Community-based ecotourism as a sustainable development option in Taita Taveta, Kenya

Nina Himberg

Abstract

The aim of this study is to present a view of the state of the indigenous forests and sacred forests in Taita Hills, in southeast Kenya, and to discuss the possibilities of ecotourism in Taita-Taveta district in preserving these natural-cultural habitats. The concept of ecotourism is defined and the interdependence of the ecological sustainability and the community viability is discussed. The plans concerning the future of the forests and local communities made by the government and non-governmental organisations are also looked at.

The high population density in the Taita Hills puts great pressure on the land and the area needs strategies for preserving its fragile biodiversity. Incomes from other sectors outside agriculture are important for many households. Ecotourism is seen as a way to combine the nature conservation and the economic development of local communities. Taita Taveta has potential but also constraints for promoting this kind of small-scaled tourism.

The biodiversity and communities in Taita Taveta

A great challenge for modern nature conservation work is to develop ways, which enable local communities to participate in planning and decision-making as well as implementation. There is a need for study of the possibilities of ecotourism in preserving natural-cultural habitats. Community-based ecotourism could be regarded as a tool for sustainable local development in rural areas like Taita Taveta in southeastern Kenya. Taita Taveta District is rich in wildlife with 62% of the area being under Tsavo East and Tsavo West national parks. Although a main foreign exchange earner for the country, tourism and its related activities have least benefited the communities in the district (Mogaka 2002:14, Mombo 2004).

Taita Hills is situated in the middle of the Tsavo plains on Taita-Taveta District. The Taita Hills cover an area of 1000 km², out of the district’s 17 000 km², and belong to a disjunct chain of mountains called Eastern Arc. The relatively high rainfall makes forest growth possible on these ancient hills, which have been classified as one of the world’s 25 most important biodiversity hotspots. Unfortunately the indigenous mountain rainforests have suffered substantial loss and degradation during the last decades (Wilder et al. 1998:181). The remaining forest areas are small. Forests cover only 0.12% of the whole Taita Taveta district.

The threats facing the forests

The main basis of the culture within the highlands is cultivation. It includes small-scale farming for subsistence purposes and has been the main reason for cutting the forests. According to the Ministry of Finance and Planning (2001:19) the population has been increasing steadily, the intercensal growth being 2.94% (1.74% per year). The population has doubled within 30 years, which has led to a shortage of agricultural land. The population density on the arable land is high and farm holding has become uneconomical both in terms of man-hours and returns per piece of land (Ministry of Finance… 2001:48-50). Due to the decreasing landholding, zero grazing has become more common in the highlands, with 45% of the forest adjacent dwellers having adopted the practice (Mogaka 2002:14).

Another reason for forest destruction is the plantation of exotic trees. The Forest Department led for many decades a forest policy that replaced the indigenous species by exotic species. Human activities, like selective logging, firewood collecting and grazing by the forest margins, have had an influence on the vegetation of the forests (Beentje 1988:30). Land allocation around some forests has been
poorly coordinated so that steep and unsuitable sites were allocated for settlement, which has caused environmental degradation (Kenya Forests Working Group 2003). Alternative sources for earning a living are needed. Three types of forests are found in the Taita Hills: planted forests, indigenous forests and sacred forests called figis. The sizes of the remaining indigenous forests are alarmingly small and they are partly disturbed. The size of the forest counts when ensuring the long-term survival of the flora and fauna (Bytebier 2001). The largest indigenous forest fragment in Taita Hills is Mbololo with 200 ha of quite undisturbed forest (Figure 3). Ngangao is the second largest fragment (92 ha). Other forests are small and disturbed by selective logging. On the top of the mountains Yale, Wesu and Vuria (0.01 ha) are small remnants of forests and isolated trees. Only Mbololo and Ngangao may be viable forests in the long run (Wilder et al. 1998, Bytebier 2001:24). According to Brooks et al. (1998:191) Taita Hills contain three endemic and threatened birds, one snake, two amphibians and three butterflies. This generic endemism also characterizes the flora of these hills. The forest flora consists of 400 species of plants of which at least 13 are endemic (Kenya Forests Working Group 2003). A crucial task is to preserve the remaining high altitude indigenous forests of the Taita Hills to prevent this uniqueness being lost forever.

The human-nature relationship and economical dependence

According to a study produced by GEF/UNDP/FAO Cross Border Biodiversity Project in 2002 (Mogaka 2002), the key challenge in forest biodiversity conservation in Kenya is the provision of adequate economical and financial incentive measures as potent avenues for enhanced community involvement. These incentives can be directly economically encouraging stakeholders to engage in sustainable forest conservation and management. Indirect economic incentives are considered at least as important in encouraging communities. The Government of Kenya has also provided a series of disincentives to discourage forest users from misusing or overusing resources. Such measures are in form of penalties and forfeiting of illegally acquired products. The main goal is to provide real benefits to communities who adjoin forest conservation, but the opportunities are still limited.

The cost-benefit ratio of conservation varies. The key costs include direct management costs, reduced farm productivity and the direct losses caused by wildlife (Mogaka 2002:7). The human-wildlife conflict seems to be a major problem in the Taita Taveta area. Wildlife causes crop and property damage, loss of livestock, injuries and sometimes loss of human lives. It is estimated that communities living along the forest boundaries lose about 30% of expected harvest to wildlife. People are asking to include a law in the new constitution to protect farmers against wild animals. For the moment, when crops are destroyed by the animals the farmers are not compensated (Mwandoto & Mwatela 2004). All these aspects explain the sometimes poor attitude of the communities towards biodiversity conservation.

Michaelidou et al. (2002:613) have suggested that “ecosystem and community viability are interdependent, so efforts to enhance one dimension would be unsuccessful if the other dimension is ignored”. A transition from the traditional land tenure system to primarily state control has had an impact on forest use in Taita. Forest areas in the district are either non-gazetted or gazetted. Most of the Taita Hills forests have been under the management of the Taita Taveta County Council, but it is proposed that all major forests (Kasigau, Mbololo, Ngangao and Chawia) should be gazetted and community participation should be promoted. In gazetted forests protection from local communities has been the norm. Communities’ attitude towards conservation has improved through the formation of a Community Environment Committee, which now has the responsibility of ensuring sustainable forest utilization practices are being followed. Developing ecotourism and beekeeping are recommended as sustainable forest based enterprises (Mogaka 2002:22). The formation of the Committee as well as local Forest Associations has created a sense of resource ownership by the communities (Mwandoe 2004).

According to Mwandoe (2004) the communities around Ngangao, Chawia and Mbololo have started to see the direct and indirect values of
forest vegetation through community-based incentives becoming a reality. For example, development of water resources for community use has promoted local understanding on the forest’s role in water catchment. The engagement of communities shows in situations such as when villagers catch an intruder trying to enter a forest without permission. Unfortunately that is not yet the case in all the forests of Taita Hills. Misuse, like illegal harvesting, has occurred in protected forests even if there are foresters employed by the government guarding the areas.

The sacred forests are traditionally protected

The laws governing the forest resources and the strengthening of Christianity have changed the relations between local people and the forests during the history. Traditional land tenure system classified land as cultivated and uncultivated. Taita people had usage rights to the land (Maundu & Ogutu 1986:56-67). They set aside areas of forest, which they respected because those places are used in many traditional ceremonies. The Taita have their traditional religion called Wutasi, which was still strong by the early 1950’s. The belief in a higher being, called Mulungu and in ancestor spirits, played important part in the lives of the Taita (Maranga & Mathu 1986:43-46).

According to village elder Judah Mwanjumba (2004), the clans have their own places in the forests or caves for sacrificing to higher powers. Initiation training and rainmaking rituals are practiced in these sacred places. It is forbidden to cut trees or collect firewood from the holy forests. Indigenous plant and tree species can be found on the patches. These holy forests called figis have had many purposes. In former days they were considered crucial in protecting the community from bad-intentioned intruders. They acted as a gateway between homeland in the hills and lowland areas considered dangerous. In every social unit there was an elder responsible for rituals. Many important preparations concerning traditional laws and village governance took place in figis. For example certain plants found there could be used in making medicine for bringing love to the community if the situation seemed unsettled. The purification of the elder, and judging and sentencing wrong doers to death took place in a sacred forest as well. According to Ville (1994:24) the Taita ritual complex has been even something more than just protecting territory and bringing rain. The food chain was controlled by magical means to suit husbandry production and the agricultural timing was directed by the elders.

Indigenous forests are still important places for collecting plants for medicinal use in health care means, although their value has diminished due to the growing awareness about western medicine. The knowledge about traditional use of plants has been diminishing during past decades, as people seem to find it easier to buy the cure for an illness from a pharmacy and lack of proper knowledge about herbalism makes them unsure how to treat children especially. Even if these small forest patches are traditionally protected, they also have had to make way for agriculture. Some figis have been destroyed by fundamentally thinking Christians (Mwanjumba 2004).

It is believed that spirits of ancestors live on the mountain peaks Yale and Vuria (Figure 3), which makes those the holiest places in the Taita Hills. These places have remained untouchable because of their holiness and also because the slopes of the mountains are too steep for cultivation. Traditionally Taita and Taveta people venerated the skulls of their ancestors one year or more after the burial in order to avoid bad things happening. The skulls were deposited in a holy lineage skull-depository, usually in a cave (Maranga & Mathu 1986:44-46). Some of these caves still exist even if most of them have been destroyed.

The traditional ceremonies have diminished among the Taita with the coming of Christianity and western education. Some of the old people still practise rituals, but most of the ritual experts like diviners, seers, defenders and rainmakers have died and have not been replaced. As most of the younger generation are Christians and have been educated in a “modern” way they are not interested to follow old traditions in a thorough way (Mwanjumba 2004). What has happened is that Wutasi has mixed with Christianity and certain old Wutasi traditions and values still rule. Traditions like name giving, circumcision of boys and funeral ceremonies are accepted in Christianity. Strong
respect of older people and parents, high working morale and the spirit of harambee (cooperation) are also values that still lead the lives of Taita (Kapule & Soper 1986:13).

**Enhancing ecotourism in Taita Taveta**

Ecotourism has been variously defined. All definitions of ecotourism emphasise that it must take place in natural areas, which could include state managed protected areas, private land and communal land. The key criteria for ecotourism are: the activity must be environmentally and culturally sensitive; must directly benefit conservation and local people who in turn have an incentive for conservation; and must be self-sustaining within the context of the natural and cultural habitats in which it takes place (Goodwin 1996:282). According to Hammit & Symmonds (2001:338-341) the primary objective of ecotourism management is to conserve the natural and cultural diversity while secondarily providing for an acceptable level of tourism or recreation.

Ecotourism, as a forest value with direct benefits, has been taken into serious consideration in Taita Taveta. Kasigau forest has had eco-tourists visiting since 2001 (Figure 3). The Tourism Banda Project is a joint venture between the communities in five village-based companies and an outside investor. The visitors are provided opportunities to live and work with the villagers in conservation and socio-economic development projects. The companies rent the bandas (traditional African huts) (Figure 1) for the investor who has the responsibility for the management and marketing. Local people are employed in management work. Part of the income goes through the Kasigau Conservation Trust for facilitating conservation and socio-economic development in Kasigau region (Mwakio 2004). Villagers consider tourism important as it brings income and as it offers the local youth meaningful job opportunities. The conservation issue is essential in Kasigau. Tree nurseries have been set up, many women go to farming schools to learn new techniques, and a new generation can learn conservation thinking in the Youth Environmental Group (Juma 2004).

There are arrangements made by the communities adjacent to Ngangao forest for an ecotourism banda and restaurant. Kenya Forests Working Group (2003) has estimated that the Ngangao forest has a big ecotourism potential (Figure 3). The forest fragment houses all three endemic bird species and the avifauna is easily seen. There is easy access to the forest from Voi town through Mwatate and Wundanyi. General visitor security is adequately good. The forest’s relative proximity to the Tsavo National Park makes it easy to tap into the tourism circuit.

Plans for community-based ecotourism are also made in a village near Mbololo forest, where some families are interested to put up an accommodation business in the form of homesteads (Mwangombe 2004). This beautiful forest hosts the endemic African violet (*Saintpaulia teitensis*) (Figure 2) that cannot be found any place else in the world. According to Kenya Forests Working Group (2003), Mbololo has unique scenic characteristics and can offer great hiking experiences for a nature lover. The forest is located quite far from the main roads, and the access there along the unsealed and bumpy dirt roads requires some survival spirit, but it is worth it.
According to the local people in Mwanda village (Figure 3), the biggest need for income is usually in January and February. Then there is lack of food as the farms are not productive enough. The villagers consider whether some small-scale, community-based tourism could bring the extra shillings needed. Mwanda with its surrounding spectacular scenery and interesting history could attract travelers if marketed. Sacred forests and scull caves can be found in the area and many villagers still know about the old traditions and respect them (Himberg 2004).

As the Taita Hills is surrounded by the Tsavo National Park it is obvious that tourism industry has concentrated on the national park area, which has good facilities for tourists. Most of the tourists visit there on the dry and sunny savannah to see wildlife (Figure 4). The Taita Hills rise up to a maximum elevation of 2200 meters and form an isolated, compact and highly dissected hill area. There are different kinds of ecological regions based on the topography and climatic conditions. The area is a mosaic of varied natural conditions and it has been said that the Taita Hills, with their foothills, are a microcosm of the whole of Kenya (Tuhanen 1991:6). The annual mean temperatures range from 13 degrees °C on the mountains to 25 degrees °C on the surrounding plains. The annual precipitation on the mountains (Wesu at 1675 meters: 1415 mm) is two or three times the amount of rainfall on the plains (Voi at 560 meters: 560mm) (Jaetzold & Schmidt 1983:273). The topography of the area offers beautiful scenery, especially when viewed from the mountaintops like Yale, Wesu or Vuria. One may see Mt. Kilimanjaro from Taita Hills, and savannahs and steep rocks seem to be ideal for rock-climbing or for admiring waterfalls (Himberg 2004).

Lodges and camping sites are located on the lowlands around the hills, near the national parks (Fitzpatric et al. 2003:312). Wundanyi, the district capital up on the hills, offers accommodation and other tourism related services. Otherwise the tourist facilities in the Taita Hills are minimal.

Most of the roads in the Taita Hills are unsealed dirt roads and motorable tracks connecting small villages and Wundanyi. Sealed all weather road leads from Voi to Mwatate and one also connects Mwatate and Wundanyi (Kenya Administrative… 1991). Dirt roads and tracks lead through the small towns and villages, and some of them lead to the vicinity of the indigenous forests.

**Favours and barriers for ecotourism development**

In the Kenya Forestry Master Plan 1995-2020 (Ministry of Environment… 1994a) the problems of non-sustainable use of forests are named and the values of the indigenous forests are raised. Ecotourism is introduced in the policy statement as a new type of activity which, when well managed, can provide income: “Ecotourism is an increasingly important forestry activity which should be promoted for maximum benefit to the local people and the raising of revenue for forest conservation, while minimum environmental damage should be ensured” (Ministry of Environment… 1994a:16).

This plan includes a strategy for promoting partnership in developing indigenous forest management. The roles between public and private sectors are distributed starting from national authorities, forest department and enterprises, coming towards Kenya Wildlife Service, private sector, NGOs and finally local people. The plan underlines the role of local farmers and non-governmental organizations as a major force in forest development (Ministry of Environment… 1994b:18-21).

In Taita Taveta District Development Plan (Ministry of Finance… 2001:48-50) ecotourism projects have been proposed in the Taita Hills.
These projects are mentioned to be justified, because they are income-generating activities increasing the income of community members and they will help to realise the economic benefits from the conservation efforts.

This plan is a governmental proposal on what is wished to happen, although the government does not necessarily support projects directly in financial way. The plan only creates the frames for action by guaranteeing project licensing and easier implementation. The communities have come up with good ideas, but the capacity building and especially the marketing of the final ecotourism product is expensive (Mwangombe 2004). The funding for projects usually has to come from the community, from an outside investor or a donor organisation. According to Basara (2004) the micro finance banks can help communities in putting up small-scaled tourism projects. In addition, the goal of the Kenya Tourist Development Cooperation is empowering communities to participate in tourism by collateral loans. Utali college, under the Ministry of Tourism in Nairobi, train people among other things in hotel management, tour guiding and tourism hospitality.

![Ecotourism attractions in Taita Hills and Kasigau. Map modified from Tourist Maps Ltd.](image-url)
Other kinds of capacity building are left mostly for non-governmental organizations. They have strengthened rural organizations and built up the confidence of the rural people in finding independent solutions to their problems. They also provide linkages among themselves and between them and the government. One visible actor in Taita Taveta lately has been the East African Wildlife Society working as a sub-grantee of Pact Inc. in the CORE program. This Conservation of Resources through Enterprise program is a USAID natural resources management program that started in 1999. Their strategy is to strengthen or facilitate the creation of businesses that are linked to the conservation and sustainable use of natural resources. One way has been the establishment of Taita Taveta Wildlife Forum, which provides membership services for community-based organizations and acts as a central forum for conservation and community development at the local level (Mombo 2004). One of the projects is the Taita Hills Eco-Tourism Network Project (Figure 5).

The Ecotourism Society of Kenya (2004) strives towards promoting responsible and sustainable tourism. They have developed criteria for evaluating ecotourism called ecorating. These kinds of criteria are important when developing ways for best practices. When meeting these criteria it is possible to have a scheme logo for the business and that can act as a booster for marketing.

Conclusions

The interdependence of ecosystem sustainability and community viability shows in various ways in Taita Taveta. The pattern of sustainable land use in the area, where agriculture is the most important economic sector and the high population density puts great pressure on the land, is complicated. The new generation needs jobs, which their home villages can rarely offer. Shortage of land is a crucial question and incomes from other sectors outside agriculture are important for many households.

At the same time there is need for new strategies in protecting the unique flora and fauna that is still left. Nature conservation is probably not the first thing in local peoples’ minds when there is lack of land, energy and income. Ecotourism is introduced as one solution for the problem of combining conservation and economic development of local communities. The existence of such organisations as EAWLS and Taita-Taveta Wildlife Forum makes community based actions more possible.

The multipurpose use of forests has been introduced for communities and many of them have started with small-scale enterprises like bee-keeping and tree nurseries. Ecotourism, as one of forest values with direct benefits, has also raised peoples’ consciousness about forests’ indirect values. For example in Kasigau the nature-oriented visitors keep up the interest in forest research and education and locals seem to value their green mountain very high in means of rain attraction and water conservation.

It seems that there is potential for ecotourism in the Taita Hills. The unique habitats in the indigenous forests are more than fit to attract nature-orientated tourists. The existence of sacred forests and the scull caves could act as one attraction. Tourists would be interested to hear about the traditions, which still affect on Taitas’ way of life. As the locals consider these places sacred, there has to be careful planning made before welcoming any visitors into them. Negotiations with local elders and officers as well as consulting the National Museums of Kenya should be done in order to lay foundations for sustainable cultural development. Homestead accommodation, by which the tourists would have an opportunity to stay with a local host family and join their
everyday life, could offer context for cultural interaction.

Ecotourism is for restricted amounts of nature-orientated travellers, not for masses, although there are many things in Taita that would interest people if marketed properly. Small-scale ecotourism should offer jobs for the villagers, and knowledge about biodiversity conservation could be shared with all participating in the projects; the professionals, the host communities and the visitors. Ecotourism could help to preserve the old cultural traditions among the Taita when carefully planned.

As Taita Hills is quite densely populated, the road network serves both people driving and walking. The forests are in reach by vehicle and by trekking. The weather in the hills is cooler and more humid than down on the savannah. In Taita Hills ecotourism could be hailed as “muddy trekking boots-tourism” and is quite controversial to the facilities, which one can find on the safaris. The unique nature, friendly Taita people and the vicinity of the Tsavo Parks makes the Taita Hills a fine destination for tourists. The increased possibilities for communities in decision-making and management of forests seem to enhance the commitment in conservation. The communities in Taita have come up more and more with initiatives, but they also need more guidance from then on. Ecotourism, even if small-scaled, is business with many horizons. Every community has to think about what is the most suitable form of combining conservation and business for them. It is worth analysing whether there is capacity enough in the community itself or if there is need for an outside operator. The responsibility of evaluating and enhancing the human resources of the communities has more or less been laid on the shoulders of non-governmental organizations. The common problems in ecotourism occur usually in the first place when it comes to investing and marketing. The capacity building is one challenge as no business is economically or ecologically sustainable in the long run without proper management. If cooperating with outside investors, communities ought to strive towards an agreement allowing themselves as much power as possible.

References


Tourist Maps Ltd. (s.a.). A Map of Tsavo National Parks. Kenya.


Interviews


