

## CHAPTER 2

# Theoretical perspectives on tourism development

### Learning objectives

At the end of this chapter you should be:

- aware of historical and geographical factors that have contributed to the growth of tourism and particularly the emergence of tourist resorts and areas;
- aware of important theories informing discussion about tourism planning and management, in particular those of Christaller, Plog, Cohen and Doxey;
- able to demonstrate awareness of factors influencing the development of Butler's life-cycle model of tourism destinations;
- able to demonstrate an understanding of Butler's life-cycle model of tourist destinations;
- aware of applications of Butler's model;
- aware of critiques of Butler's model.

### Introduction

As travel for pleasure became a significant activity, so tourist destinations emerged. New forms of transport (such as rail in

the nineteenth and road in the mid-twentieth centuries) linked the tourist generating regions with tourist resorts. Over time, due to factors such as geographical proximity to generating regions and climatic advantage, particular destinations and resort areas emerged and became popular with visitors. This popularity was maintained by return visits by tourists, as well as marketing of the resort attractions. A number of changes, some outlined in the previous chapter, such as those related to visitor motivations, transport and disposable income, and in addition negative consequences of tourism at the destination led, over a longer period, to some resorts declining as tourist attractions.

A major geographical focus of tourism planning and management is tourism destinations. It is here, in the destinations that tourists encounter and interact with the local community and the local environment. This interaction leads to impacts on the local population, the environment and also on the tourists themselves. As will be discussed in later chapters these impacts can be beneficial in relation to, for example, the local economy. However, the encounter between tourists and the destination they are visiting can also lead to, for example, damage to the local environment. It is in relation to these impacts that much tourism planning and management is targeted. Subsequent chapters invest these impacts. However, it is first necessary to understand how tourism destinations have emerged.

Hence, this chapter focuses on the development of tourism destinations and in particular is concerned with major theories in tourism that assist with our understanding of how destinations have emerged, grown and in some cases declined.

## Key perspectives

### The development of tourism destinations: important theoretical perspectives

One of the earliest writers to consider the development of tourism destinations was Christaller, who was a German geographer and planner. As Christaller worked as a planner during the Hitler era in Germany, his work was not well known in the English-speaking world until the post Second World War world. In 1963, an article by Christaller was published in which he suggested there was a process of continual development of recreation/tourist areas. He discussed how a location develops from one where, in his example, a group of painters visit. In a step-by-step process this becomes an artist colony. Later, poets, musicians and gourmets seek out this place. The place becomes fashionable and it is marketed. Members of the local community move into accommodation and food provision. Meanwhile the 'real' painters/artists move on and only those with commercial interests to sell to increasing numbers of tourists remain. Christaller (1963) suggested that elsewhere the cycle is beginning again.

Christaller's ideas were particularly influential on some later theorists of tourism planning and management. His ideas on how tourist areas

develop over time can be summarized as follows:

- destinations develop and change over time;
- there are different types of visitors at different times;
- the tourist experience (the tourism product) changes over time;
- the impacts on the destination change over time;
- the involvement of locals in tourism destinations changes over time;
- new cycles involving new tourist destinations will occur.

The American researcher Plog developed ideas on the psychology of tourists and these were published in 1973. Plog's (1973) important contribution was the notion of allo- and psycho-centric types of tourist. He argued that there are those psychological types who do not like unfamiliar environments or cultures, so when they select a holiday they will seek the familiar (these he termed psycho-centric). Plog argued that there are other groups in society who will be prepared to risk a far more uncertain holiday destination, and they actively seek out the strange or unfamiliar and these he termed allo-centric. Plog indicated that those whom he termed psycho-centric would not travel far from the local environment/region to take a holiday, while those he termed allo-centric would travel long distances to unfamiliar locations. Plog suggested the majority of tourists were neither fully psycho-centric nor fully allo-centric in relation to their holiday destination choices. In terms of his theory, the great majority of tourists were located close to a mid-point between the extremes of psycho-centric and allo-centric, Plog suggested. Nevertheless, Plog suggested in relation to their selected holiday destination, the majority of tourists seek the familiar and prefer not to travel great distances to get there.

Plog's theory was based on a study of New York residents. A major implication for destination development is that the majority of tourists will prefer to travel short distances to take holidays. Hence, the theory suggests that destinations, particularly in Developed countries, close to major population areas are likely to be developed and grow more quickly than those more distant, remote areas. Therefore, this will contribute to the growth of resorts/destinations close to the generating regions. However, Plog's theory was developed from relatively limited empirical research.

If Plog's theory was closely linked to the psychological make up of tourists, then Cohen's ideas related to the behaviour of tourists. Cohen (1972) developed a typology of tourists in which there was a fourfold classification. This classification is summarized below:

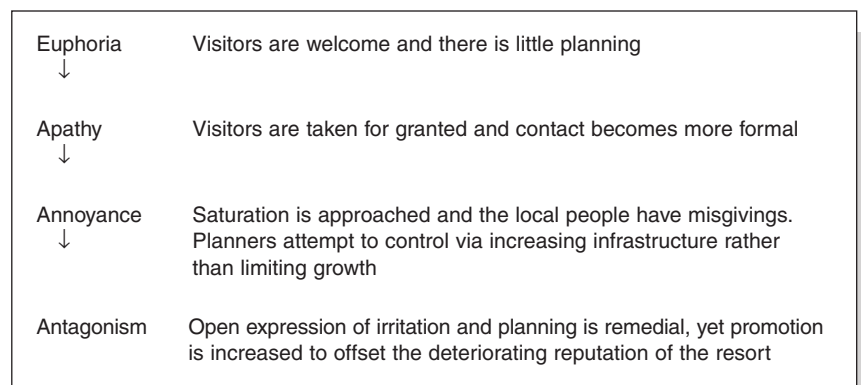
- *Organized mass tourists*. These tourists travel together in groups. According to Cohen, they take a packaged holiday (travel, accommodation and food are also arranged in advance of the trip, usually by a travel agent and/or tour operator).
- *Individual mass tourists*. This group uses the same facilities as the organized mass tourists, but make more individually based decisions about their tourist activity.

- *Explorers*. Such tourists arrange their own visit/trip. They go ‘off the beaten track’. They wish to meet locals. However, they still tend to use the facilities of the mass tourist.
- *Drifters*. The drifter shuns contact with other tourists and ‘goes native’ by staying with locals. He/she stays longer than most tourists and does not regard himself/herself as a tourist.

It is possible to combine the key ideas of Cohen with those of Plog. In this way, it can be suggested that the majority of Cohen’s ‘mass tourists’ and ‘independent mass tourists’ are likely to conform to Plog’s category of psycho-centric tourists. At the time that both Plog and Cohen were writing, the early 1970s, this tended to suggest that significant tourism destinations, in Developed countries, would be developed in relative close proximity to the tourism generating regions. As most tourists prefer the familiar when choosing their holiday destination, the theories of both Plog and Cohen also suggested that relatively few tourists would come into contact with more distant and ‘different’ cultures.

During the mid-1970s, there was a growing concern about the potential and real negative impacts of tourism on destination regions. At this time, Doxey proposed what was termed an Irritation Index, or, in its shortened form, what was known as an Irridex. Doxey’s (1975) Irridex considered the relationship between tourists and locals. The main idea in Doxey’s Irridex was that over time, as the number of tourists increased, a greater hostility from locals towards tourists would emerge. The process by which this occurs is summarized in Figure 2.1.

Doxey’s theory is built upon the premise that destinations will develop and grow over a period of time. However, an important implication of Doxey’s theory is that destinations may not have the ability to grow without check. Doxey’s Irridex suggests that, over time, as locals become more hostile to visitors, then visitor numbers will not continue to grow at the same rate as previously and may actually decline. Although regarded at the time as important and still seen as adding to our understanding of



**Figure 2.1**  
Doxey’s Irritation Index

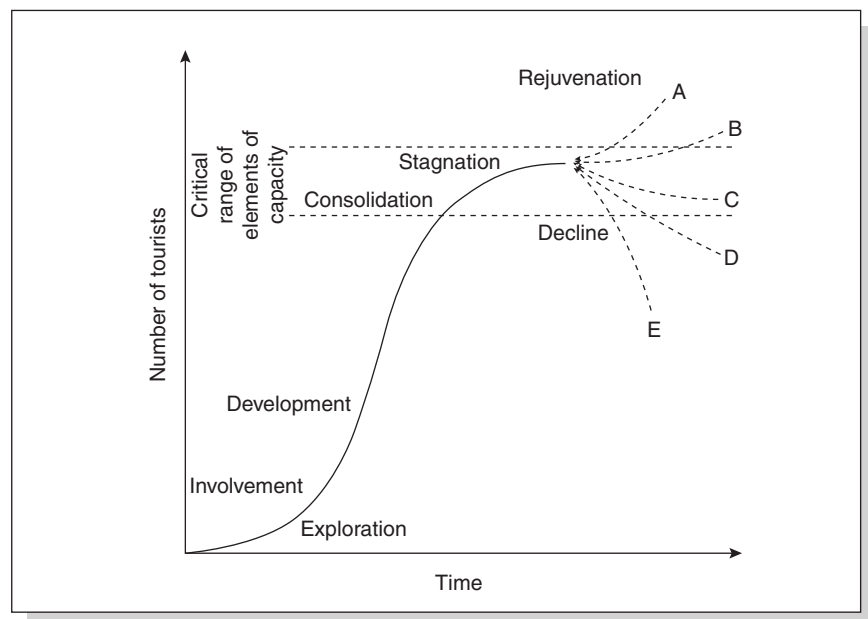
tourist–host interactions, Doxey’s Irridex was not based on detailed empirical research, but mainly on conjecture.

## Butler’s theory

The geographer Butler built on the ideas of Christaller, Plog, Cohen and Doxey to create his theory, or model. Butler’s model appeared in 1980 and he not only acknowledged that his ideas were linked to earlier theories, but he also indicated that they were based on the business/marketing concept of the product life-cycle. In summary, the product life-cycle is a theory in which sales of a new product are seen to slowly grow and then experience a rapid growth, before stabilizing and subsequently declining. When applied to tourism destinations, the model suggests that resorts develop and change over time and there are a number of linked stages: exploration; involvement; development; consolidation (shown in graph form in Figure 2.2). During these stages a tourism industry develops and the destination has an increasing number of tourists.

Figure 2.3 shows more detail on the processes occurring during each stage of Butler’s model. After the consolidation stage there are a number of possibilities. The resort/destination could ‘stagnate’, without any increase or decrease in numbers; it could ‘decline’ or it could ‘rejuvenate’.

In the 20 years or so since its creation, a number of attempts have been made to apply Butler’s theory. Such an attempt is presented in the following case study, in which Agarwhal applies Butler’s theory to the development of tourism in the Torbay area of South West England.



**Figure 2.2**  
The resort cycle of evolution  
(Adapted from Butler,  
1980.)

Stage	Characteristic
Exploration	<ul style="list-style-type: none"> <li>• Few adventurous tourists, visiting sites with no public facilities</li> <li>• Visitors attracted to the resort by a natural physical feature</li> <li>• Specific visitor type of a select nature</li> </ul>
Involvement	<ul style="list-style-type: none"> <li>• Limited interaction between local residents and the developing tourism industry leads to the provision of basic services</li> <li>* Increased advertising induces a definable pattern of seasonal variation</li> <li>* Definite market area begins to emerge</li> </ul>
Development	<ul style="list-style-type: none"> <li>* Development of additional tourist facilities and increased promotional efforts</li> <li>* Greater control of the tourist trade by outsiders</li> <li>* Number of tourists at peak periods far outweighs the size of the resident population, inducing rising antagonism by the latter towards the former</li> </ul>
Consolidation	<ul style="list-style-type: none"> <li>* Tourism has become a major part of the local economy, but growth rates have begun to level off</li> <li>• A well-delineated business district has taken shape</li> <li>• Some of the older deteriorating facilities are perceived as second rate</li> <li>* Local efforts are made to extend the tourist season</li> </ul>
Stagnation	<ul style="list-style-type: none"> <li>* Peak numbers of tourists and capacity levels are reached</li> <li>* The resort has a well-established image, but it is no longer in fashion</li> <li>* The accommodation stock is gradually eroded and property turnover rates are high</li> </ul>
Post-stagnation	<ul style="list-style-type: none"> <li>* Five possibilities, reflecting a range of options that may be followed, depending partly on the success of local management decisions. At either extreme are rejuvenation and decline</li> </ul>

Figure 2.3 Stages of resort development and associated features

## Case study

### An application of Butler's theory: Agarwhal's (1997) study of Torbay, England

Torbay is an important tourist destination in the South West region of England. The Southwest of England is the most important region of England for domestic British tourists (there were approximately 4.5 million visitors in 1995, of which 3.5 million were domestic visitors). Agarwhal attempted to apply Butler's model to Torbay. In summary form she indicated the following:

- 1 *Exploration stage* (1760–1920). There were particular types of tourists and these were linked to the health/medicinal virtues of sea water.
- 2 *Involvement stage* (1831–1950). In this period, the local provision of facilities/tourism infrastructure developed. This was in the form of hotels/boarding houses.
- 3 *Development stage* (1910–75). New tourist facilities and also tourist attractions were created in this period.
- 4 *Consolidation stage* (1950–75) A period of general take-off of trade. Visitor numbers exceeded the local population in this period and the economy was closely tied to tourism. However, antagonism began to grow between the local population and the tourists. The major causes of this were increased traffic problems and high local rates.
- 5 *Stagnation stage* (1975–86). Numbers peaked in the mid-1970s. Immediately following this, there was a great reduction in tourist numbers. Holidaymakers who had previously taken holidays in the Southwest were increasingly going elsewhere, particularly Spain and France.
- 6 *Post-stagnation* 1986+. There is some evidence of aspects of Butler's 'rejuvenation' phase. Attempts were made to regenerate tourism with new (indoor) facilities, for example, the Riviera Leisure Centre, an indoor shopping centre (the Pavilion) and the Hollywood Bowl, a ten-pin bowling alley.

Major differences between Agarwhal's study and the Butler model:

- 1 The stages of development were not discrete – there is an overlap in dates/periods.
- 2 In Torbay, unlike Butler's model, there was very early involvement of locals in tourism to try and provide tourist infrastructure.
- 3 In one part of the area (Paignton), the visitor type did not change over time, but stayed the same until very recently.
- 4 The decline of this resort area is not necessarily irreversible. Post-stagnation planning and management have attempted to overcome the downturn.

(Adapted from Agarwhal, S. (1997). The resort life cycle and seaside tourism. *Tourism Management* 18 (2), 65–73.)

In 1998, Butler reconsidered his model and indicated that, despite criticism, after almost twenty years there was also much support for his original model. In the paper, Butler indicated that the main criticisms of his theory were:

- doubts on there being a single model of development;
- limitations on the capacity issue;
- conceptual limitations of the life-cycle model;
- lack of empirical support for the model;
- limited practical use of the model.

In this same paper, he indicated a number of key points that he suggested confirmed the validity of his original theory. These were as follows:

- The key concept is *dynamism*. Hence resorts do change over time.
- There is a common *process* of development of tourist destinations.
- There are *limits to growth*. If the demand for visits exceeds the capacity of the destination, then the visitor experience will be diminished and visitors will subsequently decline.
- There are *triggers* – factors that bring about change in a destination.
- *Management* is a key factor. Management may be necessary, in particular, to avoid the 'decline' stage of the model.
- *Long-term viewpoint*. There is the need for a long-term view. Resorts need to look ahead for 50 years, not 5 years, to avoid some of the pitfalls suggested by the model.
- *Spatial component*. There is likely to be a spatial shift of tourism activity as the destination declines (i.e. tourists go elsewhere).
- *Universal applicability*. The model applies to all destinations.

## Summary

There are a number of important theories relevant to tourism planning and management and a selection of these has been discussed in this chapter. The German geographer Christaller suggested a process through which tourism enclaves can develop. The American, Plog investigated the psychological make up of tourists and the effects on their destination choices and travel patterns, while Cohen created a typology of tourists. Doxey considered the likely reaction of host populations to increases in tourism numbers over time.

Probably the single most important theory in tourism contributing to planning and management is that of Butler. He suggested a model in which a tourism destination develops over time. He claimed that there were a number of processes that contribute to this. He also argued that resorts develop in particular stages over time. Butler claimed that the processes and stages of growth are applicable to all tourism destinations. However, applications of his model have not always found appropriate supporting evidence. Nevertheless, the importance of Butler's model for tourism planning is that he suggests that resorts are likely to go into decline unless remedial action is taken.

### Student activities

- 1 Construct a table to indicate the major ideas within the theories discussed above of Christaller, Plog, Cohen and Doxey.
- 2 Use this table to show how the ideas Christaller, Plog, Cohen and Doxey are linked.
- 3 What are the key stages of Butler's theory?
- 4 What factors contribute to the changes noted in Butler's model?
- 5 With reference to Butler's model, what factors could lead to the rejuvenation of a destination?
- 6 How well does Butler's model fit the case study by Agarwhal?
- 7 What does Butler consider to be the main criticisms of his model?
- 8 To what extent does Butler consider his model to be applicable almost 20 years after it was first published?
- 9 How applicable do you think Butler's model is to resort development in other Developed countries such as Australia and New Zealand?





# An introduction to tourism impacts

## Learning objectives

At the end of this chapter you should:

- have a basic understanding of the various impacts of tourism;
- be aware of a number of influences on tourism impacts;
- be aware of why tourism has the particular impacts that it has;
- be aware that tourism impacts can be considered as positive or negative;
- be aware of a range of perspectives on tourism impacts.

## Introduction

Tourism takes place in the environment, which is made up of both human and natural features. The human environment comprises economic, social and cultural factors and processes. The natural environment is made up of plants and animals in their habitat. It is possible to make a distinction between the human environment and the natural environment and this is particularly useful when discussing the impacts of tourism. However, it is important to note that, in a real setting, the human environment and the natural environment are interwoven and human activity is both affected by and has effects on the natural environment.

Tourism, as a significant form of human activity, can have major impacts. These impacts are very visible in the destination region, where tourists interact with the local environment, economy, culture and society. Hence, it is conventional to consider the impacts of tourism under the headings of socio-cultural, economic and environmental impacts. This convention is followed in the three chapters that follow this introduction to tourism impacts. In fact, tourism issues are generally multi-faceted, often having a combination of economic, social and environmental dimensions. Therefore when considering each of the types of impact in turn, it should be remembered that the impacts are multi-faceted, often problematic and not as easily compartmentalized as is often portrayed. In other words, tourism impacts cannot easily be categorised as solely social, environmental or economic, but tend to have several inter-related dimensions. It should also be noted that much tourism planning and management is in relation to tourism impacts in destinations and resorts.

## Key perspectives

The impacts of tourism can be positive or beneficial, but also negative or detrimental. Whether impacts are perceived as positive or negative depends on the value position and judgement of the observer of the impacts. This can be illustrated through the use of an example. In this case, only economic impacts are considered and the example relates to the building of a hotel in an area with currently little tourism activity. It is possible for one observer to express a view that the building of the hotel will create more jobs, both in the building and running of the hotel and the observer would consider this to be a positive impact. Conversely, another observer may claim although jobs will be created, they will only be part-time, semi-skilled, poorly paid and lacking a career structure, as well as taking people away from traditional forms of employment. This observer would view the building of the hotel as having a negative impact on the local economy.

Another example, in this case relating to environmental effects, may help with an understanding of the importance of attitudes and value positions in relating to tourism impacts. One observer may suggest that the creation of a footpath through a national park to cater for tourists can be viewed as a way of routing tourists and therefore limiting damage – a positive impact. Another observer may claim that this footpath routing will promote an increase in tourist numbers and hence the likelihood of more damage to the environment – a negative impact. Therefore, any discussion of tourism impacts needs to consider the value positions of observers and commentators and should be set within considerations of the wider context of tourism.

However, it is conventional for researchers and policy makers to note a number of both positive and negative effects of tourism. Positive economic benefits usually include contributions to the local economy and job creation. Positive social impacts of tourism can include the revival or boosting of traditional art or handicraft activity as a result of tourist demand. Positive environmental effects of tourism may include revenue

generated from visits to sites of natural attraction being used to restore and maintain the attraction, as well as enhanced interest from visitors in the importance of the natural environment and therefore a greater willingness to support measures to protect the environment.

Negative economic effects of tourism may include food, land and house price increases in tourist destinations, which become particularly evident during the tourist season. Negative environmental consequences include pollution from vehicles, litter dropped by visitors, disturbance to habitats and damage to landscape features. Negative socio-cultural impacts may include the loss of cultural identity, particularly when tourists are from the developed world and the hosts are located in a developing country. This may be part of what is usually referred to as the demonstration effect. This occurs when inhabitants of a developing country imitate the activities of the visitors, who are from Developed countries. This may start off as what may be considered relatively innocuous behaviour, such as the desire to wear brand name jeans and consume branded fast food and drink, but can take the form of far more undesirable activities such as drug taking and prostitution.

Much research work on tourism impacts in the period since the late 1970s, has tended to suggest that negative impacts outweigh positive impacts (Jafari, 1990; Wall, 1997). However, large numbers of residents of destination areas have continued to want tourists to come and often want them very much (Wall, 1997). Jobs, higher incomes, increases in tax revenues and better opportunities for children are frequently stated reasons for wanting more tourists (Wall, 1997). Residents may be prepared to put up with some negative impacts in return for what they regard as desirable positive impacts. Thus, trade-offs are often involved in relation to tourism impacts.

As has been previously stated, it is often easy to see impacts in a uni-dimensional manner, when in reality they should be viewed within a wider context of not just tourism factors but also wider societal considerations. As Wall (1997, p. 2) stated:

The situation is extremely complex ... but impacts are often desired, are extremely difficult to assess, may require the acceptance of trade-offs and in a policy context, may involve the development of strategies to mitigate undesirable impacts.

Tourism impacts are likely to change over time as a destination area develops (Butler, 1980). According to Wall (1997), key factors contributing to the nature of the impacts are the type of tourism activities engaged in, the characteristics of the host community in the destination region and the nature of the interaction between the visitors and residents. Davison (1996) suggested a range of similar influences and also included the importance of time and location in relation to tourism impacts.

In stressing the importance of the 'where' and the 'when', Davison (1996) claimed these influences set tourism's impacts apart from those of other industrial sectors. In relation to tourism being concentrated in

space, Davison indicated that tourism production and consumption, unlike many other industrial activities, take place in the same location. This means that the tourist consumes the product in the tourist destination. Therefore tourism impacts are largely spatially concentrated in the tourism destination.

In relation to tourism impacts being concentrated in time, Davison (1996) suggested it is because it is a seasonal activity that makes this important. The seasonality of tourism is largely due to two major factors: climate and holiday periods (Burton, 1992; Davison, 1996). Climate is a significant factor in that it controls important resources for tourism, such as hours of sunshine or amount of snow cover occurring at particular times of the year. Tourists' ability to visit a destination at a particular time of the year, for example, during a school holidays or an annual holiday, tends also to make it a seasonal activity.

In Australia and New Zealand, for example, the seasonality of tourism is closely related to climate. The summer period coincides with the traditional break at Christmas. In New Zealand, until relatively recently, the majority of businesses were closed during the last few days of December until late January. Although, changing social circumstances mean that more people now work over the Christmas and New Year break, as well as in January, the period from late December until late January is still the main school holiday time.

Some of tourism's impacts also occur beyond the destination. For example, transport from the tourist's home to the destination – the transit zone as shown in Leiper's tourism system (Figure 1.4 in Chapter 1) has an effect on the transit zone. Also, a package tour purchased in the tourists home region is likely to benefit the travel and tour operator based there, rather than one in the destination.

Tourism also has an impact on tourists themselves. These effects may be noted in their behaviour in destinations. The impacts may also become apparent when the tourist has returned from a visit. For example, the tourists' experiences may affect their decision on a future visit to the destination. In this case, some of the experiences gained would be in the actual destination, although the reflection on that experience and its effects on future tourism choices could take place elsewhere.

Major factors influencing tourism impacts have been synthesized and summarized below. These factors are based at least in part on the work of Davison (1996) and Wall (1997) and are set out in the form of questions, with some comment following the questions as examples or to provide explanation.

### Major influences on tourism impacts

- Where is tourism taking place? (e.g. a rural/urban location, a coastal/inland location, a developed/developing country)
- What is the scale of tourism? (e.g. how many tourists are involved?)
- Who are the tourists? (e.g. what is their origin? Are they domestic or international visitors? Are they from Developed or Developing countries?)

- In what type of activities do tourists engage? (e.g. are these passive/active? Are these consumptive of resources? Is there a high/low level of interaction with the host population?)
- What infrastructure exists for tourism? (e.g. roads? sewage system? electricity supply?)
- For how long has tourism been established? [see particularly Butler's (1980) theory of the destination life-cycle]
- When is the tourist season? (time of year? importance of rainy/dry seasons)

McKercher (1993) argued that although the impacts of tourism are well documented, little research has been conducted into why impacts appear to be inevitable. He claimed that there are a number of what he referred to as structural realities – he used the term ‘fundamental truths’ – which explain why the various effects, particularly adverse effects of tourism, are felt, regardless of the type of tourism activity. McKercher's ‘fundamental truths’ can be considered as major influences on tourism impacts and hence are presented in a case study below (with comments added under the headings McKercher employed) and there a number of questions about these in the student activities that follow on from the case study.

## Case study

### Some fundamental truths about tourism

- Tourism consumes resources and creates waste.* Tourism is essentially a resource-based industry. These resources are either natural, man-made or cultural resources. Tourism is a voracious consumer of resources. The resources are typically part of the public domain, (e.g. woodlands, coasts, mountain regions) and hence tourism can be very invasive. Tourism is an industrial activity that creates waste with sewage, rubbish and car exhaust common by-products.
- Tourism has the ability to over-consume resources.* The natural, man-made and cultural resources that tourism relies upon are liable to be over-consumed. If threshold limits have been reached adverse effects over large areas can occur. This can be in relation to the natural, man-made or cultural resources.
- Tourism competes with other resource users and needs to do this to survive.* To survive it may be necessary for tourism to gain supremacy over competitors. Tourism and other non-tourism but leisure related activities often share the same resources. Hence, two people may be doing precisely the same activity (e.g. mountain biking) with one being classified as a tourist (because they are non-resident) the other (a ‘local’) as being only involved in recreation. Tourism may also compete with other non-leisure activities such as agriculture and forestry in rural locations.
- Tourism is private sector dominated.* As much tourism is private sector dominated, the profit motive is the key one. Investment is far more likely in profit centres (e.g. a swimming pool/leisure complex) than a cost centre (a sewage system). Governments have had a key role in promoting and developing tourism, but have been little involved in controlling it. Voluntary compliance of the industry with environmental protection is almost impossible.
- Tourism is multi-faceted and is therefore almost impossible to control.* Tourism is a very diverse industry including suppliers, producers, government agencies as well as a very large number of consumers. In Australia, for example, there were approximately 45 000 tourism businesses in the early 1990s. The great majority of these were small independently owned family businesses. Unity only comes through trade associations, which are usually voluntary organisations. This makes controlling tourism extremely difficult. It is however the most difficult challenge facing industry and government agencies. In a free

market system, a diverse and highly unregulated industry such as tourism will be very difficult to control and to restrict the expansion of.

- 6 *Tourists are consumers, not anthropologists.* Most tourists are consumers who want to consume tourism experiences. Tourists are pleasure seekers and except for a minority they are not anthropologists. Tourists are trying to escape their everyday life and hence tend to want to over-consume and are generally not interested in modifying their actions in relation to the host community or environment.
- 7 *Tourism is entertainment.* Most tourism products have to be manipulated and packaged to satisfy the needs of tourists to be entertained. This can lead to the commoditisation of local cultures and traditional activities. Existing products such as dances, festivals or even religious activities may need to be altered to satisfy the tourist demand.

Questions of authenticity are likely to be raised as a result.

- 8 *Unlike other industrial activities, tourism imports the clients rather than exports a product.* Tourism does not export products, but brings clients to consume the product *in situ*. This means tourism cannot exist in isolation from the host community. Tourism consumption usually takes place in concentrated geographical spaces. When planning for tourism, local regional and national governments should be aware of the stresses on the physical and social environment that an influx of visitors causes. Host communities also need to be aware that tourism is likely to cause a wide range of impacts.

(Adapted from McKercher, B. (1993). Some fundamental truths about tourism: understanding tourism's social, and environmental impacts. *Journal of Sustainable Tourism*, 1, 6–16.)

## Summary

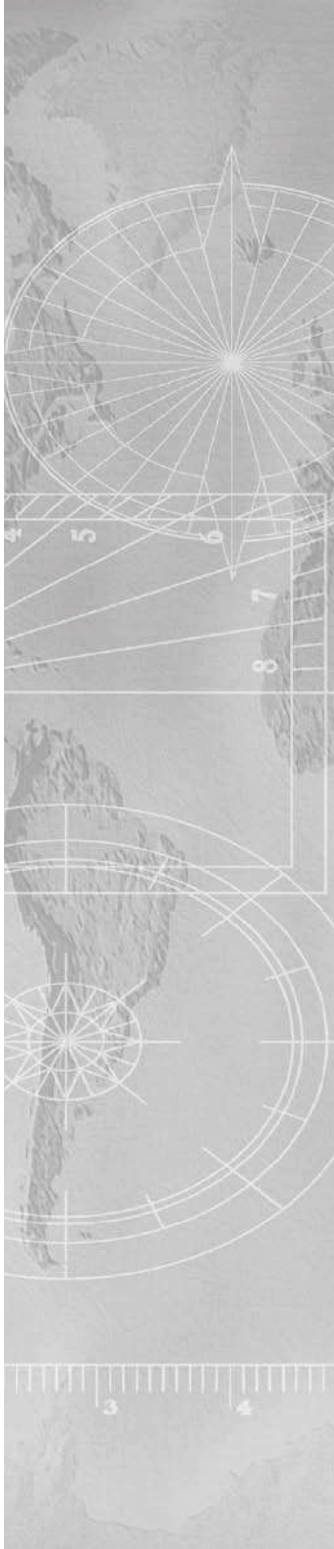
This chapter has provided an introduction to the study of tourism impacts. It has indicated that although tourism impacts tend to be multi-faceted, it is conventional to subdivide them under the following headings: economic, socio-cultural and environmental. It is also conventional to present tourism impacts as either positive or negative. The chapter has indicated that such categorisation depends upon the value position of the observer. As impacts tend to be multi-faceted, often having a combination of economic, social and environmental dimensions, it may be not that straightforward to classify impacts at one particular tourism resort or destination under the heading of either solely 'positive' or 'negative'. It is quite likely that there is a combination of impacts of tourism in relation to a destination and some of these impacts may be viewed as positive, while others are seen as negative.

The nature of particular tourism impacts is related to a variety of factors, including what type of tourism is under discussion, where it is happening, when it is happening, the seasonality of tourism as well as the tourism infrastructure. Ideas put forward by McKercher (1993) on the commercial and entertainment aspects of tourism have also been introduced and these have been considered in connection with tourism impacts. The chapter has also suggested that is important to note that much tourism planning and management occurs in relation to impacts at tourism destinations.

## Student activities

- 1 How do McKercher's 'fundamental truths' affect your views on tourism impacts?

- 2 To what extent do you agree with McKercher's 'fundamental truths'?
- 3 What are the major influences on tourism's impacts?
- 4 Consider a tourism activity/business in your local area and the impacts of this activity:
  - Make a list of the impacts under the headings: 'positive' and 'negative'
  - When complete, consider which of the two types of impacts are more important in relation to your example. NB: This does not necessarily correspond to the longer list of the two.
  - Look again at the list and consider your own value position and indicate which of the impacts could be regarded in a different way, from your own assessment by another commentator, and how these impacts could be viewed.
  - How important do you believe the nature of tourist activities are in relation to the impacts of tourism?



## CHAPTER 4

# The economic impacts of tourism

### Learning outcomes

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

- describe in your own words the major economic impacts of tourism;
- demonstrate an awareness of a range of both 'positive' and 'negative' economic impacts of tourism;
- compare the economic impacts of tourism in Developed and Developing countries;
- discuss the implications of the economic impacts of tourism for the management of the tourism industry.

### Introduction

The impacts of tourism have been historically the most researched area of tourism, and economic impacts have been more researched than any other type of impact. As Pearce (1989, p. 2) indicated:

Studies of the impact of tourist development on a destination or destinations have been the largest single element of tourism research ... much of this is predominantly the work of economists and has concentrated on the effects of income and employment.



Although, as has been stated in Chapter 3, economic impacts of tourism are linked to, and cannot easily be separated from, other types of impact, largely in an attempt to assist with understanding, economic impacts are discussed in this chapter separately from other tourism impacts.

## Key perspectives

Chapter 3 provided a general indication of the key influences on the impacts of tourism, but of particular importance in relation to economic impacts are the following: scale of tourism activities, when tourism occurs (e.g. whether tourism is a seasonal activity) and the historical development of tourism (with a particular emphasis on infrastructure for tourism). It is also worth considering again Butler's (1980) model and criticisms of it (see Chapter 2) in relation to the economic impacts of tourism.

As was discussed in Chapter 3, impacts can be considered under the headings of positive and negative. In relation to economic impacts the following are usually considered to be positive effects:

- contribution to foreign exchange earnings;
  - contribution to government revenues;
  - generation of employment;
  - contribution to regional development.
- (Lickorish, 1994)

Such benefits can usually be measured either at a national level or at the local or regional scale.

Negative consequences of tourism include, according to Pearce (1989) and Mason (1995), at least, the following:

- inflation;
- opportunity costs
- over-dependence on tourism.

Inflation relates to the increases in prices of land, houses and even food that can occur as a result of tourism. Prices for these commodities can increase when tourists place extra demands on local services at a tourism destination. Opportunity costs refers to the cost of engaging in tourism rather than another form of economic activity. For example, in a coastal area, with a predominantly rural hinterland, this could be the costs of investing in tourism instead of in arable farming, market gardening or fishing. Over-dependence on tourism can occur in, for example, small states where tourism is seen by the government as the best method of development. Over time, the emphasis on tourism becomes such that there is virtually no other approach to development. As a result, the country becomes dependent on tourism revenue to the extent that any change in demand is likely to lead to a major economic crisis.

One significant factor when discussing economic impacts of tourism is scale. Although similar processes may be operating, effects can be different as a result of them operating at different scales. The global economic

importance of tourism has been briefly referred to above with discussion of employment and contribution to balance of payment and global gross domestic product. In addition to this data, is the projection that jobs in tourism are likely to increase steadily during the early part of this century, unlike jobs in other economic sectors. These macro-level figures however hide the unbalanced nature of global tourism. One continent alone, Europe, was the single most important tourist destination with over 60 per cent of all international visitor arrivals in the mid-1990s and most international arrivals of tourists in Europe were visits from other European countries.

The United States and Canada are also both important destination areas and tourism generating regions. Asia is an important region for tourists from Europe, North America and Australasia to visit, but is also becoming increasingly important as a source of tourists. These tourists, from Japan, Korea and Taiwan in particular, are visiting other parts of Asia and the Pacific Rim but are also making visits to Europe and North America. Two continents, in particular, reveal the uneven balance of international tourism. South America is a growing destination for tourists, but produces few visitors, relatively speaking, to other parts of the world. Africa shows this to an even greater extreme with increasing numbers visiting the continent, with the game reserves of East Africa, parts of the Mediterranean coast and South Africa becoming significant tourist attractions, but the percentage of world tourists originating in Africa is very low.

Economic impacts of tourism can be particularly marked in Developing countries. The Indonesian island of Bali provides a good example of both the gains and problems that can arise from tourism development in a destination located in a developing country. Since tourism began to grow in importance in the 1960s, a significant number of jobs have been created. These have been in the relatively obvious categories of hotel workers and bar staff, but also in perhaps less obvious areas such as boat hire, cycle hire and repair, car and motorcycle hire, food and drink selling and souvenir making and selling. Tourism is also said to have revived the arts and crafts activities of painting and wood carving, as well as the introduction of new arts activities, including batik making (Mason, 1995).

Residents have tried to benefit from tourism, either through direct involvement in tourism in hotel, restaurant and guide service jobs, as well as through the manufacture and sale of craft products, the undertaking of cultural performances and food production to feed tourists (Wall, 1997). Particular examples of ways in which Balinese have benefited from tourism include the provision of home-stays and the increase in those providing informal services to tourists (Wall, 1997). Home-stays are the Balinese equivalent of the Western bed and breakfast. The great majority of home-stays are run by local residents, rather than outsiders and hence almost all of the economic gain from the activity goes directly to the local population (Cukier and Wall, 1994).

A large number of young males (aged 15–25) work as street and beach vendors in Bali. They mostly lack formal education, but have substantial language skills. Although they worked long hours, and believed they had

few alternative job opportunities, most of these vendors were relatively happy with their lifestyle and were well remunerated by Indonesian standards (Cukier and Wall, 1994). Tourism grew so rapidly in Bali in the period from 1970 that by 1995, if the associated craft industries were included, then tourism contributed over 30 per cent of the gross provincial product (Wall, 1997).

On the negative side, however, Bali provides evidence of tourism promoting inflation. Before 1968 (roughly the beginning of the growth of tourism) land prices had been steady for about 20 years, however, during the following 25 years land prices rose by nearly 100 per cent on average but by over 150 per cent in the tourist areas (Mason, 1995). Although it is difficult to calculate opportunity costs, there is some evidence from the large-scale development at Nusa Dua, on the southern coast of Bali (which was supported by the World Bank) that the money may well have been better spent on a smaller scale, less intrusive hotel complex. Something smaller would have been more in keeping with local values and may have contributed more to the local economy. It has been argued that the money would have been better spent on agriculture or forestry or locally based retailing rather than tourism that is primarily aimed at an up-market, international segment (Mason, 1995).

The future of tourism in Bali is far from clear after the terrorist bombings at Kuta in October 2002. Bali has become heavily dependent on tourism and the what happens after the events of October 2002 may indicate whether the island has become economically over-dependent on tourism.

Similar issues to those of Bali in its early stages of tourism development can be found in the Himalayan country, Nepal. As in Bali, tourism was relatively unimportant until the second half of the twentieth century, but more recently has come to be very significant to the economy of Nepal. Nepal, the fourth poorest country in the world, is a landlocked Himalayan kingdom relying on access to imports via India. Throughout the period of European global exploration, dating from about 1400 until as recently as the 1950s, Nepal was almost inaccessible and hence it holds attractions for significant numbers of potential tourists. Tourism began in the early 1960s but took off in the 1970s. By 2001, there were in excess of 500 000 tourists per year. Particularly rapid growth took place in the 1980s. Between 1977 and 1988 there was a 60 per cent increase in tourist numbers and foreign earnings from tourism went up by 75 per cent. In the capital city Kathmandu, there were 2800 people employed in the accommodation sector in 1977 and 14 500 rooms for tourists, but by 1988 there were 4100 employers and 23 700 tourist rooms (Department of Tourism, 1990).

Nepal also shares some similarities with Bali in that violence there has had an adverse effect on tourist numbers and hence the economic contribution of tourism to the economy. Although not direct targets, tourists have been put off visiting by Maoist rebels who have become particularly active since the mid-1990s as well as the legacy of the, still not fully explained, killing of almost all members of the Nepalese royal family in June 2001.

As in Bali, jobs in Nepal's tourism industry are often outside the formal sector and hence difficult to measure but include part-time guide work (often undertaken by students/teachers and lecturers as this pays as much as US\$ 10 a day compared with an average monthly wage of US\$ 35). Souvenir producing and selling is also important in terms of job creation. Hand massage is a speciality of Nepal and there is a charge about US\$ 1 a time. Those involved can make between US\$ 15 and 20 a day.

The negative effects of the rapid expansion of tourism in Nepal can be seen at important Buddhist and Hindu temples. These temples are not just tourist attractions but are used for religious activities. Those who wish to use the temples for religious activities have to deal not only with the crowds of tourists who are causing physical damage to buildings but also with those who are becoming economically dependent on tourism. These include service providers such as the souvenir sellers, the drink hawkers and even beggars of all ages and both sexes who are there because of the reliance on tourist handouts (Mason, 1991).

Some parts of Europe are not completely unlike Developing countries in terms of being resource frontiers for tourism development. In the far north of Europe is the unlikely setting for the Santa Claus industry. This industry, a focal point for domestic and international tourism, is located in Finnish Lapland and is centred on the Santa Claus Village. The village opened in 1986, focusing on the concept of it being the home of Santa Claus. An account of its foundation and economic impacts is provided in the case study below.

## Case study

### Tourism in Lapland, the Santa Claus Industry

Lapland is the northern-most province of Finland and is the least populated region of the country. Traditionally, the region has attracted two major types of tourists. Lapland provides wilderness and solitude sought by those escaping from routine who wish to find solace in the forest. Many of this type of tourists come from within Finland. The other main type of tourist is interested in the indigenous culture of the Sami (Lapp) people.

The economy of Lapland has become increasingly dependent on tourism, with in excess of 6000 people in the industry in the early 1990s. The Finnish Tourist Board expected the number employed to rise to 9500–10 000 by the early part of the twenty-first century. The Board was particularly keen to encourage more foreign tourists. Despite the success of encouraging more domestic tourism during the 1980s when the number of overseas tourists appeared to be rising in the 1980s numbers then fell in the early 1990s. Overseas tourists made

up about 20 per cent of all tourists to Lapland in the early 1990s. The main overseas generating countries were Germany, the Netherlands, Switzerland, Italy and France. Most tourists from these countries visited in summer. Many of these were in transit to the North Cape, the most northerly point of mainland Europe. Tourists from Britain and Japan come in winter to take part in winter sports, experience a 'white winter' or see reindeer.

In the late 1970s and early 1980s, the Board declared that the natural and cultural attractions of Lapland were not sufficient to attract tourists in the desired numbers and decided a new attraction had to be created. The idea of promoting Santa Claus as an attraction was appealing.

#### *The Santa Claus industry*

In 1985, the Governor of Lapland declared the entire state 'Santa Claus Land'. However, there



**Photo 2** The Santa Claus Village, Rovaniemi, Finland, which has been specifically located on the Arctic Circle

were also a number of rival claims for the home of Santa Claus at this time; in Alaska, Norway, Sweden and Greenland. In 1989, the Santa Claus Land Association was founded by 16 Finnish companies and this was connected to the Finnish Tourism Board. This association had as its sole role the marketing of the Santa Claus idea. The Association operated the Santa Claus Postal service, coordinated Santa Claus visits overseas and promoted Santa Claus at various international gatherings.

#### *The Santa Claus Village*

The showpiece of Santa Claus Land is the Santa Claus Village. This is located exactly on the Arctic Circle a few kilometres north of the town of Rovaniemi, the capital of Lapland (Photo 2). The site was chosen as, prior to the establishment, tourists had stopped at the Arctic Circle sign to have their photograph taken. The village site is on the main North–South route through Lapland. The village was opened in 1985 and contains Santa’s workshop, where he may be visited at all times of the year, Santa’s Post Office, a reindeer enclosure, several restaurants and many gift and souvenir shops. The Santa Claus Village property is owned

by a company based in Rovaniemi and individual businesses within the village are privately owned.

Of particular significance within the village is the Santa Claus Postal Service. In the 1950s, letters written to Santa Claus by European school children were received in Helsinki. In 1976, the Santa Claus Postal Service was moved to Lapland when some 18 765 letters were received. The number of letters steadily grew. Visitors to the Santa Claus Village were encouraged to sign their names in Santa’s guest book and in 1990 over 550 000 letters were sent out at Christmas containing a free gift. By the early 1990s, letters were dispatched to 160 countries.

Nearby, Rovaniemi has an international airport and can handle international jet aircraft. The most famous international flight has been the regular flights by British Airways Concorde at Christmas between 1986 and 1992.

#### *Economic impacts*

In 1985, 225 000 visitors came to the village and the number of visitors increased rapidly from then until the late 1980s reaching 277 000 in 1989. In the early 1990s, related to the general global depression visitor numbers fell. However, in the second part of the 1990s visitor numbers once again increased and reached over 300 000 in 1995. In 1996, there were 1.6 million international and domestic visitors to Lapland and 325 000 visited the Village. Visitors to Lapland increased by 22 per cent between 1986 and 1994 and foreign earnings were up by 29 per cent and this was attributed mainly to the Santa Claus Village. The Village employed 290 people, which in 1990 was 7 per cent of total tourism employment in Lapland.

Although this development is a totally artificial creation, it is an attempt to bring tourists to an area perceived as lacking many natural attractions. The village has been heralded as a great success in bringing tourists to a relatively remote and inhospitable location, and that at present there is little recorded environmental or social damage there.

(Adapted from Pretes, M. (1995). Post modern tourism: the Santa Claus industry. *Annals of Tourism Research*, 22 (1), 1–15.)

Other relatively peripheral areas in terms of the global reach of tourism have also gained tourist in the past 25 years, or so. Hence, although New Zealand received only 0.2 per cent of international travellers in 1996, this percentage has increased in the last decade of the twentieth century and the economic impacts were highly significant. (Figures presented below are based on New Zealand Tourist Board data from 1996, 2000, 2001 and 2002.) From 1993 to 1996, the number of visitors increased by an average

of 6.5 per cent per year. The average spend per trip in 1993 was NZ\$ 2041, but in March 1996 this had increased to NZ\$ 2776. By 2000, the average visitor spend per trip had risen to NZ\$ 3222.

In terms of the main groups of tourists, Australia, Japan and the United States were the major origin areas. New markets areas were Taiwan and South Korea and in March 1996 these two areas made up 15 per cent of total visitors, which was an increase over 1995 of 3 per cent. Japanese, Taiwanese and South Koreans were the biggest spenders, averaging over NZ\$ 200 per day. The importance of this expanding market can be seen in the following figures: there were 216 162 visitors from these three countries in 1996 with an estimated spend per head of NZ\$ 234. By 2000, the average spend per head had increased to NZ\$ 330 for Japanese visitors (the largest daily spend of any visitor group) and NZ\$ 221 for Koreans. Only American visitors (averaging NZ\$ 248 per day) in 2000 spent more than Koreans (Hall & Kearsley (2001)).

However, the economic crisis in Asia that occurred in late 1997/early 1998 affected the projected continued growth in this Asian market, and in 1998–9 the percentage of visitors from this region fell in relation to total visitors. Nevertheless, in 2000 visitor numbers from Asia recovered and there was a 13 per cent increase on the 1999 figure by the end of December 2000, a further 7 per cent increase during 2001 and an 8 per cent increase in 2002. By the end of 2002, visitors from Asia exceeded 500 000 for the first time, with Korea (104 000 in 2002) and China (71 000 in 2002) growing particularly rapidly in the first years of the new millennium.

At end of 2002 for the first time, New Zealand received more than two million visitors in 1 year. In relation to employment, in 1995 there were 155 000 jobs in New Zealand tourism and by the end of 2001 this had reached 176 000.

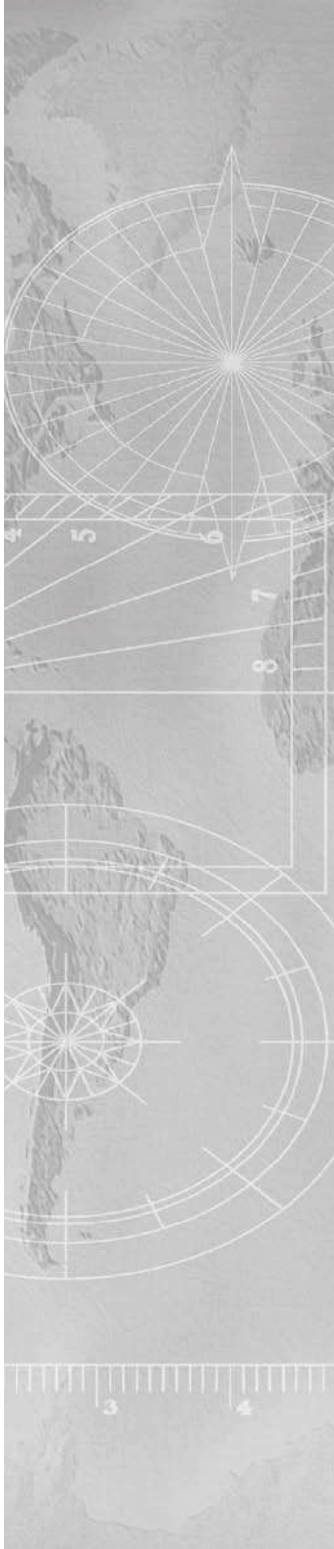
## Summary

Economic impacts are one of the most researched areas of tourism. They have tended to be far more researched than other forms of impact. Economic impacts can be subdivided into both positive and negative groupings. Often, countries perceive positive economic benefits as the major type of tourism impact and hence are supportive of tourism development. Evidence suggests that a number of Developing countries have selected tourism as part of their approach to development. Such countries desire the positive economic benefits, however they tend to be less aware that their tourism may also bring some negative economic effects.

However, tourism is often one of a range of development options facing both Developed and Developing countries and regions. Tourism is often viewed as a preferred option, in relation to other possible choices. Hence, either, where there are old dying industries and the area is in need of revitalisation, or in related un-exploited locations seeking new developments, but with few choices, tourism can bring significant economic benefits. Nevertheless, this chapter has raised the issue, that to maximize economic benefits and minimize costs, tourism requires careful planning and management.

## Student activities

- 1 Identify the positive and negative economic impacts of tourism from the perspective of a community affected by tourism that you know well.
- 2 Suggest what the economic impacts of tourism might be in small states, such as tropical islands or landlocked states.
- 3 How might the economic impacts of tourism in these small states differ from those in more Developed countries, such as those in Europe, North America or Australasia?
- 4 What factors could contribute to the impacts being different in these small Developing countries?
- 5 What factors (a) acting internally within a country and (b) acting externally (beyond the country) could affect the economic impacts of tourism, particularly in a negative way?



## CHAPTER 5

# The socio-cultural impacts of tourism

### Learning outcomes

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 the study of 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. They 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' (Burns and Holden, 1995, p. 113).

## Key perspectives

This chapter is concerned with a 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 also 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 again the influences on the impacts of tourism once, 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. This overcrowding 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; MacCannel, 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 Tomlejnovic 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.

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 peoples 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

**Figure 5.1**  
Tourism and international understanding  
(Adapted from Hunziken, R. *Revue de Tourisme*. Bern, Switzerland, 1961.)

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 5.2**  
The glasses of prejudice  
(Adapted from Krippendorf, J. *The Holiday Makers*. Heinemann, London, 1987.)

"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."

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 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 Urry, 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 life time 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.

A number of 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 was significant as it was, what Getz claimed to be, a longitudinal study. Getz' study was in reality two snapshots taken at different dates. He investigated the Spey valley in the late 1970s and then again in the early 1990. However, such return visits to the same investigation site are very unusual in tourism literature and hence the findings are particularly important. The sample size and content for Getz' studies of 1978 and 1992 were fairly similar to each other, 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 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 had become more negative towards tourism. However, the attitudes appeared more linked to a general feeling of economic depression. 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.
- The attitudes of locals had not greatly changed with the growth and change of the tourist industry. The 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 these findings provide a particularly good example of the variety of perceived different positive and negative impacts of tourism, from the perspective of local residents.

## 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 on the island of Samos (Pythagorean) 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 (based on Haralambopolulos and Pizam, 1996):

- 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, standard of living.
- Factors that would 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 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 just about all groups, except the young.

(Adapted from Haralmbopolous, N. and Pizam, A. (1996). Perceived impacts of tourism: the case of Samos. *Annals of Tourism Research*, 2 (3), 503–26.)

The case study of the Greek island of Samos indicates that socio-cultural effect 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. This form of activity does not carry the same stigma as it would in a Western society and, if anything, is a relatively common practice. 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 has been unusual in the last three decades of the twentieth century is the growing scale of sex tourism and that it increasingly involves 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 homogenous, 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 commoditised 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's 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 outcomes

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

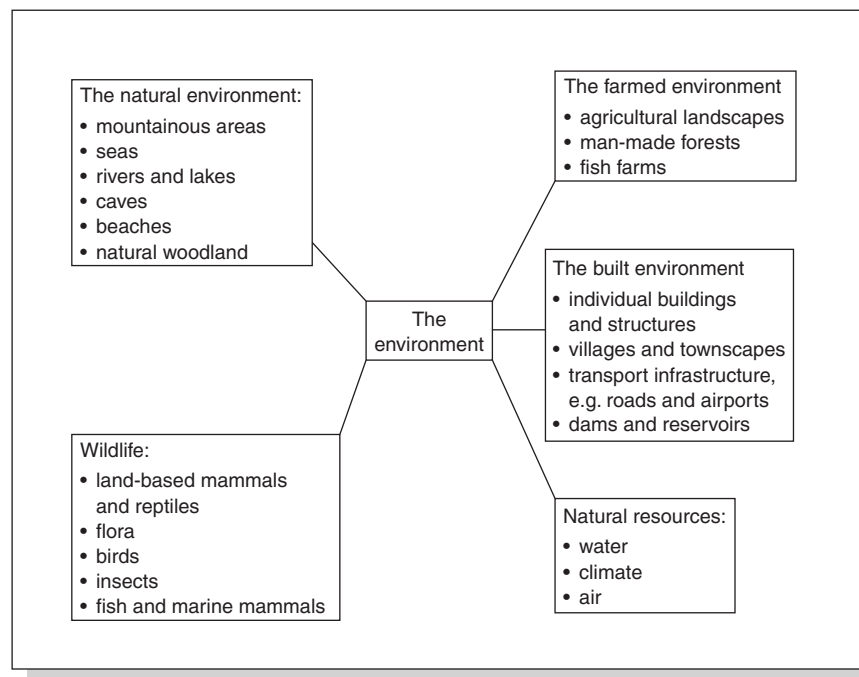
This chapter is concerned with the impact of tourism on the environment. The environment is made up of both natural and human features. Human settlements set within the countryside may contain a large number of attractions for tourists. Often the natural environment is referred to as the physical environment. 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 a key factor in tourism. In the last decade of the twentieth century, it was 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



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

farmland in search of live prey and nest material, and may even go to a town (the built environment) in search of carrion.

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, but is also the result of the nature of the organizational structure such as the planning process (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 animals in their habitat (this includes plants and other organisms, but usually excludes humans). Therefore, ecological impacts of tourism include impacts on, for example, plants as result of trampling by visitors and modifications to animal behaviour as a result of tourists being present in their habitat.

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 via, for example, 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

Area of effect	Negative impacts	Positive Impacts
Biodiversity	Disruption of breeding/feeding patterns Killing of animals for leisure (hunting) or to supply souvenir trade Loss of habitats and change in species composition Destruction of vegetation	Encouragement to conserve animals as attractions Establishment of protected or conserved areas to meet tourist demands
Erosion and physical damage	Soil erosion Damage to sites through trampling Overloading of key infrastructure (e.g. water supply networks)	Tourism revenue to finance ground repair and site restoration Improvement to infrastructure prompted by tourist demand
Pollution	Water pollution through sewage or fuel spillage and rubbish from pleasure boats Air pollution (e.g. vehicle emissions) Noise pollution (e.g. from vehicles or tourist attractions: bars, discos, etc.) Littering	Cleaning programmes to protect the attractiveness of location to tourists
Resource base	Depletion of ground and surface water Diversion of water supply to meet tourist needs (e.g. golf courses or pools) Depletion of local fuel sources Depletion of local building-material sources	Development of new/improved sources of supply
Visual/structural change	Land transfers to tourism (e.g. from farming) Detrimental visual impact on natural and non-natural landscapes through tourism development Introduction of new architectural styles Changes in (urban) functions Physical expansion of built-up areas	New uses for marginal or unproductive lands Landscape improvement (e.g. to clear urban dereliction) Regeneration and/or modernization of built environment Reuse of disused buildings

**Figure 6.2** 'Balance sheet' of environmental Impacts of tourism (Adapted from Hunter and Green, 1995.)

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:

- Environmental (or physical) carrying capacity usually refers to physical space and the number of people (or the number of cars) in a particular place.
- Ecological carrying capacity is a threshold measure, which if exceeded will lead to actual damage of plants/animals habitat.
- Perceptual carrying capacity; this 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 tourism environmental impacts. 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 450 000 visitors per year in the mid-1990s, 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 min 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: 27 per cent Japanese, 26 per cent Korean, 9 per cent Taiwanese, 8 per cent Australian and 7 per cent New Zealanders.

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 monoxide should not exceed

2400 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 glow-worms 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 various international visitor groups. New Zealanders, for example, 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 domestic visitors were being 'squeezed out' by high-volume international short-stay visitors. This was largely a result of aggressive marketing 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. 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 localised sensitivities of culture and heritage.

(Adapted from Doorne, S. (2000). Caves, culture and crowds: carrying capacity meets consumer sovereignty. *Journal of Sustainable Tourism*, 8 (4), 34–42.)

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, LACs suffer from technical difficulties in agreeing some of the more qualitative aspects of tourism development. They also assume the existence of rational planning. Another technique is that of the environmental impact assessment (EIA), which has become a particularly common process in the last 20 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 by re-routing. In this case, both impacts and management attempts to alleviate will be limited to a small area. However,



**Figure 6.3**  
Key principles of  
environmental impact  
assessment  
(Adapted from Hunter and  
Green, 1995.)

- 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

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, a key tourism draw in New Zealand, is the environment. 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 (32 per cent) of all visits to New Zealand in 2000 (New Zealand Tourism Board, 1999). There are two important ideals in the relationship between tourism and the environment in New Zealand: these are the notions of wilderness and 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.

The role of Maori people is important, as they own more than 50 per cent of native bushland in New Zealand that is in private hands. 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 two kilometres 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 3800 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 conflict between divers and recreational anglers. Divers complained about damage caused by anchors, destruction of corals by snagged lines, the catch 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. There is a 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 5000 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 limits of acceptable change. 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, D. and Harriot, V. (1996). Sustainable tourism development or the case of loving a place to death. In *Practising Responsible Tourism* (L. Harrison and W. Husbands, eds), pp. 422–44. New York, John Wiley & Sons.)

## 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. To a great extent the environment provides 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. 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 might environmental impacts on a heavily visited small tropical island vary from those on the interior of the mainland of Europe?
- 5 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?
- 9 Select a location in your area and indicate how you would assess the following:
  - environmental carrying capacity;
  - ecological carrying capacity;
  - perceptual carrying capacity.

## Conclusions to part one

The three preceding chapters (Chapters 4–6) have indicated the importance of different types of tourism impact. These impacts have been classified under the headings: economic, socio-cultural or environmental. However, as stated in Chapter 3, in a real setting, impacts are not that easy to separate and classify under these headings. Tourism impacts are, in fact, multi-faceted. A number of the case studies in Chapters 4–6 may have suggested this, although this may not have been asserted overtly.

In any given situation, it is likely that there will be a combination of different impacts, with some being considered more significant than others. It is also likely that the impacts of tourism will vary overtime. The theories of Butler and Doxey suggest how tourism' impacts may change over time. It is therefore possible and indeed very likely that, for example, where economic gain is noted at the earliest stages of tourism, it will be the case, several years later that socio-cultural effects are becoming more apparent and environmental consequences may also be noted. By this stage in the development of tourism, the initial positive economic impacts of tourism may be replaced or diminished by growing social unease between the residents and tourists as well as mounting concern about tourism's environmental impacts.

It is important to note that when considering tourism' impacts, the environment in which impacts is taking place usually comprises complex systems in which there are inter-relationship between the so-called environmental, social and economic aspects. Impacts often have a cumulative dimension in which 'secondary processes reinforce and develop the consequences of change in unpredicted ways, so treating individual problems in isolation ignores the likelihood that there is a composite impact that may be greater than the sum of the individual parts' (Williams, 1998, p. 102). Williams argued for a holistic approach to tourism impacts and, in addition to the point made above, he suggested that such an approach enables a more balanced view of these impacts to be obtained and in this way positive aspects of tourism impacts will be recognised as well negative views.

Adopting a holistic approach also makes us aware that the word environment embraces a diversity of concepts – built environments, physical environments, economic environments, social environments, cultural environments and political environments – and tourism has the potential to influence all of these, albeit in varying degrees.