MARINE TOURISM DEVELOPMENT IN FIJI

Filimore R. Ralogaivau  
Government of Fiji

Abstract: not available

Introduction

Fiji's underwater scenery and surface areas are amongst the six top destinations for diving and exploration by tourists in the world. It has been proven that protecting an area from fishing and shell collecting allows nearby areas to produce more marine species. Recently, members of Fiji's tourist industry welcomed government's intention to create marine parks and reserves. The trend worldwide is to highlight environmental issues. If Fiji proceeds with the creation of marine parks and reserves, the tourism industry as well as other sectors of the community would benefit.

Current Situation and Issues to be Addressed

In Fiji, the indigenous people are owners of fishing rights while the foreigners are the investors. The main area of contention is fishing rights. There are no clear guidelines for the use of fishing grounds for tourism activities. As a result, agreements between developers and indigenous people have not necessarily been fair or reasonable to either party. The only guidelines in use at the moment is Cabinet decision CP (74) 204 or 25/9/95, which states:

(a) That Fijian customary fishing rights are not compensable rights;
(b) That where Fijian customary fishing rights are inferred with, the owners should be compensated in the form of a capital sum by the lessee/developer or the crown or whichever party carries out the development.

To date, no formula has been set for the industry and any inquiries made to respective Government bodies have been directed back to the level of Operator—Fishing Rights Owner.

The landowners view their fishing grounds as a source of food and any exploitation through other activities will disturb the food cycle. Therefore, they feel that they should receive compensation for any disturbances to their marine resources. General developers often consider the reefs and adjacent offshore water bodies offshore as belonging to the state and therefore feel that local landowning groups do not deserve compensation for their use. The Fiji Diver Operators Association view is that (1) customary fishing rights are not affected by scuba diving (2) there is an incorrect assumption that the use depletes the Fijian people seafood and (3) diving is not harmful to the reef. Scuba diving for observation purposes has not been considered, in international arenas, as harmful to marine life. The Fiji Hotel Association says that the extent of compensation should be determined by the nature of the activity and exclusivity of use. The Society of Fiji Travel Agencies asks, who would be responsible, who would be paying, and what protection would these payments give to the operators.

At the moment, the Government, those involved in the tourist diving industry in Fiji, and the landowners have been continually discussing proposed marine park/reserve guidelines to establish commercial business ventures which would be fair and reasonable to both parties. Due to the sensitivity of the issue, the Fiji Government is carefully considering the range of views raised and is taking into consideration the interest and welfare of the nation before entering into any agreement. To reach an amicable solution, the Government has coordinated ongoing meetings through its Department of Tourism.

Fisheries Resource Management in the Pacific

Fish stock depletion has always been present. Administrators and managers of the world fisheries are searching for a series of management systems to control the exploitation and utilization of fisheries stocks on a perpetual basis. Remarkable changes have occurred in fisheries, which were brought about by political, legal, biological and technical developments. The fishing fleet has been able to essentially open all oceans. Most of the world's fisheries have paid the price of over exploitation and thus collapsed. There is an urgent need to review the methods of regulating fishing mortality. In the absence of regulations, profitable use is unstable (Panayotou, 1982).

In multi-species tropical fisheries, it has been suggested that control of access could be the solution to overfishing (Panayotou, 1982). However, since no one species is targeted, the sustainable yield curves are difficult to ascertain. The catch at any one time would consist of a number of species, each having individual population dynamics and therefore a different sustainable yield.

In the Pacific, traditional communal fishing right systems exist. In Fiji, the system is called "qolqoli." The qolqoli represents a marine tenure system, which is also found in different forms around the Pacific. The system has a very traditional customary base, hence is often referred to as the
Customary Tenure System (CMT). The CMT defines a traditional group as custodians or owners of the fishery resources in a defined marine area. The area is normally within the reef flats and lagoons.

Fisheries exploitation in these traditional customary fishing areas should be with the consent of the custodians. Within these areas, customary ceremonies are observed which often consist of fishing in the area banned for certain periods. These practices are means of conservation.

Fiji Commitment to Coastal Zone Management

The coastal zone is of vital importance to Fiji’s society and national development. It brings together a unique assemblage of resources such as reefs, mangroves, water, agriculture, seafood, beaches, and high quality landscapes. Yet it is also the location of every significant town in Fiji; the majority of villages; the vast majority of the population; as well as industry and commerce.

Effective Conservation Management

The objective is the establishment of an effective “on-ground” system of culturally appropriate protected area and sites to include: national parks; nature reserves (terrestrial and marine); regional recreation parks (such as forest parks); archaeological sites and reserves; and national monuments.

The rationale is to build upon the National Resource Assessment and the Register of Sites of National Significance and to take the survey work to define “reserve” or protected areas and sites. This will provide the Government and the DOC with an operational management framework for national environmental and heritage conservation. The resource assessment and the Register can only be as meaningful as the “on-ground” result. Establishment of a protected areas/sites system also has direct correlation with the preparation of national land use and coastal zone plans. Establishment of the system would be the first major task of the DOC.

Activities

- Consult with land/reserve owners, Provincial councils, and NLTB, on levels of use/development of respective areas/sites;
- Prepare, in the short term, management objectives/frameworks for each area or site as a basis for long-term preparation of comprehensive area/site management plans; and
- Establish an institutional capacity in DOC for effective and ongoing management of the protected areas/sites system.

Personnel

- Conservation planner (consultant) with in-depth experience in developing protected areas/sites in conjunction with traditional land/resource owners to be responsible for developing overall framework system (1–2 years)
- Ecologist/Park Planner (consultant) with experience in park establishment to determine appropriate boundaries, development, and management objectives (3–5 years)
- Archaeologists and historic site specialists to prepare boundary and management prescriptions for archaeological, historic sites and monuments (6 months–1 year)
- Resource economist/secondary tourism planner to prepare a report on potential of areas for appropriate development activities compatible with conservation objectives and resource owner aspirations (6 months–1 year)

Government Contribution

- Provision of counterparts
- Land/resource owner liaisons
- Survey teams
- Development of supporting legislation and regulations
PROSPECTS OF COASTAL TOURISM DEVELOPMENT IN BANGLADESH

M. Mahbub Alam
Marine Fisheries Academy (Bangladesh)

M. Niamul Naser
University of Dhaka (Bangladesh)

Abstract: Coastal and marine tourism of Bangladesh is now under prior consideration of the country. The country possesses the longest sandy beach of the world at Cox’s Bazar along with the world’s largest area of contiguous Sundarban mangrove forest. At present, most of the tourism activities aggregate around Cox’s Bazar at the south-east coast of the Bay of Bengal of Bangladesh. The semi-diurnal tidal patterns offer off-shore clean sea waters at high tide. In recent years the tourism authority has attracted a good number of visitors by introducing resorts, recreation center, protected beach, golf courses and warm swimming pool facilities. The area is well-connected with the capital city Dhaka and port city Chittagong by air and luxurious air-conditioned buses. The Sundarban mangrove area provides evergreen vegetation, wide range of floral and faunas including the famous royal Bengal tiger, spotted deer, over 200 migratory birds, 334 species of plants. The development of eco-tourism in this mangrove area is yet to be generated. Traditional honey collections, numerous criss-cross rivers and tidal creeks could attract wild attractions to the tourists. The present article deals with aspects of development and management practices for Cox’s Bazar and future eco-tourism in Sundarban mangrove region. Some preventive measures for environmental preservation are suggested.

Keywords: eco-tourism, sandy beach, mangrove forest, Sundarban, Cox’s Bazar, Bangladesh

Introduction

Sun, sand and seashore are the main coastal and marine tourist attraction in Bangladesh. In addition, tropical evergreen forest and high rise secondary hilly cliffs along the sea coast offers a wild interest to the tourist. Unfortunately the country has an under developed coastal and marine tourist industry. Bangladesh possesses the longest sandy beach of the world and the world’s largest area of contiguous mangrove forest (ESCAP, 1988). Most of these areas are completely unspoiled and offer a window of opportunity for practicing sustainable tourism.

Tourism is one of the well known rising industry and an important source of income for many countries. UNEP (1984) reported that the number of tourists increased approximately 5% each year in the world. This growth rate consequently increases a world wide tourist-generated income. Two-thirds of the world’s population is living along the coast (Steyaert and Troost, 1984) and 60% of the large cities are located by the sea (Duveedi, 1968). The majority of tourists have a tendency to spend their vacations at seaside and thus much attention has been given to develop coastal and marine tourist resorts around the world. As a potential sector, Bangladesh is now looking for developing and expanding its coastal and marine tourist resorts.

At present, policy of the country for development of sustainable coastal and marine tourism resorts are under prior consideration. As a potential source of foreign exchange earnings, scope for new jobs and regional development, the existing policy of the country is offering departmental cooperation to encourage the foreign investors in potential tourist sites. The Ministry of Civil Aviation and Tourism is responsible for policy-making and implementation in this sector of the country. Bangladesh Parjatan Corporation (BPC) is an autonomous institutions that ensures tourism supply and marketing facilities for tourist. In addition, a few private travel agencies provide necessary information for the tourists interested. The present articles deals with existing tourism and its future opportunities in relation to eco-tourism.

Hydro-Meteorological Regimes in Coastal Region

Bangladesh is situated in the northeastern part of South Asia, bounded by India on the west, the north, and the northeast, and Myanmar on the southeast and the Bay of Bengal on the south. The country enjoys a sub-tropical monsoon climate consisting six seasons in a year with three prominent seasons, namely winter, summer and monsoon. Winter is quite pleasant; it begins in November and ends in February. As a tropical winter, fluctuation in minimum temperature ranges from of 7.2°C to 12.7°C (45°F to 55°F) and maximum of 23.8°C to 31.1°C (75°F to 85°F). The maximum temperature recorded in summer months was 36.6°C (98°F), especially in the northwest part of the country (BDS, 1992). July is the onset of monsoon and continues till August and sometimes till early October. It contributes about 80% of country total rainfall. In general average seasonal temperature always exists at moderate level in the coastal districts.

The tidal patterns of Bangladesh coast is semi-diurnal; it consists of two high and two low tides in a lunar day. As a result, the high tide offers off-shore, clean, enjoyable sea water twice a day. Moderate velocity of the sea borne wind generates attractive wave crest and adventurous sounds. The boat and sea surfing are still to be developed. Boat riding at outer tidal area is possible but the surfing is still wanting to be tested. The average salinity during the tourist season is about 30 ppt in the Cox’s Bazar sea coast.
The mean tidal height fluctuation is about 3.5 m at Cox's Bazar and Teknaf, and about 4.0 m at Chittagong sea coast (BIWTA, 1994). During the monsoon months most of the coastal waters become turbid due to heavy rainfall in mainland, which causes a huge silt-laden river run-off water in the bay. Despite these hydro-meteorological characteristics, the winter months are considered as the peak tourist season because it possesses relatively comfortable weather in aspects of humidity and temperature.

**Natural Landscape in the Coastal Region**

Planning of tourism development is dependent upon the attractiveness of natural landscape. The coastal area of Bangladesh supports a diverse range of natural landscape. The most important tourist spots are Sundarban mangrove forest of Khulna, which is surrounded by numerous branches of rivers, canals, tidal creeks; planted-mangrove vegetation on the flat beach along the Chittagong sea coast; world’s longest sandy beaches of Cox’s Bazar-Teknaf and secondary hilly cliffs with tropical evergreen forest along this coast line; St. Martin’s coral island in the Bay of Bengal, at 22 km south of Teknaf; and numerous nearshore sandy and rocky islands. Among the islands, Kuakata, Rangabali, Moheshkhali, and Sonadia are of potential for marine tourism. The St. Martin’s island, only coral island, at present essentially needs to declare as a Marine Protected Area (MPA) since its total biotic environmental condition is extremely deteriorated due to indiscriminate exploitation of coral, seaweeds and other resources of economic importance.

The present favorite tourist spot of the country is Cox’s Bazar sea beach. The adjacent Hahana National Park is providing few natural waterfalls, offering an extra attractions to the tourists. Additionally, some other landscapes are available towards the south of Cox’s Bazar sea coast where no tourism activity been observed. This may be due to less trodden areas and lack of suitable communication.

**Existing Coastal Tourism Facilities**

Presence of tourism supply undoubtedly important to ensure visitors requirements in any tourist resorts. Adequate lodging facilities offers ample opportunity for resting and relaxing environment for tourist. In addition, adequate recreational facilities, cultural events, sports facilities, shopping centers as well as sight-seeing tours are essentially needed in a well-established tourist resort. These facilities will ensure freshness of mind since tourists are looking forward to tension-free days in their visit. The existing facilities in Bangladesh is underdeveloped stage and thus for tourist it is adventurous. At present marine and coastal tourism is centered towards Chittagong and Cox’s Bazar. Both cities support quality and inexpensive residential hotel, motel and family cottages. There are 30 hotels in Chittagong including one from Bangladesh Parjatan Corporation. Only one swimming pool is available here at Agrabad Hotel. In contrast, there are 44 hotels, motels and family cottages are available at Cox’s Bazar including a youth inn. Some of these possess swimming pools, bar, golf link and arranged seasonal-cultural programs with local tribal communities. An overview of existing physical facilities for tourist in Chittagong and Cox’s Bazar region is represented in Table 1.

Communication networks play an important key role in the tourist resorts. At present regular air links and air-conditioned bus services are available between the capital city Dhaka to tourist city Chittagong and Cox’s Bazar. Bangladesh Railways also provide several express train services between these cities. In contrast, the Sundarban and other coastal districts in southern region are well communicated by air, rail, buses and passenger ships. A famous steamer service named ‘Rocket’ is very popular among tourist for river journey. This service is available since British time and still maintained under such tradition. The journey in river often experienced by traditional Hilsa (River Shad) fishing on the River Padma and Meghna or scope for tracking the spotted deer along the river coast during Pousakholi to Khulna bound journey.

**Present Constraints**

Bangladesh possesses some of the best natural features of the world. Its marine and coastal tourism is still not popular to the international tourist communities because of several constraints. The most important one is the higher travel cost for Europe and North American tourist. Previously majority of the foreign tourists were represented by Western Europe, Far East and Oceania. After opening Biman’s (country’s national airline) New York flight, the increase in North American tourist is evident. As a nation the country has its own heritage and reputation. The lack of proper tourism follow-up in international community, it’s unique cultural conservatism failed to attract tourist (ESCAP 1988). An unfortunate image existing for Bangladesh as a country of natural disasters (i.e., flood, cyclone, tornado etc.), which may divert tourists. In fact, these natural disasters are not evident in the tourist season (winter months). Finally the existing management and marketing system for international tourist communities are not well organized like the other successful coastal and marine tourism nations. To develop the existing practice as well as to share the international tourist market the country needs some strategic policy changes as soon as possible.
### Table 1. Some Facilities in Coastal and Marine Tourism in Chittagong and Cox’s Bazar, Bangladesh.

<table>
<thead>
<tr>
<th>City</th>
<th>Name of Hotel/Motel</th>
<th>Rent/Room/Night in USS</th>
<th>Additional Facilities</th>
</tr>
</thead>
<tbody>
<tr>
<td>Chittagong</td>
<td>Agrabad Hotel (***)</td>
<td>60 to 65</td>
<td>Swimming pool, Hall room, Bar and restaurant etc.</td>
</tr>
<tr>
<td>Chittagong</td>
<td>Motel Saikat (**), BPC</td>
<td>40 to 45</td>
<td>Site seeing tour</td>
</tr>
<tr>
<td>Chittagong</td>
<td>Hotel Saint Martin (***)</td>
<td>50 to 55</td>
<td>Information is not available</td>
</tr>
<tr>
<td>Chittagong</td>
<td>Hotel Meridian (*)</td>
<td>40 to 50</td>
<td>Information is not available</td>
</tr>
<tr>
<td>Cox’s Bazar</td>
<td>Hotel Saibal (***) , BPC</td>
<td>50 to 55</td>
<td>Bar, Swimming pool, golf link, Conference Room.</td>
</tr>
<tr>
<td>Cox’s Bazar</td>
<td>Hotel Saymon</td>
<td>25 to 30</td>
<td>Bar, Swimming pool</td>
</tr>
<tr>
<td>Cox’s Bazar</td>
<td>Hotel Panowa</td>
<td>20 to 25</td>
<td>Information is not available</td>
</tr>
<tr>
<td>Cox’s Bazar</td>
<td>Palonkee</td>
<td>20 to 25</td>
<td>Information is not available</td>
</tr>
</tbody>
</table>
Future Opportunity

In general, the present tourism practice of the country is emphasizing inland historical places, like centuries old architectural monuments, numerous cultural heritage places and natural landscape sites. Evidently, the number of foreign tourists is now increasing (Figure 1). This may be due to several factors. The Bangladesh Biman offers best prices for package tour from London, Athens, Tokyo, New York, and some other international cities. Besides some problem in India and Bangkok may divert tourists in Bangladesh. Until now, most of the potential coastal landscape is under utilized for tourism. Creation of nature oriented tourism (i.e., ecotourism) in these area will provide more economic growth (Figure 2), and will open warm relationships with native and international tourist community. Herzer (1965; in Miller 1993, p. 188), mentioned that responsible “eco-tourism” is measured against four standards:
1. minimum environmental impact;
2. minimum impact on—and maximum respect for—host cultures;
3. maximum economic benefits to host country’s “grassroots”; and
4. maximum “re-creational” satisfaction to participating tourists.

It should be kept in mind that there is no standardized method of quantifying the nature of eco-tourism although ‘The Ecotourism Society’ defines ecotourism as “responsible travel that conserves the environment and sustains the well-being of local people” (Miller, 1993). As ecotourism is comparatively responsible tourism rather than traditional practice, the future development in the coastal and marine tourist resort in Bangladesh may proceed with eco-tourism practice. Some of the potential aspects are mentioned below.

Eco-tourism in the Sundarban

The Sundarban mangrove forest is one of the world’s largest contiguous mangrove forest consisting about 6290 square kilometers and 334 species of tropical evergreen trees that offers home for various biodiversity. This forest supports habitat for 400 species of wildlife, including 261 birds and 49 mammals and others like reptiles, amphibian (Khan 1986). The world’s famous royal Bengal tiger and spotted deer are the main attraction of the area. The entire forest is embraced with numerous cross-cross rivers, canals and tidal creeks. These water bodies provide home for various of fishes, shrimps, reptiles (including tropical crocodile), and freshwater dolphin. Traditional honey collection from Sundarban forest is an attractive and adventurous job for collectors since time immemorial.

The Sundarban mangrove forest is legally owned by the government and declared as a wildlife sanctuary in early 1970s. Hunting of animals, cutting of unauthorized trees are completely prohibited. The Department of Forest under the Ministry of Forest and Environment is at present managing and monitoring the wealth of the forest. At present only two tourist spots, ‘Hironpur’ and ‘Katka’ are available at the southern tips of the forest. Visiting these places requires special journey arrangement due to getting permission and accommodation. The ‘Hironpur’ resort is maintained by the Mongla Port Authority in Khulna and ‘Katka’ is maintain by the Department of Forest. The main attraction of the sites are the royal Bengal tiger, spotted deer, bird-watching and other wildlife. Development of “eco-tourism” facilities in this area (Sundarban forest) will create a new scope for tourists to have a ‘wild tour’ in a very remote but adventurous site.

Development of Marina

The coastal area of Bangladesh possesses some near shore islands which are suitable for development of marina and yacht club. The important coastal islands are Kuakata island near Patuakhali coastal area, Razabali island near Bholu district and Sonadia island near Cox’s Bazar sea coast. At present some preliminary resort development is going on in Sonadia and Kuakata islands. The most important features of these islands are isolation from local communities, absence of permanent human habitat and wide sandy beaches. The romantic features of the Kuakata island is the scope to enjoy sun rise and set scenic beauty. Development of adequate residential and recreational facilities as well as good transport networks in these areas will obviously attract both domestic and international tourists.

Approach to Environmental Preservation

It is well established that humans are the only creature responsible in damaging environmental quality of our planet. The increase in population during the tourist season generates problems related to pollution through direct waste disposal on the beaches. The mass population in a wild sanctuary or marine protected area sometimes create insecurity to the biodiversity especially when rare or endangered species are present. The development of marine and coastal tourism no doubt is one of the potential industry for the developing countries. The need of such development for improving their economic growth is also expected. Thus strategic policy approach may prevent probable environmental loss in the tourism sector. For that, to develop a new tourist resort in a valuable ecosystem, the following steps may helps to protect the marine and coastal tourism area. These are:

- Conducting detailed Environmental Impact Assessment (EIA) prior to tourist resort development including social and cultural monuments of that region.
Figure 1. Number of tourist during 1990 - 1995.

Figure 2. Income (US$) during 1990 - 1995.
- Adoption of precautionary principle in every stage during the development of tourist resort.
- Controlling tourist access by an optimum number according to the bearing capacity of the area.
- Adoption of necessary regulatory bindings in tourists area to keep the environment clean and healthy.
- Maintaining restricted and protected tourist resort for foreigners, if local socio-cultural heritage is conservative or conflicting nature with the lifestyle of visitors.
- Co-management in the coastal and marine resorts may offer better management efforts.

Conclusion

There is no doubt that the physical feature and climatological conditions of Bangladesh is suitable for sustainable and ecotourism practices. The country is now looking for the experiences to develop some of its new coastal and marine tourist resorts in potential coastal districts. Due to lack of adequate investment and technological know-how the coastal and marine tourism is yet to be utilized. To improve this bright of the country, it needs cooperation from both international and regional communities. The potential investors, companies or organization may consider to extend their new tourist resorts in Bangladesh. In turn, this will open an era of opportunities for the international tourist communities to know more of Bangladesh!

References


BIWTA. 1994. Bangladesh Tide Table. Published by Bangladesh Inland Water Transport Authority, Dhaka, Bangladesh.


TOURISM EMPLOYMENT AND THE URBANIZATION OF COASTAL BALI

Judith Cukier
City of Vancouver (Canada)

Abstract: Tourism employment is a major motivator for migration. Since many tourist resorts are located in coastal zones, migration to these resorts results in urbanization of the coastal zone. This paper presents the results of interviews conducted in two coastal resort villages in Bali, Indonesia. Tourism workers in four employment categories were surveyed: 1) hotel front desk employees; 2) guides; 3) souvenir kiosk operators; and 4) beach and street vendors.

Although migration has largely been seen as a rural to urban phenomenon, the research demonstrated that migrants to Bali's coastal resorts originated from both rural and urban centres. Furthermore, early migrants to the coastal resorts were not drawn by the "urban" nature of the resorts, but rather, by tourism employment opportunities. However, continued migration to these resorts has contributed to the urbanization of the coastal zone. The resulting urbanization is of the "desakota" form, described by McGee (1991) as a mixture of rural and urban land use.

Migrants to Bali were predominantly single males from Java who worked in the informal sector as vendors. A small proportion of migrants were married and had migrated together with family members. These migrants were found to be permanent, having never returned to their home villages. As well as non-Balinese migrants, a significant proportion of the sample were Balinese but had migrated from rural areas to the coastal zone to take up tourism employment. Both Balinese and non-Balinese migrants were found to have contributed to increased urbanization in the coastal zone. Attitudes in these coastal resort communities were of tolerance toward new migrants.

The research led to a number of policy implications for migration to and urbanization of the coastal tourism resorts. It is important for governments and tourism planners to: 1) encourage and support the economically viable informal tourism sector; 2) direct migrants to employment opportunities left vacant by the local community; 3) provide free or low-cost training courses in Balinese culture and customs for migrants; and, 4) direct migrants toward employment opportunities in other tourism areas to minimize urban growth of coastal area.

Keywords: tourism, employment, migration, coastal urbanization, Bali.

Tourism as a Coastal Urbanizing Force

A large literature exists demonstrating that tourism is an urbanizing force in the coastal zone (Smith, 1991; Wong, 1991, Goodall, 1992; Smith, 1992a; Smith, 1992b; Mollins, 1993). Most authors have argued that it is the additions to the physical infrastructure of tourism which is the primary urbanizing force (i.e., airports, roads, hotels, restaurants, stores). These additions lead to many negative impacts, resulting largely from physical transformations of the natural landscape. As beach resorts evolve into urban centres, negative environmental impacts occur, including the transformation of sensitive lands to a built environment of roads, hotels, restaurants and shops. Damage to natural ecosystems, both marine (e.g., damage to coral reefs, water quality degradation) and terrestrial (beach erosion, pollution, habitat conversion, hydrological changes) can be the result of tourism development and is both unpredictable and often irreversible (Wong, 1991, 1993). As well, it has been argued that "coastal resorts are not only a particular feature of tourism development, they are also a distinctive urban form." (Goodall, 1992, p. 5) largely characterized by strip development.

This paper argues that in addition to tourism infrastructure, migrants seeking employment in the tourism sector also act as a strong urbanizing force. As well, the paper argues that the form of urbanization resulting from tourism cannot always be characterized as simple strip development, but also includes a more complex form labelled by McGee (1991) as desakota. Desakota urbanization has been described as a pattern of alternating urban and rural land uses, where the rural lands continue to support intensive agriculture. The paper is based on the results of research conducted in Sanur and Kuta, two coastal resort villages in Bali, Indonesia.

Tourism Migration

Tourism can bring about migration within the labour force, through the creation of employment opportunities. In turn, migration to tourism areas fosters urbanization through an increase in population, and associated increases in housing and related infrastructure which service the migrant community. Although some tourism researchers (Monk and Alexander, 1986; Lever, 1987) have argued that tourism migrants are usually circular rather than permanent (that is, they work in the tourism areas during the high season and return home during the low tourist season), others have argued that migrants are permanent, remaining in the tourism area year round, even though they maintain strong links to their home village, through periodic visits or by sending home monetary remittances (Elkan 1975; Lever 1987). Thus, an important question to address when considering the urbanization effect of migrants is whether the migrants are permanent or circular. Permanent
migrants add considerably to urbanization pressures while, in general, circular migrants add less.

Another question regarding migration is whether migrants compete for tourism jobs with the local labour force or whether they fill a niche left open for social, cultural, economic or political reasons. Most researchers have argued that increased competition results (Davies, 1979; Cleverdon, 1977; Todaro, 1976; Gee et al., 1984; Parnwell, 1993; Sharples, 1994; Krippendorf, 1994). A few, however, have inferred that competition may not be the dominant consequence and that migrants for tourism jobs in fact fill vacant niches (McGee, 1982; Monk and Alexander, 1986; Lever, 1987; Connell, 1987). If, in fact, migrants do fill vacant niches, then existing employees are not displaced, community harmony is more likely to be maintained, and new migrants represent an addition to the local population and its supporting need for urban infrastructure.

Urbanization and the Desakota Model

Urbanization affects and is affected by migration. With specific reference to Asian countries, McGee asserted that the type of "urbanization" which has, and continues to occur in many Asian countries, is the development of regions of mixed rural and non-rural activity which surround an urban area. McGee (1991, 1995) labelled these areas desakota from the Indonesian words desa, meaning village and kota, meaning city. Tourism, through the creation of physical infrastructure, stimulation of economic investment, and migration for employment, is an urbanizing force. With urbanization comes the large potential for adverse effects such as congestion, inflated land prices, modified social organizations and changes in cultural values (Cukier-Snow and Wall, 1993). However, a question relevant to coastal zone management is: what pattern does tourism urbanization follow in the coastal zone? This question was applied to tourism employment in two coastal villages in Bali, Indonesia.

Tourism in Bali, Indonesia

The island of Bali (see Figure 1) is one of the most touristized of Indonesia’s provinces, with over one million tourists (approximately one quarter of all tourists to Indonesia) visiting Bali in 1995 (ITR, 1996). Although Bali has historically been Indonesia’s main tourist magnet, Bali did not become a prominent destination until the late 1960s with the construction of an international airport and the island’s first five-star hotel. The number of tourists to Bali increased dramatically over the 1969-1995 period from about 25,000 visitors in 1970 to 1.1 million in 1995 (ITR, 1996). Bali is a 5,600 km² tropical volcanic island which consists of three main biogeographical zones: the mountainous central region, the coastal lowlands, and the limestone fringes. The 1990 population of the island was 2.8 million with almost a quarter residing in the southern coastal areas (UNDP, 1992). The population density in 1991 was 500 persons per km². Bali’s population is young, with the largest percentage falling within the 15-19 age bracket (UNDP, 1992). Unlike predominantly Moslem Indonesia, the main religion in Bali is Hindu.

One significant result of the rapid development of tourism in Bali has been dramatic economic growth with the island having one of the highest average income levels in all of Indonesia (Cukier-Snow, and Wall, 1993). A highly visible result of this growth has been a rapidly changing landscape of increasing numbers of hotels, restaurants and souvenir shops, particularly in the highly desirable coastal zone. Employment in tourism has increased in both the formal and informal sectors, and the main resort areas of southern coastal Bali (Sanur, Kuta and Nusa Dua) have attracted migrant workers from other parts of Bali and throughout Indonesia.

The 1971 SCETO tourism master plan for Bali was largely responsible for the concentration of tourism, and the resulting urbanization, in Bali’s southern coastal zone. The SCETO tourism plan suggested a development strategy which encouraged rapid and concentrated tourism development in three main resort areas in southern Bali. This has contributed to greater urban growth in the southern coastal areas, than any other area of Bali. As well, Bali’s southern coastal areas have seen the greatest concentration of 5-star hotels, which Rodenburg (1980) documented as drawing 90% of their employees from outside the area adjacent to the hotel.

Tourism Employment Trends in Bali

Tourism development in Bali has resulted in the creation of many employment opportunities. Since 1970 and the initiation of mass tourism, there has been a trend in Bali for village residents to leave low-wage traditional sectors, such as farming and fishing, and migrate to the main resort areas of Kuta, Sanur and Nusa Dua in order to seek tourism employment. As well, non-Balinese migrants have been attracted to the island by tourism employment possibilities, even in the face of government policies attempting to restrict such migration. In 1973, a program was launched to allow only those migrants with a secure occupation and place to live to move to Bali (Picard, 1992). However, this policy has been difficult to enforce and was largely ineffective. The total number of migrant workers in Bali is not known, although official government figures for 1990 indicated that approximately 115,000 people were classified as migrants to Bali (Darmasetuwian, 1992).
Figure 1. Bali (inset shows the location of Bali within Indonesia).

Figure 2. Composition of tourism employment migrants to Sanur and Kuta by Province.
Case Study: Sanur and Kuta

Sanur and Kuta were chosen as case study sites because of their prominence as tourist resorts in Bali, their differing resort characteristics\(^2\), and their history of relatively unplanned and unregulated development. Nusa Dua, the third major tourism resort in Bali, was excluded from the study area because, as a government planned enclave resort, the development of tourism is strictly regulated and informal sector workers are not permitted within the enclave.

Sanur is a large village situated on Bali's southeast coast about six kilometres from the capital city of Denpasar. Before tourism arrived in Sanur, residents worked predominantly in farming, fishing, animal husbandry and artisanal activities (Picard, 1993). Although Sanur residents were able to support themselves economically by these traditional means, the area was relatively poor, largely due to the limited availability of arable land. Thus, the introduction of mass tourism to the area in the late 1960s was looked upon favourably by local residents (Lindayani and Nelson, 1995). In 1969 there were just 399 accommodation rooms for tourists in Sanur but by the end of 1990 this number had grown to 3,145 rooms (Bali Government Tourism Office, 1990). Village leaders have taken advantage of the financial prosperity resulting from tourism to finance social and cultural activities. A beach market has been created, restaurants and art shops have been opened by local villagers, and by the late 1970s, approximately 400 people were employed in these tourism-related ventures (Picard, 1993). By the late 1980s, over half of Sanur's working population was employed in tourism-related activities (Lindayani and Nelson, 1995).

Pre-tourism employment in Kuta primarily consisted of fishing and farming, with very limited craft development (Hussey, 1989). The first tourism employees in Kuta were entrepreneurs who set up small-scale, locally-owned hotels and guest houses, restaurants, clothing and souvenir shops, and bicycle and motorcycle rentals. These enterprises were initially considered by the local entrepreneurs as auxiliary activities to supplement their primary income from more traditional activities (Picard, 1993). Tourism is no longer peripheral to the community of Kuta. The number of tourists to Kuta increased from 1,000 in 1970 to 60,352 in 1980 and in 1980, the Balinese government recognized Kuta as a priority tourism area and officially changed its status from village to town (Hussey, 1989). Today, Kuta is dominated by non-stop tourism development, including hotels, shops, and restaurants.

Research Approach

Interviews were conducted with a total of 240 tourism workers in four employment categories in both Sanur and Kuta. The four employment categories were: 1) front desk staff at starred hotels; 2) drivers/guides who take tourists on tours; 3) workers in kiosk stalls (small shops) who sell souvenirs; and 4) beach and street vendors/hawkers. These groups were chosen because they represented a range of employment types, included members of both the formal and informal sector, and varied in the degree of entrepreneurship, job security, job flexibility and capital required for the job. Thirty front desk employees at starred hotels were interviewed, and 30 guides/drivers, kiosk workers and vendors were approached randomly at pre-selected sites in each of the two case study sites (Sanur and Kuta). The questionnaire was administered orally by Balinese research assistants and, because respondents were approached randomly, no effort was made to seek out an equal number of male and female respondents. The data were analyzed through use of frequency counts, cross-tabulations and analysis of variance. In addition to survey research, maps, secondary data and direct observation were used to establish the character or "form" of urbanization particular to tourism in Sanur and Kuta.

Main Findings

Migrant Demographics

Many of the tourism employees surveyed in the study had migrated to the coastal tourism areas from other parts of Bali or from other islands in Indonesia. Almost a third (28%) of the survey sample were non-Balinese migrants, most of whom were single young males from Java (64%) (see Figure 2). Vending was by far the most common tourism occupation for non-Balinese migrants (77%), followed by front desk employment (17%), guiding (13%) and kiosk employment (3%). In contrast, kiosk work was the most common occupation for Balinese respondents, followed by guiding, hotel front desk employment and vending. Since very few Balinese were drawn to Sanur and Kuta by the possibility of working as vendors, these employment opportunities were being filled by non-Balinese migrants and constitute an employment niche left vacant by the local population. Regardless of the tourism occupation, respondents in all four employment groups reported monthly earnings of at least US$80.00, double the official minimum wage for Bali (US$40.00/month), while some earned as much as five times the minimum wage (US$200.00/month).

Most Balinese and non-Balinese tourism migrants had migrated to Bali's coastal areas with at least one other person, thus multiplying the effect of migration on coastal urbanization. Most migrants were accompanied by family
members or friends. However, both Balinese and non-Balinese guides were the only groups for which the majority migrated unaccompanied.

Migration Permanence

An important aspect of migration studies within tourism is whether migrants are permanent or circular, that is, whether they remain in the resort areas year-round or return to their home periodically. All of the non-Balinese migrants were permanent migrants, i.e., they had no intention of returning home for many years or until they were financially well-off. Approximately half of the Balinese employee sample had migrated from rural areas to the coastal zone to take up tourism employment. Most (86%) of these Balinese migrants had originated from outside the southern coastal regions, but did not return to their home villages, instead remaining in either Kuta, Sanur or the immediate vicinity. Most front desk and kiosk workers (98%), vendors (97%) and guides (95%) lived within the southern coastal areas. This has a significant impact on urbanization of the resort areas and urban growth in Denpasar, considering that almost a third of the sample were non-Balinese, and that almost half of the Balinese respondents had originated from outside the southern coastal areas.

The residence time for Balinese migrants to Kuta and Sanur varied with both employment type and the location. Kiosk workers, on average, had resided the longest in the resort areas with an average of 17.2 years, followed by front desk employees (11.8 years), guides (10.5 years) and vendors (8.3 years) (F=24.37, 0.001 significance). Although similar patterns in years of residence by employment type were found for non-Balinese respondents, they, on average, resided for a shorter period of time than Balinese respondents. Non-Balinese kiosk workers had resided in Sanur or Kuta longest (7.7 years), followed by guides (6.4 years), front desk employees (6 years) and vendors, who, at two years, were the most recent migrants. These findings lend further support to the contention that migrants to the coastal tourism areas were, in fact, permanent migrants.

Urbanization Pattern

McGee's urbanization model was used to assess the role tourism has played as an urbanizing force in Bali, primarily because of the proximity of agricultural areas with tourism urban coastal areas (desakota). His model is particularly useful when applied to Bali because of the interconnection between agriculture and the socio-cultural and religious foundation of Balinese culture which, according to official government policy, is the root of tourism in Bali (pariwisata budaya). However, tourism employment is by no means the sole urbanizing force in Bali. Other influences, such as a lack of expansion capacity in traditional sectors and rising expectations resulting from media exposure and higher levels of education, are also urbanizing forces.

Although migration has largely been seen as a rural to urban phenomenon, the study demonstrated that migrants to Bali's coastal resorts originated from both rural and urban centres across Indonesia. Furthermore, early migrants to the coastal resorts were not drawn by the "urban" nature of the resorts, but rather, by tourism employment opportunities. However, continued migration to these resorts has contributed to the urbanization of the coastal zone. Although Bali's main tourism areas are outside, but with relatively easy access to, a large urban area, the type of urbanization occurring in the southern coastal areas matches that of McGee's desakota urbanization model, with tourism acting as one of the urbanizing forces.

Although some strip-type development may be found in tourism areas in Bali (Smith, 1992b), productive agricultural land is interspersed among the hotels, restaurants and shops which dot the landscape (Hussey, 1989; Lindayani and Nelson, 1995). In addition to the competition between agricultural land and tourism infrastructure, tourism employment competes for agrarian labour. However, the absolute number of individuals involved in agricultural activities has not declined, thus minimizing the potential negative impacts on Balinese cultural traditions due to a decline in agricultural importance. The agrarian tradition and its associated cultural and religious importance persist, in part, because the rice fields and the associated cultural traditions are in close proximity to the growing tourism resorts and are attractions for tourists. This proximity makes it possible for tourism employees centred in the resort areas to maintain their ties to traditional ways and, thus, negative impacts are not inevitable.

Coastal Community Reaction to Migrants

Although many authors have stated that migrants can place stress on existing communities (Cleverdon, 1977; Gee et al., 1984; Monk and Alexander, 1986; Panwell, 1993; Sharpley, 1994; Knappendorf, 1994), and some have specifically argued that migrants cause increased competition (Todaro, 1976; Cleverdon, 1977; Davies, 1979), this study revealed that there was little resentment among Balinese toward the non-Balinese employed within the tourism sector. Balinese respondents commented that they were not interested in working at the occupation that non-Balinese migrants typically chose, vending, since it was considered a relatively "low class" job which was culturally inappropriate for Balinese. Instead, Balinese respondents stated preferences for other types of tourism employment, such as working in kiosks, hotels and as guides. The fact that many non-Balinese migrants filled a niche left vacant by Balinese employees minimized possible resentment felt by Balinese towards non-Balinese migrants. Some comments by Balinese regarding non-Balinese migrants...
were: "We can learn from outsiders," "If outsiders are successful, then I too can be successful," and "People have the right to work in whatever area they desire. We can all work together and be tolerant of one another." Furthermore, non-Balinese vendors often sold products supplied by Balinese owners of souvenir kiosks. Thus, non-Balinese workers acted as sales agents and received a commission from Balinese kiosk "contractors." This finding supported the contention by some researchers that migrants to a tourist area do not cause increased job competition, rather they fill niches left void by the local population (McGee, 1982; Monk and Alexander, 1986; Lever, 1987; Connell, 1987).

Discussion and Policy Implications

Although the coastal communities of Sanur and Kuta were tolerant toward new migrants, significant barriers to employment choice existed in these communities. Most non-Balinese migrants faced restrictions in participating in many of the tourism alternatives to vending, such as working in a kiosk, or hotel or as a guide. Official residence in Bali was a prerequisite to owning a kiosk and therefore, kiosks were predominantly owned by Balinese citizens who were reportedly more likely to hire Balinese family members or friends as employees. Hotel employees generally were required to have a high level of formal education and tourism training, characteristics often lacking in the non-Balinese migrant sample. Working as a guide was an occupation in which local knowledge of traditions and the culture was deemed beneficial as was a detailed knowledge of Bali's tourist sites. New migrants to the island did not usually have this type of knowledge and, thus, initially chose alternative employment such as vending.

The study demonstrated that migration to tourism areas for employment fostered urbanization through the permanency of migration. All surveyed migrants to Bali resided in either the resort areas of Sanur or Kuta, or in the nearby capital, Denpasar. Because these migrants settled in the "urban" areas and were permanent migrants, they contributed to urbanization in the southern coastal areas. This increased urbanization in coastal Bali which has resulted from tourism employment requires further analysis and policy response by government and tourism planners.

Four main policy implications arose from the findings of this study. The first concerned the magnitude and economic structure of the informal tourism sector. The study demonstrated that the tourism informal sector was significant in Bali and its members were relatively well remunerated while exploiting niches left open by sector counterparts. Therefore, it is important for governments to encourage and support this economically viable and socially compatible sector. The perceived undesirability of the tourism informal sector is very much a current policy reality, however. The UNDP-sponsored Comprehensive Tourism Development Plan for Bali (1992, p. 50) described vendors in Bali as "...undermining the quality of the tourist product and...endangering the livelihood of other workers and investors in the industry" and recommended that such vendors be restricted to designated areas through government policies and police support. In providing support for the informal sector, it is more effective to eliminate barriers which restrict the informal tourism sector from operating efficiently rather than to impose policies which, in attempting to actively support or assist the informal sector, actually hinder it.

The second policy implication is to enhance the positive social impacts of migration to coastal tourism areas by directing migrants toward employment opportunities left vacant by the local community, thus reducing community stress resulting from employment competition.

The third policy implication is to provide free or low-cost training courses in Balinese culture, customs and traditions. Tourism in Bali is being promoted as "cultural tourism," yet many tourism employees are non-Balinese. The study suggested that official government policies promoting cultural tourism should acknowledge the importance of non-Balinese tourism employees in the formation of tourists' cultural experiences. Thus, these individuals should be incorporated into the cultural tourism policy framework. Effective policies, targeting non-Balinese tourism employees, would recognize these tourism employees as "cultural emissaries" and provide them with free or low-cost training courses in Balinese culture, customs and traditions. This policy may also assist in strengthening positive relations within coastal communities which host tourism migrants.

The fourth policy implication is to direct migrants toward employment opportunities in non-coastal tourism areas through housing policy and development planning in order to minimize urban growth in the coastal zone. In an attempt to spread the benefits of tourism to other areas in Bali, thus minimizing the negative impacts of urbanization in the coastal zone, twenty-one centres around the island have been designated by the regional government for future tourism development. This action constitutes a reversal of the SCETO master Tourism Plan and should assist in reducing the impact that migration for tourism employment has had on urbanization in Bali's coastal zone.

References

Cleverdon, R. 1979. The economic and social impact of international tourism on developing countries. London: The Economist Intelligence Unit.


UNDP. 1992c. Comprehensive tourism development plan for Bali, volumes I, II and Annexes, UNDP.


ENDNOTES

1 This figure includes only those migrants who have officially registered with the local government.

2 Sanur tends to attract up-market tourists, while Kuta cater more to low-budget tourists.

3 This proposed "solution" was similar to that proposed by the government of the Dominican Republic— relocation of vendors to a designated area in which tourists could approach them at their leisure (Kermath and Thomas. 1992). However, by doing so, these informal sector tourism employees are forced to "formalize," a process which destroys much of the potential for respectable incomes and which has been unsuccessful in other developing countries.
COASTAL DECLINE IN ANTIGUA AND BARBUDA

Jerome L. McElroy  
Saint Mary's College (United States)

Klaus de Albuquerque  
College of Charleston (United States)

Abstract: Like other small Caribbean microstates, Antigua-Barbuda has heavily promoted tourism to modernize its former colonial sugar economy. Three decades of free-market growth, however, suggest the island's tourism path is unsustainable. Unbridled development of large-scale infrastructure and foreign-financed hotel-marina resorts along delicate coastlines has caused loss of wetlands, endemic species, and pre-Columbian settlement sites and spawned illegal sand mining, beach erosion and nearshore pollution.

These coastal stresses have continued despite protective legislation, either ignored or unenforced, and the conservation efforts of local citizens and non-government organizations. Few case studies of instances of irreversible environmental damage are reported. Results indicate a sharp public policy reversal is warranted to sustain coastal assets for future commercial (tourist) and recreational (residents') value.

This shift toward a more sustainable path is urgently needed for three reasons: (1) the current context of heavy external debt and limited resources available for restoring past damage, (2) the government's pervasive control of coastal resource use and its minimal success in economic diversification, and (3) the gradual maturation of Antigua toward becoming a high-density mass tourism destination where crowding, asset loss, and declining visitor satisfaction are the rule, not the exception. The directions for change involve comprehensive planning, environmental education, training, and monitoring, and participatory decision-making.

Keywords: island tourism, Caribbean, Antigua, Barbuda, coastal resources

Setting

Antigua and Barbuda lie 250 miles east-southeast of Puerto Rico roughly midway between the Leeward and Windward Islands that comprise the Lesser Antilles. Antigua contains over 97% of the total population (59,355 in 1991) and nearly two-thirds of the total land area (170 sq. mi.). The islands enjoy unique natural and historical assets that demand careful management for their sustained enjoyment by present and future generations. Antigua's coastline is deeply indented with abundant wetlands, beaches and fringing reefs. Its coastal areas also contain over 100 pre- and post-Columbian Indian settlement sites and rich remnants of sugar mills and fortifications that testify to its plantation past and colonial role as headquarters to the British Navy in the Leewards.

Centuries of deforestation, plantation slavery and sugar culture produced a legacy of erosion, watershed damage and declining yields. The intensity of monoculture and unsustainable farming practices degraded the vegetation and landscape of Antigua . . . more significantly and more dramatically than on almost any other Caribbean island" (Coram, 1993:167). The post-emancipation era was characterized by stagnation, heavy emigration and environmental neglect. The collapse of export sugar and cotton after World War II coincided with diversification attempts at small-scale food and livestock production, light manufacturing, offshore finance, and aggressive tourism promotion. This restructuring has created a legacy of overgrazing and deforestation and has threatened the flora and fauna in coastal areas where tourism development has been rapid and intrusive.

Tourism

Prewar tourism was primarily confined to the gradual conversion of coastal plantation "great houses" into hotels (Weaver, 1988). With the postwar advent of jet travel, however, tourism and related construction quickly came to dominate the landscape and economy, accounting for over two-thirds of all foreign exchange earnings and half of GDP and employment (de Albuquerque and McElroy, 1995a). Growth was especially brisk in the 1980s. Although it took over three decades to produce the first 100,000 annual stayover visitors (1950-1983), the second 100,000 was achieved between 1983 and 1988. As a result of this intense colonization of coastal areas with infrastructure and visitor facilities, it is estimated that during the 1980s more mangrove swamps and off-shore reefs were damaged or killed than in all of Antigua's previous history (Coram, 1993:168).

According to the Tourism Penetration Index constructed in Table 1, Antigua now ranks as one of the most heavily developed resort areas in the Caribbean. Average daily visitor densities approach 100 tourists per 1,000 inhabitants. This is roughly equivalent to a 10% increase in the resident population, and approaches the threshold of high-density mass tourism islands like Aruba, Bermuda, and the U.S. Virgin Islands. Antigua shares with these destinations a propensity for large-scale resort/marina complexes, high volume hotel and cruise visitation, mounting natural asset losses, crowding, year-round tourism, and the syndrome of declining average visitor stay and satisfaction prompting increasing promotional expenditure. In addition, the relative failure of non-tourist diversification efforts has even exacerbated pressures on coastal resources (Lorah, 1995).
Table 1. Selected characteristics and density rankings for selected small Caribbean islands, 1993.

<table>
<thead>
<tr>
<th>Island</th>
<th>Pop. (000)</th>
<th>Area km²</th>
<th>Tourists (000)</th>
<th>Cruise (000)</th>
<th>Visitor Spend/Pop (US)</th>
<th>Avg Stay Pop.</th>
<th>Avg Dens. per km²(1)</th>
<th>TPI(2)</th>
</tr>
</thead>
<tbody>
<tr>
<td>St. Maarten</td>
<td>33</td>
<td>34</td>
<td>520</td>
<td>660</td>
<td>11,406</td>
<td>4.8</td>
<td>262</td>
<td>254</td>
</tr>
<tr>
<td>USVI</td>
<td>109</td>
<td>342</td>
<td>561</td>
<td>1,208</td>
<td>8,451</td>
<td>5.1</td>
<td>102</td>
<td>33</td>
</tr>
<tr>
<td>Caymans</td>
<td>30</td>
<td>260</td>
<td>287</td>
<td>606</td>
<td>8,617</td>
<td>4.9</td>
<td>184</td>
<td>21</td>
</tr>
<tr>
<td>Aruba</td>
<td>71</td>
<td>193</td>
<td>562</td>
<td>251</td>
<td>6,534</td>
<td>7.2</td>
<td>166</td>
<td>61</td>
</tr>
<tr>
<td>Bermuda</td>
<td>59</td>
<td>55</td>
<td>412</td>
<td>154</td>
<td>8,551</td>
<td>6.2</td>
<td>126</td>
<td>135</td>
</tr>
<tr>
<td>Average</td>
<td>60</td>
<td>177</td>
<td>468</td>
<td>576</td>
<td>8,712</td>
<td>5.6</td>
<td>168</td>
<td>101</td>
</tr>
</tbody>
</table>

STAGE III High Density

<table>
<thead>
<tr>
<th>Island</th>
<th>Pop. (000)</th>
<th>Area km²</th>
<th>Tourists (000)</th>
<th>Cruise (000)</th>
<th>Visitor Spend/Pop (US)</th>
<th>Avg Stay Pop.</th>
<th>Avg Dens. per km²(1)</th>
<th>TPI(2)</th>
</tr>
</thead>
<tbody>
<tr>
<td>BVI</td>
<td>18</td>
<td>150</td>
<td>200</td>
<td>86</td>
<td>6,778</td>
<td>7.0</td>
<td>226</td>
<td>27</td>
</tr>
<tr>
<td>Antigua</td>
<td>66</td>
<td>440</td>
<td>249</td>
<td>238</td>
<td>5,638</td>
<td>8.3</td>
<td>96</td>
<td>14</td>
</tr>
<tr>
<td>Guadel.</td>
<td>405</td>
<td>1,373</td>
<td>453</td>
<td>263</td>
<td>913</td>
<td>6.3</td>
<td>21</td>
<td>6</td>
</tr>
<tr>
<td>M'tnique</td>
<td>360</td>
<td>1,060</td>
<td>366</td>
<td>429</td>
<td>921</td>
<td>5.1</td>
<td>17</td>
<td>6</td>
</tr>
<tr>
<td>Barbados</td>
<td>264</td>
<td>431</td>
<td>396</td>
<td>429</td>
<td>2,000</td>
<td>11.2</td>
<td>50</td>
<td>3</td>
</tr>
<tr>
<td>Curacao</td>
<td>144</td>
<td>444</td>
<td>214</td>
<td>183</td>
<td>1,675</td>
<td>8.0</td>
<td>36</td>
<td>11</td>
</tr>
<tr>
<td>St. Lucia</td>
<td>140</td>
<td>616</td>
<td>194</td>
<td>154</td>
<td>1,579</td>
<td>10.6</td>
<td>43</td>
<td>10</td>
</tr>
<tr>
<td>Bonaire</td>
<td>11</td>
<td>288</td>
<td>55</td>
<td>17</td>
<td>2,527</td>
<td>6.9</td>
<td>95</td>
<td>4</td>
</tr>
<tr>
<td>St. Kitts</td>
<td>41</td>
<td>269</td>
<td>89</td>
<td>83</td>
<td>1,869</td>
<td>8.1</td>
<td>54</td>
<td>8</td>
</tr>
<tr>
<td>Grenada</td>
<td>96</td>
<td>344</td>
<td>94</td>
<td>200</td>
<td>501</td>
<td>7.2</td>
<td>25</td>
<td>7</td>
</tr>
<tr>
<td>Average</td>
<td>155</td>
<td>542</td>
<td>231</td>
<td>208</td>
<td>2,440</td>
<td>7.9</td>
<td>66</td>
<td>10</td>
</tr>
</tbody>
</table>

STAGE II Intermediate

<table>
<thead>
<tr>
<th>Island</th>
<th>Pop. (000)</th>
<th>Area km²</th>
<th>Tourists (000)</th>
<th>Cruise (000)</th>
<th>Visitor Spend/Pop (US)</th>
<th>Avg Stay Pop.</th>
<th>Avg Dens. per km²(1)</th>
<th>TPI(2)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Mont'srat</td>
<td>10</td>
<td>102</td>
<td>21</td>
<td>10</td>
<td>1,520</td>
<td>11.0</td>
<td>66</td>
<td>6</td>
</tr>
<tr>
<td>Dominica</td>
<td>71</td>
<td>750</td>
<td>52</td>
<td>88</td>
<td>468</td>
<td>7.8</td>
<td>19</td>
<td>2</td>
</tr>
<tr>
<td>St. Vinc.</td>
<td>109</td>
<td>389</td>
<td>57</td>
<td>69</td>
<td>500</td>
<td>10.3</td>
<td>16</td>
<td>5</td>
</tr>
<tr>
<td>Average</td>
<td>63</td>
<td>414</td>
<td>43</td>
<td>56</td>
<td>829</td>
<td>9.7</td>
<td>34</td>
<td>5</td>
</tr>
</tbody>
</table>


NOTES: (1) Average daily densities are computed as: [(No. Tourists x Avg. Stay) + No. Cruise] / population or km2 x 365. Estimates for the British Virgin Islands should be interpreted with caution since a considerable amount of BVI tourism is water-based with reduced impact on the local population and landscape.

(2) The Tourism Penetration Index is computed as the unweighted average of each destination's rankings on the six separate tourism indicators in Table 1 above.
Coastal Impacts

Unrammed visitor growth, hotel/marina expansion, tourism infrastructure and related construction, and sand mining have irreversibly altered the islands’ coastal ecosystems, reduced biodiversity, disturbed archeological sites and damaged historic artifacts. Antigua’s best known beaches, heavily colonized by tourist facilities, have been destabilized by shoreline devegetation, mangrove destruction, and erosion from illegal sand mining. The nearshore has experienced heavy siltation from surface runoff and pollution from pesticide runoff and the outfall of malfunctioning sewage treatment plants.

Resort construction and dredge dumping have also damaged several adjacent salt ponds and delicate wetlands, destroying wildlife habitat and endangering native species crowded into the coastal zone by generations of upland deforestation and erosion (USAID, 1991). Harbors have been polluted and seagrass beds destroyed by sewage from urban locations and solid waste dumping from Antigua’s renowned yachting industry. In the capital city of St. John’s, for example, open sewers flow directly into the harbor. Fringing and offshore reefs have been significantly degraded because of sedimentation from surface water runoff, sewage discharge, overfishing, and recreational diving and boating (de Albuquerque and McElroy, 1995a). As a result, fish catches and traditional pursuits like crab hunting and coconut gathering are declining.

Management Efforts

These coastal intrusions have occurred despite the existence of a public regulatory infrastructure, protective environmental legislation, and the concerns and activities of non-governmental organizations (NGOs) and private citizens. They have also taken place in the absence of a national development plan and in the context of fiscal profligacy, future economic uncertainty, and a strong government commitment to short-run economic growth over long-run environmental stability.

The Department of Public Works, responsible for protecting beaches from illegal sand mining, has been generally ineffective because it possesses no enforcement arm nor resources for monitoring and enforcement. Likewise, because of lack of funds, the Central Board of Health has been unable to enforce sanitation laws and deter litter and dumping. Most importantly, the Development Control Authority, with statutory oversight for all coastal zone construction and development activity, has been routinely bypassed by developers who go directly to the pro-business Cabinet for project approval.

The one bright spot has been the persistent efforts of NGOs and other community groups to defend Antigua’s natural, historical and cultural assets. The Environmental Awareness Group (EAG) has been Antigua’s most visible NGO publicly campaigning to dramatize coastal damage and providing library and technical support for researchers. The EAG has also mobilized regional and international organizations to fund local conservation, monitoring and educational programs. The EAG’s success, however, in limiting tourist intrusions in fragile coastal areas has been mixed.

Case Studies

The following four case histories illustrate how NGO and citizen conservation efforts have been thwarted by aggressive developers and a powerful government elite committed to rapid tourism growth.

Jolly Harbour

In 1988 the foreign owner of the 500-room Jolly Beach Hotel on Antigua’s west coast began construction of a large-scale marina/condominium project with Cabinet approval and the low-cost purchase of 33 acres of prime wetlands. Mangroves were bulldozed, the shoreline devegetated, and adjacent salt ponds dredged and partially filled (de Albuquerque and McElroy, 1991). Over 400 members of a nearby community signed a petition for the Prime Minister protesting the wanton destruction of beaches and wetlands. Government’s response emphasized the marginal commercial value of the “useless” mangrove swamps and the positive economic payoffs. Because of the power of Government and the uncertainty wrought by the 1990-1992 recession, the furor subsided. At present, the marina is completed, and several condominium phases have been built.

Marina Bay Project

In 1986 a joint venture between the St. John Development Corporation, a statutory body of government, and Italian financier was begun on Antigua’s northwest coast involving the construction of a large-scale condominium and marina/shopping complex. Excavation included dredging McKinnon’s salt pond/mangrove swamps and digging a channel that cut off shoreline access between two of Antigua’s most popular beaches and blocked off access to Corbinson Point, an historic site. Local outcry became a flashpoint. The EAG widely publicized the large-scale coastal alterations. Bowing to pressure, Government commissioned an environmental impact assessment (EIA) that was completed but never implemented. In both 1989 and 1990 McKinnon’s Pond witnessed massive fish kills which were linked to the Marina Bay project, which had impeded natural flushing, and to the dumping of poorly treated sewage effluent from nearby hotels (USAID, 1991). At present the marina is not operational, and only the first
phase of condominiums has been completed because of financial problems.

Coconut Hall

In 1992 the same scenario of massive excavation without warning or citizen consultation was repeated at Coconut Hall on Antigua's north coast. Over 80 acres of hillside and mangroves were bulldozed to make way for a large-scale resort in one of the last remaining coastal stretches rich in creeks, bays and vista access to small offshore islands. Because of the appearance of Cabinet secrecy and the perception that recommendations from appropriate government agencies were either bypassed or ignored, a major confrontation erupted between the EAG and local citizens against the developers. Caught off guard, Government commissioned an environmental impact assessment (EIA), but dragged its feet signing the final approval for the EIA. The EIA report was finally completed in July 1994 and included detailed changes to the project, mitigation strategies and monitoring plans. Presently, the project appears to be on hold since the Italian developer has lost interest, but the irreparable damage to scoured hillside and uprooted mangroves remains.

Sand Mining in Barbuda

The past two decades in the Eastern Caribbean have witnessed an unprecedented boom in hotel and residential construction. This has spawned a demand for construction sand that increased 10% per year during the 1980s. Much of this aggregate was supplied by the sand dunes of Barbuda. It is alleged that this most dramatic example of sustained ecosystem destruction in the country was allowed to continue largely because the Prime Minister and two cabinet members had up until 1991 direct financial interests in the lucrative mining company.

At the height of the operation, some 20,000 tons of sand were being exported each month to nearby islands like Antigua, Guadeloupe, Martinique, St. Maarten, and the Virgin Islands. According to the EAG, the sand mining operation has created a large crater seven meters deep, and has resulted in irreversible losses of palmetto forests, mangroves, and sea grape stands, and serious beach erosion and wildlife disruption. An injunction on further sand mining was imposed in 1992 since it was determined that Barbuda's groundwater supply had been contaminated. Since the injunction there are indications that illegal sand mining has increased on neighboring Antigua.

Lessons and Implications

These four cases exemplify the structural constraints on coastal conservation faced by small tourist-dependent microstates with few resources and economic alternatives. These limitations are especially severe for destinations like Antigua and Barbuda with a maturing visitor industry on the threshold of high-density mass tourism that are also burdened by a heavy debt legacy of past borrowing to finance infrastructure and resorts. Presently Antigua's annual debt service amounts to 10% of GDP and 70% of current government revenue.

In this context, the case studies illustrate: (1) the persistent policy preference for short-term economic gain over long-term environmental stability, (2) the overriding "environmental veto" of a dominant Prime Minister and Cabinet against the conservation policies of government agencies charged with planning and managing natural resources, (3) the ineffectiveness of environmental legislation without appropriate funding and backing for monitoring and enforcement, (4) the inability of NGOs and "green" community groups without statutory authority to reverse coastal destruction in a hostile top-down policy environment, and (5) the very weak conservation ethic that dates back to colonial times.

The overall implication is that coastal decline will continue in Antigua and Barbuda and in other high-density tourist driven islands unless a significant broad-based sustained intervention is attempted to reverse past practice. This effort would involve accomplishing the following five long-range tasks: (1) securing internal (taxes, user fees) and external funds for environmental planning and programming, (2) establishing an effective comprehensive planning framework for identifying critical and damaged assets and developing enforceable construction guidelines and impact assessment requirements, (3) providing for adequate staffing of agencies in coastal monitoring and for ongoing staff training programs, (4) instituting a community-wide coastal environmental education program to provide the electorate with a countervailing voice against the often narrow short-sighted business and political interests, and (5) designing mechanisms for public and NGO participation in coastal resource decision-making so that citizens' heightened environmental awareness and stake in their natural patrimony find concrete expression in coastal zone management policy.

Although this five-step program is ambitious and time-consuming, it is necessary to counterbalance the nonsustainable resource practices that historically and cumulatively destroyed export agriculture and presently undermine the delicate coastal asset base of today's economy. Reform is particularly imperative given current capital constraints and limited diversification possibilities as well as the intrusive large-scale high-density tourism style that increasingly characterizes Antigua's economy. Bermuda's recent example of participatory planning, growth controls and coastal conservation demonstrates that such policy reversal is possible in small, highly tourist-
dependent island societies (de Albuquerque and McElroy, 1995b).

Acknowledgements

This research was supported in part by the Environmental and Natural Resources Policy and Training Project (EPAT) funded by the U.S. Agency for International Development (USAID). The views, interpretations, opinions, and any errors are those of the authors and should not be attributed to any other source.

References


MANAGING GRASS-ROOTS COASTAL TOURISM: A VANUATU CASE STUDY

Anita van Breda

Abstract: The Republic of Vanuatu, a relatively remote and undeveloped island nation in the South Pacific, faces new issues as it plans for growth in the tourism industry. Conventional tourism to the capital city is well established. Potential exists however for development of small scale, nature-based tourism at the grass-roots level.

This case study examines an indigenous coastal tourist resort owned and operated by a family community. Offering fine sand beaches, outstanding coral diving, and tours to nearby attractions, the resort managers recognize the special attributes of their site and are committed to maintaining their cultural identity while protecting the environment and growing their business. Work with an environment and business advisor led the family to change some business practices as they called on traditional management practices to protect their environment.

Encouraging grass-roots ecotourism projects such as this one, which may involve working with a single indigenous family or individual land owner, requires resource managers and tourism practitioners to take an approach to development different from projects directed at the national level. As the tourism industry continues to grow, government and non-government organizations should consider policies and training that empower local people to truly participate in and benefit from tourism. Promotion of tourism operated at the community level, in addition to enhancing natural resource conservation, should be based on respect and appreciation for the cultural and social attributes of the people involved.

Keywords: Vanuatu, marine tourism, enterprise development

Introduction

This paper examines coastal and marine tourism and resource conservation of an indigenous resort in Vanuatu, South Pacific. An overview of Vanuatu’s environment, history, and tourism industry is given. The author then discuss the specifics of one local family’s efforts at conserving their environment, developing their tourism business, and maintaining their culture. An environment and business advisor’s (the author) role in this process is explained. Observations and recommendations are made for those interested in promoting grass-roots and land owner based conservation and business development as an alternative to conventional tourism.

Vanuatu

Environmental Setting

Vanuatu, formerly the New Hebrides, consists of some 80 islands with a population of approximately 150,000. Located 170 kilometers (km) to the south of the Solomon Islands and 800 km west of Fiji, Vanuatu’s land area covers 12,336 km². Most of the land is covered by thick bush and sharp upland ridges formed by past volcanic activity. The country’s climate is tropical in the northern islands and subtropical in the southern islands with temperatures averaging 30°C from November through April and 28°C from May to October. Rainfall averages 4000 millimeters (mm) per year in the north to 3300 mm in the south. Cyclones are a regular occurrence between December and March.

Most of Vanuatu’s islands have areas of small sand beaches, although in many places the sand ends where rocks and fringing reefs begin. Vanuatu’s warm clear waters hold an abundance of coral and fish communities not unlike Australia’s Great Barrier Reef. Vanuatu’s tropical forests offer a varied flora and are largely still intact. The islands have 57 species of land and sea birds; seven are endemic.

Political History

Vanuatu obtained independence in 1980 from joint rule under a British-French condominium government (indigenous inhabitants are known as ni-Vanuatu). Land tenure became the critical issue which drove the islanders to seek self rule and autonomy. Whereas foreigners considered land a commodity to be bought and sold, ni-Vanuatu culture espouses a spiritual attachment to the land that made it impossible to accept strict monetary value placed on their ground (Harcombe, 1991). Vanuatu has over 100 local languages, and is a country far from politically unified. Vanuatu as a nation however, prides itself on maintaining “custom” as a legitimate force in daily life, including economic development issues.

Vanuatu Tourism

Vanuatu receives about 45,000 tourists and another 70,000 cruise ship passengers annually (McVey, 1994). Most visitors are from nearby Australia and New Zealand. Figures for 1993 report tourism earnings of $US31 million or 147% of total exports valued at $US21.2 million, making tourism the top foreign exchange earner (Vanuatu Weekly, 1995). Following independence, government policy restricted tourism to the capital, Port Vila on Efate Island, and two other islands: Espiritu Santo (known as Santo) to the north, and Tanna to the south. The National Tourism


Office (NTO) was established by an act of Parliament in 1982 to promote tourism and provide information services.

Recent government decentralization has opened up the other islands to tourism development. Small bungalow accommodation and guesthouses can now be found on almost every island. In 1994 the government commissioned several consultants to research and design a master tourism plan for the country. The plan (McVey, 1994) calls for diversification of Vanuatu's tourism industry.

**SCUBA Industry**

Vanuatu's marine and coastal resources are naturally of importance to its SCUBA tourism industry. Air Vanuatu (the government-owned international airline) estimates that 25% (5,000) of the total number of visitors from Vanuatu's main market, Australia and New Zealand, come to dive (McVey, 1994). Five dive and sail operations are located in Port Vila, and two are operational on Santo, offering clients a variety of coral and wreck diving. Indications point toward a continued growth in Vanuatu's dive market if some limitations can be overcome. Vanuatu, however, must compete with Solomon Islands, Fiji, Tuvalu, Palau, and Papua New Guinea which all have a wide variety of dives that some consider of better quality (D. Derby, pers. comm.). Vanuatu's premier dive attraction undoubtedly is the S.S. President Coolidge on Santo, the world's largest most accessible wreck dive.

**Environmental Threats and Conservation Efforts**

Compared to other nations in the region, Vanuatu's environmental resources have suffered relatively little destruction and depletion. The forests, although under considerable threat from an increase in unsustainable logging, are mostly intact. Mining will become an environmental issue of concern in the near future as foreign mineral companies escalate prospecting and exploration. Marine species depleted by both commercial and subsistence over-exploitation include: coconut crab, trochus shells, green snail, and mangroves (Bell and Amos, 1993). Sea turtles also verge on extirpation.

A thorough discussion of Vanuatu's complex land tenure system is beyond the scope of this paper. The issue of land tenure, however, is relative to tourism development and the protection of natural resources. Land tenure extends beyond the waters edge and thus applies to marine and coastal resources. There is virtually no public land in Vanuatu, and therefore (with the exception of pelagic fisheries), few common resources. Foreigners can legally enter into long-term lease agreements with custom landowners only with participation of the Government Department of Lands, a sometimes long and complicated process. Development of protected areas therefore must evolve under the customary land tenure system.

The Government Environment Unit and Fisheries Department are primarily responsible for protecting Vanuatu's terrestrial and marine resources. In 1983, the fisheries department declared the wreck of the S.S. President Coolidge a marine reserve, the only one in the country. Establishment of Vanuatu's first national park by the Environment Unit is now underway on Santo. Custom landowners can proclaim land as protected without official government sanction.

**Marine and Coastal Tourism: Santo**

Santo lies one hour north by air from the capital Port Vila. With a population of approximately 22,000, the 116 km long and 59 km wide island is Vanuatu's largest in size (4,010 km²). The west coast is accessible only by boat or plane; the mountainous interior, with four peaks over 1700 m high, remains mostly undeveloped and uninhabited (Stanley 1991). In the southeast corner of the island lies Santo's main town, Luganville (population 8,000). Most tourists to Santo are divers who travel to Luganville to dive the wrecks and reefs scattered offshore. The S.S. President Coolidge is located seven kilometers outside of town. The 211 m luxury liner converted to a WW II troop transport carrier, sank in 1942; the bow lies in 20 m of water, the stern in depths close to 80 m. Nearby the Coolidge, divers enjoy the varied and abundant sea life inhabiting Million Dollar Point where the U.S. military dumped hundreds of tons of surplus (including vehicles and other heavy equipment) before leaving the country at the end of WW II. As a marine reserve, it is illegal to take souvenirs from or fish the Coolidge and Million Dollar Point. Respect for these regulations however, seems to be on the decline.

**Lonnoc Beach Resort**

**Background and History**

Scattered along Santo's northeast coastline are small villages, plantations, and modest tourist attractions such as blue holes and swimming beaches. Located 45 km northeast of Luganville lies Hog Harbour village and Lonnoc Beach Resort (LBR). Lonnoc is Vanuatu's largest and most successful ni-Vanuatu owned and operated tourism business.

The Lonnoc community consists of one extended family which owns several coastal acres of land including a scenic white sand beach lining a protected shallow water bay. The principle owners of the resort are four brothers who started the business as a barbecue stall on the beach.
Building over time, they developed the enterprise into a Melanesian resort with eight bungalows, a honeymoon cottage, and a large restaurant and bar. Most of Lonnoc’s clients are tourists from Australia and New Zealand and expatriates living in Vanuatu.

Lonnoc Setting

Remote and pristine, Lonnoc’s natural environment offers visitors palm-fringed sand beaches, safe shallow-water swimming and a genial and unpretentious atmosphere. Small patch reefs are present in Lonnoc’s bay, but the main dive and snorkel attraction for Lonnoc is Lathu, or Elephant Island, an uninhabited cay located 2 km offshore. The reefs around Elephant Island were classified by marine scientists as one of the four best in the country, with a high diversity of marine resources and a rich coral community (Done and Nadin, 1990). Elephant Island’s custom owner, who works closely with Lonnoc, collects a small fee from visitors to the island.

Dugongs (Dugong dugon) are present in the area. A pair can often be seen feeding on the shallow sea grass bed in front of Lonnoc’s beach. Neighboring Champagne Beach, within walking distance of Lonnoc, has consistently been rated by cruise ship passengers one of the most beautiful beaches in the South Pacific. Environmental consultants researching the Master Tourism Plan described Champagne Beach, Hog Harbour, and Elephant Island as profoundly scenic and “represents the essence of what draws visitors to the South Pacific islands” (Darby and Challacomb, pers. comm.).

The site suffers little from coastal damage such as overfishing, reef destruction, and commercial development and pollution. Conditions may change, however, in the near future. When cruise ships visit Champagne Beach for example, tourists trample coral, locals harvest live shells to sell to tourists, and sea turtles are caught and kept in buckets to be offered as props for tourist photos. Coral destruction from a cruise ship tender grounding at Champagne Beach has been documented.

Mineral exploration poses a potential threat. In 1995 a foreign mining company filed an application for a prospecting license with the Government for an area of land adjacent to Lonnoc. Mineral exploration could have a devastating effect on Lonnoc’s environment and tourism business.

Lonnoc Diving

Lonnoc has one four-meter fishing boat for taking guests snorkeling and diving to Elephant Island and nearby patch reefs. No formal SCUBA services (or dive master) are available on the premises; tanks and equipment must be rented in town and transported by truck to the resort. The boat owner or one of his two sons captains the boat. The two present professional dive operations in Luganville generate little business for Lonnoc. Most dive tourists visiting Santo either do not know about the coral diving at Lonnoc, or are locked into a package that does not allow them to make alternative arrangements to experience this dive site.

Management and Enterprise Development

Melanesian custom dictates that almost all family members are involved to some extent in the business. With the exception of a few “hospitality” courses, however, none of Lonnoc’s staff have formal training in any aspect of the tourism industry. Reservations are made in town at the Luganville Drugstore, operated by the wife of one of the principal owners. As Lonnoc has no telephone, communication requires some diligence by passing information with bus or taxi drivers and/or friends and business associates.

The family vision for LBR is one of managed growth; however, the resort is to remain a family enterprise. Conflicts have arisen in the past over the rate and kind of growth LBR will undertake. Western-style enterprise development does not always conform with the Melanesian approach to life and business. Most ni-Vanuatu families supplement financial income and economic security with wage employment, subsistence fishing, and gardens used for both cash crops and food for the home. Management and operation of Lonnoc, similarly diverse, can frustrate outside consultants, foreign non-governmental organizations, and expatriate business associates, who often mistake lack of defined and fixed structure as lack of interest and commitment to the business.

Lonnoc Ecotourism and Protected Area Development

Growing up with Lonnoc as their home, the reefs, beaches, forests and wildlife seemed commonplace and infinite to the family. With the help of an environment and business advisor, familiar with the family and the site, planning for business growth and the relationship that growth must have with a healthy environment, led to a change in business operations. The catalyst for change was not necessarily exposure to new ideas, such as the concept of “conservation,” but giving a different “value” to Lonnoc’s beautiful landscape and natural resources while encouraging traditional resource management practices.

Over a four-month period, formal meetings, education workshops, and informal discussions were held among the advisor, LBR owners and staff, and Elephant Island’s custom owner, allowing for mutual information exchange and learning. Topics of discussion ranged from biological relationships and the impact of management activities on the environment, to the needs, expectations, and quirks of...
western tourists. Subjects discussed pertinent to marine and coastal resources include:

**Safe Boating, Anchoring, and Diving**

- Boat captains should refrain from spearfishing while taking out snorkelers and divers, and should not leave passengers unattended in the water.
- Anchor in sand; avoid damaging coral with anchor and chainline.
- Always carry tools, spare parts, water, and extra fuel on the boat.
- If a bareboat fishing boat must be used as a tourist vessel, get a ladder. Tourists have a hard time climbing out of the water up and over gunnels.
- Map the waters and dive sites, to the best extent possible, and keep records of dive sites visited and the number and type of activity (SCUBA diving, snorkeling, fishing) and records of boat maintenance and expenses.
- Make a plexiglass bottom bucket as an educational tool. Use it to show tourists and locals (unable or unwilling to get into the water) the underwater world; can also be used to assist with finding proper anchorage.

**Environmental Education and Tourist Guidelines**

- Make available information regarding the country's flora, fauna and culture. Use posters, books, and photographs; give specific information on avoiding environmental hazards.
- Educate tourists (they can be the worst environmental offenders) and insist they respect the environment with specific rules and regulations such as: collect only dead shells; avoid touching or overturning coral; take only photographs, not organisms or specimens.
- Minimize tree and vegetation removal; in wash areas dump soapy water onto the ground, not into the bay.

**Marketing/Advertising**

- Establish and maintain good relations with professional dive operators for mutual benefit.
- Expand marketing beyond diving by promoting the seascape and coastal landscape.

**Lonnoc Protected Area**

Over time the family expressed concerns regarding Lonnoc's environment: patches of coral were dead, shellfish were no longer as plentiful, and sea turtles no longer nested on their beach. In 1995 the family placed a taboo on the reefs and waters surrounding Lonnoc. Although resource extraction has not been quantified, these areas have been used by the family, local villagers, and tourists for fishing, reef cleaning, shell removal, and a place to wash. The taboo bans all extractive activities for two years and requires that the occasional sailboat anchoring at Lonnoc do so in deep water to avoid damage to shallow water coral or sea grass. At the same time, the custom owner of Elephant Island also placed a taboo on his island, and is now considering pursuing national park designation.

These land owners believe a healthy environment will attract more tourists, a source of cash. In addition to a cash return for their efforts, they seem proud of a renewed responsibility for management of the land and sea. The small area protected perhaps does not contribute a great deal to conserving "biodiversity" on a grand scale, such as one would expect from a national conservation area or park, but the area does symbolize what local people, using traditional cultural practices, can do to manage both their environment and their ecotourism business at the grassroots level. For others with similar resources and initiative, this process could serve as a model for landowner reserves or "micro-parks" as described by Thaman (1994).

**Conservation and Development Recommendations**

The following comments and recommendations are intended for conservation and development professionals, government and non-government organizations, tourism specialists, and others seeking to encourage community level participation in the tourism industry as a means of environmental conservation and economic development.

**Environment and Business Advisor**

At Lonnoc, the incentive to manage and protect environmental resources came from within the family community with the support of an advisor. The proper advisor can be instrumental to facilitating grassroots participation in nature and cultural based tourism. The advisor(s) must be able to integrate environmental, social, cultural, economic and business factors into the planning process. Few individuals or organizations have expertise in all these subjects; therefore, limitations must be recognized and acknowledged.

**Education and Training**

Encouraging participation of local people in marine and coastal tourism requires a means for local people to obtain SCUBA training, certification, and equipment. In the Caribbean, NGOs have provided SCUBA training for indigenous people. Few ni-Vanuatu have the means to pay for a certification course or equipment. Without development of these skills however, indigenous tourist
operators will always have to rely on foreign-owned dive businesses and expatriate dive masters.

Some tourism professionals in Vanuatu believe indigenous people lack management and entrepreneurial expertise. Sentiments such as these reflect a common malady in developing countries—"experts" who are unable or unwilling to spend time in the bush and go beyond writing a report. Most locals have never been tourists themselves, and therefore may be unfamiliar with skills involved with the industry. It is also true that local people may need education and training in the mechanics of enterprise development such as book and record keeping, finance, and banking. Government and NGOs should approach "training," however, as a means to empower local people to take what they do know, including their traditional knowledge and practices, and channel these towards meaningful participation in the tourism business. Such an approach will require long-term commitment to the people and their resources, rather than short-term, high-priced, consultant taught workshops that instruct local people in service trades alone.

Ecotourism literature often discusses the need for "education and awareness campaigns" directed towards locals in order to gain proper attitudes, good will, and their participation in tourism development. Local "participation", however, sometimes means getting landowners to agree to land leases so that outsiders can develop a tourist operation. A more productive approach may be to foster a dialogue of two-way education. Those who wish to truly promote participatory planning must commit to more than simply showcasing "community" meetings; confronted with outside "professionals" few local people are likely to voice their opinion or concerns.

**Environmental Monitoring**

Whether or not rigorous scientific data is collected, training and encouraging locals to monitor environmental parameters reinforces the connection between a healthy environment and a healthy business. At Lonnoc, for example, boat drivers trained to use a secchi disk and thermometer for rudimentary water quality testing are proud to develop skills recognized as valuable, an experience which contributes to a new aspect of stewardship.

The process is not a static one, but continues to evolve and adapt over time. What has been accomplished however, can serve as a model for other communities with similar initiative.

Both government and NGO development agencies need to acknowledge tourism options, and commit to long-term development that protects and benefits local people and their environment. Small-scale and individualized interventions, such as a single tourist enterprise, requires an approach to development different from that of national programs and projects. An environment and business advisor, given time to gain locals' trust and respect and to gain an understanding of their culture, can facilitate conservation and business development at the grassroots level, thereby offering local communities an alternative to conventional tourism.

**References**


