

ECONOMIC IMPLICATIONS OF ECOTOURISM IN MARINE PROTECTED AREAS: TUN MUSTAPHA PARK, SABAH

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ABSTRACT

Socio-cultural effects of tourism on local communities are now a major focus of academic study. Primarily, the concern is with communities in tourist areas who become hosts and the tourists who become their temporary guests. The development of ecotourism in environmentally sensitive areas can have both positive and negative consequences. This paper examines: (1) whether ecotourism is feasible in marine protected areas; (2) the challenges faced by stakeholders in public-private partnerships in developing ecotourism; and (3) the needs in ensuring economic sustainability of displaced communities in and around the Tun Mustapha Park, Sabah, Malaysia. This study has employed a mixed method in data collection which includes participatory discussions, semi-structured interviews, and on-site observations and surveys with various respondents — namely, public and private sector stakeholders and local communities. The observed evidence has shown that with adequate planning and support from private sector tourism stakeholders and relevant public agencies, local communities and the natural environment can stand to benefit from ecotourism development in the area.

Keywords: ecotourism development, public-private partnership, local communities, marine protected areas, Malaysia

1.0 INTRODUCTION

The Sabah State Government has proposed a geographical area of 1.02 million hectares of land and sea, known as the Tun Mustapha Park (TMP). This initiative was approved through a State Cabinet decision in 2003 and the park was established as a marine protected area (MPA) under the Park Enactment 1984, with jurisdiction under Sabah Parks, the managing agency for all parks in Sabah which falls under the purview of the State Ministry of Tourism, Culture and Environment. The TMP will include 50 of the islands in the Kudat-Banggi Priority Conservation Area (PCA) such as the islands of Banggi, Balambangan, Malawali, Balak and Maliangin, amongst others. The Kudat-Banggi conservation area forms the southern half of the Balabic Straights, which separate Borneo from the Philippines and where the Sulu Sea and the South China Sea meet. Upon gazettelement, the TMP will form the biggest marine protected area in Southeast Asia.

The TMP adopts a multi-use concept, where various zones are identified for different types of uses. The park is administered through collaborative management between public and private stakeholders, including local communities. Ecotourism has been identified as one of the possible economic alternatives offered to communities. Generally, ecotourism is seen as a way to attain sustainable development; therefore tourism must, in itself, be sustainable from economic, political, social and environmental points of view.

The establishments of Marine Protected Areas (MPAs) are human obligations towards nature and society. Management policies and regulations, however necessary and justified, soon become controversial. Multiple use and value issues of common pools arise amongst diverse parties such as commercial fishermen, the tourism industry, local communities and special interest groups (e.g., environmental and political). Natural resource management systems such as the designation of protected areas inevitably reflect a concern for environmental sustainability. It is thus the responsibility of various elements of the public and private sectors to reconcile differences and to encourage sustainable usage.

The focus of this paper is on the establishment of TMP in its consideration of the combined futures of an existing fishery sector and a potential ecotourism sector, which will be directed by principles of MPA as a tool of governance. The opinions and decisions of managers of the proposed TMP as a MPA in the development of the two sectors (fisheries and tourism) will affect the support required for its successful implementation.

There are more than 85,000 people living within the 1.02 million hectares in the designated TMP. The primary source of income for local communities living in and around the park is from fishing activities. The dependency on fishing is one of the main factors that have contributed to the exploitation of marine resources in the area. The opportunity for the promotion of alternative livelihoods, such as that of ecotourism, may be one of the many strategies for stabilising marine resources, subsequently leading to conservation results within the park. There is limited awareness and development of tourism facilities in the area, which makes the planning and development of ecotourism less complicated than that of a well-developed area. For the most part, if an area is undeveloped there is maximum opportunity in doing things right from the outset especially when carrying capacity concerns are factored in. As is often the case, tourism in environmentally sensitive areas is developed on an ad-hoc basis as tourist arrivals continue to increase over time.

The local communities of Kg. Maliangin on Maliangin (District of Kudat) and Kg. Berungus (District of Pitas), Kg. Malubang and Banggi (Sub-district of Banggi) are most directly affected by the change in status of what are currently traditional fishing grounds. The land area within the main districts of Kudat, Pitas and nearby Kota Marudu, is dominated by agriculture, such as coconut and oil palm, In terms of land accessibility, the roads are of good condition from Kota Kinabalu to Kudat. This is particularly important as land accessibility provides linkages to the park. Any tourism development within the districts of Kudat, Pitas and Kota Marudu is also critical as this can provide institutional and infrastructural support needed for ecotourism development at the park.

The prospect of positive benefits from ecotourism had been identified as one of the potential income-generating activities which had received strong support for the establishment of the TMP as a MPA. Although this segment of the market is small, relative to mass tourism, the economic return per visitor is generally higher. Based on the profile of ecotourists, the potential for higher receipts can be achieved if positive ecological and socio-cultural impacts are evident.

2.0 METHODOLOGY

An overview of the TMP was made from a review of broad cross-sectional development plans and projects from main economic sectors, such as agriculture, finance, health, infrastructure and social services; the focus was on a selected number of sub-sectors within the main sectors. Development plans and projects with tourism or ecotourism as their primary or secondary priority were identified and reports from across government ministries and agencies were reviewed. A broad evaluation of the preliminary selection and suggested projects that had been approved or that had a tourism-based focus was made to gauge the institutional support required should the area be deemed feasible for ecotourism activities.

Visits and consultations were also made with the Worldwide Fund for Nature Malaysia (WWF-M) office in Kota Kinabalu and field office in Kudat with the aim of understanding WWF-M's conservation targets in the area concerned. The discussion also covered logistics and contact details of project staff and key members of local communities most affected by the change in status of fishing grounds. Two teams of researchers made separate trips and field visits for rapid assessments to Kg. Maliangin on Maliangin (District of Kudat) and Kg. Berungus/Kg. Malubang (District of Pitas) in April and May 2011. An assessment of the possible support attractions in the surrounding areas of Kudat, Pitas, Kota Marudu and Banggi was also conducted during these visits in determining accessibility, complementary attractions, identification of potential iconic attractions and an evaluation of the best way forward in gathering data in respect of the preparedness of local communities in embracing ecotourism as a livelihood option.

This study employed a mixed method in data collection which included participatory discussions, semi-structured interviews, and on-site observations and surveys. Such an approach was deliberately chosen as it offered adaptability in approaches to data collection, where ideas can be followed up on and, due to different stakeholder perspectives, responses can be further probed and motives and feelings can be further explored. A set of specific questions was asked and this acted only as an interviewing guide with leeway given to the respondents to expand on their views as necessary, with minimal interruption from the interviewers. Interviewers provided further clarification only when respondents were unclear about what was asked.

Primary data gathered on-site was analysed and presented in a workshop to secondary respondents (tourism industry). The feasibility of developing ecotourism activities linking sustainable fisheries and biodiversity conservation was discussed with tour operators from Kota Kinabalu. The types of ecotourism products which can be developed, and the challenges faced in its development and promotion were further explored at the workshop. Data was collected over a three-month period from May to June 2011.

3.0 LITERATURE REVIEW

Tourism is the third largest income earner for the State Government of Sabah, after manufacturing and agriculture in terms of gross domestic product (GDP). The promotion of Sabah as a destination is heavily reliant on the quality of its natural environment. With projected tourist arrivals set to increase at a rate of 10% for the next five years [Sabah Tourism Board, 2012; SEDIA, 2011], this natural resource-based industry, can have both positive and negative impacts on the environment.

The sustainability of marine resources, including fisheries and biodiversity conservation, is often executed by establishing MPAs (IUCN, 2011). The

establishment of the TMP as part of a community-based resource management undertaking is a complex task which requires a large number of interlinked factors to be addressed simultaneously. Unfortunately, a large number of MPAs are ineffective (Tisdell and Broadus, 1989; Sharpley, 1994) and soon become 'paper parks' that are designated, but in effect, do not achieve their anticipated conservation goals (Tisdell and Broadus, 1989; Wall and Mathieson, 2006). Tisdell and Broadus (1989), WWF (1996) and Spait (2001) have stated that the lack of effectiveness is due largely to limited acceptance and support by local communities that are, at the best of times, required for the successful implementation of MPAs.

The term 'marine protected area' (MPA) used in this paper is any area designated to protect marine ecosystems, processes, habitats and species and this is the context in which the TMP is taken. As stakeholders such as government/public sector negotiators, non-governmental organisation (NGO) representatives, local communities, the private sector and other policymakers involved in the process of gazetting the TMP as a protected area come from a diverse set of backgrounds with different skills and experiences, a good understanding of the associated context and processes for an equitable and sustainable approach to marine resource management (Jumin and Kassem, 2009) is important.

To introduce ecotourism as an alternative livelihood option is not easy. The factors likely to influence its sustainability would mainly be economics and the extent to which ecotourism is consistent with conserving the resource base, its social acceptability of a service-based economy and political feasibility. These compatibility aspects of ecotourism are more often than not, directly linked to its sustainability. However, these aspects are often beyond the control of local communities and require government intervention in tourism management, acting as a guide to sustainable ecotourism development.

There are many variations to the definition of ecotourism and using any of these distinctions in practice is not easy. In the context of this paper, ecotourism is defined as:

Environmentally responsible travel and visitation to relatively undisturbed natural areas, in order to enjoy and appreciate nature (and any accompanying cultural features — both past and present) that promotes conservation, has low negative visitor impact, and provides for beneficially active socio-economic involvement of local populations (Ceballos-Lascurain, 1996; Liew-Tsonis, 2007).

Clarifying the different approaches and emphasis of ecotourism, in its comparison with other forms of tourism (such as adventure or nature-based tourism), will guide appropriate development, ensure that tourism products (Ceballos-Lascurain and Boo, 1990) are assigned to their proper sites, and consequently strengthen the processes involved in environmental and cultural conservation.

There is no doubt that there is a need for marine resource management at the TMP. MPAs, if partially or entirely closed to fishing (WWF, 1996; Passmore, 1974), have proven to be very effective. In association with conventional fisheries management, MPAs have contributed to rebuilding damaged fish stocks (WWF, 1996; Sewell and Burton, 1971; Sautter and Leisen, 1999) and in giving all stocks some stability (Passmore, 1974).

The need to establish MPAs has been recognised by many stakeholders, including commercial fishermen and local communities themselves. The community's support and involvement in the management of MPAs increases the likelihood of their respect of management (Murphy, 1981; Mitchell et al, 1999; Lindberg, McCool and

Stankey, 1997) and its regulations. Local communities, who continue to fish illegally in the area, despite voluntary agreements at the outset, will substantially reduce the efficacy of a reserve (Murphy, 1985; Reed, 1997; Reid et al, 1999) and continuation of previous unsustainable fishing patterns will be taken up again if there are limited available livelihood alternatives offered.

However, unsustainable resource use also aggravates poverty (IUCN, 2011; Passmore, 1974; Murphy, 1985) as the very base of natural resource is degraded and disappears through overfishing or habitat destruction. The introduction of livelihood schemes is vital for the success of MPAs, not only in terms of continuous support of the change in status of designated areas but also, to provide substitutes (Passmore, 1974; Lindberg, McCool and Stankey, 1997) which supplement income sources for communities faced with a declining resource (Moutinho, 2000; Mitchell et al, 1999).

Clearly, conservation of oceans is vital, but why there is a need to have MPAs is often asked, especially in areas where there is a lack of available economic alternatives. Considering that there are limited natural boundaries in the oceans, the setting up of an MPA will not stop fish moving out of the designated boundaries nor will it prevent pollutants from moving in. There are two principal reasons (IUCN, 2011; WWF, 1996) for designating MPAs. Firstly, to protect habitats and biodiversity (WWF, 1996) in order to maintain viable fish stocks. By protecting habitats, MPAs can assist in safeguarding the vital life-support processes of the sea, which protect both biodiversity and water quality. The protection of marine habitats in their natural state provides an essential foundation for sustainable, nature-based tourism, which is becoming a world industry and provides major benefits to local communities.

Secondly, MPAs act as an insurance policy for fisheries (Tisdell and Broadus, 1989; IUCN, 2011; Timothy, 1999) (as the conventional method of conserving fish stocks is to attempt (often unsuccessfully) to control fishing effort and total catch (Tisdell, 1996; WWF, 1996), by allowing levels of fishing which are determined from a prediction (IUCN, 2011; Mitchell et al, 1999) of fish stocks.

As the TMP falls under the jurisdiction of Sabah Parks, one of the main objectives of park managers is to conserve and maintain marine resources (Sabah Parks, 2010). Without cohesive management and a transparent relationship between private and public sectors (Cheuk et al, 2010), any major natural occurrence combined with human activities can lead to further degradation of marine resources. The degradation of marine parks will no doubt affect the potential and sustainability of ecotourism in the parks. In addition, because of the highly connected nature of the sea to land use, a MPA will rarely succeed unless it is embedded in, or is integrated into the wider ecosystem (WWF, 1996; IUCN, 2011, Reed, 1997) management regime. Without continuous public awareness and local community support in reporting abuses (Tisdell and Broadus, 1989), degradation of marine resources will still occur.

Ecotourism often has the most to gain from a MPA (Commonwealth of Australia, 2003) and can generate the greatest economic return from its establishment, enhanced by other sectors such as fisheries (WTTC, 2012; Southern, 2000), aquaculture, coastal development practices, agriculture and mangrove forests. Although income from ecotourism may be small to start with, the communities will inevitably gain new skills and knowledge, in preparing them for more sustainable alternative employment.

However, long-term sustainability does require a local network of legislation (Reed, 1997; Timothy, 1999), skills, awareness, organisation and empowerment (WTTC, 2012; Tisdell, 2001) which will last beyond external interventions (Murphy, 1985; Ceballos-Lascurain and Boo, 1990). While marine conservation (IUCN, 2011; Commonwealth of Australia, 2003) and sustainable use (Liew-Tsonis, 2008; Lindberg, McCool and Stankey, 1997) are at times seen to have primarily different objectives, they are in fact closely interconnected. Some MPAs have been unsuccessful as the only aim of the external sponsor has been biodiversity conservation while that of local communities are seen as resource users. Both aims can be, more often than not, reconciled (McNeely, Thorsell and Ceballos-Lascurain, 1992; Shaw and Williams, 1994) within one MPA. For ecotourism to work, there needs to be transparency from the start about how these two sets of objectives are related to each other. For strong partnerships to be created, MPA managers need to understand that local communities most affected will be their biggest challenge and they need to include them as a major stakeholder for collaborative management.

As an alternative economic incentive to fishing, there is a need to bear in mind that ecotourism can damage natural systems (McNeely, Thorsell and Ceballos-Lascurain, 1992; Mathieson and Wall, 1982; Tisdell, 1995) as much as mass tourism, if its planning, development and operation are not properly managed. However, when ecotourism is properly planned, developed and managed, it can minimise impacts on both the socio-cultural and natural environment, and even benefit (Lindberg, McCool and Stankey, 1997; Passmore, 1974) from it.

4.0 FINDINGS AND DISCUSSION

For local communities in and around the TMP to be successfully involved in ecotourism development, general consciousness towards tourism is essential and necessary. The tourism industry is predominately service-based. Local communities are made up of different coastal ethnic groups (Bajau, Ubian, Suluk, Kagayan, Balabak and Bajau Laut) which differ from the inland communities of Rungus, Bonggi and Dusun. The varied ethnicity of these communities serves as an interesting backdrop especially for ecotourism.

There are sufficient natural resources and tourism amenities available in creating new and viable ecotourism activities. Some of the immediate opportunities involve other heritage/cultural products which can be linked to festivals like the areas which are currently marketed by the tourism industry, e.g., the Tip-of-Borneo Jazz Festival, Pesta Jagung or Pesta Kelapa. The creation of marine- and/or freshwater-based boat activities featuring tours to the pristine marine habitats, appreciation of traditional fishing activities and/or visits to geologically interesting rock formations such as the Legend of Supirak can be considered.

With the lack of infrastructure and accommodation available in the villages around the TMP, the success of ecotourism as an immediate livelihood option for local communities is limited at present. Instead, it is more feasible to rely on tourism facilities and attractions leading to the park. The suitability of facilities is most evident in Kudat town. There are reasonable accommodation choices in Kudat, ranging from the four-star Kudat Golf and Marina Resort to other smaller hotels. Kudat is promoted as a place for good, fresh seafood due to its proximity to marine resources. The majority of tours to Kudat are culture-based (for example, to see the Rungus Longhouse, Gong Factory, Rungus Beads) culminating with a visit to the Tip of Borneo. There is an apparent lack of attractions in the districts of Pitas and Kota Marudu, but there is a possibility of developing Banggi as the entry point to the park.

Although the districts of Kudat, Banggi, Pitas and Kota Marudu do not currently promote tourism actively, there are high prospects in developing ecotourism activities leading to overnight stays at the islands of Maliangin, Berungus and Malubang, when infrastructure is secured. The overall impression is that the area is performing below its potential, largely due to the lack of infrastructure, co-ordination and expertise knowledge between public and private sectors in tourism industry development. The respective districts were observed from the perspective of accessibility and institutional support to Maliangin (District Office of Kudat), Berungus and Malubang (District Office of Pitas).

The TMP is important because of the presence of migratory species such as sea turtles and whales that use the area as access to and from the South China Sea and the Sulu Sea. Some rare species such as dugongs and Irrawaddy dolphins had also been reported in the area. Aside from its important fauna, the TMP also serves as a haven for a coastal and marine ecosystem, particularly, mangroves, seagrass beds and coral reefs. These ecosystems create productive fishing grounds that support a large number of coastal communities in the region. Additionally, the region also provides one of the largest shrimp fishing grounds in the state, and is the source of the majority of prawn landings in Sabah. There is also a fast growing live reef fish industry that provides a range of livelihood opportunities for the districts of Kudat, Pitas and Kota Marudu, including the islands of Banggi, Balambangan and Malawali.

Until alternative income and food sources are found for fishing communities, exploitation of marine resources will continue. The socio-economic conditions for island and coastal communities such as that of the TMP must improve in order for unsustainable practices to end. Alternative income-generating activities, such as that of ecotourism, are judged as important components that provide income away from fishing. With other ways of securing an income, these activities not only support the improvement of fish stocks but also, the success in the management of the TMP.

The three villages of Maliangin, Berungus and Malubang were found to have the components required to develop activities that will fulfil ecotourism principles. Due to the small direct population at the islands in situ, the consideration of human resource requirements to run the activities would need to be sourced from outside the area. This remains an option until community members themselves acquire the necessary skills and knowledge to maintain the activities. There are several outstanding natural areas where ecotourism can be planned and developed. However, district offices in the respective areas would need to co-ordinate basic infrastructure support such as accommodation and jetty facilities and/or boat transfers to the islands, either from Kudat or Banggi. As there are no suitable facilities to accommodate tourists on-site at the TMP, the opportunity in planning for appropriate facilities is available especially in terms of infrastructure development, targeting the right tourist markets, strict guidelines for carrying capacity, and planning for employment opportunities which benefit local communities.

There is not one particular village or island which in itself can sustain a market based on the presence of multiple attractions, although some immediate prospects do exist for special interest groups such as volunteers, environmental educational groups, backpackers, divers and/or student markets. However, without infrastructure support and options to stay at the islands, direct benefits to local communities are minimal. The education markets such as undergraduate or postgraduate students on marine ecology, sustainable fisheries or social sciences such as human geography, would find studies of the TMP an area of interest. Given the opportunity, not only will these markets be longer-staying guests in general but they can also create a market for homestays, and assist in securing direct income for the communities at the formative

stage of ecotourism development. Typically, these are not considered as 'ecotourists', as the terminology implies, but nevertheless they are still a defined market. Full- or half-day tours can be developed to the islands if they are linked to accommodation hubs in Kudat and Banggi; although there are bed-and-breakfast facilities being built in Malubang, these were incomplete during the time of the field visits.

With appropriate management of the TMP, the promotion and marketing of compatible ecotourism initiatives identified in this study are financially viable in providing livelihood options aside from those in fisheries. However, to generate significant economic reliance on ecotourism activities may be unrealistic at this point in time. Funds may need to be spent on skills training to equip the communities with the basic skills expected in standard service delivery. Development of compatible ecotourism infrastructure in the villages will require substantial financial support, from public and private sources, for product development and training; much can be done if the members within the communities concerned are prepared to put in the effort for very little gain for the initial years.

The potential sources of grants for training or infrastructure can be from several government or non-government agencies but to ensure sustainability, the communities themselves are better served in developing strong entrepreneurial skills of their own. Planning for financial sustainability is a critical concern for many MPA managers. Therefore, TMP managers need the freedom to raise funds in as many ways as possible such as user fees, donations and environmental funds, to be retained for managing the TMP. The multidimensional and multidisciplinary nature of ecotourism development suggests the need for multifaceted responses. This can only be identified by the initiation of an approach where stakeholders discuss and agree on a plan together.

From the discussions with stakeholders, the planning and development needs of different stakeholders must be identified. These needs can form the basis for guiding a sequence of complementary interventions and provide direction in identifying and developing ecotourism projects at the TMP. Progress can be seen quickly if products are developed using existing marketing and promotional leverages of Sabah Tourism and Tourism Malaysia. However, longer-term development is expected to be from the respective district offices in terms of incorporating ecotourism development in their overall development plan. The success in achieving conservation objectives of the TMP will be based on local communities' level of co-operation and future efforts can either undermine, or determine, the income to be attained from ecotourism.

As the full ecotourism potential may take years to materialize, its impact is extremely varied. On the one hand, it plays an important and certainly positive role in the socio-economic and political development at the TMP. Not only will ecotourism offer new employment opportunities but it can also contribute to a broader understanding of MPAs by creating awareness, respect of diversity of cultures and local ways of life to tourists. On the other hand, as a tool to create jobs, ecotourism has not fulfilled its expectations. At the same time, complaints from other tourist destinations concerning massive negative impacts upon environment, culture and residents' way of life have given rise to a demand for a more sustainable development of any tourism around environmentally sensitive protected areas.

The proposals for ecotourism product development, promotion and marketing approaches will remain a challenge without a clearly defined implementation plan. Several issues should be considered as the development of tourism opportunities unfolds. Encouraging entrepreneurs to start ecotourism-related activities must be a

high priority for the plan to succeed. The local communities most affected by the change in status of fishing grounds must be actively involved from the earliest possible stage for any ecotourism development to succeed. Conflicts between a reliance on fisheries and ecotourism activities should be discussed at the community's institutional levels from the outset, and attempts made to develop activities which promote sustainability must be clearly defined so as not to over-emphasise ecotourism's economic viewpoints. It is usually a mistake if too much emphasis is placed on the achievement of economic returns, rather than the implied potential returns that can be achieved when conservation goals are attained.

As part of the tourism industry, ecotourism will have to struggle to identify itself as part of either the conventional direction or the alternative environmental direction in terms of promoting and marketing the TMP. However, without strong institutional support in terms of monitoring and evaluation, this will remain an overwhelming challenge. Statistically, the capacity to manage tourism in protected areas is lagging behind the growth of tourism in protected areas. In many protected areas, tourism is a major activity that occurs without much forethought or preparation in its implementation. To ensure that the benefits of tourism outweigh the costs, careful planning and management of tourism impacts are needed.

There are too many MPAs in the world which offer ecotourism as an alternative income avenue. These are frequently unsuccessful. This is due more to failure to incorporate all the necessary components of preparation, implementation and evaluation of ecotourism development rather than the concept of ecotourism itself. More often than not, as the MPA documents increasing tourist arrivals and is deemed a 'success', this is usually due to economic considerations; any close participation with local communities becomes a secondary concern or at worse, completely forgotten. Although the reasons for success or failure in the implementation of MPAs in the long term are well documented, many MPAs remain unsuccessful, even where the general principles for its establishment have been well intended from the start. While every MPA does have different sets of conditions, it is important to understand what the local limitations are and to consider the key indicators for success.

5.0 CONCLUSION

Ecotourism is not, as many people assert, a clean and non-polluting industry. One of the many problems which contributes to this perception is a lack of understanding of the concept of ecotourism and its implications. This ambiguity leads to violations of environmental regulations and standards. Hence, diverse environmental problems arise from introducing ecotourism to the area. Firstly, the tourism industry in general is very resource and land intensive. Consequently, the interest of the tourism sector will often be in conflict with local resource and land use practices. The introduction of ecotourism can imply an increased stress on available resources. An influx of tourists into an already sensitive area will lead to more competition for scarce resources. Employees working at the tourist sites compound this competition. Almost as a rule, tourists are considered at the expense of the local populations.

Additionally, MPA managers have limited resources and cannot dedicate the time in community preparation, organisation, capacity building and monitoring of alternative livelihood options; conservation and continuous education becomes a secondary consideration once support is confirmed and a MPA is established. This has proven not only to have contributed to detrimental results, but has also prompted the continuance of unsustainable practices. This is particularly true when external intervention and funding ceases. There is a long history in almost all areas of the

world where ecotourism is recommended as an income alternative to unsustainable fishing. The conflict and lack of monitoring impacts in MPAs as tourist arrivals increase is well documented. The tendency is to set aside the original objectives of marine resource conservation and an income for the local communities against that of economic attainment in tourism receipts for the area in general.

Ecotourism has become a popular tool for biodiversity conservation, although there are many other income-generating avenues for local communities such as aquaculture, agriculture and fisheries, which are by far more lucrative. However, in consideration for the successful implementation of the TMP, based on the principle that biodiversity must pay for itself by generating economic benefits and particularly for the improvement of local attitudes towards conservation, ecotourism may be the best option. It should be noted that the contribution of ecotourism to conservation and local economic development is restrained by factors such as limited earnings, weak linkages between biodiversity gains and commercial success, and the competitive and specialised nature of the tourism industry.

Due to an increasing demand for environmental accountability and socio-cultural responsibility, the tourism industry and local initiatives have a vested interest in identifying suitable and efficient mechanisms to create businesses which remain viable for the long term. Logically, all stakeholders who rely on the success of the TMP, in co-operation with ecologically conscious visitors, have the potential to ensure that any specific ecotourism initiative remains under control economically, socially and environmentally. Investment in ecotourism is justified only in cases where such small changes and benefits can yield significant conservation and social benefits, although it must still be recognised that for it to be acknowledged as a success would require long-term commitment.

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