

**Communities and conservation in West Kilimanjaro, Tanzania: Participation,  
costs and benefits**

**Lokalsamfunn og naturvern i Vest-Kilimanjaro, Tanzania: Deltakelse, kostnader og  
nytte**

Philosophiae Doctor (PhD) Thesis

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## **Abstract**

This thesis contributes to the current debate on how to balance conservation and development objectives. The extent of land under protection globally has increased enormously over the last 30 years, and there are still plans to expand the current protected areas (PAs) and create new ones. Their establishment is associated with impacts on local communities who live in the proximity of such areas. Different actors have proposed local participation and benefit sharing for people affected by these conservation initiatives. Despite their implementation over three decades, the social, economic, and political impacts of establishing and maintaining PAs remain debatable. It is in this context that this study was conducted in the Enduimet Wildlife Management Area (WMA), the Kilimanjaro National Park, and the West Kilimanjaro Forest Plantation in Tanzania.

The specific research questions of the study are:

- i. What are the social and economic impacts of the expansion and establishment of conservation areas on local people in West Kilimanjaro; and how are the impacts distributed along gender lines?
- ii. How are the conservation benefits shared with local communities in West Kilimanjaro?
- iii. How do the conservation benefits and costs affect local peoples' attitudes towards and perceptions of conservation?
- iv. What are the factors that drive human-wildlife conflicts?

Data were collected using qualitative methods through the combination of in-depth interviews, focus group discussions, informal interviews, and participant observation. Secondary data in the form of written sources on the study area were used in addition to the primary data gathered. The research results are presented in four separate but interrelated papers.

Paper I investigates the gendered impacts of the creation of the Enduimet WMA and expansion of the Kilimanjaro National Park during recent years. The results of Paper I indicate that the establishment of these PAs has caused local people to lose rights to land and resources, harassment by PA staff, and increased conservation costs. The costs were found to be distributed along gender lines. However, women are affected more than men, due to inequality in the division of labour and

resources at household level. Furthermore, relatively wealthy men and women suffer less compared to their poor counterparts because they are capable of buying natural resources such as fodder and firewood, an option which is less available to the poor. Furthermore, women in female-headed households suffer more, compared to women in male-headed households, because they lack sufficient labour power for collecting natural resources and thus spend more time and energy in doing so. In addition, some are poor – hence they lack the money to purchase these resources, while others are of old age and do not have relatives willing to help. Collecting natural resources forces poor women to spend more time and labour, which affects their health and restricts their time for participating in economic activities.

Paper II explores the local benefits and transparency concerning the collection and distribution of tourism revenues from the Enduimet WMA. The results of Paper II show that the benefits channelled to local people who bear the costs of conservation are modest, and the system lacks transparency. The Enduimet Community-Based Organisation is entitled to receive 65 % of non-consumptive tourism revenues accrued from the WMA. In practice, it receives less than 65 % after the revenues collected have passed through the non-transparent central government system. In 2011 each village received about 3.6 % of the tourism fees, and altogether the member villages received 32.5 %. When taking into account the uncompensated costs that some villagers bear in terms of increased crop damage, livestock loss, and loss of human life caused by increasing wildlife populations, the practice does not match the ‘win-win’ discourse, that the Enduimet WMA will secure a sustainable source of income for local communities.

Paper III compares the Kilimanjaro National Park and the West Kilimanjaro Forest Plantation in terms of local participation and benefit sharing, and how these affect relations between local communities and the two areas. The results of Paper III show that the Kilimanjaro National Park earns about 17 million USD per year, but from the inception of the park outreach programme in 1994 to 2011 (17 years), the park has spent only about 1.6 million USD to support 39 out of 90 neighbouring villages. Only one village among the three studied was supported by the park in 2002/03, in the form of the construction of a water intake and storage tank worth 13,571 USD. The headquarters claim that they offer 7.5 % of the park’s operational budget to neighbouring villages,

but in practice, it is much less. Revenue sharing in the park is affected by bureaucratic procedures hampering applications for community projects, political influence, lack of transparency, mismanagement, and misuse of funds by national parks headquarters. It was found that some income was used to support parks that generate insufficient income. In addition, there is generally a lack of communication between the park and villagers. Villagers feel resentment towards the park that leads them to withdraw park resources illegally. They referred to the park staff as ‘enemies’ who do not care about their livelihoods. On the contrary, the West Kilimanjaro Forest Plantation has had a positive impact on neighbouring villages. Local communities benefit through the legal collection of forest products, farming opportunities, logging businesses for registered customers, and casual labour opportunities. Income from casual labour and agriculture serves as a source of income for them and their families. Nevertheless, casual labourers are paid too little (2.5 USD/day) and the process of allocating farming plots is affected by favouritism. The differences observed between the two areas are related to sectoral legal reforms in the 1990s to accommodate locally-based and decentralised approaches to natural resources management following the economic crisis of the late 1970s to the early 1980s, and the resulting declining capacity of government agencies.

Based on inspiration drawn from the field of political ecology, Paper IV applies ‘webs of relation’ approach to unwind inter-related factors behind cases of elephant killings in West Kilimanjaro. In recent years, there has been a considerable increase in elephant killings in Africa, for ivory. However, the ivory market is not the only reason why elephants are killed illegally. The results of Paper IV show that resistance to conservation is a reason behind elephant killings in West Kilimanjaro, following appropriations of large tracts of land for conservation by external actors without the participation of local people. Local people suffer costs such as crop raiding, property damage, livestock deaths, and a threat to their own lives as they try to sustain a living on the remaining land that lies between conservation areas. In addition, they lack government support in chasing wildlife away from their fields, and they are not compensated for wildlife damages. They are denied access to natural resources in the PAs, they are ill treated when found in the PAs, and they receive little or no benefits from conservation. Moreover, they lack land security, as there are more proposals from conservationists to create new conservation areas. This leaves people with

an increased feeling of being marginalised and disempowered, with limited possibilities of influencing the situation through democratic means. Thus, local people resist conservation by killing wildlife.

All areas studied (Enduimet WMA, Kilimanjaro National Park, and West Kilimanjaro Forest Plantation) share a centralised structure in terms of decision making on the management of natural resources and benefit sharing. Local people are not able to participate in decision making in the management of the areas, and it is difficult for communities to influence or challenge the way the structure operates. In Enduimet, the WMA was proposed as community-run conservation area. In practice, the communities do not have the power to collect revenues, decide on shares, or to verify whether they receive the income they are entitled to receive. The central government collects the revenues and channels the percentage to local people. The Kilimanjaro National Park was found to involve local people only when there is a fire outbreak; thus local people claimed to be used as ‘tools’. The park management system does not allow space for local people’s opinions. Most of the collected revenues are retained by the national parks headquarters and local people do not have any power or influence over the revenues. In practice, the park operates under a strict ‘fences and fines’ or ‘fortress conservation’ strategy. In the West Kilimanjaro Forest Plantation, local people do not have any power or share of the revenues collected from the sale of logs and poles, apart from payment received from casual labour. The income from logs sold is remitted to the central government. In all three areas, participation is used as ‘means’ to improve environmental conservation and a way to accrue more revenue for the government.