Chapter - 5

Indicators for Impact Assessment
5.1. Impacts of Sustainable Tourism

Ecotourism is an industry with vast impacts on social, environmental and economical sectors. A thorough understanding of each component of the ecotourism phenomenon is fundamental so that those involved with development, management and policy determination have a basis for decision-making. Impact studies emerged in the 1960s with much emphasis on economic growth as a form of national development, measured in terms of "Gross National Product (GNP)," rate of employment (Krannich, Berry and Greider, 1989). The 1970s saw the impacts of tourism ventures on social-cultural issues (Bryden, 1973). Environmental impacts of tourism became the sole concern of tourism researchers in the 1980s (Butler, 1980). 1990s tourism impact studies are an integration of the effects of the previous determined impacts, leading to a shift from "Mass Tourism" to "Sustainable Tourism" in the form of ecotourism, heritage tourism and community tourism (Jurowski, Uysal and Williams, 1997).

Tourism is one of the many external forces influencing the direction and options for local development. The question of whether tourism can be sustainable—that is, whether it can contribute to local sustainable development—is researched and analyzed so as to formulate the necessary management strategies to address the issue optimally.

5.2. Measuring Impacts

Tourism is an interdisciplinary field and involves a number of different industries and natural settings. Planning is essential to stimulate tourism development and its sustainability. Without tourism planning, many unintended consequences may develop,
causing tourist and resident dissatisfaction. These include damage to the natural environment, adverse impacts upon the cultural environment, and a decrease in potential economic benefits. The negative experience of many unplanned tourist destinations and the success of local and regional planned destinations demonstrate that tourism development should be based on a planning process that includes a solid assessment of the resources at the destination and their attractiveness potential (Blank, 1989; Formica, 2000; Gunn, 1994; Inskeep, 1994). Planning is also important for developed tourist destinations at which major efforts are generally focused on revitalizing the area and sustaining its attractiveness over time (Dragicevic, 1991; Formica, 2000; McIntosh, Goeldner, and Ritchie, 1995; Witt, 1991).

Historically much of tourism has been unsustainable mostly because tourism is a fierce competitor for resources - the provision of cultural and ecotourism opportunities for tourists may mean that local residents can potentially be displaced. The needs of tourists are different than those of local residents and, thus, serving tourists may again not suit the needs of local residents. Furthermore, few people understand tourism and what is required to develop successful tourism products, meaning that a lot of ecotourism locations have made unwise investments in tourism. Finally, tourism is often imposed on local communities, especially rural and minority communities, at level and speed that causes great social disruption (Mckercher, 2003).

There are numerous methods for measuring the ecotourism impacts (Salafsky, Nick and Margoluis, Richard, 1998). The environmental and economic impacts are generally measured using quantitative methods, while experiential and socio-cultural impacts are often examined qualitatively. In case of the latter two impact types, surveys
of visitors and local community members are common. A wide range of questions may be asked, including those which deal with visitors’ attitudes towards the community and community attitudes towards visitors.

The early research in the ecotourism area focused on identifying the various perceived impacts of tourism development (Belisle and Hoy, 1980; Liu, Sheldon, and Var, 1987; Liu and Var, 1986; Perdue, Long, and Allen, 1987; Ross, 1992; Sheldon and Var, 1984). The major impacts and variables have been identified, methodological approaches developed and problems and research needs delineated. Generally, residents recognized the positive economic impact of tourism development, but were concerned with potentially negative social and environmental impacts such as traffic congestion, crime, public safety issues and pollution.

Strategies to manage the impacts arising from ecotourism may be direct or indirect. Direct strategies include limiting the total numbers of visitors to an area, dispersing visitors, zoning, using fixed viewing points and setting guidelines for minimum viewing distances. Indirect strategies are those that aim to modify the behavior of tourists. One of the most important ways of achieving this is to educate visitors about the potential disturbance they can cause and to provide advice on how to reduce it. Ecotourism has the potential to be more damaging than mass tourism since they often occur in fragile or unique environment. Small-scale operations in environmentally sensitive locations may eventually turn into much larger and more destructive operations (Hunter and Green, 1995).

The early research also typically examined differences in perceived impacts among different types of local residents identified on the basis of socio-demographic
characteristics (Belisle and Hoy, 1980; Liu and Var, 1986; Milman and Pizam, 1988; Pizam, 1978); place of residence or distance from the tourism area of the community (Belisle and Holy, 1980; Sheldon and Var, 1984); and economic dependency on tourism, measured both as type of employment (Milman and Pizam, 1988; Pizam, 1978) and by comparing local entrepreneurs, public official and other residents (Thomason, Crompton and Kamp, 1979; Lankford, 1994; Murphy, 1983). This research found little consistent difference in perceived tourism impacts by socio-demographic characteristics. Perceived impacts of tourism decrease as distance between individuals’ homes and the tourism sector of the community increases. Overall favorability of tourism impact perceptions increases with the individual’s economic dependency on tourism.

Among tourism impact studies, the development of a tourism impact assessment scale has also been one of the important topics espoused by scholars starting about two decades ago (Chen, 2000). Pizam (1978) brought up tourism impact attributes; research started using various resident attitude-related attributes to postulate-perceived tourism impacts. Several researchers (Liu and Var, 1986; Liu, Sheldon and Var, 1987) further distilled these attributes into fewer identical impact domains. After that, Lankford and Howard (1994) found two factors from a 27-item tourism impact scale. McCool and Martin (1994), who investigated mountain residents’ attitudes toward tourism, revealed four factors including impacts, benefits, equity, and extent. However, Burns (1996), who surveyed 102 inhabitants from 14 villages in the Solomon Islands, noticed that respondents’ greatest concern was tourism’s socio-cultural impact with regard to the demonstration effect and different cultural values of tourists.
According to the Inter-organization committee (1994), in general, there is consensus on the types of impacts that needs to be considered (social, cultural, demographic, economic, social psychological). Also, political impacts are often included. Recently Ap and Crompton (1998), in their effort to develop a reliable and valid impact assessment scale, revealed a 35-item tourism impact scale that helps monitor sustainable tourism development. However, the inter-organization committee (1994) concluded that the Social Impact Assessment (SIA) practitioner should focus on the more significant impacts, use appropriate measures and information, provide quantification where feasible and appropriate, and present the social impacts in a manner that can be understood by decision makers and community leaders. In addition to investigations of scale development, scholars have facilitated discussions on the issues of perceived economic, social, cultural, and environmental impacts as a result of the presence of tourism. In the next section, the major positive and negative impacts of tourism development is discussed and summarized in Table 5.1

Table 5.1. The major positive and negative impacts of tourism

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Chapter 3

Indicators for Impact Assessment

Negative economic impacts
1. Causes inflation of land value
2. Increases demand for local products, raising price on food and other products
3. Diverts funds from other economic development projects
4. Creates leakage through demand for imports
5. Results in seasonal employment
6. Displaces traditional patterns of labor
7. Involves costs of providing the construction and maintenance of infrastructure

Positive social impacts
1. Creates favorite image of the country
2. Provides recreational facilities for residents as well as tourists
3. Facilitates the process of modernization
4. Provides opportunities education

Negative social impacts
1. Creates resentment and antagonism related to dramatic differences in wealth
2. Causes overcrowding, congestion, traffic jams
3. Invites moral degradation resulting in increased crime, prostitution, drug trafficking
4. Causes conflicts in traditional societies and in values

Positive cultural impacts
1. Encourages pride in local arts, crafts, and cultural expressions
2. Preserves cultural heritage

Negative cultural impacts
1. Create demonstration effect whereby natives imitate tourists and relinquish cultural traditions.
2. Encourage the tranquilization of crafts
Positive environmental impacts

1. Justifies environmental protection (marine reserve) and improvement
2. Protects wildlife
3. Encourages education of value of natural based tourism

Negative environmental impacts

1. Fosters water pollution, air pollution and solid waste
2. Tramples delicate soil and beaches
3. Destroys coral and coastal dunes
4. Disrupts flora and fauna (wildlife, plant life wetlands)

This list of tourism impacts was drawn from the literature on the impacts of tourism (Andereck, 1995; Ap and Crompton, 1998; Crandall, 1994; Farrell and Runyan, 1991; Gunn, 1988; Mathieson and Wall, 1984; Murphy, 1985; Tosun, 2002; Weaver and Lawton, 2001; Witt, 1990).

5.3. Need for Ecotourism Impacts Monitoring

In recent years, ecotourism has exploded in popularity. Ecotourism takes tourists away from civilization and exposes them to exotic wildlife, new cultures and entrancing landscapes. At the same time, travelers strive to have as little impact on the environment as possible. Sustainable ecotourism, or ecotourism at its best, enhances the lives of the people in the host country without exploiting these peoples, disrupting their culture or damaging the ecosystem. When handled correctly, there are many benefits of ecotourism for the host country (Laura Evans, 2008).
Chapter 5  Indicators for Impact Assessment

Ecotourism can contribute enormously to the management of protected areas. Benefits include foreign exchange revenues, employment opportunities, improving awareness of conservation objectives and stimulation of economic activities. While protected areas are major destinations for eco-tourists, private enterprise is playing an increasing role in the ecotourism sector. In addition, ecotourism is a major vehicle for realizing tangible benefits of conservation for local communities with wildlife populations occurring on their land. However, the benefits accruing to local communities from tourism have so far been overstated. The type and magnitude of the environmental impacts associated with ecotourism vary with the type of tourist activity pursued. Some impacts are obvious and easily identifiable, while others are indirect and difficult to quantify.

The indicators and related indices (questions) are both quantitative and qualitative in nature and give an idea of the scope of the tourism sector. There are questions about the overall number of tourism enterprises and the number of people employed in tourism. On the other hand, these data allow a comparison between tourism and other economic activities. This helps to define tourism’s role in regional development at the present time, to evaluate the objectives that were set, and to identify future objectives related to tourism development in the region. These indicators and indices highlight the overall picture of tourism, i.e. number of those employed in tourism, type of employment, salaries/wages, contributions by government (construction, donations), improvements that are needed – facilities and services, and availability of local training in tourism. Indicators which are included in tourism sector provide information on tourism quality and its dynamics, and help to identify the key trends in its development.
Monitoring visitors is an important element in the monitoring system. Visitors should be monitored continuously, and the data should serve as a basis for evaluating the quality of services, for making changes in services, for developing the tourist product, and for strategically planning tourism development at the destination. The important indicators which are included in Appendix-II are: income, demographic characteristics and other data on visitors, access to services, parking, satisfaction with services and facilities, image of the destination etc. Monitoring visitors is ultimately targeted at management of product quality by using indicators to determine the visitor's degree of satisfaction with the goods and services offered.

Indicators which are used to gather information from local population indirectly measure changes in the economic, socio-cultural and ecological environment through the attitudes and perceptions of the local population. They show whether there is economic growth, whether the psychological comfort of local population is established or violated, and whether qualities/features of the natural environment and of cultural and historical heritage are preserved and improved. Further indicators measuring public sector show the actual role of each participant and reveal the relationships among them.