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PERIPHERAL TOURISM

Development and Management

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Abstract: This article outlines the economic, environmental, and social problems encountered in developing and managing tourism in peripheral regions. These include large economic leakages from tourism expenditures, difficulties in providing and maintaining touristic infrastructure, and managing its environmental conservation and social impacts. The growth of tourism on Cape York Peninsula (Australia) is taken as an example and use made of the results of a survey of tourists and of tourism operators. This region is distant from large urban centers, is relatively underdeveloped, and contains a proportionately high aboriginal population. **Keywords:** development, peripheral regions, management, conservation, user pays, sustainable tourism, Cape York Peninsula.

Résumé: Le tourisme périphérique: développement et gestion. Cet article donne un aperçu des problèmes économiques, environnementaux et sociaux que l'on rencontre dans le développement et la gestion du tourisme dans des régions périphériques. Ces problèmes comprennent les grandes pertes économiques des dépenses du tourisme, les difficultés dans la défense de l'environnement et des impacts sociaux. On prend comme exemple la croissance du tourisme dans la Péninsule du Cap York (Australie) en utilisant les résultats d'une enquête des touristes et des tour operators. Cette région est loin des grands centres urbains, est relativement sous-développée et contient une population aborigène proportionnellement élevée. **Mots-clés:** développement, régions périphériques, gestion, défense de la nature, usager paie, tourisme soutenable, Péninsule du Cap York.

INTRODUCTION

Australia has been one of the tourism success stories in the last decade. Tourism growth rates have been among the highest in the developed world and its contribution to both GDP and the workforce has risen to almost 6% (EIU 1990). However, the distribution of the benefits derived from tourism has been very uneven. Standard tours usually include a city sightseeing of Sydney or Melbourne; beach life at Queensland's east coast between the Gold Coast and Port Douglas; a nature experience ranging from rainforest walks in the Great Dividing Range to scuba diving at the Great Barrier Reef or a visit to Kakadu National Park; and maybe an outback destination such as Coober

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Pedy or Ayers Rock. Most parts of the country are bypassed by the flow of visitors—especially the often remote, marginal, and sparsely settled regions of central and northern Australia. Whereas the arid center of the continent is not likely to attract many tourists in the future, with the exception of outstanding sights such as Ayers Rock and the Olgas, some destinations at the western and northern periphery do have the potential to get their “share of the pie”.

Monkey Mia (in Western Australia's Gascoyne Region) and Kakadu National Park (in the Northern Territory) are already world-renowned destinations. Others, such as locations in the Kimberleys or Cape York Peninsula, could become similar attractions, if the appropriate development takes place. There are, however, substantial problems to overcome. In peripheral regions the environment and the social structures, especially those of indigenous peoples, are often extremely vulnerable to major changes.

Decisive matters for the remote and marginal regions are many. One is whether negative impacts of tourism development are unavoidable or whether carefully devised strategic tourism-planning including significant participation of the local population and the local and regional levels of government in the decision-making process can minimize the potential for conflict. Another decisive matter is whether efficient political control measures can ensure that the natural resource base and the integrity of the local human communities are not endangered in the advancing development process.

This paper looks into the prospects of tourism development in a peripheral region of Australia, the Cape York Peninsula, and its possible deleterious influences on the environment and on local human communities. Cape York Peninsula is one of the “last frontiers” of tourism development in Australia. This geographically and economically peripheral region has been long off limits for all but the hardest travelers. However, over the last two decades there have been considerable improvements in the Peninsula's infrastructure, and visitor numbers have increased dramatically. Tourism development has been largely unplanned and, despite the huge area, visitor carrying capacity lately has been surpassed during the peak season in hotspots, leading to environmental degradation and a deterioration of the visitor experience itself. The economic benefits of tourism are considerable. However, it is doubtful if this remote region itself profits greatly from the increased visitor numbers, since the leakages back to the economic center are very strong.

This article is partly based on a tourism survey conducted by the authors in the Cape York Peninsula region (Hohl and Tisdell 1994a). The central part of the study depended upon gaining ample information directly from tourists, accommodation owners, and tour operators. On-site inspections and interviews were conducted from early July to the end of September 1993. The timing of the fieldwork coincided with the high season where visitor-numbers peak, which made it possible to obtain relatively large tourist samples. On the other hand, accommodation owners and tour operators were very busy, which was reflected in their limited willingness to participate in the survey.

TOURISM DEVELOPMENT IN PERIPHERAL REGIONS

Tourism development is certainly a promising industry-diversification option for marginal lands, especially when there is little other alternative in the context of a generally depressed economy and a severe economic crisis for the traditional agricultural sector, as in the case of Australia. However, tourism should not be seen as a solution for all problems. Economically, it is a highly insecure industry, vulnerable to variance in incomes and preferences of people outside the target regions and to national and international policy changes (Tisdell and Wen 1991). Additionally, for peripheral regions the viability of tourism is likely to be greatly reduced, because visitors may spend money in the region only for food, petrol, and other goods of immediate consumption; many goods that tourists ask for have to be imported; operating costs for tourism facilities may be excessive, with high transport costs leading to very expensive supplies, high electricity charges, high local government charges, and expensive machinery servicing; the region may have appeal only for a very limited segment of the tourism market and product diversification may be difficult (because there are only the given natural attractions and tourists may like a more varied mix of natural and man-made attractions); tourists, especially Japanese, may not visit the area because of the time involved in travel; the local tourism industry may employ mostly outside personnel because locals do not have the necessary skills; obtaining and long-term retaining of trained and experienced staff may be very difficult; natural conditions may lead to extreme seasonality of the tourism product, with limited possibilities for off-seasonal tourism, even when package tours are developed and offered; and the incoming profit from tourism may be largely consumed and invested outside the peripheral economy (Cape York Peninsula Tourism Workshop 1992; Connell Wagner 1989).

The "cargo-cult"-like expectations that have been fuelled by the exceptional tourism growth in the last decade might be dashed. John Menadue, the chief executive of Qantas, warned already in the late 1980s that "Tourism may well be the . . . equivalent of last century's gold rush, which did not last, or the resources-led recovery of the late 60s and 70s, which proved to be illusory" (Spiers, 1987).

Ecologically, there could be an unpleasant awakening after the "rush," when Australians realize that much of their natural heritage is gone, sealed under tarmac, polluted, and replaced by unsightly development. Tourism development certainly includes the danger of destroying some of the last almost undisturbed wildlands of the world for short-term economic benefits.

Socially, the interests of the local population, especially the indigenous peoples, might not be adequately considered by developers. Tourism is not easily accepted everywhere. According to a Pacific Asia Travel Association Commission Report, for example, "residents of *all* the Cape York Peninsula communities, including Cooktown and Weipa, express a deep suspicion of tourism . . ." (PATA 1990:iii). The main concern is that local interests may be overruled by powerful groups outside the region once development takes place. Still, politi-

cally, the local and regional government might lose control over the development process to higher government levels and industry lobbies pursuing the interests of the developed core regions.

The economic problems of tourism in peripheral regions are hard to counteract. Whereas central tourism regions have to a certain extent a choice about what segment of the market, such as a domestic or an international clientele, up-market or low-budget tourists, or independent or tour travelers, to cater for, the periphery has to develop the few market segments that are attracted by their limited resources. Peripheral regions have less economic flexibility in relation to the industry. Another important point is that central tourism regions have greater ability to smooth out seasonality effects by offering specials during off-season periods. In many peripheral regions, there is no such possibility because natural forces such as the monsoon in Cape York Peninsula or the severe winter conditions in Canada's north or the Antarctica, make off-season tourism virtually impossible.

Ecological, social, and political problems can often be effectively countered by controlling and limiting the flow of tourists in space and time. To ensure conservation of natural resources, access and land-use may be restricted by zoning. However, the mere setting up of national parks is not enough. Conservation zones have to be integrated into the man-dominated landscape by the establishment of conservation networks that include corridors linking reserves and buffer zones designed to reduce human impact.

Social impacts can be controlled by limiting development over time, for example, by delaying the opening up of certain regions for tourism until the local population has been trained as managerial and administrative staff. Politically, a strong regional tourist organization working closely together with the local and regional levels of government is necessary to maintain at least some degree of control over the development process.

However, it has to be noted that peripheral control does not always ensure "the best" solution to development problems. What is preferred by local people can conflict with national or even global preferences as in the case of preservation of species, where locals might, for instance, prefer hunting over conservation. Additionally, extremist factions within the local communities might come into power and pursue a different policy, such as, one of highly exploitative development.

Tourism in Cape York Peninsula

For the purposes of delineating the northern Australian tourism industry, the administrative region of Far North Queensland is subdivided into seven distinct zones: Cairns, the Atherton Tablelands, Southern Beaches, Northern Beaches, Daintree, Port Douglas, and Cape York Peninsula (personal communication with Far North Queensland Tourism Promotion Bureau in 1993). Of these subzones, Cape York Peninsula so far has been the least touched by tourism, which leaves options open as to where development should lead.

The Peninsula is a cone-shaped extension from the Australian mainland mass, totaling 137,000 to 180,000 km², depending on the area

definition (Connell Wagner 1989; PATA 1990; WPSQ 1990). The Daintree region on the east coast is usually defined as an independent tourism region. On the west coast, the area up to Kowanyama is considered to be part of the Gulf region. For simplicity, in this study, the Cape York Peninsula was defined as the area from Laura northwards (Figure 1).

Only about 15,000 people live in the Peninsula scattered over its vast area (Connell Wagner 1989:1ff). Over 50% of the total population consists of Aborigines and Torres Strait Islanders, whereas this proportion in the Australian population averages only one percent (WPSQ 1990:65).

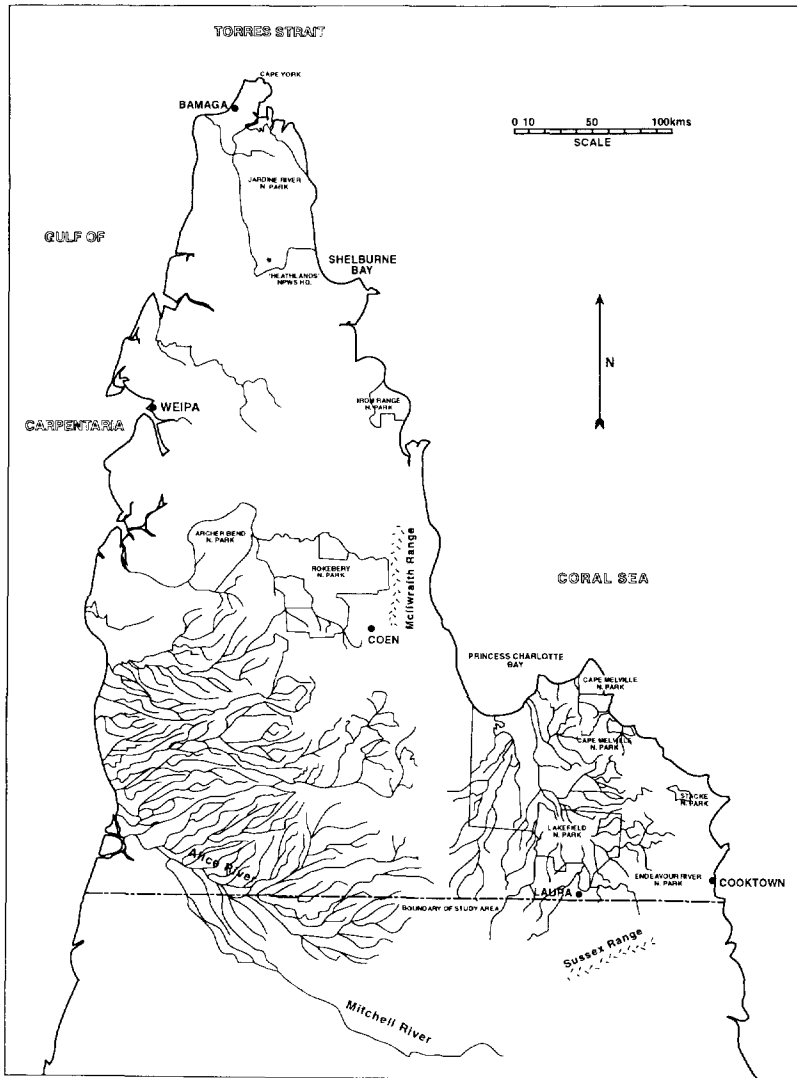


Figure 1. Location and Boundary of the Study Area in Northern Australia

Cape York Peninsula contains very diverse natural environments with rainforests, vine forests open forests, grasslands, heathlands, dune fields, and aquatic and tidal wetlands. As a region of animal and floral interchange between Australia and New Guinea, it supports unique biological assemblages with high endemism rates (Hohl and Tisdell 1993; WSPQ 1990). The high conservation value of this bioregion is internationally recognized (Mittermaier and Werner 1990; Myers 1988 and 1990).

The Cape York Peninsula has much to offer for the tourist. Its huge size, its almost unpopulated state, its remoteness from major population centers, and its near pristine natural qualities make it one of the prime wilderness areas of Australia. Of special interest are the east coast beaches and dune fields, the rainforests of the Iron and McIlwraith Ranges and the Lockerbie Scrub, and the lower reaches of the Jardine, Mitchell, Wenlock, and Palmer rivers (Connell Wagner 1989). Furthermore, the Peninsula potentially offers access to large areas of the Great Barrier Reef to the east as well as to the crocodile-rich estuaries of rivers flowing into the Gulf of Carpentaria to the west. In addition, there is an interesting human history of at least 40,000 years of Aboriginal settlement and over 200 years of European presence. Cape York Peninsula was probably one of the first areas in Australia settled by humans, presumably crossing the then existing land bridge from New Guinea. The cultural heritage of the Aboriginals is comparatively well-preserved, for example, in the Quinkan Galleries area near Laura. Aboriginal rock art sites are numerous. The European history of the region began with Captain Cook's arrival in 1770, although some European contact (e.g., by the Spanish) predated this. His vessel, the *Endeavour*, was careened and repaired at Cooktown, while on his epic 3-year voyage.

The spatial distribution of tourism activities in Cape York Peninsula is still very limited—a large number of vehicles are driven from the south to the northern “tip of Australia,” with few deviations to the east or west. Most people camp at river crossings or where simple facilities are provided. Resort development is limited in the Peninsula. Most of the available accommodation in the small townships and at some of the cattle stations is very basic. Only at the “Tip” and in Cooktown are there upmarket lodges. Tourism is strictly seasonal, because road access is largely impossible during the monsoon season (PATA 1990).

Growth of Tourism and Seasonality

One of the problems facing tourism research in Cape York Peninsula is the lack of quantitative data. The Australian Bureau of Statistics provides data only for Far North Queensland in general. There are no separate statistics available for the Cape York Peninsula region. Data on tourism numbers are largely nonexistent.

Some indications about the development of visitor numbers can be gained from the road counts of the Cookshire Council (1993). Counters are placed in strategic positions along the main traffic arteries. As all vehicle movement is registered, no distinction can be made between tourist and other kinds of traffic. Readings undertaken at irregular

intervals provide only information on the average number of cars per day during a specific period. Additionally, the counters suffer frequently from technical breakdown, deliberate breakages, or theft. Due to these shortcomings, data sets are often incomplete, which makes clearcut comparisons between the years impossible. However, at least graphically (Hohl and Tisdell 1994a) it can be seen that the traffic volume has increased over the last 5 years, even though the number of residents of Cape York Peninsula is relatively stationary. This is indicated by data from Musgrave in the south and Batavia Downs in the north of Cookshire Council. The latter is north of the Weipa turn-off and can, therefore, be expected to have a high percentage of tourist vehicles in the road counts. Both data sets demonstrate the extreme seasonality of vehicle movements. During the summer monsoons, road-traffic becomes impossible in many parts of the Peninsula. Most monthly movements occur in the dry period, June to October (inclusive), with traffic volumes being much lower in the remainder of the year, the wet season.

For one location in the center of Cookshire Council, Coen Airport, data are available on a monthly basis, which allows the charting of absolute numbers of vehicles per month (Figure 2). January to April (inclusive), the main wet season in this area, is one of little vehicle movement.

There is only one year, 1991, with complete data sets for all three locations. In this year, the traffic volume decreased northwards: Musgrave 25,439; Coen Airport 17,465; Batavia Downs 9,946. There are

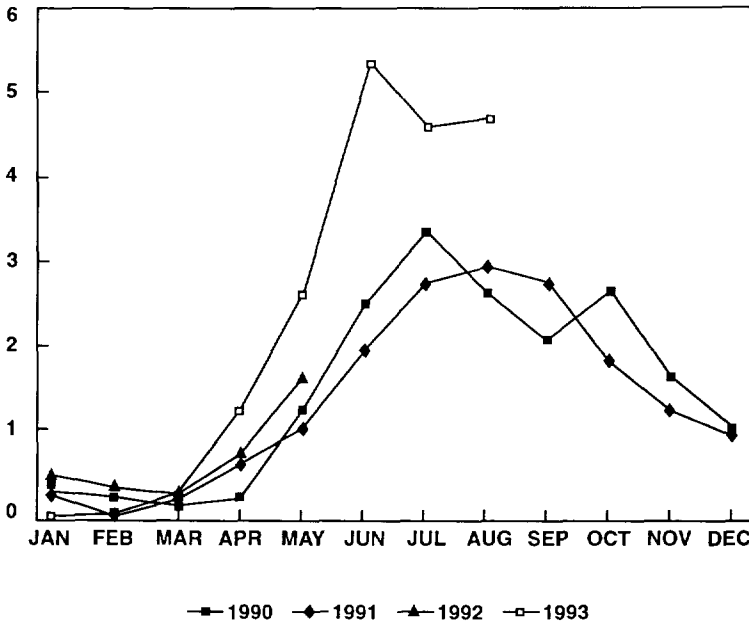


Figure 2. Vehicle Moments at Coen Airport as Recorded by Cookshire Council Vehicle Counters

no road counts in Injinoo Council, the northern area that covers the tip of Cape York Peninsula. However, there are some data available on the number of ferry crossings over the Jardine River. Numbers are 1,900 for 1983, 2,000 for 1984, 2,500 for 1985, and 2,880 for 1986, the latter number representing tourist vehicles exclusively (Cookshire Council 1993). The Injinoo Council estimated the number of vehicles to have crossed the Jardine by ferry in 1992 at about 4,000 (Injinoo Council 1993). For 1992, the number of tourists reaching the northern tip of Australia was estimated to be in the range of 20,000 (Injinoo Council 1993).

Information gathered from accommodation owners further illustrates the influence of seasons on the tourism industry (Hohl and Tisdell 1994a). During the peak season, which was defined by the accommodation owners as usually running from mid-May to mid-October, their average occupancy rate was 59%. During the intermediate season (from April to mid-May and from mid-October to November), occupancy rates averaged 18%, and during the off-season (from December to March), they went down to an average of a low 3%.

Thus, it is clear that this region experiences major seasonality in tourism, as do many monsoonal regions in the world. This seasonality adds greatly to the costs of operating tourism businesses in the region because of the considerable seasonal variation in utilizing the capacity of such businesses.

Types of Visitors

Tourists can be categorized by the level of prearranged holiday organization and by their means of transport. Individual travelers were distinguished from visitors traveling on organised tours. Within these primary categories, there is considerable variance. Individual travelers may follow beaten tracks or really "go bush." Organized visitors may choose a comfortable fully accommodated tour, traveling in an air-conditioned bus. Others may prefer to ride on a motorcycle to the northernmost point of Australia, while the tour operator only guides and transports the camping equipment.

Table 1 lists the main means of transport to the Cape York Peninsula and within the region used by visitors surveyed. As one visitor may have used several means of transport, the percentages given add up to more than a hundred. The most common means of transport to the region were individually driven four-wheel drive vehicles, both privately owned and rented. They were used by 55% of the travelers. These were followed by planes with 30% and tour operator vehicles with 28%. Other means of transport used included private two-wheel drive vehicles (8%), motorcycles (5%) and the train (4%). Within the Peninsula private four-wheel drive vehicles were used by 58% of the visitors and tour operator vehicles by 33%. Five percent of the visitors rode motorcycles, another 5% came up in two-wheel drive vehicles and 4% used regional plane services. Other means of transport were not encountered, but locals reported tourists traveling in Cape York Peninsula on push bikes, by foot, or on horseback. The average occupancy rate of private cars was 2.6 and that of tour operator vehicles 17

Table 1. Means of Transport to and within the Cape York Peninsula Region

Means of Transport	Percent ^a of Visitors Using Transport to the Peninsula			Percent ^a of Visitors Using Transport within the Peninsula		
	Individual	Tour	Total	Individual	Tour	Total
Plane:						
^a International	12	13	12	—	—	—
^a National	5	36	17	—	—	—
^a Regional	0	2	1	0	11	4
Private 4WD	83	0	52	87	0	55
Rented 4WD	4	0	2	5	0	3
Private 2WD	11	4	8	8	0	5
Tour Operator						
Vehicle	0	76	28	0	89	33
Motorcycle	1	11	5	1	11	5
Train	7	0	4	—	—	—

^aMultiple answers were possible.

persons. The individual travelers interviewed intended to stay on average 16 days in the Cape York Peninsula and those on organised tours 10 days.

Unfortunately, the study could not be extended to cover water-based traffic except for the river ferries. According to estimates of the Wet Tropics Management Agency (WTMA), over a thousand yachts go up to the northern tip of Australia each year (WTMA 1993). Cruise/drive tours are increasingly offered by tour operators. Further, there are coastal boat services from Weipa to Kurumba and from Bamaga to Cairns.

Some tourists travel exclusively by plane. This accounts especially for specialist visitor types like fishermen or bird watchers who travel to the Peninsula during the wet season, when car transport is impossible, but animal life is the most spectacular. These often affluent travelers usually stay in upmarket accommodation.

For the whole of the Cape York Peninsula, four visitor types can be distinguished: individual visitors traveling by private vehicle; tourists on commercial four wheel drive safari tours; charter boat tourists; and specialist travelers using regional air carriers and lodge-type accommodation.

Tourist Expenditure

As tourists and tour operators buy most of their supplies in places outside the Cape York Peninsula before they start their journey, their expenditure in Cape York Peninsula is limited to relatively few items such as fresh food, drinks, petroleum products, and souvenirs (Table 2). In the Cape York Peninsula, there is hardly any retail market production of any kind. Cattle from the stations have to travel all the way down to the abattoirs in the south such as in Mareeba to comply with veterinary standards. Beef is packaged there and reimported to

Table 2. Expenditure of Tourists in Cape York Peninsula (in Australian\$)

Type of Expenditure	Individual Travelers		Tour Group Members	
	Absolute	Percent	Absolute	Percent
Fuel	13.7	43	?	
Food	7.7	24	?	
Accommodation	4.5	14	?	
Souvenirs	2.8	9	4.8	47
Other Supplies (drinks, etc.)	2.0	7	3.5	35
Other Expenditure (ferry, museum, etc.)	0.9	3	1.8	18
Total	31.6	100	10.1	100

the Peninsula. Game and feral animals taken in the region cannot be sold to tourists because of strict health regulations. The relatively small pockets of agricultural production around Cooktown and Lakelands may contribute to a small extent to the food requirements of tourists. Some local fishery products find their way to the markets. However, almost all of the commercially taken fish and crustaceans are marketed in Cairns and other southern cities. Therefore, with few exceptions, all the supplies bought by tourists in the Cape York Peninsula have to be imported from outside the region.

Individual travelers spent on average per person and per day AUS\$13.7 on fuel, \$7.7 on food, \$4.5 on accommodation, and \$2.8 on souvenirs. Other supplies, mainly drinks, account for \$2, and other expenditure (such as ferry or museum entrance fees) account for \$0.9. Unfortunately, as tour operators are very elusive with information about their real expenses, it could not be determined how much money their tourists actually spend in the Peninsula for fuel, food, and accommodation. Organized travelers spent on average per person and per day \$4.8 on souvenirs, \$3.5 on other supplies (such as drinks), and \$1.8 on other items (such as ferry and museum fees).

Because most items bought in the Peninsula are imported to the region, the actual amount of money staying in the local economy is rather small. Profits are almost entirely restricted to persons working in the service industry, such as owners and employees of accommodation facilities, petrol stations or supermarkets. Income multiplication effects that are common in other tourist regions are almost nonexistent. Due to the extreme seasonality of tourism not even the most basic trades such as butchers or bakers can make a living outside the major population centres. The local crafts and souvenir industry is hardly developed at all. There are certainly market chances for "typical" products such as Aboriginal art or articles that remind one of the pioneer era.

Management Problems During Peak Season

Some 20 years ago, a visit to the Cape York Peninsula was a lonely trip into an almost empty country. Today, there are more tourists than

residents, and most travel on the same few roads during the same restricted period. According to the Pacific Asia Travel Association the number of tour operators running tours up to Cape York has increased sixfold to over 30 in the last 20 years (PATA 1992:5). Most of the tourists camp on the same river crossings or scenic spots and visitors leave the wastes of their human activities nearby. The Cape York Peninsula in general is still an empty land, but some the tourist bottlenecks suffer from overcrowding.

On the question of what could be done to improve the quality of visits to Cape York Peninsula, the interviewed visitors made a variety of suggestions (Table 3). Clearly the most desired improvement, suggested by 26% of the sample, is the more frequent grading of the roads. More road signs was suggested by 14% and more camping and toilet facilities of better quality by 8%. Educational material was missed by 5% of the visitors, and 3% thought that prices were too high. Another 3% wished for better garbage removal. A wide range of individual suggestions included qualify vehicles before allowing them to use rough roads; more control of traffic offenders; restrict vehicle size, no buses or unimogs; limit speed on dirt roads; limitation of access; limitation of visitor numbers; creation of a tourism information office at Laura; more walking tracks; more petrol stations; better advertising of tours; and better management of the tourism resources.

There were some differences between individual travelers and organized tour tours in responses. The latter can ask their tour guides about the Peninsula and therefore, do not rely on educational material as much as do individual tourists. Tour operators inform customers about the disposal of garbage, so they tend to view waste problems more critically than the individual travelers.

It is obvious that the authorities having managerial functions in the region, such as the local councils, the traffic police, or the National

Table 3. Suggested Improvements for a Cape York Visit

Suggested Improvements	Percent of Individual Travelers	Percent ^a of Tour Group Members	Percent ^a of Total
Improvement of Roads	28	24	26
Improvement of Road Signage	15	13	14
Better and/or more Camping Facilities/Toilets	9	7	8
More Educational Material (boards, leaflets)	7	2	5
Lower Food and Petrol Prices	3	4	3
Garbage Cleanup	0	9	3
Other	16	22	18

^aMultiple answers were possible.

Park and Wildlife Services, have been unable to cope with the expansion of tourist numbers in Cape York Peninsula. The high influx of modern four wheel drive vehicles that can travel at high speeds causes severe corrugations. The fast deterioration of the roads after grading puts pressure on the local councils to increase their road work activities. However, funds are too limited to provide smooth surface roads during all of the tourism season.

The traffic police clearly have to do more to make traveling in the Peninsula safer and reduce accident rates. Speed limits could be introduced, more road signs could be set up and vehicle controls for roadworthiness and safe driving could be more frequent. The need for the establishment of more and better camping facilities and toilets, as well as for better information and educational facilities, has been recognized by both the local councils and the National Park and Wildlife Service. Again, the main problem lies in funding.

With regard to national parks, criticism of the Queensland National Park and Wildlife Service was frequently expressed, the main points of dissatisfaction being: lack of availability of rangers, lack of knowledge on part of the rangers, lack of courtesy on part of the rangers, lack of control of feral animals, awkward and time-consuming registration process.

There can be no doubt that the National Park and Wildlife Service is heavily understaffed, underfunded, and maybe in some aspects undertrained. The multiplicity of goals that this body is supposed to perform under severe natural conditions in a huge area just cannot be met with the few rangers posted there. Although Cape York Peninsula's National Parks cover about 10% of the region, they are managed by only 10.5 administrative and field staff members (Cape York Peninsula Tourism Workshop 1992).

Possibilities and Constraints

The further development of tourism depends on the exceptional qualities of Cape York Peninsula as a remote and isolated wilderness. When these special qualities are lost due to overdevelopment, tourists are likely to prefer other, more accessible regions. According to the Wildlife Preservation Society of Queensland, the appropriate strategy is to foster extensive tourism while ensuring its compatibility with conservation (WPSQ 1990:241). The Pacific Asia Travel Association stresses the necessity to develop only structures harmonious with the natural assets of the area (PATA 1990:4ff). If tourism "development" continues at the present rate without sufficiently constraining and enforced regulations, parts of the Peninsula are in danger of being "loved to death" (Kennedy 1993).

Tourism uses the Cape York Peninsula's resources, but the benefits of it are mostly enjoyed outside the region. The provision of management controls and visitor infrastructure has failed to keep pace with growth in visitation rates. Environmental degradation has been the consequence. Unsavory visitor behavior has led to conflicts with local landholders, such as graziers or Aboriginal communities.

In order to overcome these problems, tourism development has to be regulated and constrained. A joint initiative between the Queens-

land and Commonwealth Governments, the Cape York Peninsula Land Use Strategy Task Force has been set up to define the policy and decision-making framework for balanced and sustainable development in the Peninsula (CYPLUS 1992). As a first step, CYPLUS has identified the natural and cultural values and resources of the region. The potential for tourism was evaluated and a register of the tourism assets compiled. The data collected will be used in producing geographical information systems. CYPLUS put much emphasis on a participatory approach. Great efforts were taken to bring together all important interest groups, including local councils, Queensland and Commonwealth Governments, the Peninsula Development Association, the Pastoral Advisory Group, ethnic and conservation groups, to work out a long-term land use strategy for the Peninsula. It can be hoped that further CYPLUS initiatives and their political implications will eventually lead to the establishment of an environmentally and socially sensitive tourism management plan for the region.

A central planning and management agency for the Cape York Peninsula, such as the Wet Tropics Management Agency, which is responsible for the North Queensland World Heritage rainforest region, would certainly enhance the chances for integrated and coordinated development. Such an agency could evolve out of the current CYPLUS structures. However, at the moment, there are no plans to extend the life-span of the task force beyond 1994. As federal and state funding is very limited, important planning and managerial functions will fall to the tourism industry itself, if it intends to preserve its resource base.

In the planning field, the Pacific Asia Travel Association has already given some guidelines for future development (PATA 1990 and 1992). The regional Cape York Peninsula Development Association Tourism Committee has identified a number of additional tasks that need to be initiated by the tourism industry (Cape York Peninsula Tourism Workshop 1992). These include broadening of the composition of the Cape York Peninsula Development Association Tourism Committee in order to establish an effective organizational structure for tourism development; developing a marketing and promotion plan for Cape York Peninsula; seeking membership on National Parks Management committees in order to improve interinstitutional cooperation; and developing a visitor information database.

However organized, land-users, such as the tourism industry, will have to consider the strong constraints imposed by the interests and rights of Aboriginal communities and by the vulnerability of the environment on further development. Indigenous communities are concerned with the impending court decisions on Mabo claims, which are likely to extend Aboriginal land control in the Peninsula considerably. The High Court of Australia found in 1992 that the common law of Australia recognized a form of native title, which was not extinguished upon the assumption of sovereignty by the Crown. This court ruling, called the "Mabo" decision after the name of the person who first brought this case to the courts, changed the meaning of "Crown land," that is no longer considered *terra nullius*, unalienated waste land, but land that is held by the Crown subject to the existence of nonextin-

guished native title (Puri 1992, Stephenson 1993). The Mabo decision has led to numerous land claims—without regard to the form of tenure—of Aboriginal individuals and communities all over Australia. Tempers are running high in some parts of the country. Some radical supporters of the Aboriginal land claims would like to see Cape York as exclusively reserved for indigenous groups. On the other hand, some white farmers threaten they would not give up their land to Aborigines without fight. However, there are still ample hopes that some kind of peaceful deal will be made between the ethnic groups.

For Aboriginal communities tourism development is generally not a priority. However, there are tourism facilities that are managed by Aborigines, such as the Wilderness Lodge, "Pajinka," at Cape York, a motel in Bamaga and various campsites. If Aborigines decide to get involved in the organization and management of the tourism business on a larger scale more education and training programs will be needed for local staff of indigenous descent.

The negative environmental impacts of tourism are, due to the very limited road access to large parts of the Peninsula, still very localized. Nevertheless, greater care has to be taken that water pollution at river crossings will be prevented and a solution to the garbage problem needs to be found. Adequate behavioral rules should be introduced to slow down the erosion of the entrances and exits of vulnerable river crossings, such as Gunshot Creek. Environmental education programs, that have been successfully implemented in other Australian regions, have been severely neglected in the Peninsula.

As most mammals are very elusive, the most attractive wildlife that visitors are likely to see are birds. Some species, such as the Great Palm Cockatoo and the Eclectus Parrot, occur nowhere else in Australia. These species form an important resource base, maybe not for the tourist in general but for the affluent specialist traveler, who might visit the Peninsula during the wet season as well. If poaching goes on, as has been reported recently (Doneman and Morton 1993a and b), the loss of rare birds will not only be catastrophic from a conservationist's point of view, but also for the tourism industry catering for the naturalist market. Tourist guides and accommodation owners in remote areas should become more involved in the monitoring and reporting of poaching activities. As bird smuggling is often connected with the illicit drug and arms trade, police forces should put more focus on what has formerly been considered just a petty crime.

The executive powers that are supposed to control current land-uses, to prevent deleterious social or environmental impacts, and to educate residents and visitors, are by no means sufficient. One of the main reasons of these shortcomings and neglects is the lack of funds at all levels. Therefore, the Cape York Peninsula Tourism Workshop (1992: 1) has recommended that a "user pays" mechanism be thoroughly investigated, to see whether visitors to the Peninsula can contribute significantly to the cost of tourism development.

The User Pays Principle

Many tourists are not satisfied with the management of the Cape York Peninsula and would like to see improvements such as better

roads, signage, or more comprehensive ranger services. For the locals who are not directly involved with the industry, tourists bring no benefits or can even be a nuisance. Tourism certainly uses the natural resources of the region without tourists paying much or anything at all for this use. As a way of providing better services to tourists, increase benefits for the local population, and alleviate the pressure on the environment, the implementation of the user pays principle in the region has been suggested (Cape York Peninsula Tourism Workshop 1992). So far, the main management authorities have applied user pays measures rather reluctantly or not at all.

Queensland has a policy of free road access, even in remote areas. There are no toll roads in the Cape York Peninsula. The construction and maintenance of the most important roads in the region, the Peninsula Developmental Road from Mareeba to Weipa, the Cooktown Developmental Road and the Department of Community Services Road to Bamaga, are financed by the Queensland Department of Transport. Furthermore, the costs for works on roads under local council control are often covered 50% or even 75% by the state government, if the councils are unable to provide the necessary financial means. A user pays policy with regard to transport and access has only been adopted by some aboriginal councils. The Injinoo Council charges \$20 one way for cars crossing the Jardine River on the council ferry. The Mapoon community allows paying visitors only on their land. Fees are due for camping permits and for day visits. There are no facilities or other tourism services, such as guided tours, provided for this money. It is rather considered to be compensation for the inconveniences caused by tourists.

The Queensland National Park and Wildlife Service (QNPWS) charges camping fees of different magnitudes, depending on the facilities in the National Park. However, there are plans to create a uniform camping fee of \$2 per person, as costs are not so much related to the standard of the relatively simple camping facilities as to the creation and maintenance of access roads (QNPWS 1993). Queensland's national parks have, considering the often enormous areas, very few rangers. The current policy is to post one or two rangers in all visited parks. Only parks with very high visitor pressure have more personnel. Despite the relatively low level of presence, the management costs are so high that only about 10% can be recovered by visitors' camping fees. This percentage does not compare unfavorably with international rates. Even in the United States' national parks with much larger visitor volumes and higher entrance fees cost recovery rates cover only between 10% and 20% of management costs (QNPWS 1993). Therefore, it can be concluded that the full application of the user pays principle would result in prohibitively high entrance and camping fees and would not be feasible. The sensible objective can only be to increase the rate of cost recovery. Steps in this direction within the current system could be to simplify the registration process, provide more registration facilities, and to step up control measures.

Some long-term solutions that would simplify administration and control could be the introduction of park entrance fees regardless of the intention to camp (i.e., anyone in a national park without a permit

could be fined, and the issue of regional permits, e.g., a "Cape York Peninsula camping pass" varying in price according to intended length of stay, rather than permits for very many different campsites.

Naturally, tourists would not be delighted with the prospect of having to pay for something that used to be free. Fees for mere access to national parks and Aboriginal communities would not be popular. Therefore, it would be necessary to accompany the introduction of such measures with educational programs that show what are the benefits for the visitors (such as better infrastructures or information), environmental improvements (such as better national park management or less pollution), and for Aboriginal communities gains (such as improvement of community facilities). If visitors could be honestly informed about what happened with their money, the willingness to pay for the use of resources would be greatly enhanced.

However, if visitors are made to pay for their holiday, they have to be guaranteed to get value for money. In order to provide a high quality experience in an ecologically and socially unique environment, the existing resources have to be well protected and visitor numbers and tourism development must be restricted. But visitors alone should not bear the burden. It must be asked how the tourism industry itself could help to provide services to visitors and cut costs for state authorities. Information and national park camping registration facilities could be set up at campsites, shops and roadhouses. Up-to-date maps, brochures, and leaflets should be readily available. Educational boards could be placed at points of interest. Tour operators and local businessmen should have an interest in the good management of the Cape York Peninsula's resources, and might be willing to finance tourism information officers who could be posted in a few strategic locations along the main tourism routes.

CONCLUSIONS

Tourism in peripheral regions is a relatively risky enterprise. The general problems of tourism development, such as those relating to incomes and preferences of travelers, and vulnerability to policy changes, are aggravated in peripheral regions because of their limited resource base and greater economic inflexibility. However, such regions usually have few economic opportunities, so any economic diversification is likely to be welcomed.

So far, tourism in Cape York Peninsula is a steadily developing industry. There are favorable chances and dangers in this process. Tourism can bring substantial benefits to an economy that is peripheral and scarcely developed, apart from the mining centers. However, to make this happen, the enormous economic leakages out of the region need to be reduced, which implies that the local communities must become involved to a much larger extent than today with the industry. The main obstacles to the build-up of locally controlled businesses is the lack of a skilled workforce and the extreme seasonality of the Cape York tourism. The former often prevents locals becoming small entrepreneurs or getting jobs within established outside controlled tourism businesses. The latter prohibits most engagement in those secondary

services that would benefit from multiplier effects of tourism. An evening out of the influx of tourists is not easy to achieve. Fly and cruise holidays could be promoted during the wet season, but the high costs will act as a deterrent. The most promising marketing strategy would be to try to attract international tourists and retirees to come to the Cape York Peninsula during the intermediate seasons.

If the economic benefits of tourism are largely enjoyed outside the region, and local communities have to put up with the negative impacts of the industry, resentment to further tourism development will be inevitable. Growing alienation of the visitor and the host communities should be taken seriously and be countered by changing the focus of tourism and by reducing the intensity of tourism activities. Cautious planning and management will be necessary to avoid conflicts. Partial introduction of user pays mechanisms could make local communities more inclined to accept tourists on their land. However, if Aboriginal groups decide they do not want to get involved with tourism, it has to be made sure that visitors and tour operators respect their decision and avoid their territory.

Unspoiled nature is one of the major drawcards of the region. Tourism must be developed in a way that does not destroy its own resource base. Continuous monitoring of any adverse effects on the environment should be carried out and vulnerable sites should either be protected (e.g., by the construction of boardwalks or by planting prickly plants along the demarcated tracks) or visitor streams should be guided away from them.

If the overall goal of tourism development is to achieve economic, social, and ecological sustainability, it must provide a first quality visitor experience, conserve natural and cultural resources, and bring substantial benefits to local communities. In the current situation of "wild growth" of tourism, short-term economic considerations are likely to overrule social and environmental concerns and thereby threatening long-term economic prospects as well. Hence, it is vital for the future of the tourism industry that the development process is carefully controlled by state or private management authorities and that adequate counter-measures are taken against evolving negative impacts. In order to avoid negative economic, social, or ecological impacts of tourism, a carefully designed land-use planning strategy is needed. Planning processes should be participatory to enable local communities to integrate their interests. Special training programs could help to produce sufficiently skilled local labor.

To ensure sustainability of the development, the carrying capacities of the resource base should not be surpassed. This can be achieved by the distribution of visitors in space and time and the diversification of tourism activities. Continuous monitoring of adverse effects should accompany the expansion of the industry in Cape York Peninsula. The danger of fragmentation and isolation of wilderness areas by increasingly intensive land-use by tourists can be counteracted by the establishment of conservation networks (Hohl and Tisdell 1994b). Only if the residents can maintain sufficient control of the development process and if ecological sustainability can be achieved is industrial diversification into tourism likely to produce substantial benefits for Cape York Peninsula. □ □

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REFERENCES

- Cape York Peninsula Tourism Workshop
1992 Maximizing Benefits—Managing Impacts. San Francisco: Pacific Asia Travel Association.
- Connell Wagner
1989 Cape York Peninsula Resource Analysis. Cairns: Queensland Premier's Department, Cairns.
- Cookshire Council
1993 Unpublished Road Count Data. Coen: Cookshire Council.
- CYPLUS
1992 Cape York Peninsula Land Use Strategy (CYPLUS)—What is it? Cairns: CYPLUS Information.
- Doneman, P., and T. Morton
1993a Smugglers Slip Past Understaffed Police. *The Weekend Independent* (October 29).
- EIU
1990 Australia. *International Tourism Reports* 4:63-83.
- Hohl, A., and C. Tisdell
1994a A Survey of Tourism and Tourism Management in a Remote Region—Cape York Peninsula, Australia. Discussion Paper No. 143. Brisbane: The University of Queensland, Department of Economics.
1994b Conservation Networks, Integrated and Sustainable Land-Use in a Tropical Frontier—The Cape York Peninsula Region. *The Environmentalist* (14)4:253-259.
- Kennedy, F.
1993 Daintree—Threatened by Success. *The Australian Magazine* (January 9).
- Mittermaier, R. A., and T. B. Werner
1990 Wealth of Plants and Animals Unites: "Megadiversity" Countries. *Tropicus* 4(1):1, 4-5.
- Myers, N.
1988 Threatened Biotas: Hotspots in Tropical Forests, *The Environmentalist* 8(8): 1-20.
1990 The Biodiversity Challenge: Expanded Hot-Spot Analysis. *The Environmentalist* 10(4):243-256.
- PATA
(1990) Cape York Peninsula—Tourism Issues & Opportunities. San Francisco: Pacific Asia Travel Association.
1992 Endemic Tourism, Pacific Asia Travel Association Think Tank. San Francisco: Pacific Asia Travel Association.
- Puri, K.
1992 Mabo—A Legal Revolution. Brisbane: The University of Queensland Press.
- Spiers, J.
(1987) Hotel Shortage Threatens Tourism Boom. *The Australian* (November 10).
- Stephenson, M. A.
1993 Mabo and the Doctrine of Land Tenure. Brisbane: Law Journal and The University of Queensland Press.
- Tisdell, C. A., and J. Wen
1991 Foreign Tourism as an Element in PR China's Economic Development Strategy. *Tourism Management* 12:55-68.
- WPSQ
1990 A Conservation Strategy for Cape York Peninsula. Brisbane: Wildlife Preservation Society of Queensland.

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