995). In Bali, this in turn has promoted the growth of a souvenir trade that has made a significant contribution to the local economy.

However on the negative side, the desire of visitors to experience the 'real' culture has brought into question the authenticity of the tourist experience. In some developing world locations, for example, Bali, the Solomon Islands and developed world locations with indigenous cultures, such as Canada, Arctic Norway and Finland, demand for cultural artefacts and performances has become packaged for convenient consumption by visitors. Such commoditization has led to challenges concerning the authenticity of the tourist experience. The commoditization has led

'Travel in its current form hardly helps to bring people closer together and promote their mutual understanding. The dim glasses of prejudice are never taken off. Although there are studies of the subject, all indications are that travel, especially to countries with a totally different culture, does not diminish prejudice but reinforces it. The other people are poor but happy. Carefree, easy-going, and hospitable, but yes, a bit untidy, not so clean you understand, yes, even dirty and unhygienic, certainly unreliable, lazy too, and well, not so very intelligent. Well, that's exactly what one had expected, it's not surprising, that's what Africa's like – people say. The image we have of other nationalities is as distorted as their image of ourselves. For the native, the tourist's behaviour is typical of his country. In his eyes, for example, tourists are immensely rich and never have to work. Or because they walk around half-naked, they must come from "cold islands". In the cold parts they cannot go to the beach because snow is falling and certain parts of the beach is frozen.' Neither the native nor the tourist knows what their respective worlds are really like. In this way travel confirms the clichés of both host and guest.

Misunderstanding instead of understanding among peoples. At times confrontation instead of meeting. In the worst case mutual contempt instead of esteem: tourists despise the 'underdeveloped' natives, and natives in their turn despise the unrestrained foreigners.

**Figure 5.2** The glasses of prejudice (adapted from Krippendorf, 1987)

to pseudo-events that share the following characteristics: they are planned rather than spontaneous; they are designed to be performed to order, at times that are convenient for tourists; and they hold at best an ambiguous relationship to real elements on which they are based (Mason, 1995; Williams, 1998). Also, of particular concern, as Williams noted, is that these pseudo-events eventually *become* the authentic events and replace the original events or practice.

As Mason (1995) reported, the keechak dance, part of a traditional religious ritual, performed originally only on special occasions in Bali's Agama Hindu culture, has been shortened, taken out of its religious context and performed on a daily basis, to paying tourist groups. Tourists observing such an inauthentic pseudo-event may feel cheated, although this assumes that they have the knowledge in the first place to comprehend the local traditions and they may not even be aware that they are watching a pseudo-event. It can be argued that this type of performance may actually relieve pressure upon local communities and even help to protect the performances real cultural basis from the tourist 'gaze' (see Unry, 1990). However, there is danger that the local performers, may, over time, forget



the true meaning and significance of the practice or event now staged mainly for tourists. Likewise, traditional objects that are reproduced and marketed as tourist souvenirs may lose their meaning and value.

Much of the preceding discussion has focused on the interaction between tourists and residents of tourist destinations, with an emphasis on the effects on the resident population. However, contact between tourists and residents also will clearly have an impact on the tourists themselves. As is indicated in Figure 5.2, this can contribute to the reinforcing of stereotypes, rather than the broadening of the mind that, according to the aphorism, travel experiences are meant to bring about. Nevertheless, there is increasing evidence to suggest that the impacts of experiences on tourists themselves can lead to, not only changes in their thinking and attitudes, but can also result in behavioural changes. A growing number of tourists visited the Antarctic continent in the last decade of the twentieth century. However, the continent still remains relatively inaccessible and expensive to visit; for many who travel there it is a once in a lifetime journey. Those who visit often have a profound interest in nature and the wildlife of the continent. It would appear that those who have visited return from the Antarctic with not only increased knowledge, but also a far greater awareness of the need to conserve this unique wilderness environment (Mason and Legg, 1999). Therefore, it is possible to conclude that the experience of their visit has had such a marked effect, to the extent that these tourists have become significant ambassadors for the continent.

A significant problem in assessing socio-cultural impacts is that it is difficult to differentiate these from other impacts and hence particularly difficult to measure them. This partly explains why these impacts have been regarded in the past as less significant than economic impacts. Much of what has been written about socio-cultural impacts of tourism has been based on research that has required those actually affected by these types of impact, to assess the impact on themselves, or on others. This form of research tends to be more qualitative and subjective in comparison with the more quantitative approaches used to assess and measure economic impacts of tourism, such as the multiplier. For some commentators, this qualitative approach is less acceptable than quantitative approaches as it is argued that such an approach is less scientific. A number of criticisms of this position can also be made as those who support the more qualitative approach would argue, among a number of points, their techniques are more flexible, achieve a higher response rate and their data is likely to be richer, more detailed and hence more meaningful (see Tribe, 2000).

A number of theories have been put forward regarding socio-cultural impacts of tourism. One of the best known is Doxey's Irritation Index or Irridex and this was previously discussed in Chapter 2. As a reminder, in this theory, advanced in the mid-1970s, Doxey claimed that the resident population, or hosts in a tourist area, would modify their attitudes to visitors over time. Doxey suggested there are a number of stages in the modification of resident attitudes. When tourists first visit, Doxey argued, they will be greeted with euphoria and then, over time, as the tourist numbers grow, attitudes will move through stages of apathy, annoyance and finally to outright aggression towards the visitors.

Several pieces of research have been conducted to apply theoretical perspectives on socio-cultural impacts of tourism. An important study was conducted, by Getz, in the Scottish Highlands, who attempted to apply Doxey's theory. The study is particularly interesting as it is one of the few attempts in tourism to conduct a longitudinal study (or at least an approximation to one, as it was in reality two snapshots taken at different dates). Getz investigated the Spey valley in the late 1970s and then again in the early 1990s. Such return visits to the same investigation site are unusual in tourism literature and hence the findings are particularly important. The sample size and question content for Getz' studies of 1978 and 1992 were fairly similar, but there were different individuals involved on each occasion. Each used a sample of 130 households. The main findings were as follows:

- In both surveys residents were mainly supportive of tourism.
- Despite mainly positive views, by 1992 there was much more of a negative feeling towards tourism. This was partly related to the fact that by 1992 tourism was not found to be as successful as had been hoped in the 1970s.
- Those directly involved in, and hence dependent on, tourism were more likely to be positive about tourism.
- There was some support for Doxey's idea that, over time, locals become more negative towards tourism. However, the attitudes appeared more linked to a general feeling of economic depression than concerned solely with tourism. Getz suggested that if an economic upturn occurred, then views would probably improve towards tourism. Also, it would appear residents were particularly concerned that there were few viable alternatives to tourism in the area, so despite the lower satisfaction with tourism's impacts it was still felt that it was the best alternative. Hence, the notion of 'trade-offs', discussed earlier in Chapter 3, was important here.

- Over the 14-year period, the attitudes of locals had not greatly changed with the growth of linking phrases and change of the tourist industry. Also, number of tourists did not appear to have gone beyond a threshold in Speyside. This was not because of local's attitudes, but due to more general concerns with environmental impacts of tourism and restrictions on skiing development, although it would seem residents did not feel particularly concerned about environmental impacts.

In summary, the research by Getz (1978, 1994) suggested that, unlike the theoretical statements of Doxey, the attitudes of residents do not appear to change greatly over time. However, Getz noted some increase in negative attitudes to tourism in this time period, but not to the extent indicated by Doxey (1975). Getz, in fact, discovered that attitudes to tourism by the host population were closely linked to economic fluctuations, both nationally and locally, as well as to an awareness of the small range of other options to tourism in the local region.

In the mid-1990s, research was conducted into resident attitudes to tourism growth on the Greek island of Samos. The main results from this research are discussed in the following case study as this provide a particularly good example of the attitudes to tourism that can be gained via a survey, in this case the views of local residents, which revealed a variety of perceived different positive and negative socio-cultural impacts of tourism.

### **Case Study: Attitudes to tourism on the Greek island of Samos**

The study was concerned particularly with impacts of tourism on the host population in one town (Pythagorean) on the island of Samos and their attitude to visitors and tourism in general. In this study 20 per cent of households in the town were given a questionnaire. As many as 71 per cent of those questioned, were involved in a tourism-related business and 59 per cent had a member of the family involved in tourism. Most of those interviewed were relatively wealthy in comparison with the average Greek wage earner.

The main results were as follows:

- In general, residents favoured tourism (as high as 80 per cent strongly favoured tourism in their area).
- As many as 84 per cent indicated that the image of Pythagorean had improved since tourism developed.

- Residents were in favour of more tourism, indicating visitor numbers could increase.
- As many as 87 per cent of the residents perceived that tourists were different from them.
- Specific questions were asked about the perceived social impacts. The top three factors seen to improve as a result of tourism were: employment, personal income and standard of living.
- Factors that were seen to worsen as a result of tourism, in order of importance, were as follows: drug addiction, fighting/brawls, vandalism, sexual harassment, prostitution and crime in general.
- A number of tests were conducted to investigate whether those with direct involvement in tourism had different views than those with no direct involvement. The researchers found, perhaps not surprisingly, that those with direct involvement in tourism did have more positive views on it. Even those with no personal involvement indicated that tourism had positive effects, but were generally less keen on the activity than those directly involved and they also had more neutral and negative views in relation to other effects.
- In terms of socio-demographic factors and attitudes, age was important; the young were generally more in favour of tourism. Length of time in the area was also important; the longer people had been resident, the less keen they were on tourism. Bigger family size also led to more positive views on tourism, and this was probably due to perceived job opportunities. More educated residents were more likely to have positive attitudes to tourism. Increasing sexual permissiveness was the only factor seen negatively by all groups, except the young.

Adapted from Haralmbopolous and Pizam (1996).

The case study of the Greek island of Samos indicates that socio-cultural effects tend to be unbalanced in relation to different groups in society. In the Samos example, those who were more actively involved in tourism were more likely to be supportive of it. However, there is often a gender dimension to socio-cultural impacts of tourism.

There is now significant evidence to indicate that women are on the receiving end of different effects of tourism, particularly within the context of the developing world. The exploitation of mainly women (but also children – both male and female) through prostitution in the developing countries was a feature of the last

three decades of the twentieth century. Prostitution is only one form of sex tourism (massage parlours, sex shops, sex cinemas are other examples), but it is particularly strong in developing countries.

In a number of Southeast Asian countries/destinations, prostitution and some form of sex tourism have been in existence for a long period. Such areas include Thailand, the Philippines, Korea, Taiwan and the Indonesian island of Bali. In such countries, traditional attitudes particularly of males towards females, means that the use of female prostitutes by males is a relatively common practice. Therefore this activity does not carry the same stigma as it would in a Western society. Hence, prostitution has become institutionalized in countries such as Thailand and the Philippines. However, prostitution is not necessarily legal in countries of Southeast Asia, but laws tend not to be always enforced.

What was unusual in the last three decades of the twentieth century was the growing scale of sex tourism and that it increasingly involved international tourists. The great majority of these international tourists originate in developed countries (O'Grady, 1980; Hall, 1992). One of the reasons for this has been the cost differential for sexual services in the developing world compared with the developed world (Hall, 1992). Other reasons include the difference in attitudes to women in Southeast Asian societies compared with Western societies, and the actual status of women in Western societies and Southeast Asian societies, respectively (Mason, 1995). Throughout much of the period from the 1970s until the late 1990s, sex tourism in, for example, the Philippines and Thailand was also strongly promoted and marketed to mainly male tourists from Australia, the United States and Europe.

In an attempt to trace its history, Hall (1992) suggested that sex tourism in Southeast Asia passed through four stages. The first stage was indigenous prostitution, dating back several centuries, in which women were subjugated within the patriarchal nature of most Southeast Asian societies. The second stage came about as a result of militarization and economic colonialism. An example would be American service personnel satisfying their sexual needs in Thailand during 'rest and relaxation' from the Vietnam War. This was made possible as a result of the infrastructure that existed for indigenous prostitution. During this period, economic development was closely linked to the selling of sexual services. The third stage involved the substitution of international tourists for the military personnel. Hall suggested that the authoritarian nature of many Asian political regimes meant that sex was often considered as an important commodity that could be

traded in an attempt to achieve economic growth. As a saleable commodity, little regard was actually given to individuals involved in providing the sexual services. This attracted media condemnation from Western societies, but also is likely to have stimulated increased sex tourism, as potential customers noted that the attitudes of the authorities were not condemnatory of the tourist's activities.

In the early 1990s, Hall suggested that standards of living in Southeast Asia had been improved, meaning less dependency on sex tourism as a means to economic development. However, it was too early to say whether attitudes to sex tourism as a saleable commodity had changed. Nevertheless, in the last decade of the twentieth century, there was growing awareness of the spread of AIDS via prostitutes in developing countries (Mason, 1995). This, coupled with the attempts of some politicians and influential members of Thai society to move the image of the destination away from one where sex tourism is a key activity, may reduce the dependency on sex tourism in the first decade of the twenty-first century.

## Summary

There is a range of both positive and negative socio-cultural impacts of tourism. Much has been written about the supposed negative impacts, including the demonstration effect, cultural damage, authenticity and specific issues such as increases in drug taking, prostitution and crime in general. The negative consequences have been noted, particularly where there is a major cultural difference between the tourists and the local population.

Assessing and measuring socio-cultural impacts is not straightforward. Most research has relied on the attitudes of a range of respondents, particularly local residents, but also tourists themselves and other players in tourism. As local communities are not homogeneous, socio-cultural impacts are perceived differently by different individuals.

A good deal of research has also been an attempt to apply various theories, such as that of Doxey (1975) to specific contexts. Empirical research tends to suggest that local residents in many locations are willing to consider trade-offs in relation to tourism – they are willing to accept some negative consequences as long as tourism is perceived as bringing some benefits. This is particularly so where tourism is one of a small range of choices.

## Student activities

- (1) In relation to a tourism development/activity in your area identify the main types of socio-cultural impact. What characteristics do they exhibit? Arrange these impacts under the headings of positive and negative. Look again at the lists you have prepared and consider whether someone else asked to carry out this task would put the impacts under the same headings.
- (2) Consider an aspect of your culture that could be packaged and commoditized for tourist consumption. What would be the likely reaction of tourists? What would be the likely impacts of this commoditization on the aspect of culture you have selected?
- (3) Under what conditions would Doxey's theory apply? Can you think of any locations in your region/country where Doxey's theory is applicable?
- (4) What would you suggest are the main reasons for the responses obtained in the survey conducted on the Greek island of Samos? How well do these findings relate to Doxey's theory?
- (5) Getz' findings from his research in the Spey Valley, Scotland were not closely related to Doxey's theory? What reasons would you give for this?
- (6) Why has sex tourism become so important in society in countries such as the Philippines and Thailand?
- (7) Hold a class/group debate in which the main proposition is as follows: 'As a female citizen of Thailand, I believe it is better to be involved in prostitution than trapped in poverty'.



# Chapter 6

## Environmental impacts of tourism

### Learning objectives

At the end of this chapter you should be able to:

- describe in your own words the main types of environmental impacts of tourism;
- be aware of the various meanings of the term carrying capacity in relation to environmental effects of tourism;
- describe in your own words the key tourism management and planning issues that result from the environmental of tourism;
- discuss the implications that these issues have for the good management of the tourism industry.



## Introduction

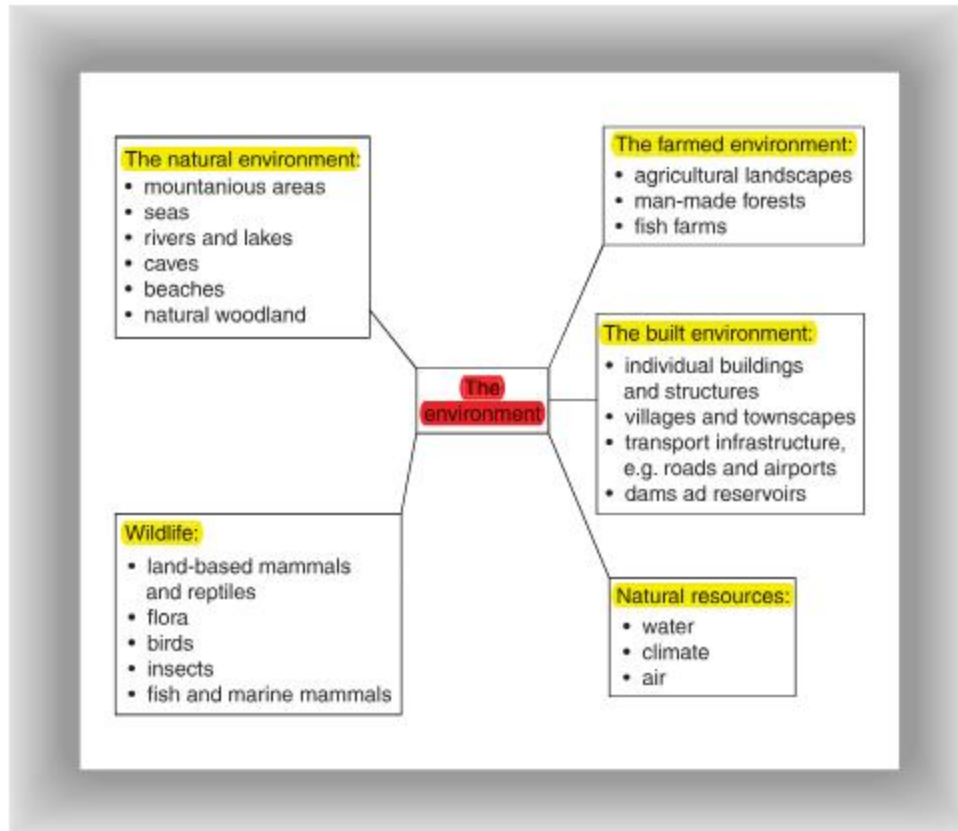
This chapter is concerned with the impact of tourism on the environment. The environment is made up of both natural and human features. Human settlements set within the countryside may contain a large number of attractions for tourists. Often the natural environment is referred to as the physical environment. The natural or physical environment includes the landscape, particular features such as rivers, rock outcrops, beaches and also plants and animals (or flora and fauna).

## Key perspectives

The environment is being increasingly recognized as the major resource for tourism. It has been noted that tourism depends ultimately upon the environment, as it is a major tourism attraction itself, or is the context in which tourism activity takes place (Holden, 2000). However, tourism–environment relationships are complex. There is a mutual dependence between the two, which has been described as symbiotic. Williams (1998) explains this relationship as one in which tourism benefits from being in a good quality environment and this same environment should benefit from measures aimed at protecting and maintaining its value as a tourist resource.

In the post Second World War period and especially since the beginning of mass tourism in the 1960s, it has become clear that the relationship between tourism and the environment has become unbalanced. Tourism has become a major cause of environmental damage to the environment rather than a force for enhancement and protection in the past 50 years.

The term environment is often assumed to mean no more than the physical or natural features of a landscape. However, as Figure 6.1 shows, according to Swarbrooke (1999), there are five aspects of the environment. These are: the natural environment, wildlife, the farmed environment, the built environment and natural resources. Figure 6.1 indicates the components of each of these five. It should also be remembered that these five aspects are not separate entities, but linked. For example, a bird of prey, an example of wildlife, may nest in a mountain area (the natural environment), will certainly consume water – a natural resource, is likely to visit farmland in search of live prey and nest material, and may even go to a town (the built environment) in search of carrion.



**Figure 6.1** The scope of the concept of environment (Source: Swarbrooke, 1999)

Chapter 3 indicated the main factors influencing tourism impacts and it is advisable to reconsider these again. However, in relation to environmental impacts the following are particularly significant:

- The 'where' factor is important. Some environments are more susceptible to tourism impacts than others.
- The type of tourism activity.
- The nature of any tourist infrastructure will also be important.
- When the activity occurs, particularly any seasonal variation.

In relation to the 'where' factor, an urban environment is likely to be affected differently, in comparison with a rural environment. An urban environment, being a largely built one, can usually sustain far higher levels of visiting



than most rural environments. This is not just because a city has, for example, roads and paths, which minimize the direct impacts of tourists' movements, but is also the result of the nature of the organizational structure such as the planning process in urban areas (Williams, 1998). However, tourists are also particularly attracted to sites that are coincidentally fragile, such as cliff-tops, coasts and mountains (Ryan, 1991; Williams, 1998).

The nature of the activities tourists are engaged in will greatly influence the impacts they have. Some activities lead to minimal impact on the environment and are not resource consumptive. Sight-seeing from a bus will have little effect on the actual environment travelled through (although the bus may contribute to pollution and traffic congestion). Off-road vehicles in a mountain or dune environment will have far more direct impact. Tourism involving hunting and fishing can also be heavily resource consumptive if not carefully controlled and as indicated in Chapter 3, McKercher (1993) argued that tourism tends to over-consume resources.

The nature of the infrastructure that exists for tourism is significant in relation to impacts. It would appear that the effects of those involved in mass tourism on the French and Spanish Mediterranean coastal areas are potentially far greater than a small number of walkers in the Himalayan Mountains. However, if this form of mass tourism is well planned and the groups controlled, this can limit impacts to a minimum. Paradoxically, a small group of trekkers visiting a relatively remote area of Nepal, where there is little preparation for tourists, could be far more damaging to the environment (see Holden and Ewen, 2002).

In many parts of the world, tourism is a seasonal activity. Under these conditions, tourism may only affect the environment for part of the year. During the rest of the year the environment may be able to recover. However, in some areas despite only seasonal tourism affecting the environment, this impact is so serious that there is little chance for recovery. For example, there are certain areas of the Swiss Alps that are so heavily used for ski tourism that they cannot recover fully during the summer period. Over time the inability of a slope to re-grow sufficient vegetation means it is more susceptible to erosion (Krippendorf, 1987).

In relation to tourism's impacts on the physical environment, an important term is ecology. Ecology is the study of the relationships between animals and plants. The relationships are often complex, involving soil, water, microorganisms, plants and animals. The individual components and the links between them are referred to as ecosystems and there are many of these across the globe, ranging

from, at the small scale, a pond, up to those covering thousands of kilometres, such as the tropical rain forest. In some ecosystems, humans are of relatively minor importance, but increasingly all ecosystems are either directly or indirectly affected by human activity, including tourism (Mason, 1990; Holden, 2000). At the relatively small scale, ecological impacts of tourism include for example, the effects on plants as a result of trampling by visitors and modifications to animal behaviour as a result of tourists being present in their habitat. An example of ecological impacts of tourism at a global scale would be atmospheric pollution caused by passenger airliners, the resulting contribution to global climate change and consequent effects on both terrestrial and marine ecosystems.

There is a relatively long history of the environment acting as a significant attraction for visitors, but there is also growing evidence of conflict between tourism activity and the wish to conserve landscapes and habitats. As with other impacts it is possible to sub-divide environmental impacts under the headings positive and negative. Although, as with other impacts the value position of the observer, or commentator on environmental impacts, will affect their assessment of whether these impacts are classified as positive or negative.

Conventionally, the following may be regarded as positive impacts:

- tourism may stimulate measures to protect the environment and/or landscape and/or wildlife;
- tourism can help to promote the establishment of National Parks and/or Wildlife Reserves;
- tourism can promote the preservation of buildings/monuments (this includes for example UNESCO's World Heritage Sites);
- tourism may provide the money, for example, via entrance charges, to maintain historic buildings, heritage sites and wildlife habitats.

Conventionally, the following have been regarded as negative environmental impacts:

- tourists are likely to drop litter;
- tourism can contribute to congestion in terms of overcrowding of people as well as traffic congestion;
- tourism can contribute to the pollution of water courses and beaches;
- tourism may result in footpath erosion;



- tourism can lead to the creation of unsightly human structures such as buildings (e.g. hotels) that do not fit in with vernacular architecture;
- tourism may lead to damage and/or disturbance to wildlife habitats.

Figure 6.2 shows a number of impacts of tourism on the environment and it indicates a somewhat more complex situation regarding the effects of tourism than the lists above. Here, by comparing the positive and negative effects of tourism in relation to particular key themes, a form of balance sheet has been created. Figure 6.2 shows a far greater number of negative effects than positive effects, but this does not mean that negative effects are more important, as quantity of impacts does not necessarily equate with quality of impacts.

One of the key concepts in relation to environmental impacts of tourism is *carrying capacity*. This can be viewed as a scientific term, and it is therefore possible to measure carrying capacity. When used in a scientific sense it may relate to, for example, a plant or animal species that is threatened by the damage caused by visitors, and any increase will lead to more damage. In this way, it can be seen as a threshold measure, beyond which damage and possibly irreversible change may occur.

Carrying capacity also has a less purely scientific connotation, as it can be viewed as a term linked to perception. In this sense, the perceptual carrying capacity is in 'the eye of the beholder', for example, what one observer views as a landscape virtually free of human activity, for another may be already too full with the evidence of people, past and present. This point about varying perceptions of carrying capacity is also important in relation to damage/disturbance in the environment. One commentator may perceive loss, or damage, or perhaps unsightliness, while another 'sees' none of these impacts.

Whatever the nature of perception by different individuals, it is clear some landscapes are more susceptible to damage from tourism than others. In an attempt to overcome this problem of differing perceptions, environmental or physical impacts can be separated from ecological impacts when discussing carrying capacity. As has been suggested there is a third type of carrying capacity, perceptual carrying capacity. These three forms of carrying capacity are summarized below:

- (1) *Environmental (or physical) carrying capacity* usually refers to physical space and the number of people (or the number of cars) in a particular place.

| Area of effect              | Negative impacts  | Positive impacts  |
|-----------------------------|---|---|
| Biodiversity                | <ul style="list-style-type: none"> <li>Disruption of breeding/feeding patterns</li> <li>Killing of animals for leisure (hunting) or to supply souvenir trade</li> <li>Loss of habitats and change in species composition</li> <li>Destruction of vegetation</li> <li>Soil erosion</li> <li>Damage to sites through trampling</li> <li>Overloading of key infrastructure (e.g. water supply networks)</li> </ul> | <ul style="list-style-type: none"> <li>Encouragement to conserve animals as attractions</li> <li>Establishment of protected or conserved areas to meet tourist demands</li> <li>Tourism revenue to finance ground repair and site restoration</li> <li>Improvement to infrastructure prompted by tourist demand</li> <li>Cleaning programmes to protect the attractiveness of location to tourists</li> </ul> |
| Erosion and physical damage | <ul style="list-style-type: none"> <li>Water pollution through sewage or fuel spillage and rubbish from pleasure boats</li> <li>Air pollution (e.g. vehicle emissions)</li> <li>Noise pollution (e.g. from vehicles or tourist attractions: bars, discos, etc.)</li> <li>Littering</li> </ul>   |   |
| Pollution                   | <ul style="list-style-type: none"> <li>Depletion of ground and surface water</li> <li>Depletion of water supply to meet tourist needs (e.g. golf courses or pools)</li> <li>Depletion of local fuel sources</li> <li>Depletion of local building-material sources</li> <li>Land transfers to tourism (e.g. from farming)</li> </ul>   |   |
| Resource base               | <ul style="list-style-type: none"> <li>Detrimental visual impact on natural and non-natural landscapes through tourism development</li> <li>Introduction of new architectural styles</li> <li>Changes in (urban) functions</li> <li>Physical expansion of built-up areas</li> </ul>   | <ul style="list-style-type: none"> <li>Development of new/improved sources of supply</li> </ul>   |
| Visual/structural change    |   | <ul style="list-style-type: none"> <li>New uses for marginal or unproductive lands</li> <li>Landscape improvement (e.g. to clear urban dereliction)</li> <li>Regeneration and/or modernization of built environment</li> <li>Reuse of disused buildings</li> </ul>  |

**Figure 6.2** 'Balance sheet' of environmental impacts of tourism (adapted from Hunter and Green, 1995)

- (2) *Ecological carrying capacity* is a threshold measure, which if exceeded will lead to actual damage of plants/animals habitat.
- (3) *Perceptual carrying capacity* is the level of crowding that a tourist is willing to tolerate before he/she decides a particular location is too full and then goes elsewhere.

The first two terms refer to actual measures and, in particular, ecological carrying capacity would be used in a scientific approach to the environmental impacts of tourism. Both environmental carrying capacity and ecological carrying capacity can be measured with scientific equipment and are likely to be significant measures in determining the point at which negative environmental impacts will occur. As perceptual carrying capacity is a subjective assessment of environmental effects, it is not a strictly scientific term as it requires individuals' views. The ways in which it would be assessed in a given setting is through the use of a questionnaire survey or interview. The case study of Waitomo Caves in New Zealand indicates the significance of perceptual carrying capacity.

### Case Study: Waitomo Caves, New Zealand

Waitomo Caves are located in the North Island of New Zealand. They are a part of a system of limestone caves and underground rivers. The key feature of the system is the Glowworm Cave. The area is part-owned by a local Maori group, but is also part government owned and the responsibility of the Department of Conservation (DOC). The Glowworm Cave itself and a number of associated commercial activities are currently leased to a commercial operator Tourism Holdings Ltd (THL) and form part of the village of Waitomo (population approximately 500). The site is regarded as one of considerable aesthetic and ecological significance and, with over 500,000 visitors per year in the early twenty first century is one of the most important visitor attractions in New Zealand.

The Glowworm Cave operates as a 'traditional' attraction in which tour groups are guided through various parts of the cave system. The high point of the visit (for the great majority of tourists) is the viewing of the glowworms from a small boat on an underground river in almost complete darkness. As the glowworms hang from the roof of the cave they look like overhead stars in the night sky.

Tours of the Glowworm Cave lasts approximately 40 minutes and visitation is subject to diurnal and seasonal fluctuations. The peak season is November–April and 11 am–2 pm



is the busiest time of day. In the mid-1990s, the main visitor groups were as follows: Japanese 27 per cent, Korean 26 per cent, Taiwanese 9 per cent, Australian 8 per cent and New Zealander 7 per cent.

THL regards the Glowworm Cave very much as a 'money maker', and it is considered by most speleological (caving) circles as a 'sacrificial' site, that is, it concentrates activity so that other, more environmentally significant, sites remain relatively undisturbed. An important environmental problem of the cave is carbon dioxide, as excessive amounts of it leads to corrosion of the limestone. The cave license specifies that carbon dioxide should not exceed 2,400 parts per million. This is equivalent to 300 people per hour. There is no accurate measurement of visitor numbers at the cave, but anecdotal evidence suggests that the limit of 300 people per hour is regularly exceeded. It would appear that the glowworms are unaffected by visitor numbers (although the use of flash photography can change behaviour). However, a perception that commercial interests were over-riding ecological and experiential factors, led to DOC conducting research. This study focused on visitor experience with respect to crowding, and whether perceptions of crowding were affecting the experience and hence its sustainability.

The results of the study indicate a number of differences in perception of crowding and satisfaction with the visit between New Zealanders and the various international visitor groups. New Zealanders registered the highest perception of crowding, although they were generally not dissatisfied with the visit. Although Koreans registered amongst the lowest levels of crowding, they were dissatisfied with the number of groups in the cave at any one time and having to wait for other groups. As many as 71 per cent of visitors in summer registered some form of crowding, but this fell to 40 per cent in winter. Australian and Japanese visitors tended to view the cave system as relatively crowded, more so than the Korean visitors, but less so than the New Zealanders. Another important finding was that New Zealand visitors were being 'squeezed out' by high-volume international short-stay visitors. This was largely a result of aggressive promotion to the 'Asian market'.

In conclusion, this study suggested that the search for social carrying capacity at the Glowworm Cave necessitates the introduction of the issue of who decides on appropriate levels of crowding and for which visitor groups should it be applied to. The research also revealed that the concept of social or perceptual carrying capacity was unworkable without some clearly defined value positions that management could employ. This study therefore shows the potential and real conflict facing a tourism operator when market driven management and a strong marketing policy clash with the localized sensitivities of culture and heritage.

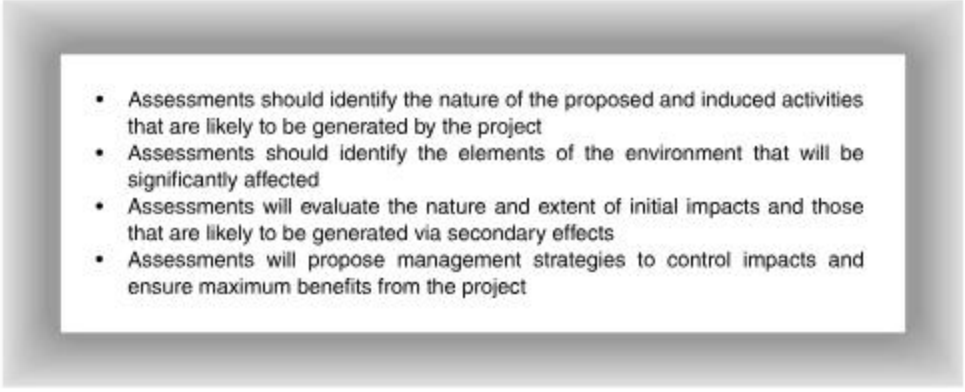
Adapted from Doorne (2000).



The Waitomo study indicates that perceptual carrying capacity is difficult to assess, however even in relation to ecological and environmental carrying capacities, measuring is far from straightforward. Capacities are also likely to vary according to whatever management strategies are in place. To overcome this problem, other measures have been developed and applied. The limits of acceptable change (LAC) technique, was developed in the United States. This has been used in relation to proposed developments. It involves establishing an agreed set of criteria before the development and the prescription of desired conditions and levels of change after development (Williams, 1998). However, this approach suffers from technical difficulties in agreeing some of the more qualitative aspects of tourism development. The LAC approach also assumes the existence of rational planning, which, as is discussed in Chapter 7, should not be assumed to be occurring in any given context.

Another technique is that of the environmental impact assessment (EIA), which has become a particularly common process in the last 25 years or so. In relation to assessing tourism's impacts, the EIA is similar to the use of the LAC and the key principles of EIA are summarized in Figure 6.3. EIAs are also used in relation to other industries and they provide a framework for informing the decision-making process. A number of different methods and techniques can be used in an EIA, including impact checklists, cartographic analysis simulation and predictive models (Williams, 1998).

Discussion of carrying capacities, LACs and EIAs raises one of the key factors in relation to environmental impacts. This is the importance of scale. Footpath erosion, for example, may appear a small-scale impact and may easily be alleviated

- 
- Assessments should identify the nature of the proposed and induced activities that are likely to be generated by the project
  - Assessments should identify the elements of the environment that will be significantly affected
  - Assessments will evaluate the nature and extent of initial impacts and those that are likely to be generated via secondary effects
  - Assessments will propose management strategies to control impacts and ensure maximum benefits from the project

**Figure 6.3** Key principles of EIA (adapted from Hunter and Green, 1995)

by re-routing. In this case, both impacts and management attempts to alleviate will be limited to a small area. However, in the case of coastal pollution that has been caused by raw sewage being pumped into the sea from a hotel complex, this is very likely to spread widely and attempts to alleviate this will require access to an extensive area.

As the Waitomo Caves case study indicates, **the environment is a key tourism draw in New Zealand.** It is certainly a major tourist attraction, if not the major attraction. This is linked to the idea of the 'clean green image', which is used in marketing New Zealand to international tourists. For a relatively long period until the early 1980s New Zealand felt sheltered from negative impacts of tourism on the environment.

**Part of the reason there is a growing concern about environmental impacts of tourism in New Zealand, is that the country needs to maintain its 'clean green image' to sell holiday experiences.** The New Zealand Tourism Board (1992) indicated that, in 1991, natural attractions accounted for 29 per cent of visits to New Zealand and 55 per cent of all overseas tourists visited a National Park in that year. Natural attractions accounted for almost one-third (31 per cent) of all visits to New Zealand in 2003 (New Zealand Tourism Board, 2004). There are two important ideals in the relationship between tourism and the environment in New Zealand: these are the notions of **firstly wilderness and secondly equality of access to the countryside.** However, with increasing numbers of both domestic and international visitors these ideals may become incompatible.

Coastal areas and offshore islands, lakes and rivers and high country and mountain areas have been identified as the most environmentally sensitive areas in New Zealand (New Zealand Tourism Board, 1996). In relation to impacts on ecosystems, native bush areas are threatened by introduced species, native animals are vulnerable to disturbance and construction of facilities can cause problems particularly if too much vegetation is removed as poor drainage of sites results and the ground becomes unstable.

As Maori own more than 50 per cent of the privately owned native bush-land in New Zealand, their role is very important. However, many Maori people see growth in environmental concern as being detrimental to them. This can lead to conflict as a result of different Maori attitudes to the environment compared with white (*pakeha*) views. Nevertheless, there is some evidence in New Zealand that tourism can promote preservation and, of particular relevance to Maori values, tourism can help promote protection of sites of cultural significance.

Large areas of Australia are often regarded as wilderness or semi-wilderness. Their use for all forms of development in the past has tended to ignore that such areas are finite resources. However, coastal areas are the most developed in Australia and the case study of Julian Rocks considers the growing scale of environmental impacts of tourism in Australia in a marine environment.

### **Case Study: Julian Rocks, Australia**

The Julian Rock Aquatic Reserve is close to the township of Byron Bay and located approximately 2 km off the northern part of the New South Wales (NSW) coast in Australia. This is a popular holiday spot on the NSW coast and the main attraction is the surfing beach. Scuba diving is also a very significant activity. The great majority of visitors are Australian domestic visitors. Backpackers comprise the fastest growing visitor segment and there are increasing numbers of international backpackers.

Julian Rocks comprise a nature reserve and the surrounding waters (within a 500 m radius) have been an aquatic reserve since 1982. The aims of the aquatic reserve are to protect, manage and conserve the environment and existing uses of the area and to ensure ecological diversity and significance are maintained. Julian Rocks has been described as one of the best diving locations on the east coast of Australia. Although not part of the Great Barrier Reef, over 10 per cent of the reserve is made up of coral. The area contains a diverse range of habitats including rock reefs, caves, tunnels, steep rocky slopes and sandy areas. There are many fish species, some of which breed here as well as marine turtles and grey nurse sharks.

Julian Rocks is a popular and heavily used scuba diving site. The peak diving season is November–January (the southern hemisphere summer) and also at Easter. Diver numbers in December are double those of June. There were in excess of 20,000 dives in 1993, 86 per cent of which occurred in two specific locations. These sites are used as intensively as all but two of those on the Great Barrier Reef, but they are smaller in area than the leading two on the Great Barrier Reef. The number of divers has increased steadily since the mid-1980s. In 1985, there were only two dive operators, who ran normally three, or at most, four vessels. By 1994, there were four operators using up to ten boats. Each of these vessels can carry up to twelve divers. In 1994, the vessels made 3,800 launches at the local boat launch ramp. This suggests that there was the potential for over 40,000 dives per year (double the actual usage in 1993).

By the mid-1990s there were reports that the site had declined since the early 1980s. Damage was largely attributed to boat anchors, although this was not only from dive vessels but also fishing boats. Research in the early 1990s indicated that a

key contributor to environmental damage was overcrowding at the two most visited sites. Some of the damage was inflicted directly by divers coming into contact with sensitive sub-marine material, in particular coral. Fins, coming into contact with living coral, were a cause of damage, although most of this was not serious damage, hard coral suffered more than other organisms. This research also noted that the majority of damage resulted from inexperienced divers. There was also conflict between divers and recreational anglers. Divers complained about damage caused by anchors, destruction of corals by snagged lines, the catching of non-target fish and the incidence of turtles and sharks with fish hooks in their mouths.

It is very difficult to define the carrying capacity for an area such as Julian Rocks. A major problem is the lack of baseline data on the ecology of the area. There is also a lack of information on attitudes of divers to crowding. Nevertheless, a study conducted at a site in the Caribbean with some similarities to Julian Rock, although with more sensitive coral, suggested an upper limit of 5,000 dives per year. Each of the two most popular sites at Julian Rocks had double this number in 1993. Because of this lack of baseline data it is also difficult to assess the LAC. However, anecdotal evidence would suggest that the great majority of divers would conclude that no change was acceptable. Apparent or potential degradation was a primary reason for declaring Julian Rocks a marine preservation area, implying that any further change was unacceptable. User perception of the area suggests that levels of change related to social values such as crowding are likely to be as significant as environmental change. Hence, even if management practices led to an improved environment, social factors might impose an upper limit on user numbers that could be below a threshold limit above which environmental damage would occur.

Adapted from Dervis and Harriot (1996).

## Summary

The environment is a key resource for tourism. It is possible to subdivide the environment into the human (or built environment) and the natural environment. The environment provides some of the significant attractions for visitors. Hence, any damage to the environment may contribute to a reduction in visitor numbers.

Tourism can have important negative impacts on the environment, including footpath erosion, river and marine pollution, litter, traffic congestion, overcrowding



and the creation of unsightly structures. It can seriously affect ecosystems. However, it can have beneficial impacts by contributing to an awareness of the need to conserve valued landscapes and buildings and revenue generated from visitor charges can be used to preserve and maintain threatened sites.

In relation to assisting with planning and management of environmental impacts, the concept of carrying capacity is particularly useful. Environmental and ecological carrying capacity are both scientific terms and hence lend themselves to scientific forms of measuring. The concept of perceptual carrying capacity is no less important in relation to management of environmental impacts, although it may be more difficult to assess in a given context, as it is a more subjective term.

As visitor numbers continue to increase, and virtually nowhere on the earth remains free of tourists, the need for carefully planned and managed tourism in relation to environmental impacts has become, and continues to be, a critical issue.

## Student activities

- (1) In relation to a tourism activity in your area, identify the environmental impacts. Classify the impacts under the headings 'positive' and 'negative'. Note which of these two lists of impacts is the longer. Why do you think there are differences in the content and length of these two lists?
- (2) Which areas of your region/country are particularly susceptible to environmental impacts of tourism?
- (3) What are the major types of environmental impact of tourism in your country/region?
- (4) How can tourism negatively affect ecosystems in your area?
- (5) How might environmental impacts on a heavily visited small tropical island vary from those on the interior of the mainland of Europe?
- (6) Explain why carrying capacity is an important concept, but a problematic one.
- (7) What does the case study of Waitomo Caves reveal about the concept of carrying capacity and its practical application?
- (8) What are the environmental impacts of tourism at Julian Rocks, Australia and why is tourism difficult to control here?

## Types of Tourism

### Adventure tourism

Adventure tourism is tourism that involves a degree of risk. It typically requires specialist skills or physical exertion. Adventure travel includes activities that involve physical activity, cultural exchange, and connection with nature. Some examples of adventure tourism activities include rock climbing, skydiving, white water rafting, mountain climbing, zip-lining, and paragliding.

### Agritourism

Agritourism, also referred to as agricultural tourism, argotourism, or farm tourism is a subset of the rural tourism industry. It focuses on agricultural operations and involves tourist activities based in or around farms. This includes activities such as wine tours, horseback riding, clay birds hooting, animal petting, and historical agricultural exhibits.

### Ancestry Tourism

Ancestry tourism, also known as genealogy tourism or roots tourism, is tourism that involves travel to destinations that the tourist is connected to through ancestral means. Parallel to the emergence of several organizations aimed at tracing a person's family tree, this form of tourism has grown in recent years. Destinations such as Scotland, The USA and Canada are popular ancestral tourism destinations given the extent of past immigration in these countries.

### Backpacking

Backpacking is essentially the act of traveling with a backpack. It is typically associated with budget, long-term, independent travel, and is common for travelers in their 20s. However, the nature of backpacking has changed in recent years. Whilst some tourists do fit the typically description of young, budget tourists on a gap year, there has been an emergence of older backpackers, backpacking families, and wealthy backpackers (see-flashpacker).

### Business tourism

Business tourism, or business travel, is essentially a form of travel that involves undertaking business activities that are based away from home. The World Tourism Organization (UNWTO) defines tourists as people 'traveling to and staying in places outside their usual environment for not more than one consecutive year for leisure, business and other purposes', thus making business an important and integral sector of the tourism economy. Business tourism activities include attending meetings, congresses, exhibitions, incentive travel, and corporate hospitality.

### Community-based tourism

Community-based tourism is a term used to describe holidays that benefit both the traveler and the destination. Community-based tourism is based on the premise of collective responsibility, allowing the local community to have an active involvement in the development and management of tourism in the area. It often involves rural, poor, and economically marginalised populations, where individuals are given the opportunity to raise money through work as land managers, entrepreneurs, produce and service providers, and employees.

### Cruise tourism

Cruise tourism refers to holidays that are entirely or partly based on a cruise ship. It enables tourists to experience a multicenter holiday, whereby they spend time at various destinations throughout their trip. Cruise ships vary from small yachts to mega ships and can take place on the ocean, river, or fjords. Cruise tourism is popular in the Caribbean, Mediterranean, and Arctic amongst other destinations.

### Culinary Tourism

Culinary tourism, also known as food tourism, is the act of pursuing unique and memorable eating and drinking experiences. Seen as a subsector of cultural tourism, it enables the tourist to try local authentic delicacies and partake in traditional food and drink activities. Such experiences are varied and can range from drinking vodka shots with your meal while traveling Russia to taking a cooking class in Northern Thailand.

### Cultural tourism

Cultural tourism is the act of travellers visiting particular destinations in order to experience and learn about a particular culture. This can include many activities such as; attending events and festivals, visiting museums and tasting the local food and drinks. Cultural tourism can also be an unintentional part of the tourism experience, where cultural immersion (with locals, their language, customs, cuisine, etc.) is an inevitable part of a person's vacation.

### Dark tourism

Dark tourism, or grief tourism, is tourism that is associated with death or tragedy. The act of dark tourism is somewhat controversial, with some viewing it as an act of respect and others as unethical practice. Popular dark tourism attractions include Auschwitz, Chernobyl, and Ground Zero. Lesser known dark tourism attractions might include cemeteries, zombie-themed events, or historical museums.

## Ecotourism

Ecotourism is a form of tourism directed at preserving fragile environments and ecosystems. Ecotourism occurs commonly in threatened natural environments, where the intention is to provide conservation. Ecotourism efforts include the construction of tourist facilities that have minimal impact on the natural environment, the adoption of products such as compost toilets or solar-powered electricity. Ecotourism has become somewhat of a 'buzz word' in recent years and is closely related to the concept of sustainable tourism.

## Enotourism

Enotourism, oenotourism, wine tourism, or vinitourism is tourism that focuses on wine. It includes wine appreciation, wine tasting, vineyard tours, and the buying and selling of wine. Popular enotourism destinations include France, California, South Africa, and Italy, which are all known for producing good standards of wine.

## Film tourism

Film tourism, also referred to as screen tourism, is a subsector of the cultural tourism industry. It is focussed on the concept of film-making and producing, whereby tourists seek to visit locations which are either featured in films or where recording of film takes place. Popular film-induced tourism destinations include The Beach in Thailand, Dubrovnik, and Northern Island as featured in the Game of Thrones and Petra which is famously known for its use in Indiana Jones and the Last Crusade. Filmset examples include the Harry Potter Studios in Hertfordshire, Universal Studios in California, and Pinewood Studios in London.

## Glamping

Glamping is an abbreviation of the term 'glamorous camping'. It refers to the act of camping with additional amenities and resort-style products and services that are not associated with ordinary camping. Glamping has become popular in recent years and often includes the use of specialised equipment, such as yurts or pods. Popular clamping destinations include the United Kingdom, Norway, Spain, and the United States of America.

## Health tourism

Health tourism, also known as medical tourism, refers to the act of traveling to another destination for medical treatment. Motivations of medical tourists can include reduced costs for treatments or higher quality of care. Medical tourists may seek life-saving treatments unavailable to them at home, cosmetic surgery or dental procedures among a range of other medical needs. Popular destinations include India, Turkey, and Panama.



## LGBT tourism

LGBT tourism, also sometimes referred to as gay tourism or pink tourism, is a form of tourism marketed towards those who identify themselves as lesbian, gay, bisexual, or transgender. It includes LGBT only tours, events, and festivals aimed at an LGBT audience and 'LGBT friendly' vacation packages. While remaining a niche tourism form, the notion of LGBT tourism is becoming increasingly recognised by the mass market, with operators such as Thomas Cook retailing holidays to this market segment.

## Mass tourism

Mass tourism is the movement of a large number of people who choose to undertake their leisure pursuits in a given area. Commonly associated with package tourism, mass tourism destinations tend to be associated with reduced-cost or budget holidays and have extreme peaks and troughs depending on the season. Mass tourism is typically associated with negative connotations of environmental degradation, cultural erosion, and overpopulation.

## Religious tourism

Religious tourism, also known as faith tourism, refers to the act of traveling for the purposes of religious pilgrimage, missionary, or interest. Religious tourism was one of the first forms of tourism. Not all religious tourists conform to beliefs or religious practices of the attractions/destinations that they are visiting, which can cause conflict between visitors and worshippers. Popular religious tourism destinations include Israel, Mecca, and Varanasi.

## Rural Tourism

According to the World Tourism Organization, rural tourism is 'a type of tourism activity in which the visitor's experience is related to a wide range of products generally related to nature-based activities, agriculture, rural lifestyle / culture, angling and sightseeing.' Rural tourism takes place in non-urban areas such as national parks, forests, or mountain areas. Popular rural tourism activities include cycling, walking, or hiking.

## Special-interest tourism

Special interest tourism is the provision of tourist activities focused on a particular interest. Most forms of special-interest tourism are also niche tourism forms. A paradox of mass tourism, special interest markets cater for a wide range of pursuits from art to golf to dancing.

## Sustainable Tourism

Sustainable tourism, similarly to responsible tourism, relies on the premise of taking care of the environment, society, and economy. The principles of sustainable tourism aim to minimise the negative impacts of tourism, while maximising the positive impacts. As defined in the Bruntland Report, sustainable tourism is 'development that meets the needs of the present without compromising the ability of future generations to meet their own needs'.

### Urban Tourism

Urban tourism refers to the notion of undertaking tourist activities in a built-up, or urban, area. Popular urban tourism activities include visiting monuments, observing architecture, and making use of cultural amenities such as museums, local hospitality, and entertainment.

### Visiting friends and relatives (VFR)

Visiting friends and, relatively, commonly referred to as VFR, is a popular form of tourism worldwide. VFR constitutes the act of traveling to home or to friends and family or to a place of mutual convenience. VFR is particularly popular in areas that have been subjected to high immigration.