

LINKING ECOTOURISM TO THE FUTURE OF LAKE MALAWI NATIONAL PARK

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ABSTRACT

Ecotourism and nature tourism are the fastest-growing sectors of the travel and tourism industry. The tourism sector in many developing countries has not been able to create jobs and wealth for the unemployed young people in the local communities. What role ecotourism can play in the pursuit of sustainable development and economic growth has been discussed. International attention is now focused on achieving sustainable tourism development through conservation of the ecosystem.

An important source of income for Malawi, which is among the ten poorest countries in the world with an annual income per capita US\$ 170, is the tourists attracted by Lake Malawi. Lake Malawi, 600 km long and 60 km wide, is the southernmost basin of the African Great Rift Lakes system. The lake hosts some of the greatest diversity of freshwater fish in the world, especially cichlid fish. To protect examples of the lake's aquatic communities as well as their habitats, Lake Malawi National Park (LMNP) was established in 1981 and designated as a UNESCO World Heritage Site in 1984.

As part of a conservation and development project by World Wide Fund for Nature (WWF) Finland, the socio-economic potential of ecotourism was studied in LMNP. Preliminary results show that though the amount of foreign visitors in LMNP has decreased strongly during the last ten years, presumably due to economic instability in the Southern African subcontinent, tourism still provides important economic inputs for local livelihoods. Dialogue between traditional authorities, park authorities and businesses should result in the distribution of income from ecotourism to the local community. The geographic location and cost base alone restrict marketing LMNP for the masses; therefore, tourism best suitable for the area can be defined as ecotourism.

INTRODUCTION TO THE FASTEST GROWING INDUSTRY IN THE WORLD

Ecotourism and nature tourism are the fastest growing sectors of the tourism industry and tourism itself is the fastest growing industry in the world (Russo 2003). The World Tourism Barometer was rising at the end of last year even when the impacts of the war in Iraq and the SARS epidemic were still fresh (<http://www.world-tourism.org>). Between 1990 and 2000, tourism has increased by more than 100% in the world's biodiversity hotspots, regions that are richest in species and facing serious threats (<http://www.sustdev.org>). International attention is now focused on achieving sustainable tourism development while conserving ecosystems.

The International Ecotourism Society (TIES) defines ecotourism as "responsible travel to natural areas that conserves the

environment and sustains the well-being of local people" (<http://www.ecotourism.org>). The main message raised at the World Ecotourism Summit in Québec in May 2002 was that ecotourism is expected to play an important role in promoting sustainable development in the entire tourism industry. However, ecotourism has not been among the favourite subjects of forest scientists so far. For example, when the XXI IUFRO World Congress was organised in Kuala Lumpur in August 2000, over 1,400 papers were presented, but only in one of them (Ali and Toshiyuki 2000) was ecotourism included in the topic.

Ecotourism in the forest or woodland areas can also be included in non-wood forest products (NWFP) as services derived from forests or woodland. Generally, low productivity of land and labour limit the viability of NWFP extraction to sparsely populated regions, even though in some cases the net revenue from NWFP collection may exceed the income that might otherwise be derived from alternative land use options (Homma 1992; Grimes and others 1994, Kangas 2001). Also tourism development is increasingly linked to the sparsely populated regions in the developing countries of the world which often host areas of high biodiversity. Tourism is an important export for the 49 least-developed countries in the world and principal for 37 of them (<http://www.sustdev.org>).

A study on the environmental impact assessment of ecotourism (particularly in protected areas) was started by FAO last year. Several environmental and social impacts of different activities related to ecotourism can be investigated. For example, fourteen negative and two positive impacts of ecotourism on fauna have been suggested. The two positive ones are: 1) Improved knowledge/data about animal distribution and behaviour; and 2) Locals promote the protection of wildlife. The negative impacts included, for example, decline of rare species, habitat destruction, deaths of individual animals and disturbance of predator-prey relationship (Gaul 2003).

As a part of a conservation and development project by World Wide Fund for Nature (WWF) Finland (Conservation of Endangered Species of Fishes and Forests of Lake Malawi National Park: Environmental and Economic Strategies, started in 2001), we studied the socio-economic potential of ecotourism in Lake Malawi National Park in Southern Malawi, Africa. We investigated the importance of nature-based tourism for local people, and how the different stakeholders see the potential of tourism as means of benefiting both the local community and the environment. Fieldwork of the study included a survey of tour operators, structured interviews of the park management, and unstructured interviews of tourists and local people between August and December 2003.

MALAWI AS A TOURIST DESTINATION

Though a small country, Malawi has a large number of protected wildlife areas. The national parks are: Nyika, Kasungu, Lake Malawi National Park (around Cape Maclear), Liwonde, and Lengwe. In addition, there are four game reserves (Vwaza Marsh, Nkhotakota, Mwabvi, and Majete). Still, in the early 1990's all camp sites and lodges inside parks and reserves were of poor quality, mainly because they were run by the Department of National Parks and

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Wildlife, and revenue that was raised disappeared into central government coffers (along with about 90% of the national park entrance fees) (Lonely Planet 1998). Since then, the Malawian government has started to grant 25-year leases on property in national parks for foreign businessmen—the government itself did not have the needed resources and skills for the business (Mr. Leonard Sefu, personal comment). In 2002 the government promoted a massive campaign with the new slogan “Malawi – The Warm Heart of Africa.”

In October and November 2003, five tour operators in Malawi were interviewed by email (BOX 1). The tour operators suggested that the government of Malawi should market the country as a tourism destination better and more aggressively, because Malawi is not yet a well-known African destination, like Kenya or Tanzania. The government could also assist with tax and import duty incentives to encourage investments in tourism. There is also a need for better basic infrastructure especially in Lake Malawi and Liwonde National Parks. One tour operator stated that Malawi couldn't offer expensive 5-star tourism like Botswana, Namibia, or Tanzania. Therefore, it would be better to concentrate more on what the country can offer and perhaps not to try to attract the upmarket tourists (see also: <http://www.barefootsafarismalawi.com/> and <http://www.sochetourmalawi.com>).

*Box 1. “MALAWI - THE WARM HEART OF AFRICA!”
Malawi as a tourist destination according to the tour operators.*

- 1) Malawi is a relatively safe but lively country with friendly people and interesting culture.
- 2) Lake Malawi is part of the rift valley in Central African Plateau.
- 3) Unique evergreen mountain forests of Mt. Mulanje with good hiking locations.
- 4) National parks and game reserves are all in close proximity of each other.
- 5) Possibilities for special interest groups, such as birders, sea kayakers, cichlid fish, and orchid enthusiasts.
- 6) Good road network and international airport linking Malawi to the rest of the world.

TOURISM IMPROVING WELFARE IN LAKE MALAWI NATIONAL PARK

Lake Malawi National Park (LMNP) is a UNESCO World Heritage Site situated at the tip of Nankumba peninsula in southern Malawi. The park consists of 87 km² of terrestrial area, mainly Miombo woodland, and 7 km² aquatic zone. Hosting some of the largest diversity of cichlid fish in the world, LMNP is unique for its fauna, but also because it encases the most populated village in Malawi (approximately 10,000 people), Chembe. Surrounded by a protected area, local villagers are permitted to collect dead firewood inside the park, unlike all other national parks in Malawi (Vickers et al 2004). LMNP is situated in Mangochi District where the annual population growth is 5% and primary school enrolment rate is 30% (for boys 35% and for girls 25%) (Arsalo and others 2001).

Natural preconditions for ecotourism are ideal in Chembe: most tourists visiting LMNP are attracted by snorkelling or scuba diving in the clear waters of the lake with a chance to see the colorful cichlid fish, or kayaking excursions to the uninhabited national park islands. The park also offers prominent bird watching and mountain hiking opportunities, though these are thus far being

little utilized (Rantala and Tyynelä 2004). However, the number of tourists in LMNP is gradually decreasing. According to the interviewed lodge owners in Chembe there are several reasons for this, like poor basic infrastructure, tourist threats including crime and harassment by local street hawkers and wrong information about the area abroad. Also problems in Zimbabwe and weak South African Rand were mentioned.

Decrease in the amount of foreign tourists in LMNP has been huge between 1997 and 2003 (Figure 1). Statistics concerning the visitors who paid the entrance fee at the park gate also showed that the number of nationalities visiting LMNP has decreased dramatically from 30 in 1997 to 18 nationalities in 2002 and only 12 nationalities in 2003. The mean number of visiting nationalities per month has decreased from 12.6 in 1997 to 8 nationalities in 2002 and 5.2 nationalities in 2003. Most visitors came from the United Kingdom. The mean number of tourists per month from the UK to LMNP was 18.8. It was followed by South Africa (7 tourists/month), Germany (6.1), USA (3.9), Italy (3.5), the Netherlands (3.2) and Finland (2.9). Altogether tourists from these seven rich countries constituted 72.4% of all foreign visitors while the remaining 27.6% came from 22 other countries.

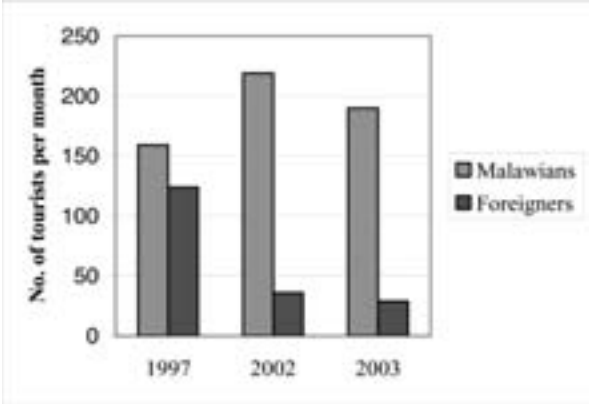


Figure 1. The amount of foreign tourists is continually decreasing in Lake Malawi National Park.

Generally, local people can directly benefit from the tourism industry in Malawi in three ways:

- 1) Employment;
- 2) Own businesses that sell crafts and curios; and
- 3) Projects organised by tour operators.

In LMNP about 100 people are employed by lodge owners. Selling crafts can sometimes be very profitable. When a group of 15 tourists from Finland were visiting LMNP in November 2003, each of them bought wood carvings worth about 1500 MK (US\$ 15). That is approximately half of the mean monthly salary in the village. In Kenya for example, there are 60,000 full time wood carvers who support over 400,000 dependants and the export value of the Kenyan carvings is worth over US\$ 20 million annually (Choge and others 2002). In LMNP the collection of wood for carvings has not yet been a problem but domestic use as well as for the needs of commercial fish smoking industry has led to woodland degradation on the hills surrounding the village (Vickers and others 2004).

Though lodge owners and tour operators sometimes have financial problems, many of them are successful examples of small-scale projects organized by international non-governmental organizations (NGOs) in cooperation with the local natural resources committee. For example, with the assistance of U.S. Peace Corps a women's group was taught how to make peanut butter and peanut brittle. As a result, they made over \$500 to share between the five members in six months. The natural resources committee now has the capital to initiate other projects such as a community garden, woodlot, or bee keeping (Meyer 2004). In turn, an Israeli NGO is partly funding their AIDS project in the village with money received from a lodge they are running (Irit Rabinovitch, personal comment, see also <http://www.chembe-aids.org/>). Encouraged by an existing local market (the lodges and their visitors) WWF Finland started a hand-made paper business providing employment for nine people, with potential for growth. They also arranged a training course for eight selected local tour guides to improve their skills in customer service, first aid, knowledge of natural history and eco-friendly activities (<http://www.wwf.fi/malawi>). In an attempt to assist the national park and its stakeholders in combating deforestation, WWF Finland established an organic matter briquette project in 2001 (Wiklund and others 2002).

The lodge owners in LMNP were asked if they saw any threats to their business through environmental degradation. Two Malawian businessmen answered that no environmental degradation was taking place. On the contrary, they were proud of their village which is still growing and is more like a town nowadays. They also thought that fishing was not affecting tourism at all. Contrary to that, the four non-Malawian business-owners strongly argued that deforestation and over-fishing were major threats to tourism. They urged that the government should strictly control fishing within the 100 meter limit off shore and end illegal firewood collection. However, the head officer of the Park Department in LMNP stated that park officers had very limited resources to control anything (Mr. George Banda, personal comment). The non-Malawian lodge owners further suggested that more sustainable farming methods and establishment of woodlots should be taught to villagers. The lodge owners also said that they sometimes got positive feedback from tourists regarding the eco-friendly infrastructure of their operations. No negative environmental or social effects of tourism mentioned by Russo (2003) were encountered in this study.

DISCUSSION AND CONCLUSIONS

Preliminary results show that though the amount of foreign visitors in LMNP has decreased strongly during the last ten years, tourism still provides important economic inputs for local livelihoods. For example, the lodges employ around 100 local people as managers, chefs, waiters, gardeners, cleaners, watchmen, and boatmen. In addition, there are several economic gains from local crafts and arts, and services such as boat tours that are sold to tourists. Indirect benefits include a small clinic run together with a lodge by an Israeli NGO, and attention brought about by tourism has resulted in the building of primary clinic facilities in the village. The road leading to the village, the condition of which has been seen as a major hindrance for local development, is also being upgraded, which will promote access to the park and hopefully boost the local economy. Most of the lodge owners see a positive future with potential for growth and employment opportunities (Rantala and Tyynelä 2004).

On the other hand, five out of seven of the lodges in Chembe village are owned by foreigners that have been granted 25-year leases on property by the Malawi government. This means that the biggest gains (or possible losses as well) from the business go

abroad, a fact that creates doubt about the benefits of tourism among local people. For example, when the distribution of wildlife tourism revenues in Kenya was calculated it was found that less than 1% of cash income accrued to the local Maasai and less than a tenth remained in the district as council revenues or wages to local employees (Douglas-Hamilton 1988). With no capital, locals have little possibilities to start their own businesses. Another thing to consider is the unexceptionally high population density of the area; ecotourism usually works well in supporting smaller communities. It can be asked, how many of the hundreds of unemployed fishermen can the tourism sector realistically employ in the future?

Developing ecotourism in LMNP should be a participatory process including all the stakeholders: local people, the state, tour operators, and NGOs working in the area. The role of the state can be seen as supporting the building of sufficient infrastructure for tourism and an effective park management system, but at the same time controlling and ensuring development is sustainable. Dialogue between traditional authorities, park authorities and businesses should result in the distribution of income from ecotourism to the local community. In addition to facilitating the whole process directly, NGOs can contribute remarkably by promoting Malawi in general. The geographic location and cost base alone restrict marketing LMNP for the masses; therefore, tourism best suitable for the area can be defined as ecotourism.

REFERENCES

- Ali, M.E. and Toshiyuki, T. 2000. Prospect of community-based ecotourism in the Sundarbans mangrove forest in Bangladesh. Paper presented in the XXI IUFRO World Congress, 7-12 August 2000, Kuala Lumpur, Malaysia.
- Arsalo, A., Salokangas, P. and Pitkänen, T. 2001. Problem Well Defined- Half Solved. Experiences of a Finnish NGO from a Rural Health Care Project in Malawi. Ministry for Foreign Affairs of Finland, Department for International Development Co-operation. 93 p.
- Choge, S.K., Ellery, F.W. and Cunningham, A. 2002. The impact of woodcarving industry on natural forests and woodlands in Kenya. in: Seydack, A.H.W., Vorster, T., Vemeulen, W.J. and van der Merwe, I.J. (eds.) Multiple use management of natural forests & woodlands. Policy refinements and scientific progress. Natural forests & savanna woodlands symposium III. 6-9 th May 2002 Berg-en-dal Camp, Kruger National Park, South Africa. Organised by the Department of Water Affairs and Forestry in co-operation with the International Union of Forest Research Organizations.
- Douglas-Hamilton, I. and associates. 1988 Identification Study for the conservation and sustainable use of natural resources in the Kenyan portion of the Mara-Serengeti ecosystem. Report prepared for the European Development Fund of the European Economic Community, Nairobi.
- Gaul, D. 2003. Environmental and social impacts of different activities in the field of ecotourism. Non-Wood News, 10. Food and Agriculture Organization of the United Nations (FAO).
- Grimes, A., Loomis, S., Jahnige, P., Burnham, M., Onthank, K.I., Alarcon, R., Cuenca, W.P., Martinez, C.C., Neill, D., Balick, M., Bennet, B. & Mendelsohn, R. 1994. Valuing the rain forest: the economic value of non-timber forest products in Ecuador. *Ambio* 23 (7): 405-410.
- Homma, A.K.O. 1992. The dynamics of extraction in Amazonia: A historical perspective. in: Nepsatad, D.C. & Schwartzman, S. (eds.) Non-timber products from tropical forests. Evaluation of a conservation and development strategy. *Advances in Economic Botany* 9: 23-31.

- Kangas, K. 2001. Wild berry utilisation and markets in Finland. D.Sc. (Agr. and For.) thesis. University of Joensuu, Faculty of Forestry. 43 p.
- Lonely Planet, 1998. Africa on a shoestring. Lonely Planet Publications. 1055 p.
- Meyer, E. 2004. From poaching to sustainable use of NWFPs: Two successful cases from Malawi's National Parks. Non-Wood News, 11. Food and Agriculture Organization of the United Nations (FAO) (in print).
- Rantala, S. and Tyynelä, T. 2004. The promise of ecotourism in Lake Malawi National Park. Non-Wood News, 11. Food and Agriculture Organization of the United Nations (FAO) (in print).
- Russo, L. 2003. Ecotourism - Environmental impact assessment. Non-Wood News, No. 10. Food and Agriculture Organization of the United Nations (FAO). Pp. 13-17.
- Vickers, M., Rantala, S. and Tyynelä, T. 2004. Organic Matter Briquettes as an alternative to firewood in Lake Malawi National Park. ETRN Newsletter No. 41 (in print).
- Wiklund, A., McKaye, K., Mponda, J. and Stauffer, J. (2002) "Fuel briquettes as a sustainable economic alternative to deforestation in the Lake Malawi ecoregion". Paper presented in the SDI/UGF Summit 2002 (online: www.sustdev.org).

PERSONAL COMMENTS

- Mr. Leonard Sefu, Director of Malawi National Parks (November 5th 2003)
- Ms. Irit Rabinovitch, Head of the Chembe-Aids Project (November 10th 2003)
- Mr. George Banda, Head of the Park Department in LMNP (November 11th 2003)

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