

# Tropentag 2007 University of Kassel-Witzenhausen and University of Göttingen, October 9-11, 2007

Conference on International Agricultural Research for Development

# Cultural influence of forest perception and forest use among the Tiriki community in West Kenya

Barbara Taubert<sup>a</sup>, Jürgen Pretzsch<sup>b</sup>

a&b Technische Universität Dresden, Institute of International Forestry and Forest Products, Germany

a Email: taubert@forst.tu-dresden.de b Email: pretzsch@forst.tu-dresden.de

#### **Abstract**

Despite rapidly ongoing globalisation, some forests in Kenya are managed by local people in a traditional and sustainable way. It is assumed that the related perception of forest use by local people is based on specific values and attitudes. The aim of this paper is to investigate intangible forest-related values and attitudes of the Tiriki, tribal villagers living around the Kakamega forest in western Kenya. The sacred community forests of the Tiriki are described as rich in biodiversity. The study investigates cultural constructs that influence the perception and use of these forests and the role of traditional and religious practices. The main emphasis is given to contemporary connections of the Tiriki and 'their' sacred forests. Traditional and modern intangible values are investigated to understand the importance of sacred forests and to elucidate differences that distinguish these places from governmentally administered forests. Based on the case study approach the following data collection methods are being applied: review of secondary material, accompanying community members to spiritual places and activities, photograph documentation, group discussion, semi-structured and narrative interviews. Interviews were recorded, transcribed and analysed using the software MAXqda2. The analysis of the interviews reveals that forest-related intangible values can be classified and hierarchically structured taking reference to Bagatzky (1986). On the highest level of abstract principles the Tiriki common spirit and the closed canopy as well as a selection of special indigenous tree species of sacred forests as cultural places can be identified. The direct protection of the forest and related practical rules are clearly stated on lower levels (e. g. who is allowed to perform which activities in these forests). The Tiriki are known to obey their simple rules very strictly (common spirit). This will be illustrated by empirical evidence. Further data analysis aims to derive tangible indicators of culturally appropriate forest use that may be used for the formulation of guidelines for sustainable forest management.

Keywords: Tiriki, sacred forest, perception, attitudes, values, cultural impact, forest use

## 1. Background and Research Questions

Human behaviour towards forests in a particular society is guided by the prevailing culture<sup>1</sup> and perceptions of the entire environment. What the environment means to an individual determines his behaviour toward it. It is reflected by the variety of different skills and practices that exist in relation to natural resources. Behaviour in a contemporary sense is driven through a constant process of perception and interpretation mediated by an individual's experience of the world around them. Individuals maintain a certain attitude or disposition to respond positively or negatively toward some aspect of the perceived world (Ajzen&Fishbein 1975).

The interaction of humans and nature that has shaped and constantly continues to shape the appearance and condition of the natural resources has attracted the interest of researchers and development practitioners. It is now increasingly recognized that knowledge on the underlying value and cultural systems is a precondition for the formulation and implementation of efficient interventions and policies in the field of natural resource management (Manning et al. 1999; Vining&Tylor 1999; Urban et al. 2005).

This paper intends to foster the understanding of cultural influence of forest perception among the Tiriki. Their villages are found in the vicinity to Kakamega forest, the last remnant of a tropical rainforest in Kenya. Kakamega forest lays at an altitude of about 1600 m. Two major hills loom inside the forest and two river systems cross it. During the last decades continuous human impact has fragmented the forest to varying degrees. Nowadays Kakamega forest is an ecosystem of mosaics of different size, structure and distances to each other. It consists of secondary forests of different growth and changes of diversity of flora and fauna (Althof, 2005).

The investigation has been carried out in adjacent villages of the Tiriki community being located in the south-eastern part of the forest. This part of Kakamega forest is administered by the Kenyan Forest Service and shows clear signs of overuse and degradation. Yet, more than 40 smaller "cultural forests" of the Tiriki are situated in the same densely populated area south-east of Kakamega forest. They are described as rich in biodiversity (Onyango et al. 2004).

The villages of the Tiriki are adjacent to both types of forests – governmentally administered forest and cultural forest sites.

The aim of this paper is to explore the ways in which the Tiriki perceive and value aspects of the local landscape, particularly forests, and how this may ultimately influence environmental behaviour and forest use. Therefore, this case study will address the following questions:

- What is the difference in the perception of governmentally administered forests and local spiritual forest sites?
- Which cultural constructs influence the perception and use of forests among the Tiriki community?

### 2. Methodology

This study adopts a qualitative research approach to elucidate the beliefs, values, and ethics guiding the behaviour of the Tiriki community toward their environment. The data have been collected during a four month field research in 2006 and 2007<sup>2</sup>.

The methods include different types of qualitative interviews, group discussions, participant observation, documentation of the study sites using photographs, and the review of secondary materials.

<sup>1</sup> So far, the concept of culture is not clearly defined from the perspective of natural resources management related disciplines. Therefore, brief definitions shall be provided here. According to Haviland (1993) culture is defined as: "Often unconscious standards by which societies – groups of people – operate". Seeland (1997) adds that "The amalgamation of both local resources and their mobilisation through social cognition and institutions at distinct local levels is what culture means". Haviland (1993) stresses the importance of religion as a core element of culture. According to Grisworld (1994, p.50) religion can be understood as "the system of ideas by which people represent their society." Finally this pre-existent design in our minds, transmitted across generations in the form of received conceptual schemata, and manifested physically in the artificial products of their implementation, is what commonly is known as 'culture' (Ingold, 2000).

<sup>&</sup>lt;sup>2</sup> The results presented in this paper are preliminary and part of an on-going PhD project on "Stakeholder Value Systems, Attitudes and Acting - the case of forest management in Kenya" at the Institute of International Forestry and Forest Products, Technische Universität Dresden.

For the current paper 10 key informant interviews have been transcribed and analysed using the software MAXqda2.

#### 3. Results and discussion

# 3.1. History of forest perception and use among the Tiriki

The Tiriki form one of the eighteen sub-tribes of the Luhya, one of the major tribes in Kenya. The Luhya traditionally settle around the Kakamega forest. In former times the elders ("Lukuru") were the custodians of the norms, values, myths and traditions of the Luhya community. Everything was evaluated in terms of its functional value, usefulness or harmful effects to the community (Opole 1992). Land was commonly owned. Before demarcation of the Kakamega forest, each Luhya clan maintained the autonomy of managing its own section and environment of the forest. In the Tiriki culture, clan unity was of secondary importance. Age groups (warrior, senior warrior, judicial elder, ritual elder and aged elder) have been the most important social categories. Membership in local councils was determined by age grade and not by clan affiliation (Opole 1992). Rituals were performed in the community rather than on clan basis, with blessings sought from ancestors of a certain age group. Circumcision rituals were organised by the whole community and not by single clans. With regard to the natural resources all initiated Tiriki were allowed to occupy and manage unused parts of the land.

After demarcation of the Kakamega forest by the government in the early 1930's, traditional boundaries have been removed. This drastically reduced the power of traditional authorities. It was in that time that the Tiriki community started to develop and conserve the present "cultural forests" (Opole 1992).

#### 3.2. The perception of the today forest among the Tiriki

The Tiriki perceive clearly visible differences between the two forest types. These mainly refer to the fact that the governmental forest is larger and consist of exotic and indigenous tree species, while the cultural forests are smaller, naturally grown and composed of indigenous tree species. Nevertheless, a set of common perceptions exist for both forest types.

The governmentally administered forest is clearly perceived as officially protected by the forest guards and the foresters. The main value of the forest for the interviewees consists in meeting their profane daily needs such as firewood, grass and building materials, traditional medicine and grazing ground for cattle (Table 1). The forest is further valued for attracting rain as much as tourists who come to visit the forest for its natural beauty and biodiversity. The forest is seen as property of the government; therefore, no direct protection rules exist among the Tiriki community that concern the forest as a whole. However, traditional beliefs and rules refer to certain features of single trees.

#### Table 1 Perception of the Kakamega forest as mentioned by the interviewees

- "...A natural resource that God gave us. A good thing, that gives rainfall so we do not get harsh climate. We get our firewood from the forest. Nowadays according to Christianity we do not have customary rules related to that forest"
- "The Kakamega forest is a helpful thing that helps to attract rainfall. Also cattle go to graze in the forest. A place potential for crop planting. ... Nowadays it is forbidden by the government"
- "...forest I have bush, trees, animals in the forest and a good air, yeah. Yeah, I see good health to our people I see a lot of assistance from the forest to people, a lot of benefits for the local people, that would benefit from forest. I also see myself benefiting from the forest again."

"Generally people have eh admired the forest apart from a few individuals of course that may want to steal firewood from the forest, which is a benefit to them despite the fact that they steal it. It is a benefit to them but generally I have seen the forest as a resource, a place where people get food during dry seasons when they have no food ... the people who are totally poor ... walk to the forest, you see a lot of children when the harvest is poor."

The cultural forests are described to vary in size between 0.5 and 4 ha and to mainly consist of indigenous tree species such as Arungana or Musasa. Many trees are said to be more than 100 years old. Since for traditional circumcision ceremonies water is required, the cultural forest sites are normally situated in valleys. In order to be useful for circumcision ceremonies, the forests need to be densely stocked, so as to provide a good shelter and hiding place for the boys during the circumcision and initiation time, which nowadays lasts four to eight weeks, and which is practiced every 5 years.

Nearly all of the 43 cultural forest sites are hold as trust land, which is administered by the local authorities (Count Councillor) in close cooperation with the village elders. This ensures that the forests serve the local people and their cultural uses. In every village at least one of the village elders is responsible to control the forest. Additionally, via social pressure the whole village controls the adherence to customary rules that protect the cultural forests. The most common rules are:

- Women are not allowed to enter the forest.
- o It is not permitted to take wood out of this place, and to cut trees except during the circumcision and initiation time.
- Traditional medicines can be collected but only by circumcised men.
- o The "secrets" referring to the initiation rituals are told from the old men to the younger ones, and they are not allowed to share them with outsiders (woman, strangers and children).

The circumcision ceremonies are accompanied by cheerful dances and beer drinking outside of the forest. Here all villagers are included and invited. During these activities the forest will not be entered.

The adherence to the protection rules is motivated by strongly rooted and inherited fears (see Table 2).

Nevertheless, most of the interviewees assume a positive attitude towards the cultural forests and perceive it as a major part of their identity as Tiriki. The cultural forest has clearly more spiritual meaning to them than the governmental forest. It represents the infinite bond and long-lasting relationship that unites the former, the actual and the coming generations. The vital rituals celebrated in those forests contribute to the continuance of this perception.

# Table 2 Valuable aspects of the sacred forests as mentioned by the interviewees

"Those forests or shrines are considered holy places for all those circumcision things and so they are totally protected by the culture because from our forefathers [ancestors] it was said if you cut a tree from my shrine you will die! You will die. So that fear has grown from age to age. ...And people are happy to protect the shrines."

"The sacred forests gives us happiness ... I am happy when my boys come safe from the circumcision"

"The place [sacred forest] is only and specifically for circumcision – all trees found in that place they are considered special. It is not a planted forest it is natural grown ..."

"It [sacred forest] gives joy! [Meaning the dancing and beer drinking ceremonies for all community members]"

"It [sacred forest] helps to conserve our culture. It has all the trees we need during circumcision"

"There are many monkeys; I like to see them. ...Our sacred forest occupies only a small area. It is very thick and beautiful to look at"

"I get medicine there [forest]."

"It's a cultural forest – we are happy when we take boys there. It is protected by costumes – it will go on with many trees for a long time"

# 3.3. Hierarchical structure of forest-related intangible values

Forest-related intangible values can be classified and hierarchically structured taking reference to Bargatzky (1986). The Ordered Adaptive Structure (Fig. 1) consists of several hierarchically arranged subsystems, which are controlled by surveillance authorities.

The sub-systems of the lower level denote specific and exact tasks. These are tasks like collecting firewood, driving cattle to the forest, collecting medicine or attending circumcision rituals inside the cultural forest. At higher sub-system levels, the tasks become more unspecific and abstract. On the top of the hierarchy the most abstract ideas are located, which are at the same time the most lasting ones. The ideas about the sense of the world are placed here. Changes of these ideas take time. In the

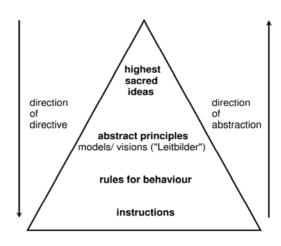


Figure 1 Ordered adaptive structure (Bargatzky 1986) slightly changed by Irrgang (2005)

case of the Tiriki, their perception of the governmental forest can be described as being a "help" in general. The forest was a help in former times, and it still is a help today. Cultural forests are a source of "joy and happiness". Since the cultural forests exist longer as a cultural construct of all levels, they are less disturbed in their hierarchical structure as the governmental forest. The highest sacred ideas of these forests have been in existence since a long time. The vision and the behaviour rules are clear for the community. Instructions are easy to understand and to follow. The highest abstract ideas of the government are not clear to the adjacent community. Therefore, the protection of this resource is not in the responsibility of the local people and is not part of the local culture.

Table 3

Value structure	Cultural Forest	Governmental forest
Highest sacred ideas	Relationship with ancestors, present and coming generation, common spirit (long-lasting) Secrecy of knowledge (shared knowledge within a gender group across generations) Responsibility of protection Happiness/Joy Wisdom Protection of the forest	Big help (long-lasting) Happiness
Abstract guiding principles (Leitbilder)	Place should be covered with old indigenous tree species and should remain for a long time the same way as it is Identification as a "Tiriki" closely related to the circumcision that takes place in the cultural forest	The forest should remain there to help with the daily needs, the tree species have to contribute to this aim Attraction of rain Attraction of tourists
Rules for behaviour	Rules are customary and given by the ancestors e.g. Women are not allowed to enter Man have to be circumcised before entering the place Punishment if rules are not obeyed	Rules are defined by the government, e.g.: Before entering the forest a permit has to be obtained from the forest officer
Instructions	E.g. Do not enter the forest at times not allowed to, do not enter the forest as a woman or outsider. Keep the secrets of the men.	E.g. Do not cut trees, collect firewood from dry trees only

#### 4. Conclusion

Till today, the cultural forests of the Tiriki are valued in terms of identity and old traditions. This includes the indigenous tree species growing at these sites. The common spirit of the Tiriki helps and assists in the conservation and maintenance of the cultural forests. Indeed, a man is only accepted in the society if he has undergone the ritual of circumcision and initiation inside the forest. This ritual based on the traditional religion is also practiced by Christians and remains the basis for the involvement of all community members. Although women are not allowed to enter the forests they also participate in the traditions during the outside ceremonies at the fourth week of the circumcision celebrations. The small size of the forests and their most central place helps the community to easily control the place. The long history of the sites and the related rituals, and the reference to the ancestors gives these places their high value.

On the other side the governmentally administered Kakamega forest is valued as a benefit and help to the daily lives of the Tiriki but the ordered adaptive structure is disturbed. The governmental aims and ideas are not identical with the value system of the Tiriki. If the traditional values and perceptions of the Tiriki can become part of the picture throughout the process of further administration of the Kakamega forest, a better understanding of the management of forests in the region can be achieved, and improved decisions on the management of governmental forests can eventually be arrived at.

#### References

**Althof A. J. (2005)** Human Impact on Flora and Vegetation of Kakamega Forest, Kenya - Structure, distribution and disturbance of plant communities in an East African rainforest. Diss., Universität Koblenz-Landau.

**Ajzen I., Fishbein M. (1975)** Belief, Attitude, Intention, and Behavior: An Introduction to Theory and Research. Reading, MA: Addison-Wesley. http://www.people.umass.edu/aizen/f&a1975.html download 12.09.07.

Bargatzky T. (1986) Einführung in die Kulturökologie: Umwelt, Kultur und Gesellschaft Berlin.

Griswold W. (1994) Cultures and societies in a changing world. Pine Forge Press.

Haviland W. A. (1993) Cultural Anthropology. Orlando Florida.

**Ingold T. (2000)** The Perception of the Environment. Essays on livelihood, dwelling and skill, Routledge Taylor& Francis Group, London and New York.

**Irrgang B. (2005)** Work ethic in Judaism, Christianity, Islam and African Religion. Paper presented at the DAAD Workshop "Development of two teaching modules" in Tharandt 28. Mai - 6. June 2005.

**Manning R., Valliere W., Minteer B. (1999)** Values, Ethics, and Attitudes Toward National Forest Management : An Empirical Study. Society & Natural Resources, 12 : 421- 436, Taylor & Francis.

**Onyango J.C., Nyanja R.A.O., Bussmann R.W. (2004)** Conservation of Biodiversity in the East African Tropical Forest, Lyonia – journal of ecology and application, Volume7 (2), p.151-157.

**Opole M. (1992)** Community liason activities in three villages on the edge of the Kakamega Forest Reserve. Kenya indigenous forest conservation programme (KIFCON), Nairobi.

**Opole M. (1992)** Local traditional, institutional forms among selected Tiriki communities in Kakamega District. Kenya indigenous forest conservation programme (KIFCON), Karura Forest Station. Nairobi.

Seeland K. (1997) Nature is Culture. Intermediate Technology Puplications Ltd, London.

**Urban M. (2005)** Values and Ethical Beliefs Regarding Agricultural Drainage in Central Illinois, USA. Society and Natural Resources, 18:173–189, Taylor & Francis Inc.

**Vining J., Tyler E. (1999)** Values, Emotions and Desired Outcomes Reflected in Public Responses to Forest Management Plans. Human Ecology Review, Vol. 6, No. 1, Society for Human Ecology.