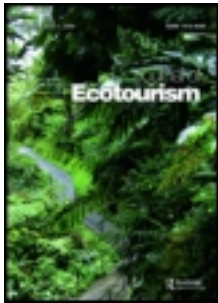


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Sarah L. Hitchner ^a, Florence Lapu Apu ^b, Lian Tarawe ^c, Supang Galih@Sinah Nabun Aran ^d & Elyas Yesaya ^e

^a Department of Anthropology, University of Georgia, Athens, Georgia, USA

^b Bario-Ba' Kelalan Nature Guide Association, Bario, Malaysia

^c Tarawe's Lodge, Bario, Sarawak, Malaysia

^d Batu Ritung Lodge, Pa' Lungan, Sarawak, Malaysia

^e LSM Tanah Tam/FORMADAT, Terang Baru, Indonesia

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Community-based transboundary ecotourism in the Heart of Borneo: a case study of the Kelabit Highlands of Malaysia and the Kerayan Highlands of Indonesia

Sarah L. Hitchner^{a*}, Florence Lapu Apu^b, Lian Tarawe^c, Supang Galih@Sinah Nabun Aran^d and Ellyas Yesaya^e

^aDepartment of Anthropology, University of Georgia, Athens, Georgia, USA; ^bBario-Ba' Kelalan Nature Guide Association, Bario, Malaysia; ^cTarawe's Lodge, Bario, Sarawak, Malaysia; ^dBatuh Ritung Lodge, Pa' Lungan, Sarawak, Malaysia; ^eLSM Tanah Tam/FORMADAT, Terang Baru, Indonesia

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This article examines the current state of community-based transboundary ecotourism in the Kelabit Highlands of Sarawak, Malaysia, and the Kerayan Highlands of Kalimantan, Indonesia, areas included within the international 'Heart of Borneo' conservation initiative. Ecotourism development is an important element of the Heart of Borneo initiative, which aims to simultaneously promote conservation and sustainable development by linking protected areas with low-impact use zones in a variety of ecosystem types. There is strong local, governmental, and international support for ecotourism development here, as well as an awareness of the possible pitfalls of expanding ecotourism in this region. Research for this case study was conducted primarily in the Kelabit Highlands of Sarawak, and it included interviews with local actors in ecotourism (local guides and homestay owners, as well as urban-based tour operators and tourism promotion centres and agencies), participation in inter-community dialogues regarding transboundary ecotourism, as well as the analysis of promotional materials on ecotourism in these areas, comments in the visitors' books of lodges, and tourists' websites and travel blogs. This case study represents a stage of introspection by people actively engaged in current ecotourism activities and seeks to chart a course forward that takes into account the specific ecological, social, cultural, and political context of this region. The process of conducting this research project helped to pinpoint some of the specific challenges of transboundary ecotourism in this area, and will form the basis for a more comprehensive ecotourism management plan for local communities on both sides of the border. Gathering, collating, and analysing the findings of this research with local community members revealed that the main issues that need to be addressed include: (1) protection of forests and cultural sites as foci for ecotourism; (2) improved communication between villages, guides, and lodges; (3) increased promotion of transboundary trekking options; (4) village-level preparation for more tourists and more equitable distribution of income generated from ecotourism; (5) careful improvements in tourism infrastructure; (6) the negotiation of legal complications arising from international border crossings by tourists and guides; and (7) the maintenance of local control over ecotourism management and of the trajectory of future tourism development in the Heart of Borneo.

*Corresponding author. Email: slhitchn@uga.edu.

Keywords: transboundary ecotourism; community-based ecotourism; Borneo/Malaysia/Indonesia; transboundary conservation; conservation and development; Heart of Borneo

Introduction

The Kelabit Highlands of Sarawak, Malaysia, and the Kerayan (also called Krayan) Highlands of Kalimantan, Indonesia, are highland plateaus separated by the Apad Wat mountain range in the interior of the island of Borneo. This area is now known around the world as the Heart of Borneo, which references the high-profile transboundary conservation initiative led by the World Wide Fund for Nature (WWF). These highlands offer a combination of experiences that appeal to ecotourists. Due to the altitude of just over 1000 m, the temperature year-round is cool and comfortable, thus more appealing as a trekking destination than areas in Borneo's hot and humid lowlands. Also, the remote, mountainous, and relatively 'unspoilt' (compared with other places in Borneo) forests here are the island's last places to do long-distance village-to-village trekking. The Kelabit and Kerayan Highlands contain a number of small villages and longhouse communities that have not yet been commercialised, allowing tourists seeking remote places and exotic people (Azarya, 2004; Tucker, 1997) to experience a more genuine cultural encounter than is possible in other places in Borneo that are promoted as tourism destinations (Zeppel, 1997). These tend to be heavily commercialised and, to a certain extent, 'staged' (Din, 1997). Based on numerous discussions with tourists who visit the highlands of Borneo, it became obvious that tourists do not come here wanting to stay in hotels or resorts; they prefer to avoid artificial or contrived lodgings made especially for tourists and come with the desire to stay with local families and to trek in the jungle with local guides.

The Kelabit and Kerayan Highlands are home to several closely related ethnic groups (including Kelabit, Lun Dayeh/Lun Bawang, Berian, Lengilu, Saban, and Penan) that speak related languages and have many cross-boundary kinship ties. Shared cultural features include similar wet-rice cultivation techniques and handicrafts (such as beadwork and weaving of baskets and mats), as well as a common history of megalith-making activities. These megaliths (erected or carved stones or large rock piles) and other cultural monuments dot the landscape surrounding the rural villages and demonstrate the cultural contiguity of these plateaus, which are a 2–3 day hike apart. These close cultural ties between the Kelabit and Kerayan Highlands, in addition to forests that have not yet been logged or converted to large-scale agriculture development, create an ideal situation for the development of community-based transboundary ecotourism initiatives that have the potential to be both a long-term source of revenue for rural communities and a land-use option that is compatible with local, regional, national, and international goals of conservation of biodiversity and natural resources. However, there are several factors that can make implementation of this type of tourism difficult to achieve on the ground. These will be discussed later in this article, but the most obvious one is that ecotourism development is one of the several goals for development proposed by the governments for this area, and it is not necessarily compatible with other governmental proposals.

This article examines the current state of transboundary ecotourism development in the Kelabit and Kerayan Highlands, with emphasis on the Kelabit Highlands of Sarawak. It situates the promotion of ecotourism here within the rhetoric of state and national conservation and development goals, and also identifies several of the main challenges faced by the local communities in the further development of community-based transboundary ecotourism. Research for this case study was conducted primarily in the Kelabit Highlands, and

it included interviews with most of the guides and homestay owners in the Kelabit Highlands¹ and with 14 tourism professionals (tour operators, members of the Sarawak Tourism Board, and employees at visitors' centres) in the main cities of Sarawak, and participation in inter-community dialogues regarding transboundary ecotourism. In addition, it analyses promotional materials (both in print and on the Internet) on ecotourism in these areas, comments in the visitors' books of lodges in the Kelabit Highlands, and tourists' websites and travel blogs. Co-written by four local guides and homestay owners in Sarawak and Kalimantan and a graduate student from the USA who has conducted 3 years of ethnographic research in the Kelabit Highlands, this case study represents a stage of introspection by people actively engaged in current ecotourism activities and seeks to chart a course forward that takes into account the specific ecological, social, cultural, and political context of this region. The process of conducting this research project helped to pinpoint some of the specific challenges of transboundary ecotourism in this area, and will form the basis for a more comprehensive ecotourism management plan for local communities on both sides of the border.

Gathering, collating, and analysing the findings of this research with local community members revealed that the main issues that need to be addressed include: (1) protection of forests and cultural sites as foci for ecotourism; (2) improved communication between villages, guides, and lodges; (3) increased promotion of transboundary trekking options; (4) village-level preparation for more tourists and more equitable distribution of income generated from ecotourism; (5) careful improvements in tourism infrastructure; (6) the negotiation of legal complications arising from international border crossings by tourists and guides; and (7) the maintenance of local control over ecotourism management and the trajectory of future tourism development. Analysis of these issues in this transboundary area will not only help maximise local benefits from ecotourism in interior Borneo but also address many themes central to the academic literature on ecotourism in other parts of the world.

Background: ecotourism in Malaysia

Tourism, and particularly ecotourism in developing countries rich with natural and cultural capital, is often touted as a sustainable source of revenue for indigenous and rural communities (Briedenhann & Wickens, 2004; Chambers, 2000; Mowforth & Munt, 1998; Ponting, 2001; Schilcher, 2007), and tourism often helps to bring developing countries and even local communities into the global economy (Azarya, 2004; Hall, 1998; Russell & Stabile, 2003; Schilcher, 2007; Wood, 1997). Although it is widely recognised now that while tourism has the potential to stimulate economic growth in marginal and underdeveloped areas, it can also serve to exacerbate inequalities within and between communities (Belsky, 1999; Brohman, 1996; Carrier & Macleod, 2005; Global Forest Coalition [GFC], 2008; Olsder, 2004; Reed, 1997; Richter, 1989; West & Carrier, 2004), and between local communities and the larger social, economic, political context in which these communities are embedded (Mowforth & Munt, 1998; Schilcher, 2007; Weaver, 1998). Many scholars, human rights advocates, and tourism practitioners have argued that in order to address these issues of inequalities created or reinforced by tourism in rural areas, it is important that local communities are active stakeholders in tourism ventures and that such ventures are not imposed on them by outsiders who seek personal gain (Berno, 2003; Burns, 2003; GFC, 2008; McLaren, 1997; Ponting, 2001; Scheyvens, 1999; Stronza, 2005; Twining-Ward & Twining-Ward, 1998). However, this can be difficult and problematic on the ground, particularly when multiple communities are involved

(Suich, 2008). The local communities in the Kelabit and Kerayan Highlands, both of their own initiative and with the assistance of international organisations such as WWF and the International Tropical Timber Organization (ITTO), have implemented several strategies for maintaining local control of tourism and promoting and improving community-based transboundary ecotourism.

In Malaysia, the Ministry of Tourism and Culture, established in 1987, became the Ministry of Culture, Arts, and Tourism in 1989. Now, tourism activities fall under the national jurisdiction of the Ministry of Tourism, and in the state of Sarawak, under the jurisdiction of the state Ministry of Urban Development and Tourism. In recent years, the Malaysian government has been steadily increasing its promotion of tourism, even globally advertising the year 2007 as Visit Malaysia Year. Malaysia is a popular tourist destination (over 12 million visitors in 2001), and in particular, an ecotourism destination. Chin, Moore, Wallington, and Dowling (2000, p. 20) notes that in the Malaysian state of Sarawak, 'tourist receipts have increased from RM 140.6 million in 1989 to RM 522.3 million in 1997'. According to Mohamed (2002), revenues from ecotourism in Malaysia were RM 655 million, of a total of RM 14 billion generated from all types of tourism. However, Davison (1995) notes that it is difficult to obtain reliable information on the number of ecotourists to Malaysia.

Tourism in Malaysia has been seen by Malaysians as a double-edged sword. On the one hand are the positive benefits of tourism such as increased employment, infrastructure development for rural areas, the enrichment of local culture through contact with outsiders, and the revitalisation of local cultural traditions, while on the other hand are deleterious effects such as the encroachment of new (Western) values on local communities, pollution and ecological damage, haphazard development, exacerbation of inter- and intra-community tensions, economic inflation, and in some cases, even prostitution and drugs (Din, 1997). These same benefits and concerns are echoed in case studies around the world, but are particularly salient in Malaysia, which aims to be a 'fully developed country' by 2020 (as articulated in *Wawasan 2020*, or *Vision 2020*, a common reference in Malaysian development circles). Din (1997, p. 105) explained what he called this 'scapegoating' of tourism: 'tourism has either been disproportionately credited with all the good effects, or has received more than its fair share of the blame for the bad effects. A balanced discussion of the subject is rarely found, if at all, in Malaysia'. Since then, there have been several focused case studies of ecotourism in national parks in Malaysia that do offer more balanced and nuanced discussions (Abidin, 1999; Chin et al., 2000; Mohamed, 2002; Yacob, Shuib, Mamat, & Radam, 2007). These studies describe benefits to local communities through employment and increased protection of natural resources. They also note specific problems caused by overuse by visitors, including subsequent ecological damage and economic leakages that direct the cash flow from ecotourism away from local economies.

In the early 1990s, national discussions on tourism in Malaysia began to reflect consideration for cultural issues, such as the commercialisation of culture and the equitable distribution of benefits from tourism, as well as the linkage of sustainable development to environmental conservation in the form of new ecotourism enterprises, especially in Sarawak and Sabah (Din, 1997; King, 1993). The link between ecological and cultural tourism is particularly strong in Malaysia, and these alternative forms of tourism have been touted by governmental agencies, non-governmental organisations, tour operators, and local communities as a way to simultaneously promote conservation and non-consumptive use of natural resources, showcase unique indigenous cultures, and generate income for less-developed rural areas (King, 1993). The marriage of these goals is common

to ecotourism endeavours around the world (Armesto, Smith-Ramirez, & Rozzi, 2001; Azarya, 2004; Belsky, 1999; Carrier & Macleod, 2005; Cohen, 1988; Crick, 1989; Maharana, Rai, & Sharma, 2000; Mbaiwa, 2008; Mowforth & Munt, 1998; Stronza, 2001, 2005; Wood, 1993), but it represented an important shift in tourism goals by the Malaysian government, which previously did not thoroughly examine the effects of tourism on local communities.

Malaysia has officially adopted the World Conservation Union (IUCN)'s definition of ecotourism,² and in 1997 created the National Ecotourism Plan, which outlined a set of 25 guidelines for categorising sites and ecotourism opportunities, defining carrying capacity and limits of acceptable change for each site, creating and improving national parks and forest reserves, promoting accreditation of ecotourism products and other activities necessary for ensuring compatibility between conservation and sustainable development through ecotourism (Mohamed, 2002). However, Abidin (1999) says that these guidelines are not specific enough, and that criteria and indicators for measuring carrying capacity, limits of acceptable change, and sustainability are lacking in this national plan, as are mechanisms for evaluating and monitoring future tourism and conservation programmes. He says: 'There are also no criteria and indicators developed for sustainable tourism management and biological diversity conservation in the protected areas of Malaysia' (p. 16). Malaysia, while enthusiastically jumping on the ecotourism bandwagon, has its share of challenges and problems in ensuring such compatibility between conservation and sustainable development. An enlightening study by Lim (1999) (discussed in Mohamed, 2002) revealed that travel agencies promoting ecotourism packages in Malaysia:

- are mostly new with 4–6 years experience;
- travel guides into ecotourism sites lack proper training and education; many have generic licenses but operate within ecotourism spots;
- only 11.9% of the agencies gave information regarding buying banned items when visiting ecotourism sites in Malaysia. And the same percentage contributed their income towards conservation activities;
- less than 46% have close relationships with the local communities;
- over 30% have little relation with the government; another 30.8% admitted they have no relation with the government;
- 10 out of 15 agencies do not really understand the principles and concepts of ecotourism;
- Almost 80% of the activities tend to be fun-filled or adventurous but lacking in terms of getting to know the nature. (quoted from Mohamed, 2002, p. 7)

The results of this study show that Malaysia clearly can improve its ecotourism practices rather than just promoting its natural areas as ecotourism destinations.

At the Borneo Ecotourism Conference in April of 2005, Mr Rambli Ahmad, the Manager of Planning and Development of the Sarawak Tourism Board, stated that although ecotourism had benefited the people of Sarawak, 'an adverse consequence of this business was that most of the longhouses were trying to meet the needs of foreign tourists rather than preserving their culture' (quoted in Dowling, 2005, p. 1). Communities around the world have faced similar challenges when tourism (including ecotourism and cultural tourism) has been introduced, particularly that of the commodification or objectification of material culture and the staging of performative culture that can lead more to the falsification or exaggeration of culture than the preservation of it (Azarya, 2004; Cohen, 1988; Jamal & Kim, 2005; King & Stewart, 1996; Stronza, 2005; Van den Berghe, 1980; Wearing &

Wearing, 1999; Wood, 1997; Yoko, 2006). According to Din (1997), the objective is to balance the needs of the guests and the hosts, and to allow the local communities to define their priorities. He says: 'For Malaysians, it is important that tourism will not jeopardize the societal goals that the host community defines' (p. 116). In the case of the Kelabit and Kerayan Highlands, most community members agree that their main goals are conservation and development through their own local initiatives, and they see ecotourism as an important means of achieving these goals simultaneously. Community members have taken important steps to improve the quality of the ecotourism experience for visitors, to monitor and protect the natural and cultural resources in their villages, to expand the direct benefits of ecotourism to more community members, and to maintain control over the pace and course of ecotourism development.

Genuine community-driven ecotourism development requires that local communities determine the type and trajectory of tourism development, not merely react to the needs and desires of foreign tourists and accept top-down implementation of tourism projects by outside agencies. Due to the remoteness of this area, so far there has been little threat of the imposition of tourism on these communities, so it has remained in the hands of the community members. This could change in the near future, however, as the highlands become accessible by logging roads and more infrastructure development is sponsored by the government and the private sector. Concern for local autonomy has guided both local ecotourism initiatives and NGO-assisted programmes for ecotourism development in the highlands of Borneo. At the same time, communities and assisting organisations recognise the need to work with multiple stakeholders in ecotourism development. Participants elaborated on this sentiment during the Borneo Ecotourism Conference in 2005, as the conference fostered new partnerships between governmental agencies, private businesses, and local communities in ecotourism development (Dowling, 2005). Both the federal government of Malaysia and the state government of Sarawak have made numerous public statements supporting the development of ecotourism, as both an income-generating activity for rural communities and as an important component of state and federal sustainable forestry policies (Rodger, 2005). For example, the Deputy Chief Minister of Sarawak, Datuk Patinggi Tan Sri Dr George Chan, said that:

The foresight of our Chief Minister [YAB Pehin Haji Abdul Taib Mahmud] has been instrumental in moving the tourism industry here to where it is today even though funds for such developments were often hard to come by due initially to the small number of tourist arrivals which did not justify the amount spent of such facilities. However, we persevere and spending wisely we have managed to bring Sarawak into the world map of eco tourism which is envisaged as a sustainable industry for the state for a long time to come. (Chan, 2007, p. 1)

The Eighth Malaysia Plan (2001–2005) includes an entire section on tourism development, with a focus on nature-based tourism or ecotourism; this rhetoric supporting ecotourism development is reiterated in the Ninth Malaysia Plan (2006–2010), particularly as a means to generate income for rural communities, while simultaneously demonstrating the commitment of the government to conserve natural resources in the geographical and metaphorical Heart of Borneo.

The Heart of Borneo conservation initiative

Led by WWF, the Heart of Borneo is a large-scale, tri-national transboundary initiative that aims to tie ecological conservation with sustainable development in the

geographical middle (or ‘heart’) of the island of Borneo. Following an April 2005 meeting in Brunei, the governments of Indonesia, Malaysia, and Brunei publicly committed to a cooperative conservation initiative at the Convention on Biological Diversity (CBD) meeting in Curitiba, Brazil, in March 2006, and the official Heart of Borneo Declaration was signed by representatives of these countries on 7 February 2007. The area covered by the Heart of Borneo initiative is approximately 220,000 km² or 2.5 million hectares, and includes the upper montane forests in highlands and watersheds that cross international boundaries (World Wide Fund for Nature [WWF] Denmark, 2006) (Figure 1).

The interior of Borneo is recognised internationally by scientists, researchers, and conservation organisations as being globally important, and ecologically and culturally

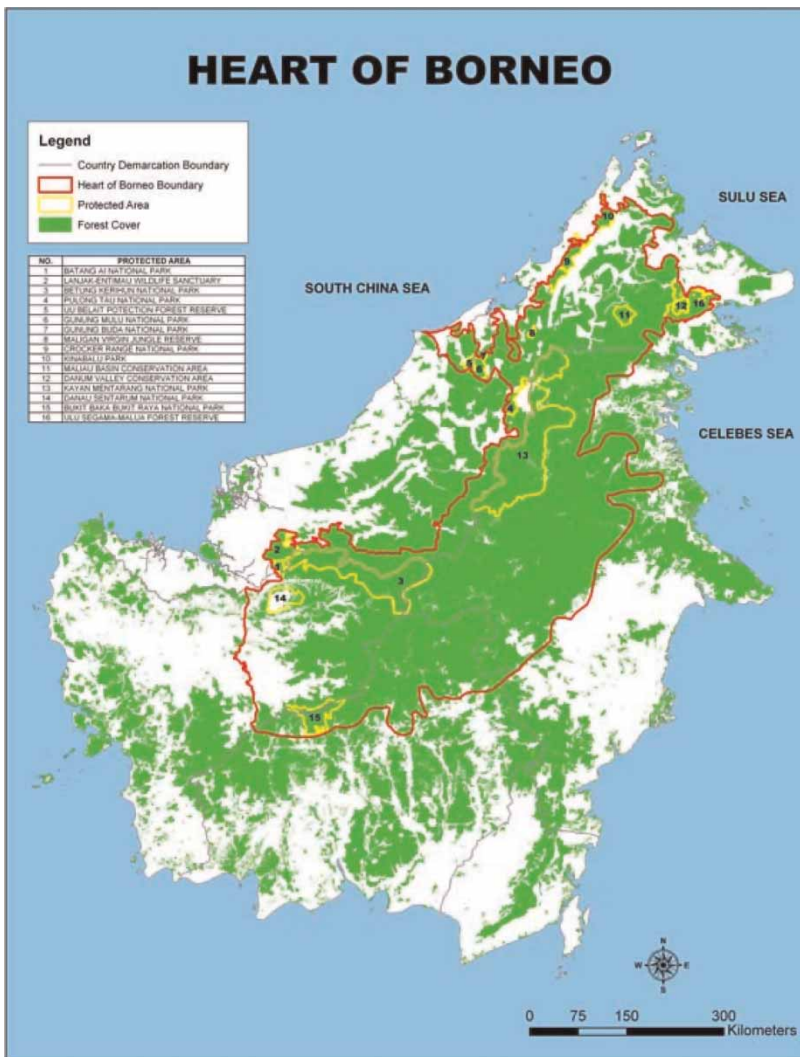


Figure 1. Proposed boundaries of the Heart of Borneo.
Source: WWF-Malaysia.

unique. It is a repository of numerous endemic and endangered species, a source of watersheds for the entire island, and home to a number of indigenous communities who have managed this landscape sustainably for untold generations. Local livelihoods, centred on income from organic rice production and ecotourism, are dependent on intact forests and watersheds. However, government agencies and private sector companies in both Malaysia and Indonesia are planning different scenarios for this area: expansion of protected areas, continued logging, large-scale agricultural development, increased smallholder agriculture, infrastructure and ecotourism development, and creation of income opportunities for local communities. These different scenarios would have enormous impacts on the future of ecotourism in the interior highland areas of Borneo, in ways that are generally self-explanatory. The future here is uncertain, which makes long-term planning difficult for local communities, but they are pursuing ecotourism development at the moment, with the support of various government agencies.

Much of the Kerayan Highlands of Indonesian Borneo is already within the boundaries of the Kayan Mentarang National Park (KMNP), encompassing over 1.3 million hectares along the border with Sarawak (WWF Denmark, 2006). On 24 March 2006, a new national park was officially gazetted in Sarawak near the border with Kalimantan (Pearce, 2006; Tsai, 2006). Pulong Tau National Park (PTNP), which translates to 'Our Forest' in the Kelabit language, was first requested by members of the Kelabit community in the late 1970s as a means to protect the headwaters of several major rivers in Sarawak, including the Baram, Tutoh, and Limbang Rivers (Chiew, 2007; Nyanti & Grinang, 2007; Sreedharan, 2006; Wahab, 2007). Originally, this park included 164,500 hectares, but over the years, the area was decreased incrementally to its current size of 59,817 hectares (Paschal, 2007; Sreedharan, 2006). Key landscape features were removed from the park, and all but about 2 km of the transboundary areas were also removed.

There is currently a proposal by the ITTO and the Government of Malaysia to extend the border of PTNP in Sarawak to join with KMNP in Kalimantan, thus creating a large transboundary conservation area. This ITTO project, entitled 'Transboundary Biodiversity Conservation: The Pulong Tau National Park, Sarawak State, Malaysia', is now in its second phase. During the first phase (2005–2007, with an operating budget of USD 1,546,563), Sarawak Forest Department employees conducted baseline ecological studies within the park, as well as socioeconomic and cultural studies on the communities in the Kelabit Highlands, areas within and bordering the proposed extension area (International Tropical Timber Organization [ITTO] and Government of Malaysia, 2003). These baseline studies were intended to inform the long-term management plan of PTNP. The second phase of the project (2008–2010, with an operating budget of USD 1,490,165) includes implementation of the projects proposed in the first phase, the most significant of which is the actual extension of the boundaries of PTNP to create a genuine transboundary conservation area with KMNP (International Tropical Timber Organization [ITTO] and Government of Malaysia, 2007).

A large component of the sustainable development goals of this ITTO project is to establish an infrastructure for renewable income for local communities through ecotourism, while at the same time promoting ecoregional conservation of biodiversity and watersheds. The budget for Phase II of the ITTO project (ITTO and Government of Malaysia, 2007) includes USD 4000 for informational material on PTNP (p. 22), USD 15,000 to improve and maintain jungle trails to Mount Murud, a popular trek for tourists (p. 24), USD 6000 for tourist guide training and tourism information materials (p. 25), and USD 2000 to propose Kelabit megalithic areas as a UNESCO World Heritage Site (p. 25). It also budgets for a total of USD 29,000 for 'cross-border socioeconomic activities among

local communities', of which USD 3000 is specifically earmarked for 'cross-border ecotourism: resource development, joint promotion materials, and tourist guides training/visits' (p. 26). The ecotourism potential of this area is mentioned throughout this document, and it states clearly that: 'Through transboundary cooperation, the people across the borders can work to bring their economies closer, by improving roads, promoting cross-border trade and joint ecotourism for mutual benefits' (p.17).

Ecotourism is often proposed as an economic investment in conservation (Archabald & Naughton-Treves, 2001; Maharana et al., 2000; de los Monteros, 2002; Stronza, 2005; Young, 1999); however, positive examples of ecotourism in the academic literature are still rare (Gossling, 1999; de los Monteros, 2002). Many academic articles argue that the goals of ecotourism can conflict with the goals of conservation and preservation of cultural traditions, as well as local livelihoods (Isaacs, 2000; Kirkpatrick, 2001; Langholz, 1999; Maikhuri, Rana, Rao, Nautiyal, & Saxena, 2000), and that conservation laws can conflict with local livelihoods derived from ecotourism. A central concern with relying on ecotourism as a way to conserve natural resources is that tourism itself can bring about ecological degradation (Farrell & Marion, 2001; Ross & Wall, 1999). But despite these critiques of ecotourism ventures in some areas, it is still a viable and desirable alternative in many places, so long as it is carefully planned and monitored. Malaysia is a signatory to the CBD, whose fifth Conference of the Parties (COP-5) decided that: 'tourism does present a significant potential for realising benefits in terms of the conservation of biological diversity and the sustainable use of its components'. However, it also noted that: 'Historical observation indicates that self-regulation of the tourism industry for sustainable use of biological resources has only rarely been successful' (quoted in GFC, 2008, p. 48). Visitor impact assessment is vital to maintaining the health of ecosystems that are ecotourism destinations (Farrell & Marion, 2001; Ross & Wall, 1999). This is particularly important in ecosystems as fragile as those found within the highland plateaus of the Heart of Borneo (Pearce, 2006), and a central concern for promoting the development of ecotourism (or any type of tourism) here is minimising the negative social, cultural, and ecological effects.

The most recent ITTO document (ITTO and Government of Malaysia, 2007, p. 62) says that 'with careful planning and monitoring, it is unlikely that ecotourism development will affect the sustainability of the park (PTNP)'. But what is needed in the highlands is on-the-ground monitoring of the impacts of all types of development coming to these areas. Monitoring of, and mitigation for, ecotourism presents less of a challenge in the Kelabit and Kerayan Highlands than for other types of large-scale development that are also being proposed for this area, so it is difficult to consider this in isolation from other possible futures for this complex cultural and geographic landscape.

The political landscape of this area is also complex; in addition to myriad governmental agencies and private corporations making plans for this area, there are also numerous actors involved in ecotourism efforts in the highlands of Sarawak and Kalimantan. In addition to state and national ministries and governmental agencies in Malaysia and Indonesia, a number of international conservation, development, and finance NGOs and agencies are directly and tangentially involved in the Heart of Borneo initiative: WWF, The Nature Conservancy (TNC), Conservation International (CI), the IUCN, Global Environmental Facility (GEF), Wildlife Conservation Society (WCS), ITTO, United States Agency for International Development (USAID), United Nations Development Programme (UNDP), United Nations Educational, Scientific, and Cultural Organization (UNESCO), the World Bank (WB), International Monetary Fund (IMF), Asian Development Bank (ADB), International Finance Corporation (IFC), and Association for East

Asian Nations (ASEAN). Many of these organisations have attended meetings regarding the Heart of Borneo initiative, and/or have contributed financial or verbal support, but WWF is the most involved on the ground, particularly in Kalimantan. Involvement by NGOs is more limited in Sarawak, and in the Kelabit Highlands, only ITTO (working with the Sarawak Forest Department and Sarawak Forest Corporation) has been directly involved in conservation efforts.

Alongside, and to some extent in conjunction with these national and international organisations, there are several local organisations that are actively engaged in ecotourism in the Kelabit and Kerayan Highlands, including the Tourism Bureau of the Kelabit Highlands, the Bario-Ba' Kelalan Nature Guide Association, Lembaya Swadaya Masyarakat Tanah Tam ('Our Land' Indonesian NGO), and the FORMADAT (Alliance of the Indigenous People of the Highlands in the Heart of Borneo). The focus of this article is on the efforts of these community-level organisations to promote, monitor, and improve transboundary ecotourism.

Community-based organisations promoting ecotourism

Tourism Bureau of the Kelabit Highlands

The Tourism Bureau of the Kelabit Highlands is a committee under the larger unit of local development, the Bario Village Development Security and Health Council (known also as the JKKK Induk Bario). The mission of the council is the 'mobilisation and co-ordination of local tourism committees for accommodation providers, guides, porters, produce growers, handicraft artisans, sales outlets, catering operations, tea shops and local flora and fauna experts' (Harris, 2002). The Tourism Bureau oversees tourism development in the Kelabit Highlands and supports further ecotourism development, as well as enhanced international cooperation with the villages in the Kerayan Highlands.

Bario-Ba' Kelalan Guide Association

According to Sarawak state law, local tourist guides must be certified and licensed by the Ministry of Urban Development and Tourism. Until recently, no guides in the Kelabit Highlands were licensed, due to both ignorance of this law and the inconvenience and prohibitive cost of attending a training course held elsewhere in the state (RM 3000–4000, plus travel costs). Finally, due to pressure from the Kelabit guides, in September 2006, the Borneo Tourism Institute of Sabah and the Ministry of Urban Development and Tourism of Sarawak co-sponsored a 16-day training workshop for guides in the Kelabit Highlands and Ba' Kelalan (a village north of the Kelabit Highlands, also in Sarawak). This workshop, culminating in written and verbal examinations, resulted in the certification and licensing of 21 guides from the Bario area and 6 guides from the Ba' Kelalan area. These guides formed the Bario-Ba' Kelalan Nature Guide Association (hereafter called the Guide Association). During this workshop, there was also a training session for homestay owners, and most of the homestay operators in the Kelabit Highlands completed the programme for certification as a Sarawak Eco-Host. Additional training for homestay owners was conducted by the Sabah Tourism Board at the e-Bario Knowledge Fair (an international academic and UNDP-focused conference held in Bario in December 2007), while the Guide Association operated a booth to organise day trips for conference participants.

The Guide Association is the primary acting agency in the Kelabit Highlands for addressing the challenges of transboundary ecotourism development that will be discussed

in the next section; the council is currently creating a promotional website with information on trekking itineraries and costs, building and maintaining jungle trails, and organising the on-the-ground demarcation of cultural sites in the Kelabit Highlands.

LSM Tanah Tam

In 2002, a community-based ecotourism project was initiated in three communities in the Kerayan Highlands of Kalimantan, Indonesia (Long Rungan, Pa' Upan, and Long Layu'), in response to community concerns regarding long-term income generation from tourism and sustainable management of local resources. The land included in this project is customary land in an area known as the Krayan Hulu; some of this land is located within the boundaries of KMNP, while some is in the buffer zone of the park. Ecotourism here is viewed as an environmentally and economically sustainable alternative to other exploitative activities occurring all over Borneo, including logging and large-scale conversion of forest to monocrop plantations. WWF-Indonesia assisted in the planning and implementation of this project, which included training, local capacity building, and cross-border visits to communities in Sabah, Malaysia, that have been developing community-based ecotourism. In 2003, the local ecotourism committee gained the status of an NGO (LSM, or *Lembaya Swadaya Masyarakat*, in Indonesian), known as Tanah Tam Krayan Hulu ('Our Land' Krayan Hulu). Tanah Tam, an inter-community organisation with committees in each village, works with community organisations in the Malaysian states of Sabah and Sarawak, as well as the local Tourism Office (*Dinas Pariwisata dan Kebudayaan*) to encourage and facilitate transboundary ecotourism options. Tanah Tam aims to ensure that control over the direction of ecotourism development remains in the hands of local community members (see www.borneo-ecotourism.com/; www.aboriginal-ecotourism.org/spip.php?article163).

FORMADAT

The FORMADAT, or Alliance of the Indigenous People of the Highlands in the Heart of Borneo (*Forum Masyarakat Adat [Asli] Dataran Tinggi Borneo*), is a transboundary community-based organisation led by village headmen. It was officially established in 2003 with the financial and organisational assistance of WWF-Indonesia, although meetings among the various headmen in the highland communities have been taking place since the year 2000, under the organisation's former name of FoMMA, or the Alliance of the Indigenous People of the KMNP (WWF Denmark, 2006). The main communities involved in the FORMADAT are the Bario Highlands (including nine main villages, from Pa' Lungan in the north to Pa' Dalih and Ramudu in the south), Ba' Kelalan, Long Semado, Long Pasia, Long Bawan, Long Mio, Ulu Padas, and Long Layu'. These communities include about 15,000 people on the Malaysian side of the border and around 20,000 on the Indonesian side. Several closely related ethnic groups (themselves sometimes subdivided into smaller groups) are represented by the FORMADAT: Lun Dayeh/Lun Bawang, Kelabit, and Saban. Their mission is to: 'increase awareness and understanding about the highland communities, build local capacity, and encourage sustainable development in the Heart of Borneo', and several specific issues on which they focused recent meetings have been conservation, agroforestry, organic farming, and transboundary ecotourism (Figure 2).

The most recent FORMADAT meeting was held in Long Layu', Kalimantan, in November 2007, and it was attended by three of the five co-authors of this article.

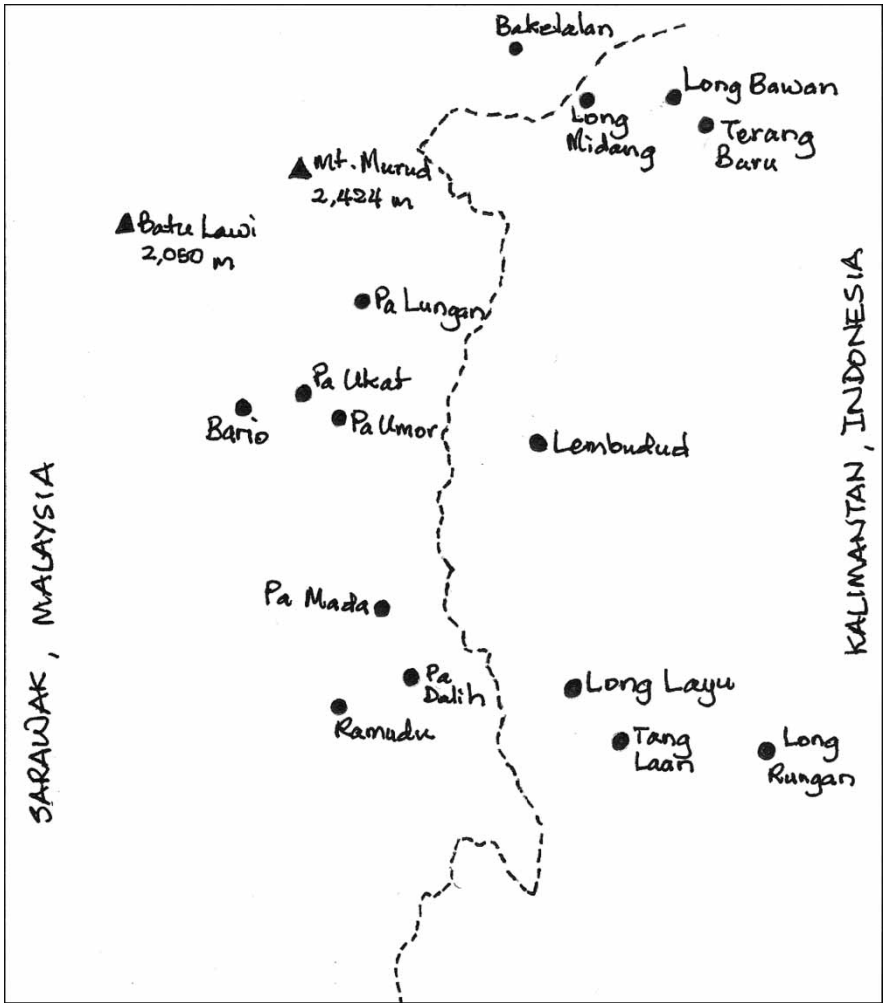


Figure 2. Villages in the Kelabit Highlands of Sarawak and the Kerayan Highlands of Kalimantan.

At this meeting, there was agreement that the respective districts would continue to work closely with governmental agencies and national and international NGOs to ensure the on-the-ground implementation of activities within the Heart of Borneo initiative, focusing on conservation and economic, social, and cultural programmes that will directly benefit the local highland communities. At this meeting, F.L. Apu, Chairman of the Bario-Ba' Kelalan Nature Guide Association, delivered a presentation on 'Transboundary Tourism in the Heart of Borneo', in which she outlined and described many of the challenges facing the further development of community-based transboundary ecotourism initiatives, which will be discussed in the next section of this article. As many of the attendees of her presentation were themselves guides on the Kalimantan side of the border, they were especially eager to hear of the challenges on the Sarawak side, and likewise, those attending from Sarawak listened to the challenges from the Kalimantan side. Thus, the FORMADAT meeting became a venue for the active exchange of information and ideas that will benefit ecotourism development on both sides of the border. To date, both the Bario-Ba' Kelalan Nature Guide

Association in Sarawak and the LSM Tanah Tam in Kalimantan have begun to act on the challenges discussed at this meeting. The next FORMADAT meeting will be held in 2009 in Long Pasia', Sabah, Malaysia, and the guides from both sides of the border are expected to give updates and exchange further ideas on transboundary ecotourism at that time. The attention given to transboundary ecotourism development at this meeting demonstrates the commitment of the local communities on both sides of the border to expand and improve ecotourism in the Heart of Borneo.

Challenges for ecotourism development in the Kelabit and Kerayan Highlands

Protection of forests and cultural sites

As clearly stated by Rodger (2005, p. 19) in his study on the long-term sustainability of ecotourism in the Kelabit Highlands, 'The logging of the forests in the Kelabit Highlands is the single largest threat to the future of ecotourism in the region'. Ecotourism is unlikely to survive if the forests of the Kelabit Highlands are destroyed. The negative consequences of logging in Sarawak and elsewhere have been well documented, and it is obvious that logging and large-scale clearing of forests would have a deleterious effect on ecotourism. Areas south of Bario are already unfit for ecotourism (Cluny & Chai, 2007); the well-known Bario Loop, a 5–7-day trek between Kelabit villages, which is still being advertised in the tourist literature, has been damaged since 2002, and now it is impossible without hiking long stretches on logging roads or through cleared areas. As a result, ecotourism efforts by the Guide Association will be focused on the areas north of Bario and within and bordering PTNP in Sarawak, and the Guide Association and LSM Tanah Tam will have to work together to create new trails for transboundary trekking that bypass logged areas. The Guide Association also plans to take an active lead in fencing the cultural sites in the Kelabit Highlands that could be marketed as tourist attractions. Fencing and demarcating the sites on the ground are necessary to prevent destruction of these sites by logging activities, and the Kelabit community has recently received RM 80,000 of funding from several international organisations (the US Cultural Foundation, a foundation of the US Embassy to Malaysia, and the Oxbridge Society of the UK) to help subsidise the costs of this demarcation.

Tourists visiting the Kelabit Highlands often express concern to community members about the logging, and often offer their support. Many are active in NGO organisations in their home countries and quite a few keep Internet blogs of their travels. These blogs, in addition to the comments they leave in visitors' books in the lodges and homestays in the Kelabit Highlands, reveal activist (or at least sympathetic) leanings, with varying degrees of knowledge about the true situation on the ground. One such illustrative comment, from a young American man, is: 'If there is any danger of logging and palm oil plantations threatening this area, please email me and we will join your campaign against such travesties'. A Japanese student wrote: 'I'm sure to work for the environment in Asia, especially against logging, after going back to Japan'. Finally, a middle-aged English man promised: 'We will do all we can to help to stop the logging. You have support in England'. The recent ITTO Project document (ITTO and Government of Malaysia, 2007, p. 17) also notes that: 'Tourists have complained about trekking through logged over and damaged forests'.

Many members in the local community hope to 'convince the Sarawak State Government to halt the continuation of logging in some areas of the Kelabit Highlands that are regularly used by, and therefore, a valuable asset to the local tourism industry' (Rodger, 2005). Rurum Kelabit Sarawak (The Kelabit Association of Sarawak) has been in negotiation with Samling, the logging company in possession of the logging concessions for the Kelabit Highlands, and has met with some success in having certain areas set aside as communal

forest reserves that can be used for ecotourism and other local needs. They have also initiated discussions with the logging company regarding the responsibilities of the communities to mark cultural sites and the company's responsibility not to disturb them. However, logging is ongoing, and it continues to pose a serious threat to the future of ecotourism in the Kelabit Highlands.

Communication

In addition to logging activities that threaten the ecosystems of the Kelabit and Kerayan Highlands, a second major challenge to transboundary ecotourism development is the difficulty of communication between villages, guides, and lodges on both sides of the border. Means of communication are limited; the Kelabit Highlands has only a few telephones that use satellites and solar power, and these only function intermittently. There is an Internet telecentre in Bario in the Kelabit Highlands, but there are currently no Internet capabilities in the Kerayan Highlands. It is possible to use mobile phones in some villages on the Indonesian side of the border, but not on the Malaysian side. To date, there are no fax machines on either side of the border. Communication tends to be written or verbal, and these methods are not always reliable. While it is expected that the Kerayan Highlands will soon receive an Internet centre and that the Kelabit Highlands will soon receive a tower that will enable the use of mobile telephones, for now this uneven technological development in the Kelabit and Kerayan Highlands makes communication difficult. This lack of communication technology is a key reason that urban-based tour operators in Sarawak are reluctant to organise tour packages to the Kelabit Highlands. It also obviously creates major complications for tourists who need to make advance bookings with guides and lodges, especially when they want to trek across international borders.

Promotion

There is very little printed information on the Kelabit Highlands. The Visitors' Centre in Kuching, an important place for tourists arriving in Sarawak to make plans and book excursions during their vacations, has only minimal information regarding the Kelabit Highlands. Interviews with the staff revealed that although they do know quite a lot about conditions in the Kelabit Highlands, they are not very forthcoming with the information and prefer to steer tourists to better-known and more widely visited destinations. Similarly, visits with many of the tour operators in Kuching and Miri yielded very little information about travelling to the Kelabit Highlands. Tourists who do visit the Kelabit Highlands do so based on the recommendations of other tourists or on information found in tourist guide books or on web-based tourist blogs. LSM Tanah Tam has produced promotional brochures available in both English and Indonesian for ecotourism packages in the Kerayan Highlands, and if similar brochures on ecotourism in the Kelabit Highlands were circulated in visitor centres, airports, and hotels in Sarawak, the number of tourists visiting the Kelabit Highlands would likely increase.

The Sarawak Tourism Board is also eager to promote Kelabit Highlands (through direct marketing and inclusion of the area in overseas package tours), but according to CEO Gracie Geikie, what is needed first is an updated website with current information regarding guides (experience, areas of expertise, fees, and direct contact information), lodges and homestays (locations, attractions, and costs), transportation (options and costs), and tourist itineraries. LSM Tanah Tam in Kalimantan already has a detailed

website (www.borneo-ecotourism.com/). There is some information for tourists on two Kelabit-run websites (www.kelabit.net and www.ebario.net), and the Guide Association in the Kelabit Highlands is currently working to create an updated and more detailed website.

Preparation and equitable distribution of benefits

Due to the remoteness of the Kelabit Highlands, currently only accessible by air (though this will change soon, as Bario will soon be connected to a nearby logging road), it is difficult and costly for community members to import many items from the cities that would be needed to support more tourists visiting the Kelabit Highlands. There is also limited surplus food produced in the Kelabit Highlands, since export of foodstuffs is likewise expensive. According to community members in Bario and other Kelabit villages, to accommodate more tourists with maximum benefit to the local communities, it would be beneficial to produce more food, particularly fruits, vegetables, and domesticated animals, within the highland villages. This local production of food would also help to spread the benefits of tourism more evenly among community members through contracts with farmers, gardeners, and gatherers of wild fruits and vegetables. Currently, the main beneficiaries of tourism in the Kelabit Highlands are accommodation and transportation providers, guides, and handicraft sellers. Shops and cafes make little money directly from tourists, since lodges tend to include all meals in the cost of accommodation (Rodger, 2005). Increased local food production could help to address the common problem of elite capture of benefits in ecotourism ventures in rural areas (Azarya, 2004; Milne & Ateljevic, 2001; Reed, 1997; Richter, 1989; Schilcher, 2007).

There is potential for the local Kelabit communities to derive more income from ecotourism, by increasing both the number of tourists and the amount of money spent locally by tourists (Harris, 2002). It has been estimated that as of 2003, around 1000 tourists visit Bario each year, up from about 350 per year in 1997 (Rodger, 2005), and each spends an average of USD 110. If Bario could attract 3000 guests per year and encourage them each to spend an average of USD 540 (by encouraging longer stays with more options and by increasing prices and fees for guides, porters, and lodging), the increase in the amount of cash flow into the Kelabit Highlands from ecotourism would be substantial (Harris, 2002). It has been estimated that tourism, branded mostly as ecotourism, could bring revenues of up to RM 6 million into the Kelabit Highlands per year based on the existing labour and infrastructure,³ and almost all of this money would be held in the community. There would be very few economic leakages to outside interests, as right now all lodges, homestays, restaurants, and shops are locally owned, and all guides are self-employed (except for the occasional guide that comes with a tour agency in Miri).

This is an ambitious figure, which falls well short of tourism revenue that currently flows into the Kelabit community, but it does demonstrate the potential revenue that could be generated in the Kelabit Highlands with the current infrastructure and labour available. Further infrastructure development for tourism could potentially have either positive or negative effects for the local communities, depending greatly on how much of the revenue from ecotourism continues to circulate within the communities. As noted earlier, the future for the highlands is uncertain. Large-scale logging, land conversion to agricultural plantations, and the connection of roads to the Kelabit Highlands would all affect the future of ecotourism and the flows of money into, within, and out of the communities. But for now, ecotourism seems like a viable option, especially given the regional and international support for the Heart of Borneo initiative.

Improvement of tourism infrastructure

Currently, tourism is limited by the flight system into the Kelabit Highlands, as only small 19-passenger planes are able to land at the Bario airport, and many of these flights are full with residents travelling back and forth to the city or with cargo. Plans to increase the length of the runway to accommodate larger planes have been submitted, in addition to requests for more flights and varied routes that would make it more convenient for tourists visiting other destinations in Sarawak to come directly to Bario. One recent development in the flight schedules that could have direct impact on transboundary ecotourism is the cancellation of the weekly flight between Bario and Ba' Kelalan. A popular route for tourists interested in long-distance trekking, the Bario-Ba' Kelalan route passes through part of Indonesia, and many tourists who hike from the Malaysian side of the border to the Indonesian side (or vice versa) choose to leave things at the airport in either Bario or Ba' Kelalan with the intention of taking the return flight to pick these up; the cancellation of this flight creates problems for tourists with that plan. Because it has only been a few months since this flight route was cancelled, it is too soon to judge the repercussions on transboundary ecotourism, but it is the opinion of the authors that there will be a negative impact for ecotourists intending cross-border treks. Further, the cancellation of this flight makes communication between villages on both sides of the border much more difficult, which will most definitely hinder inter-community transboundary cooperation of any kind.

A paradoxical problem often faced by local communities who engage in ecotourism ventures with the goals of generating income while simultaneously preserving their natural resources and cultural traditions is that once too many tourists visit their communities, the place loses its appeal to tourists as being remote and underdeveloped (Abram & Waldren, 1997; Azarya, 2004; Farrell & Runyan, 1991; Nuttall, 1997; Ponting, 2001). This can force local communities to offer new and different options that might conflict with their other goals. It can also 'lead service providers [i.e. tour operators] to open up new frontiers and to move them further away as some of them become well traveled' (Azarya, 2004, p. 952), possibly leading to decreasing tourist arrivals to destinations where local communities have become dependent on income from tourism. Finally, infrastructure development in the Kelabit Highlands, such as roads, a larger airport, widespread electricity, or construction of other tourist attractions such as spas, golf courses, resorts, or hotels, would also, without doubt, change not only the number and type of tourists, but also the flows of money from tourism. It is highly likely that such changes would benefit outside investors more than local community members, leading to economic leakage, which is a common problem in ecotourism development (Azarya, 2004; Mowforth & Munt, 1998; Ponting, 2001; Schilcher, 2007). Mohamed (2002) and Yacob et al. (2007) note that in Malaysia, most profits from ecotourism go to resort and hotel owners, not local communities, and that much of the money spent by ecotourists leaks out and is not recirculated within the local communities. So the issues regarding the improvement of infrastructure for the purposes of tourism must be carefully weighed and thoughtfully implemented, with a broad view of potential impacts on the local economy and the ecology of the area.

Legality of international border crossings

One particularly crucial obstacle to encouraging and promoting transboundary ecotourism between the Kelabit Highlands of Malaysia and the Kerayan Highlands of Indonesia is that it is technically illegal for people to cross these borders on foot. There are immigration stations on both sides of the border, in both the Kelabit and Kerayan Highlands, and these immigration officers have the responsibility to write letters authorising tourists and

locals to cross the border at the appointed mountain passes and to ask tourists and locals for letters from immigration officers on the other side of the border. But immigration officers on both side of the border neither have the means to conduct rigorous background checks or to interview or interrogate people requesting to cross the border, nor the authority to stamp the passports of locals or tourists. According the Head of Immigration of the state of Sarawak, Malaysia, himself a Kelabit from the Kelabit Highlands, this issue regarding the legality of border crossings by both tourists and locals cannot be resolved at the state level; it must be addressed by the federal governments of both Malaysia and Indonesia. A Memorandum of Understanding must be signed between the two countries, and immigration officers at the outstations on the border would require additional training and technological capabilities that are not currently available. There is awareness that these capabilities are necessary anyway, for the issues of transnational security, and in September 2008 immigration officers from Sarawak visited villages in Kalimantan to discuss transborder immigration control. The outcome of this and other discussions regarding transborder crossings by locals and tourists will likely affect the future of transboundary ecotourism. So while international border crossings by locals and tourists are now tolerated by the respective state and national governments, the negotiation of legal issues regarding transboundary trekking would make these tourism options easier to promote at national and international levels. Currently, this is a point of confusion for tourists, guides, and local immigration officers on both sides of the border.

Local control

While all forms of tourism, including cultural tourism and ecotourism, have been criticised by scholars to the degree that academic literature on tourism has become known to some scholars as a 'protest genre' (Din, 1997, p. 111), in this area in the interior of Borneo, it can safely be stated that so far the local people have remained in control of ecotourism endeavours, support the further development of ecotourism options, and are actively engaged in solving the inevitable problems associated with ecotourism, and the specific challenges of transboundary ecotourism. The organisation, influence, and level of activity of the three main local organisations involved in ecotourism (The Bario-Ba' Kelalan Nature Guide Association, LSM Tanah Tam, and FORMADAT) demonstrate that local communities have the desire and the capability to successfully manage ecotourism.

Conclusion: the future of community-based transboundary ecotourism in the Heart of Borneo

With the current attention on ecotourism in the multinational Heart of Borneo initiative and among the local communities themselves, there is a high level of local, state, national, and international support for community-based transboundary ecotourism development in the Kelabit and Kerayan Highlands. However, for ecotourism to be successful, or even feasible, in the future, several key challenges need to be overcome.

First among them is the protection of the ecological and cultural context that draws travellers to these highlands in the first place. Other issues, such as communication and infrastructure limitations, will most likely be addressed in the near future. So long as these technologies and developments are used wisely and for the benefit of local communities and not just private companies or larger governments, these can be key factors in the improvement of community-based transboundary ecotourism. Legal issues surrounding border crossings by tourists and guides must be managed at an inter-governmental level,

the solutions perhaps pushed by local organisations most affected by these laws. Ecological monitoring of the effects of increased ecotourism on the ecosystems in the Kelabit and Kerayan Highlands will require assistance from forest departments on both sides of the border and perhaps independent botanists, biologists, hydrologists, and other scientists.

Issues related to equitable distribution of benefits within and between communities must be addressed by local organisations, and these organisations must continue to guide the vision, pace, and trajectory of ecotourism development, if this is to truly remain a community-based venture in the future. Communities on both sides of the border can potentially benefit ecologically, economically, and socially from increased and improved community-based transboundary ecotourism, so long as they proceed carefully, by learning from the successes and failures of similar projects in other parts of the world and by directly addressing their own unique challenges.

Notes

1. There are 21 registered guides in the Bario-Ba' Kelalan Nature Guides Association, and at least as many unregistered guides. There are 25 more-or-less official lodges or homestays, and other families also occasionally host tourists.
2. 'Environmentally responsible travel to relatively undisturbed natural areas in order to enjoy and appreciate nature (and any other accompanying cultural features). One that promotes conservation, one that has low visitor impact, and one that provides for beneficially active socioeconomic involvement of local populations'.
3. This figure has been calculated by the authors, by assuming full capacity of all lodges and homestays, full-time employment of all guides for most of the year, as well as income generated from transportation, handicraft and souvenir sales, and sales of food and drinks.

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