Tourism and the Environment (English Tourist Board/Employment Department, 1991) examined and established the scale and nature of environmental problems induced by mass tourism at major tourist sites, and produced guidelines on how such problems were to be addressed. The study pointed to the need to maintain the resource base for tourism activities. As part of the study, common problems resulting from tourism were identified, including wear and tear on the urban fabric, overcrowding, and social and cultural impacts between the visitors and local communities.

Indeed, some authors have portrayed tourism–environment impacts as running along a continuum where the effects may be positive in inner city environments that benefit from tourism-led regeneration, ranging to more negative impacts as in other tourism environments (e.g. coastal areas, rural areas, upland and mountain environments). Depicting this dependent relationship between tourism and the environment, Mathieson and Wall (1982: 97) argued that:

In the absence of an attractive environment, there would be little tourism. Ranging from the basic attractions of sun, sea and sand to the undoubted appeal of historic sites and structures, the environment is the foundation of tourism.

This is nowhere more evident than in the South Pacific, where stereotypical images of palm trees, beaches, lagoons and sun create an impression of an idyllic tourist landscape. Yet many of the Pacific Islands encapsulate the environmental problems created by tourism, and these are illustrated in Box 12.1.

**Box 12.1  Case study: the environmental impact of tourism on the Pacific Islands**

Many Pacific Islands are fragile ecosystems where the impacts of tourism are highly visible, particularly given the tendency for tourism development to concentrate on coastal areas. As Hall (1996: 68) observed:

. . . because of the highly dynamic nature of the coastal environment and the significance of mangroves and the limited coral sand supply for island beaches in particular, any development which interferes with the natural system may have severe consequences for the long-term stability of the environment.
As a result, inappropriate tourism development on coastal areas causes:

- Erosion, where vegetation clearance exposes the beach to sea storms, and building activity on beaches makes sand deposits loose and more vulnerable
- The salination of fresh ground water sources, which are usually in limited supply
- Sewage outfall into shallow waters, which causes nutrients to build up and algal growth that adversely affects the coral reefs.

Furthermore, the modification of mangrove swamps on lowland areas to create harbours and marinas, and for land reclamation, leads to loss of ecological diversity and the rich environment for wildlife. It also removes a barrier to sediment build up. As a result, tourism’s environmental impacts on Pacific Islands include:

- Environmental degradation and pollution
- The destruction of habitats and ecosystems
- The loss of coastal and marine resources
- Coastal pollution
- Impacts on ground water.

As island ecosystems are characterized by limited space and species, impacts are very evident — especially where the geographical isolation of an island state is suddenly affected by the rapid development of tourism. Some attempts to address these concerns have been seen with the development of ecotourism. In the South Pacific, Hall (1996) indicated that ecotourism could be construed in two ways:

1. As ‘green’ or nature-based tourism, with a niche market, as part of special interest tourism (e.g. scuba diving)
2. As any form of tourism development that is considered to be environmentally responsible.

Both of these should pay regard to the sustainable use of very fragile resources. In many island microstates in the Pacific the significance of environmental issues in
MANAGING VISITORS AND THEIR IMPACTS

Tourism is apparent, as a number of common themes characterize its development and the pressures on the resource base:

- Scale, where impacts can easily be damaging to fragile resources
- The high levels of dependency on external international tourism interests that do not have a long-term stake in the local environment
- An absence of indigenous sources of capital to develop tourism, removing many opportunities for sustainable tourism development that is community owned and locally managed
- The predominance of colonial patterns of control in the tourism sector limiting the permeation of new ideas such as environmentalism
- An economic system characterized by outward migration, a dependence upon remittances back to families, aid to assist economic survival, and bureaucracy (known as the MIRAB model)
- Increasing competition among island microstates for tourists in the Pacific and resulting compromises in tourism planning and development to attract visitors.

There is also a growing dependence upon tourism, which is politically promoted as a solution to problems of underdevelopment. Yet the main problem is the consumption of a finite resource – the environment needed to meet tourism aspirations in island microstates in the Pacific.

The environmental impacts in the Pacific islands can be combined with the list of the more general problems that Mathieson and Wall (1982) identified in resort areas, which include:

- Architectural pollution owing to the effect of inappropriate hotel development on the traditional landscape
- Ribbon development and urban sprawl in the absence of planning and development restrictions (as is the case in many Spanish resorts in the Mediterranean)
- The resort infrastructure becoming overloaded and breaking down in periods of peak usage
- Tourists becoming segregated from local residents